Federal Energy Regulatory Commission

Fiscal Year 2018 Congressional Performance Budget Request

Fiscal Year 2016 Annual Performance Report

Acting Chairman Cheryl A. LaFleur

TABLE OF CONTENTS

MISSION

RELIABLE, EFFICIENT, AND SUSTAINABLE ENERGY FOR CONSUMERS

Assist consumers in obtaining reliable, efficient, and sustainable energy services at a reasonable cost through appropriate regulatory and market means.

GOAL 1

ENSURE JUST AND REASONABLE RATES, TERMS, AND CONDITIONS

Ensure that rates, terms, and conditions of jurisdictional energy services are just, reasonable, and not unduly discriminatory or preferential.

GOAL 2

PROMOTE SAFE, RELIABLE, SECURE, AND EFFICIENT INFRASTRUCTURE

Promote the development of safe, reliable, secure, and efficient infrastructure that serves the public interest.

GOAL 3

MISSION SUPPORT THROUGH ORGANIZATIONAL EXCELLENCE

Achieve organizational excellence by using resources effectively, adequately equipping FERC employees for success, and executing responsive and transparent processes that strengthen public trust.

Proposed Appropriation Language

For necessary expenses of the Federal Energy Regulatory Commission to carry out the provisions of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including services as authorized by 5 U.S.C. 3109, the hire of passenger motor vehicles, and official reception and representation expenses not to exceed $3,000, $367,600,000, to remain available until expended: Provided, That notwithstanding any other provision of law, not to exceed $367,600,000 of revenues from fees and annual charges, and other services and collections in fiscal year 2018 shall be retained and used for necessary expenses in this account, and shall remain available until expended: Provided further, That the sum herein appropriated from the general fund shall be reduced as revenues are received during fiscal year 2018 so as to result in a final fiscal year 2018 appropriation from the general fund estimated at not more than $0.

Full Cost Recovery

The Federal Energy Regulatory Commission (FERC or the Commission) recovers the full cost of its operations through annual charges and filing fees assessed on the industries it regulates as authorized by the Federal Power Act (FPA) and the Omnibus Budget Reconciliation Act of 1986. The Commission deposits this revenue into the Treasury as a direct offset to its appropriation, resulting in a net appropriation of zero.

	FY 2016 Actual	FY 2017 Estimate	FY 2018 Request
Appropriation	$319,800,000	$319,192,060	$367,600,000
Offsetting Collections	($319,800,000)	($319,192,060)	($367,600,000)
Net Appropriation	**$ -**	**$ -**	**$ -**

Note: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate.

FY 2018 Request Summary

The Federal Energy Regulatory Commission (FERC or the Commission) requests $367,600,000 and 1,465 full-time equivalents (FTEs) to execute its mission in fiscal year (FY) 2018. This funding request is an increase of $48,407,940, or about 15.2 percent, above the FY 2017 annualized continuing resolution (CR) rate.

The FY 2018 request supports an overall 5 percent increase in base operating costs. The Commission allocates over two-thirds of its budget to directly cover the compensation costs of its employees on an annual basis. The Commission's request reflects the necessary resources to support increases in salaries and benefits associated with a 1.9 percent pay raise in FY 2018. The request also provides continued funding for program contracts associated with statutorily required hydropower environmental workload, natural gas pipeline construction oversight, liquefied natural gas (LNG) construction inspections, and expert witness contractor assistance in the Commission's enforcement program. This request provides resources to support the Commission's infrastructure review process for non-federal hydropower and natural gas pipeline facilities. Both programs have an involved environmental review process which include substantial efforts at public outreach and stakeholder engagement, as well as compliance oversight. Furthermore, the Commission's request includes an increased investment in new information technology projects that will advance priority information technology (IT) initiatives and yield increased operational efficiency. These projects will modernize core mission and support systems, expand existing data analytics and visualization capabilities, and improve the agency's cyber security posture. Through the successful execution of these projects, the Commission expects to maintain a cost-effective suite of IT products and services that will meet its near-term mission needs and provide a scalable platform to support future needs beyond 2020, while meeting applicable security mandates.

In addition to our base operating expenses, this budget request includes additional funding required to continue a complex multi-year renovation effort within its headquarters building. The renovation project will enable the agency to realize mandated space savings. With the enactment of the Commission's full FY 2017 appropriation, the Commission expects to fund an additional $16.2 million for this effort above amounts originally planned under the annualized continuing resolution. The FY 2018 request includes $11.1 million to continue the modernization effort.

Comparison of FYs 2017 and 2018 by Major Category

Major Category (Dollars in thousands)	FY 2017 Estimate	FY 2018 Request	Difference	Percent Change FY 2017 to FY 2018
Salaries & Benefits	$ 239,023	$ 248,866	$ 9,843	4.1%
Rent	33,234	32,677	(557)	-1.7%
Information Technology	35,508	44,213	8,705	24.5%
Environmental and Program Contracts	10,225	10,161	(64)	-0.6%
Administrative (including Travel and Training)	22,138	20,552	(1,586)	-7.2%
Building Modernization	1,717	11,131	9,414	548.1%
Subtotals	**$ 341,845**	**$ 367,600**	**$ 25,755**	**7.5%**
Application of Prior Year (PY) Budget Authority	(22,653)	-	-	
Totals	**$ 319,192**	**$ 367,600**	**$ 48,408**	**15.2%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate. Numbers may not add up due to rounding.

Resources by Strategic Goals and Objectives

The Commission's budget request and associated justification is aligned with its updated Strategic Plan for FY 2014 – FY 2018. The first two goals are mission critical and correspond to key aspects of the Commission's statutory authority. The third goal is a mission support goal focused on establishing a foundation of organizational excellence that enables the achievement of the Commission's mission.

Strategic Goal and Objectives (Dollars in thousands)		FY 2016 Actual	FY 2017 Estimate	FY 2018 Request	Percent Change FY 2017 to FY 2018
Goal 1	Funding	$ 149,853	$ 156,794	$ 168,111	7.2%
	FTE	685	690	676	-2.0%
Objective 1.1		118,099	125,005	132,811	6.2%
		551	552	542	-1.8%
Objective 1.2		31,754	31,789	35,300	11.0%
		134	138	134	-2.8%
Goal 2	Funding	$ 116,047	$ 123,076	$ 131,836	7.1%
	FTE	501	494	506	2.4%
Objective 2.1		61,693	65,383	70,357	7.6%
		261	257	265	3.0%
Objective 2.2		54,354	57,693	61,479	6.6%
		240	237	241	1.8%
Goal 3	Funding	$ 59,215	$ 61,975	$ 67,653	9.2%
	FTE	286	281	283	0.6%
Objective 3.1		30,330	31,885	35,272	10.6%
		147	144	147	2.2%
Objective 3.2		13,418	14,107	15,492	9.8%
		64	63	64	1.6%
Objective 3.3		15,467	15,983	16,889	5.7%
		75	74	72	-3.3%
TOTAL	Funding	**$ 325,115**	**$ 341,845**	**$ 367,600**	**7.5%**
	FTE	**1,472**	**1,465**	**1,465**	**0.0%**
Application of PY Budget Authority		**(5,315)**	**(22,653)**	-	
TOTAL	Funding	**$ 319,800**	**$ 319,192**	**$ 367,600**	**15.2%**
	FTE	**1,472**	**1,465**	**1,465**	**0.0%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate. Numbers may not add up due to rounding.

Resources by Industry

Regulated Industry (Dollars in thousands)		FY 2016 Actual	FY 2017 Estimate	FY 2018 Request	Percent Change FY 2017 to FY 2018
Electric	**Funding**	$ 184,341	$ 193,499	$ 207,964	7.5%
	FTE	841	845	831	-1.6%
Hydro	**Funding**	72,228	76,559	82,963	8.4%
	FTE	323	317	329	3.6%
Natural Gas	**Funding**	59,601	62,534	66,608	6.5%
	FTE	266	261	264	1.2%
Oil	**Funding**	8,945	9,253	10,065	8.8%
	FTE	42	41	41	-0.2%
Subtotal		**$ 325,115**	**$ 341,845**	**$ 367,600**	**7.5%**
Application of PY Budget Authority		(5,315)	(22,653)	-	
Total	**Funding**	**$ 319,800**	**$ 319,192**	**$ 367,600**	**15.2%**
	FTE	**1,472**	**1,465**	**1,465**	**0.1%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate.
Numbers may not add up due to rounding.

Object Class Summary

	OBJECT CLASS SUMMARY (Dollars in thousands)	FY 2016 Actual	FY 2017 Estimate	FY 2018 Request
11.9	Personnel Compensation	$ 176,593	$ 181,041	$ 186,807
12.1	Benefits	54,177	57,973	62,059
13.0	Benefits for Former Personnel	4	9	-
	Subtotal, Personnel Compensation & Benefits	$ 230,774	$ 239,023	$ 248,866
21.0	Travel and Transportation of Persons	2,856	3,476	3,573
22.0	Transportation of Things	1	2	2
23.1	Rental Payments to GSA	32,140	33,234	32,677
23.2	Rental Payments to Others	667	845	821
23.3	Communications, Utilities & Misc. Charges	1,776	1,990	1,925
24.0	Printing and Reproduction	2,089	2,075	1,989
25.1	Advisory and Assistance	8,951	10,118	9,345
25.2	Non-Federal	9,400	12,894	13,871
25.3	Federal	2,039	1,562	1,571
25.4	Operation & Maintenance of Facilities	1,696	1,732	1,775
25.7	Operation & Maintenance of Equipment	24,933	25,715	28,182
26.0	Supplies and Materials	1,919	2,819	2,924
31.0	Equipment	5,099	5,083	12,477
32.0	Leasehold Improvements	695	339	7,540
41.0	Grants, Subsidies & Contributions	53	42	37
42.0	Insurance Claims and Indemnities	28	896	25
	TOTAL, OBLIGATIONS	$ 325,115	$ 341,845	$ 367,600
	Application of PY Budget Authority	(5,315)	(22,653)	-
	GROSS BUDGET AUTHORITY	319,800	319,192	367,600
	Offsetting Receipts	(319,800)	(319,192)	(367,600)
	NET BUDGET AUTHORITY	$ -	$ -	$ -

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate.
Numbers may not add up due to rounding.

Verification and Validation of Performance Information

The Commission collects, uses and reports performance data on its activities to inform decision making, track progress and meet statutory reporting requirements. The Commission believes the capacity and skill to measure performance is critical to maintaining operational effectiveness. FERC implemented a process to verify and validate performance measure data to support the development of this capability, establish internal controls over performance information, and ensure the completeness and reliability of FERC performance measure data.

FERC's FY 2016 Annual Performance Report has been combined with its FY 2018 Congressional Performance Budget Request, which continues to serve as its Annual Performance Plan, to provide more complete and meaningful data on past performance and the Commission's efforts to improve performance in the coming fiscal years. The report is organized by strategic goals and objectives established in the FY 2014 – FY 2018 Strategic Plan. The performance goals and indicators expressed in this report are aligned to the objectives in the strategic plan and define the level of performance to be achieved.

FERC ensures that the performance data presented in this report meet the verification and validation criteria of being valid, complete, consistent, accurate, and timely based upon the following assessment steps:

1. The Commission applies logic modeling to develop performance measures through its strategic planning process.
2. FERC's program offices document procedure manuals to ensure confidence in the reported performance data. The procedure manuals define:
    - the purpose and interpretation of the measure,
    - external factors that may impact the measure,
    - data collection and storage procedures,
    - data quality controls,
    - and reporting requirements.
3. Performance results are calculated and reported according to established procedures and approved by the office director.
4. Performance measures undergo an independent Verification and Validation Assessment during the four year performance reporting cycle. An Independent Review Team prepares a report evaluating each performance measure based on the five verification and validation criteria.

Overview of the Federal Energy Regulatory Commission

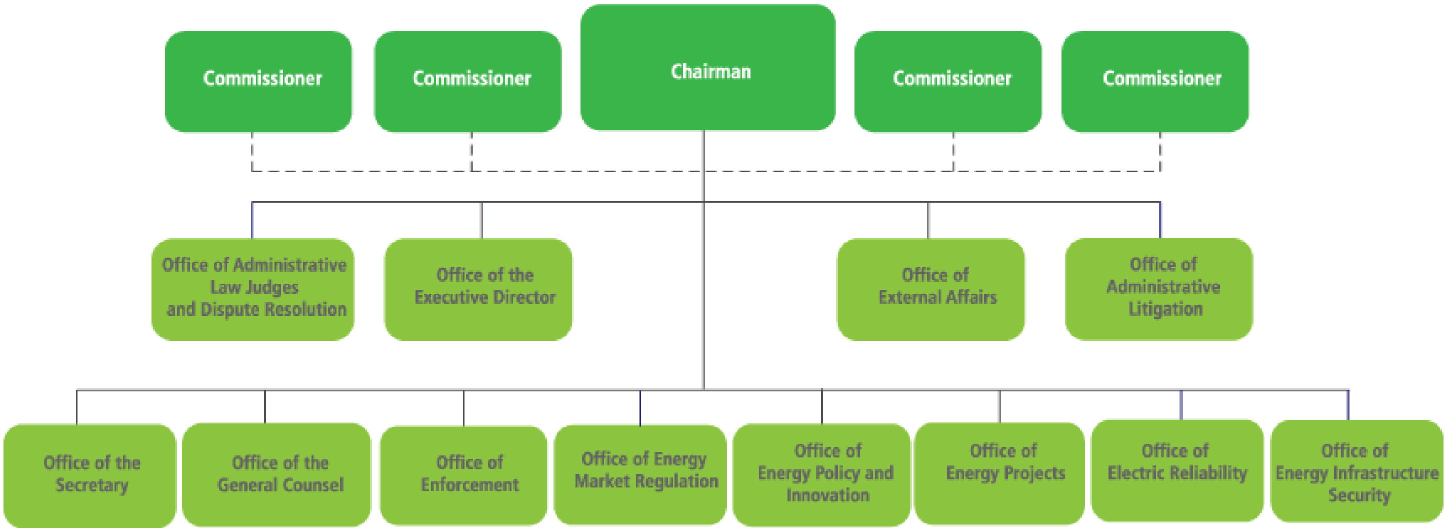
The Commission is an independent regulatory agency within the U.S. Department of Energy. The Commission's statutory authority centers on major aspects of the Nation's wholesale electric, natural gas, hydroelectric, and oil pipeline industries.

The Commission was created through the Department of Energy Organization Act on October 1, 1977. At that time, the Federal Power Commission (FPC), the Commission's predecessor that was established in 1920, was abolished and the Commission inherited most of the FPC's regulatory mission. As authorized by statute, including the Omnibus Budget Reconciliation Act of 1986, the Commission recovers the full cost of its operations through annual charges and filing fees assessed on the industries it regulates. This revenue is deposited into the Treasury as a direct offset to its appropriation, resulting in a net appropriation of zero.

FERC is composed of up to five commissioners who are appointed by the President of the United States with the advice and consent of the Senate. Commissioners serve staggered five-year terms and have an equal vote on the orders through which the Commission takes action. To avoid any undue political influence or pressure, the Commission is a bi-partisan body and no more than three commissioners may belong to the same political party. The President appoints one of the Commissioners to be the Chairman of FERC and the Chairman is the administrative head of FERC.

In addition to the Chairman and Commissioners, FERC is organized into 12 separate functional offices and each is responsible for carrying out specific portions of the Commission's responsibilities. The offices work in close coordination to effectively carry out the Commission's statutory authorities.

Commission Organizational Chart



Commission Offices

The **Office of Energy Projects** (OEP) fosters economic and environmental benefits for the nation through the approval and oversight of hydroelectric, natural gas pipeline, natural gas storage, and liquefied natural gas projects that are in the public interest.

The **Office of Energy Market Regulation** (OEMR) analyzes filings submitted by electric utilities and natural gas and oil pipelines to ensure that rates, terms, and conditions of service are just and reasonable and not unduly discriminatory or preferential. OEMR also analyzes filings submitted by the Electric Reliability Organization (ERO) dealing with its budget, rules of procedure, and bylaws.

The **Office of Enforcement** (OE) protects customers by conducting oversight of energy markets, identifying and remedying market problems in a timely manner, assuring compliance with rules and regulations, and detecting and investigating market manipulation.

The **Office of Energy Policy and Innovation** (OEPI) provides leadership in the development and formulation of policies and regulations for the Commission's consideration. OEPI focuses on potential reforms that advance the goals of the Commission, including policies to ensure the efficient development and use of transmission, generation, storage and wholesale and interstate markets generally. OEPI undertakes policy and quantitative analysis and conducts outreach with a range of entities.

The **Office of Electric Reliability** (OER) oversees the development and review of mandatory reliability and security standards by the ERO and ensures compliance with the approved mandatory standards by the users, owners, and operators of the bulk power system.

The **Office of Energy Infrastructure Security** (OEIS) identifies and—working with other governmental agencies, industry, and other stakeholders—seeks comprehensive solutions to potential threats to FERC-jurisdictional infrastructure from cyber and physical attacks, including geomagnetic disturbance and electromagnetic pulse events.

The **Office of the General Counsel** (OGC) provides sound, timely legal counsel to the Commission and Commission staff by assisting in the development of Commission orders, rulemakings, and other decisions; representing the Commission before the courts; advising the Commission and Commission staff on legal matters; and advising other government agencies, regulated entities, and the public on matters within the Commission's jurisdiction.

The **Office of Administrative Litigation** (OAL) advances the public interest in cases set for hearing by providing expert and independent legal and technical analyses; building complete evidentiary records through the presentation of expert testimony and cross examination of witnesses at hearings; briefing issues to law judges; and negotiating settlements that achieve prompt rate reductions, provide rate certainty, and conserve Commission resources.

The **Office of Administrative Law Judges and Dispute Resolution** (OALJDR) develops an evidentiary record in contested cases as directed by the Commission. Through trial-type hearings and the issuance of an initial decision, OALJDR ensures that the rights of all parties are preserved. In addition, the Administrative Law Judges act as settlement judges, mediators, and arbitrators to help resolve contested matters. OALJDR also assists interested parties engaged in disputes to achieve consensual decision making through services such as mediation, negotiation, conciliation, arbitration, and facilitation with the Dispute Resolution Service.

The **Office of the Secretary** (OSEC) serves as the focal point through which all filings are made for all proceedings before the Commission, notices of proceedings are given, and from which all official actions are issued by the Commission. OSEC promulgates and publishes all orders, rules, and regulations of the Commission and prescribes the issuance date for these unless such date is prescribed by the Commission.

The **Office of External Affairs** (OEA) communicates with the public, other governmental entities and industry on behalf of the Commission. OEA provides informational and educational services to Congress; federal, state and local governments; the news media and the public; regulated industries; and consumer and public interest groups. This office also is the Commission's liaison with foreign governments.

The **Office of the Executive Director** (OED) provides administrative support services to the Commission including human resources, procurement, information technology, organizational management, financial, logistics and security.

The Chairman and Commissioners

Acting Chairman
Cheryl A. LaFleur
Sworn In: July 13, 2010
Term Expires: June 30, 2019

Commissioner
Colette D. Honorable
Sworn In: January 5, 2015
Term Expires: June 30, 2017

Commissioner Vacancy

Commissioner Vacancy

Commissioner Vacancy

Regulatory Authority History and Overview

The Commission has an important role in the development of a reliable energy infrastructure and the protection of wholesale customers from unjust and unreasonable rates and undue discrimination and preference. The Commission draws its authority from various statutes and laws that are described below.

Hydropower

In 1920, Congress passed the Federal Water Power Act, which gave the Federal Power Commission (FPC), the Commission's predecessor, its original authority to license and regulate non-federal hydropower projects. As Congress expanded the regulatory authority of the FPC, the Federal Water Power Act ultimately became Part I of the Federal Power Act (FPA). Part I of the FPA has been amended by subsequent statutes including the Electric Consumers Protection Act of 1986, the Energy Policy Act of 1992, and the Hydropower Regulatory Efficiency Act of 2013. The Commission relies on these authorities to carry out its hydropower responsibilities, including: the issuance of preliminary permits; determinations regarding qualifying conduit facilities; the issuance of licenses for the construction and operation of new projects; the issuance of relicenses for existing projects; the investigation and assessment of headwater benefits; and the oversight of all ongoing project operations, including dam safety and security inspections, public safety, and environmental monitoring. While the Commission's responsibility under the FPA is to strike an appropriate balance among the many competing developmental and non-developmental (including environmental) interests, several other statutes affect hydropower regulation. These include, but are not limited to, the National Environmental Policy Act (NEPA), Clean Water Act, Coastal Zone Management Act, Endangered Species Act, Fish and Wildlife Coordination Act, and National Historic Preservation Act.

Electric

Since 1935, the Commission has regulated certain electric industry activities under Part II of the FPA. Under FPA sections 205 and 206, the Commission ensures that the rates, terms and conditions of sales for resale of electric energy and transmission in interstate commerce by public utilities are just, reasonable, and not unduly discriminatory or preferential. Under FPA section 203, the Commission reviews mergers and acquisitions, and certain other corporate transactions involving public utilities and public utility holding companies. Under FPA section 204, the Commission reviews the issuance of securities or assumptions of liabilities by certain public utilities subject to its jurisdiction.

Section 215 of the FPA provides for the establishment of a federal regulatory system of mandatory and enforceable electric reliability standards for the Nation's bulk power system. The standards, developed by a Commission-certified ERO and approved by the Commission, apply to all users, owners, and operators of the bulk power system. The ERO operates within the 48 contiguous states and is under the direct oversight of the Commission. The Commission is ultimately responsible for the effective enforcement of the standards.

The Commission also has other electric regulatory responsibilities under portions of the Public Utility Regulatory Policies Act of 1978 and the Public Utility Holding Company Act of 2005 pertaining to qualifying facilities, exempt wholesale generators, and books and records access requirements. Under the Energy Independence and Security Act of 2007 (EISA), the Commission, along with the Department of Energy and National Institute of Standards and Technology (NIST), has a role to play in ensuring awareness, coordination, and integration of the federal government's diverse activities related to smart grid technologies and practices.

The Commission's regulations apply primarily to investor-owned utilities. In contrast, federal government-owned utilities (e.g., Tennessee Valley Authority, federal power marketing agencies), state and municipal utilities, and most cooperatively-owned utilities are not subject to Commission regulation (with certain limited exceptions). Regulation of retail sales and local distribution of electricity are matters left to the states. In addition, the Commission does not authorize the construction of new generation facilities (other than non-federal hydroelectric facilities); such authorization is the responsibility of state and local governments.

Natural Gas and Liquefied Natural Gas

The Commission's role in regulating the natural gas industry is largely defined by the Natural Gas Act of 1938 (NGA). Under section 3 of the NGA, the Commission reviews the siting, construction, and operation of facilities to import and export natural gas, including liquefied natural gas (LNG) terminals. As part of this responsibility, the Commission conducts cryogenic design and technical review of the proposed LNG facilities during the authorization process, and compliance inspections during construction. Once an

LNG facility is constructed and operational, the Commission conducts safety, security, and environmental inspections for the life of the facility.

Under section 7 of the NGA, the Commission issues certificates of public convenience and necessity for the construction and operation of interstate natural gas pipelines and storage facilities. The Commission also conducts compliance inspections of natural gas pipelines and storage facilities during construction. Although the Commission does not have jurisdiction over the safety or security of natural gas pipelines or storage facilities once they are in service, it actively works with other agencies that do have these responsibilities, most notably the Pipeline and Hazardous Materials Safety Administration of the Department of Transportation.

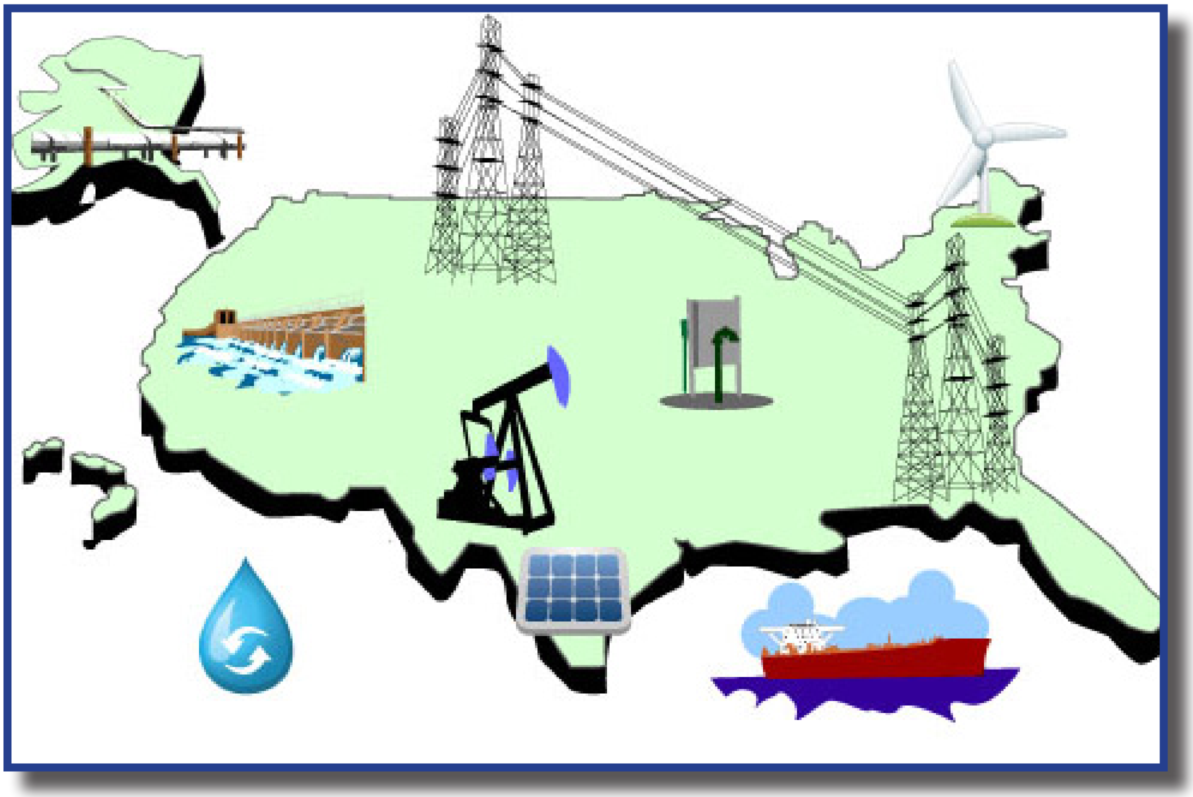
As required by NEPA, the Commission prepares environmental documents for proposed natural gas and LNG facilities and acts in conformance with other environmental statutes as appropriate, including the Endangered Species Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, and Coastal Zone Management Act.

Under sections 4 and 5 of the NGA, the Commission oversees the rates, terms and conditions of transportation and of certain sales for resale of natural gas in interstate commerce. The Commission is also responsible for determining fair and equitable rates for intrastate pipelines transporting or storing natural gas under section 311 of the Natural Gas Policy Act of 1978 (NGPA). The Commission's jurisdiction over sales for resale of natural gas is limited by the NGPA and the Natural Gas Wellhead Decontrol Act of 1989. Regulation of the production and gathering of natural gas, as well as retail sales and local distribution of natural gas, are matters left to the states.

Oil

The Interstate Commerce Act (ICA) gives the Commission jurisdiction over the rates, terms and conditions of transportation services provided by interstate oil pipelines. Oil pipelines transport crude oil, natural gas liquids (ethane, propane and butane), refined petroleum products (gasoline, jet fuel and fuel oils), and liquefied petroleum gas. The Commission has no authority over the construction of new oil pipelines or over other aspects of the industry such as production, refining or wholesale or retail sales of oil.

In addition to ensuring oil pipelines comply with the Commission's regulations governing oil pipelines' tariffs subject to section 6 of the ICA, the Commission's responsibilities include the establishment of equal service conditions to provide shippers with equal access to pipeline capacity, and analyzing market-based, cost-of-service and anchor shipper contract rate applications to ensure just and reasonable rates for transporting petroleum and petroleum products by pipeline in interstate commerce.



Enforcement

Through the Energy Policy Act of 2005 (EPAct 2005), Congress gave the Commission broad authority to prohibit manipulation in wholesale energy transactions. Congress also enhanced civil penalties for violations of the FPA, NGA, and NGPA. EPAct 2005 made three major changes to the Commission's civil penalty authority.

1. Congress expanded the Commission's FPA civil penalty authority to cover violations of any provision of Part II of the FPA, as well as of any rule or order issued thereunder.

2. Congress extended the Commission's civil penalty authority to cover violations of the NGA or any rule, regulation, restriction, condition, or order made or imposed by the Commission under NGA authority.

3. Congress established the maximum civil penalty the Commission may assess under the NGA, NGPA, or Part II of the FPA as $1,000,000[1] per violation for each day that it continues.

In addition, Congress expanded the scope of the criminal provisions of the FPA, NGA, and NGPA by increasing the maximum fines and increasing the maximum imprisonment time that apply when the Commission refers the case to the Department of Justice for criminal prosecution.

[1] Such penalties are adjusted annually to reflect the effects of inflation, as provided by the Federal Civil Penalties Inflation Adjustment Act of 1990 and the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015. See, e.g., Civil Monetary Penalty Inflation Adjustments, Order No. 834, 158 ¶ 61,017 (2017).

GOAL 1

ENSURE JUST AND REASONABLE RATES, TERMS, AND CONDITIONS

Ensure that rates, terms, and conditions of jurisdictional energy services are just, reasonable, and not unduly discriminatory or preferential.

Introduction

Electricity, natural gas, and oil are vital resources that fuel economic activity and help to meet the nation's energy needs. Through the FPA, NGA, and ICA, among other laws, Congress gave FERC authority to regulate the transmission and wholesale sale of electricity and natural gas in interstate commerce, and to regulate the transportation of oil by pipeline in interstate commerce. The Commission's responsibility in the exercise of this authority is to ensure that rates, terms, and conditions for wholesale sales and transmission of electric energy in interstate commerce and transportation of natural gas in interstate commerce, as well as for transportation of oil by pipeline in interstate commerce, are just and reasonable and not unduly discriminatory or preferential. As part of this responsibility, the Commission balances the economic viability of energy suppliers with the protection of energy customers. Through these efforts, FERC ensures that consumers have reasonable access to the resources they need and that service providers are appropriately compensated. To achieve this goal, the Commission uses a range of regulatory and market means, as well as market oversight and enforcement.

Strategic Goal and Objectives (Dollars in thousands)		FY 2016 Actual	FY 2017 Estimate	FY 2018 Request	Percent Change FY 2017 to FY 2018
Objective 1.1	**FTE**	551	552	542	-1.8%
	Funding	118,100	125,005	132,811	6.2%
	Program	88,405	92,083	94,614	2.7%
	Support	29,695	32,922	38,197	16.0%
Objective 1.2	**FTE**	134	138	134	-2.8%
	Funding	31,754	31,790	35,300	11.0%
	Program	24,546	23,560	25,853	9.7%
	Support	7,208	8,230	9,448	14.8%
Goal 1 Subtotal	**FTE**	**685**	**690**	**676**	**-2.0%**
	Funding	**149,854**	**156,795**	**168,111**	**7.2%**
Application of PY Budget Authority		(2,450)	(10,390)	-	
Goal 1 Total	**Funding**	**147,404**	**146,405**	**168,111**	**14.8%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate. Numbers may not add up due to rounding.

Objective 1.1

Establish Commission rules and policy that will result in just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of jurisdictional service.

To establish rules and policies, FERC draws on both market and regulatory means. When competitive markets exist and there are adequate assurances against the exercise of market power, FERC leverages competitive market forces to promote efficiency for consumers while taking measures to mitigate inappropriate or excessive market power. When competitive market conditions do not exist and competitive forces are inadequate to protect consumers, FERC relies on traditional rate-setting authority and tools such as cost-of-service ratemaking.

FERC determines the appropriate approach by balancing two important interests: protecting consumers against excessive rates, and providing an opportunity for regulated entities to recover their costs and earn a reasonable return on their investments. Regardless of the approach, the Commission ensures that interested stakeholders have the opportunity to provide their views and that the Commission's ultimate decisions are adequately supported by the evidentiary record. These techniques produce just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions.

Rate and Tariff Filings

A significant portion of the Commission's work to establish just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of service is accomplished through the review of rates and tariff provisions and other requests for Commission action from regulated entities and interested stakeholders. All jurisdictional public utilities, natural gas pipelines, and oil pipelines are required to have their rates, terms, and conditions on file with the Commission. The Commission must review proposed changes to filed rates, terms, and conditions and all comments filed in response before determining whether to accept, conditionally accept subject to modifications, or reject the proposed changes. The Commission expects to use quantitative analysis, as appropriate, to help inform the Commission's decision-making on both an ex-ante and ex-post basis.

Commission staff also performs regular reviews of cost-based electric transmission rates. Beginning in FY 2014, Commission staff annually performs a comprehensive review of electric utility formula rates and protocols. Based on the findings of those reviews, the Commission has initiated FPA section 206 proceedings to, among other things, require utilities to make annual informational filings to implement their formula rates. Staff has prepared written guidance that is posted on the Commission's website to assist all utilities in complying with Commission policies on formula rate updates. Staff has devised a plan for monitoring and reviewing such filings in an organized fashion and will continue to review these filings in FYs 2017 and 2018. The Commission will consider what additional steps may be warranted to address any issues identified in the course of this review.

The Commission reviews applications for market-based rate authorizations for the sale for resale of electricity, capacity, or ancillary services by public utilities; for storage services provided by natural gas companies; and for transportation services provided by oil pipelines. The Commission also permits natural gas pipelines to charge negotiated rates, subject to the availability of a cost-based recourse rate. Additionally, the Commission may grant merchant transmission developers authorization to sell transmission services at negotiated rates under certain circumstances. The Commission grants market-based rate authorization where the ability to exercise market power either is not present or has been adequately mitigated and where other conditions are met.

Public utilities and natural gas pipelines that have not been granted market-based rate authority must establish their rates using a cost-based rate structure. Oil pipelines that have not been granted market-based rates may establish their rates using a cost-based rate structure or by filing a sworn affidavit stating that the initial rate is agreed to by at least one non-affiliated person who intends to use a new service. When reviewing cost-based rate proposals, the Commission considers the opportunity to recover investments in energy infrastructure and the fair allocation of costs among ratepayers.

From a broader geographic perspective within the electric industry, the Commission also regularly reviews proposals from regional transmission organizations (RTOs) and independent system operators (ISOs) to reform organized wholesale energy markets to ensure that the dynamics for buying, selling and transmitting energy are robust and working as intended and to promote operational efficiency in wholesale markets. In particular, the Commission engages the RTOs/ISOs and stakeholders to ensure that energy, capacity and ancillary services markets provide appropriate price signals, support market evolution, and provide appropriate opportunities to participate for all eligible resources, including emerging technologies.

In reviewing some filings, the Commission determines that a trial-type evidentiary hearing or other procedures are needed to bolster the factual record on which the Commission will base its decision. In these instances, the Commission recognizes the value of resolving issues through consensual means where possible. Settling cases benefits energy consumers as it dramatically limits the time, expense, and resources that the Commission and outside parties would otherwise devote to litigating these cases. A settlement not only provides ratepayers reduced rates and refunds far more quickly than litigation, but also provides business certainty and facilitates the construction of needed infrastructure in a timely manner. Further, the resolution of a case through settlement is likely to be more acceptable to the parties than a litigated result, and therefore, reduces the likelihood of an appeal. The Commission's administrative law judges (serving as settlement judges), trial staff, and dispute resolution staff all play important roles in resolving matters without full litigation. In instances where a settlement cannot be achieved, the trial staff and the parties develop evidentiary records that the presiding judges and the Commission use to determine just and reasonable, and not unduly discriminatory or preferential, rates, terms, and conditions of service.

In FYs 2017 and 2018, the Commission will continue to dedicate a significant amount of resources to the analysis of rate and tariff filings because of the large number of such filings received annually.

Rate and Tariff Filings by Industry

	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Estimate	FY 2018 Estimate
Electric	6,018	6,054	5,436	6,100	6,100
Gas	1,503	1,634	1,617	1,725	1,725
Oil	770	735	776	750	750

Note: Estimates are based on historical data and expected filings.

Wholesale Energy and Ancillary Services Market Rules

The Commission reviews proposed market rules to ensure just and reasonable rates, terms, and conditions, and to maintain open access for diverse energy resources. In FYs 2017 and 2018, the Commission will review wholesale energy and ancillary services market rules to ensure that they provide efficient price signals and incentivize performance for all eligible resources.

Ancillary services are necessary for the reliable and efficient transmission of electric power. These services, as defined in Order No. 888, include: Scheduling, System Control and Dispatch; Reactive Supply and Voltage Control from Generation Sources; Regulation and Frequency Response; and Energy Imbalance. As the energy mix changes in response to renewable energy portfolio requirements, there is a growing need for ancillary services to support grid functions and the integration of intermittent resources.

In February 2015, the Commission proposed to allow the sale of primary frequency response service at market-based rates by sellers with market-based rate authority for energy and capacity. In November 2015, after reviewing the comments filed in response to its proposal, the Commission issued Order No. 819, *Third-Party Provision of Primary Frequency Response Service*, to foster competition in the sale of primary frequency response service. This final rule permits the sale of primary frequency response service at market-based rates by sellers with market-based rate authority for sales of energy and capacity. The rule promotes competition in anticipation of growing demand for primary frequency response service as a result of a reliability standard that will be enforced beginning December 1, 2016 that requires balancing authorities to meet a minimum frequency response obligation. Primary frequency response service is one of the tools available to ensure reliable operation of the North American electric system.

In November 2015, the Commission proposed to require all new interconnecting generators, including wind generators, to provide reactive power by revising both the pro forma Large Generator Interconnection Agreement (for facilities larger than 20 megawatts) and the pro forma Small Generator Interconnection Agreement (Docket No. RM16-1-000). Reactive power is needed to control system voltage for efficient and reliable operation of the transmission system. The Commission issued the final rule, Order No. 827, in June 2016. The Commission will review filings to comply with the rule in FY 2017.

More recently, the Commission issued two items related to essential reliability services. The Commission issued a final rule, Order No. 828, in July 2016, modifying requirements for newly interconnected small generating facilities to ride through abnormal frequency and voltage events and not disconnect during such events. The Commission will review filings to comply with the rule in FY 2017. Additionally, the Commission issued a notice of inquiry regarding the provision and compensation of primary frequency response in February 2016 (Docket No. RM16-6-000). After reviewing the comments in response to the inquiry, the Commission issued a notice of proposed rulemaking in November 2016. Comments are due in January 2017 with work continuing into FYs 2017 and 2018.

In June 2014, the Commission initiated a proceeding to evaluate issues regarding price formation in the organized wholesale electric energy and ancillary services markets operated by RTOs and ISOs. The goals of proper price formation are to: maximize market surplus for consumers and suppliers; provide correct incentives for market participants to follow commitment and dispatch instructions, make efficient investments in facilities and equipment, and maintain reliability; provide transparency so that market participants understand how prices reflect the actual marginal cost of serving load and the operational constraints of reliably operating the system; and ensure that all suppliers have an opportunity to recover their costs.

The Commission directed its staff to engage in outreach and convene workshops to explore improvements to market designs and operational practices of the organized markets. In September 2014, the Commission convened a workshop to discuss with industry uplift payments in energy and ancillary service markets operated by RTOs and ISOs.

In October 2014, the Commission convened a workshop on technical, operational, and market issues related to offer price mitigation and offer price caps as well as scarcity and shortage pricing in energy and ancillary services markets operated by RTOs and ISOs.

In December 2014, the Commission convened a workshop to address technical, operational, and market issues related to operator actions in energy and ancillary services markets operated by RTOs and ISOs. Following these workshops the Commission solicited additional stakeholder comments on various aspects of price formation in RTO and ISO markets that were discussed at the technical conferences. The Commission has undertaken several actions as described below, with work in this area continuing in FYs 2017 and 2018.

In September 2015, the Commission issued its first proposal on price formation to address practices regarding settlement intervals and shortage pricing that fail to provide appropriate signals for resources to respond to the actual operating needs and properly reflect system conditions. In its Notice of Proposed Rulemaking on Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators (Docket No. RM15-24-000), the Commission proposed to require that each RTO/ISO align settlement and dispatch intervals by settling energy transactions in real-time markets at the same time interval that it prices operating reserves, and that each RTO/ISO trigger shortage pricing for any dispatch interval during which a shortage of energy or operating reserves occurs. In June 2016, the Commission issued the final rule, Order No. 825, largely affirming its initial proposal and requiring that each RTO/ISO: (1) settle energy transactions in its real-time markets at the same time interval it dispatches energy; (2) settle operating reserves transactions in its real-time markets at the same time interval it prices operating reserves; and (3) settle intertie transactions at the same time interval it schedules intertie transactions. The final rule also required each RTO/ISO to trigger shortage pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval. Compliance filings on this rule are due from all six RTO/ISOs by January 2017. The Commission will review filings to comply with the rule in FY 2017.

Concurrent with these rulemakings and as part of the price formation initiative, the Commission issued an order directing reports in November 2015 (Docket No. AD14-14-000). In that order, the Commission directed each RTO/ISO to report on five areas that had the potential to improve price formation. Specifically, the reports focused on pricing of fast-start resources, commitments to manage multiple contingencies, look-ahead modeling, uplift allocation, and transparency. The Commission reasoned that in addition to providing an update on the RTO/ISOs' current practices in the five areas, the reports would assist in identifying best practices that in turn provide incentives to maintain reliability, to facilitate accurate and transparent pricing, to reduce uplift, and for market participants to operate consistent with dispatch signals. Further, the information will also assist the Commission in understanding the reasons why each RTO/ISO has made its policy choices. Each RTO/ISO submitted its report in March 2016 and stakeholders commented on those reports in April 2016.

Based on the reports and the comments on those reports the Commission issued, in December 2016, a notice of proposed rulemaking regarding fast-start resources. The Commission proposed that RTOs/ISOs incorporate the costs of fast-start resources into energy prices to better reflect the marginal cost of serving load when a fast-start resource is needed to serve load. Comments on the proposal are expected in early 2017. The Commission also issued, in January 2017, a notice of proposed rulemaking regarding uplift cost allocation and transparency. Comments on the proposal are expected in early 2017. Related work will continue in FYs 2017 and 2018.

In January 2016, the Commission issued a Notice of Proposed Rulemaking to revise the caps imposed on supply offers in day-ahead and real-time energy markets run by RTOs/ISOs (Docket No. RM16-5-000).

After receiving and reviewing the comments in response to the proposed rule, in November 2016, the Commission issued the final rule, Order No. 831. The final rule requires that market operators cap each resource's incremental energy offer at the higher of $1,000/MWh or that resource's verified cost-based incremental energy offer, and to cap the verified cost-based incremental energy offers used to calculate the locational marginal price (LMP) at $2,000/MWh. Any cost-based incremental energy offer above $1,000/MWh must be verified prior to being used to calculate LMPs to ensure that a resource's cost-based incremental energy offer reasonably reflects that resource's actual or expected costs. The final rule advances two of the Commission's goals with regard to that effort: LMPs will be more likely to reflect the true marginal cost of production when resources' short-run marginal costs exceed $1,000/MWh, and resources will have the incentive to participate in RTO and ISO electricity markets when their short-run marginal costs exceeds $1,000/MWh because they have the opportunity to recover these costs. Adequate investment in resources and resource participation in RTO/ISO energy markets ensure adequate and reliable energy for consumers.

Compliance filings on this rule are due from all six RTOs/ISOs by May 2017. Work is expected to continue into FY 2017 and FY 2018.

Electric Market-Based Rates

In accordance with Order No. 697, the Commission grants market-based rate authorization for wholesale sales of electric energy, capacity, and ancillary services by sellers that can demonstrate that they and their affiliates lack or have adequately mitigated horizontal and vertical market power. In FY 2016, the Commission issued a Final Rule, Order No. 816, to clarify and streamline certain aspects of its market-based rate program for wholesale sales of electric energy, capacity and ancillary services. The changes will increase transparency while continuing to ensure that the program results in market-based rates that are just and reasonable. Among other things, the Final Rule streamlined the program by eliminating a requirement that market-based rate sellers file quarterly land acquisition reports for new generation sites. The Final Rule became effective in January 2016. In FY 2016, the Commission addressed the requests for rehearing of the Final Rule by clarifying a number of requirements for market-based rate filings, such as those related to horizontal market power, wholesale market share and pivotal supplier indicative screens, and the asset appendices required of each market-based rate applicant.

Capacity Markets

The Commission has approved forward-looking, auction-based capacity markets in the PJM Interconnection, L.L.C. (PJM) and ISO New England Inc. (ISO-NE) regions to allow load-serving entities to procure adequate capacity to meet the long-term electricity needs of consumers. In the region operated by the New York Independent System Operator, Inc. (NYISO), the Commission has approved a monthly and seasonal auction-based capacity market. The Midcontinent Independent System Operator, Inc. (MISO) also employs a Commission approved auction mechanism to help meet resource adequacy requirements and the Commission has approved an alternative approach for the California Independent System Operator Corp. (CAISO).

The Commission continually evaluates how the centralized capacity market rules and structures are supporting the procurement and retention of resources necessary to meet future reliability and operational needs established by the regions and the Commission approves auction parameters on a periodic basis for the different regions. The Commission also evaluates changes to capacity markets that accommodate the integration of new technologies and resources with different operating capabilities. Commission staff convened a technical conference (Docket No. AD17-11-000) in May 2017 to discuss the interplay of state policy goals and to examine the relative roles of wholesale energy and capacity markets operated by ISO-NE, NYISO and PJM in shaping the quantity and composition of resources needed to cost-effectively meet future reliability and operational needs. Post-technical conference comments are expected, with work continuing into FY 2017 and FY 2018. While the capacity market mechanisms the Commission approves often vary in design, all are intended to provide the proper price signals to, where appropriate, retain existing efficient resources and encourage the entry of new resources in areas where they are needed to meet electric supply needs.

In 2015, the Commission approved performance enhancement incentives for the PJM capacity market which, to a certain extent, followed incentive improvements to ISO-NE's capacity market approved in 2014. The benefits of these changes will be seen in upcoming delivery years. Capacity markets are an important aspect of wholesale market design and the Commission will be evaluating and monitoring capacity market issues to ensure that both wholesale supply and demand derive the benefits of efficiently operating markets.

Pipeline Rate Review

In FY 2009, the Commission began an in-depth review each year of information filed annually by natural gas pipelines in their financial reports to determine whether the pipelines' returns are just and reasonable. Based on the findings, since FY 2010, the Commission has initiated 14 NGA section 5 actions to determine the justness and reasonableness of existing transportation and storage rates. In FY 2017, the Commission initiated two additional NGA section 5 actions. In FY 2018, the Commission will continue to review the pipelines' financial reports to determine whether the pipelines' returns are just and reasonable. If any pipeline's returns appear to be excessive, the Commission will consider what additional steps may be warranted. Similarly, in FYs 2017 and 2018, the Commission will review the information filed by jurisdictional oil and product pipelines in their financial reports to determine whether these pipeline earnings are just and reasonable. If any pipeline's earnings appear excessive, the Commission will consider what additional steps may be warranted.

The Commission has established an indexing rate methodology that is designed to enable oil pipelines to recover costs by allowing pipelines to raise rates at the same pace as they are predicted to experience cost increases. This oil pipeline indexing rate methodology was established consistent with the Energy Policy Act of 1992. In FY 2016, the Commission completed its five year review of the index and adopted a new index to establish annual rate ceiling levels for oil pipeline rate changes for the period July 1, 2016 through June 30, 2021.

In response to a petition for rulemaking filed by several oil pipeline shippers asking the Commission to require changes to the annual reports filed by oil pipeline companies, in FY 2015, Commission staff held a technical conference to discuss the issues raised in the petition. Subsequently, entities filed comments on the petition. In FY 2016 Commission staff met with stakeholders and reviewed comments on the proposal. In FY 2017, the Commission issued an Advanced Notice of Proposed Rulemaking seeking comment on proposed changes to the Commission's policies for evaluating oil pipeline's indexing rate methodology changes and proposed additions to oil pipeline reporting of data on FERC Form No. 6. Comments were filed in FY 2017, and staff will evaluate the comments and recommend what additional action, if any, the Commission should take in response to the petition.

In FY 2017, the Commission responded to a decision from the U.S. Court of Appeals for the District of Columbia Circuit by issuing a Notice of Inquiry (NOI) regarding the potential for double recovery of tax costs for regulated entities with pass-through taxation, as well as proposed methods to resolve such concerns. Comments were filed in FY 2017, and staff will evaluate and recommend what additional action the Commission should take regarding the taxation issue.

Settlements and Trial-Type Evidentiary Hearings

As noted earlier, some filings lack the necessary facts for summary Commission action. These cases are set for trial-type evidentiary hearings and, in some instances, also for settlement judge procedures. When such cases are set for hearing, presiding judges convene prehearing conferences, resolve discovery disputes, issue subpoenas, and issue orders. During the hearing, judges admit evidence, rule on motions to strike, and in general ensure that there is a full and complete record upon which the judge can issue an initial decision. The Commission's trial staff and the parties conduct comprehensive discovery to develop facts relevant to the issues set for hearing and to create a complete and accurate record for the presiding judges and the Commission. After discovery is complete, Trial staff and the parties file several rounds of expert testimony and exhibits addressing the matters that are the subject of the hearing. In FY 2016, the Commission's trial staff filed 53 pieces of testimony. Thereafter hearings, which can often last over a month, are convened. Following a hearing at which witnesses are cross-examined, trial staff and the parties file briefs addressing the factual, legal and policy issues presented by the proceeding. Thereafter, the presiding judge issues an Initial Decision and further briefs are filed with the Commission by the trial staff and parties, after which the Commission issues its final decision in the case. During FY 2016, the Commission's trial staff filed 49 pre and post hearing briefs. In FY 2016, such proceedings resulted in the issuance of 11 Initial Decisions and 13 Commission opinions or orders on Initial Decisions. Additionally, in FY 2016 two such Commission orders affirming Initial Decisions involved over $2 billion dollars; *BP Pipelines (Alaska) Inc.*, 153 FERC ¶ 61,233 (2015) and *BP America Inc. et al.*, 156 FERC ¶ 61,031 (2016).

The Commission encourages settlements, and the majority of cases result in settlements approved by the Commission as in the public interest. Settlement negotiations frequently take months, often involve numerous highly technical issues, and require a delicate balancing of many different interests. Such settlements result in faster, less expensive resolutions of cases and frequently also earlier refunds and rate reductions to ratepayers. The Commission also benefits because settlements limit the time, expense and resources needed to achieve a fair result for all parties. In FY 2016, there were 89 full or partial settlements in cases set for hearing.

Savings to ratepayers from settlements that occurred in FY 2016 totaled approximately $673 million ($141 million in electric utility matters and $532 million in natural gas pipeline and oil pipeline matters). The bulk of these savings to energy customers will continue in future years, until a subsequent rate case is filed, and thus provide long-term benefits beyond just the savings in FY 2016.

In addition, many matters, docketed and non-docketed, are resolved through the intervention of the dispute resolution staff serving as mediators or facilitators. For example, during FY 2016, the dispute resolution staff (inclusive of the landowner helpline) successfully resolved 46 disputes. One proceeding was successfully resolved through negotiated settlement, but the parties chose to withdraw their filing with the Commission rather than file a settlement agreement.

In FYs 2017 and 2018, the Commission will continue to: (i) scrutinize filings to ensure that customers pay just and reasonable rates that ensure continued access to adequate energy supplies; (ii) actively encourage settlement of proceedings to secure prompt benefits for ratepayers, jurisdictional entities, and the Commission; and (iii) assure fair and thorough hearings of those cases that cannot be resolved through settlement.

Corporate Activities and Mergers

The Commission also takes action to improve competitiveness in wholesale electric markets by preventing the accumulation and exercise of market power as it reviews proposed mergers, dispositions, and acquisitions involving public utilities, thereby ensuring that all such transactions are consistent with the public interest. The Commission ensures that the disposition, consolidation, or acquisition of jurisdictional facilities is in the public interest by reviewing each proposed transaction to determine its potential effect on rates, regulation, competition, and cross-subsidization.

The Commission will protect customers from affiliate abuse and guard against cross subsidization through oversight of public utility holding companies and by dealing with complex issues associated with ownership and control of utility assets.

In FY 2016, the Commission issued a Final Policy Statement in Docket No. PL15-3-000 clarifying the Commission's implementation of hold harmless commitments under Section 203 of the Federal Power Act. The policy statement provided guidance in four areas related to hold harmless commitments: (1) the scope and definition of the costs that should be subject to hold harmless commitments; (2) controls and procedures to track the costs from which customers will be held harmless; (3) the continued acceptance of hold harmless commitments that are limited in duration; and (4) clarification that applicants may offer another form of ratepayer protection mechanism in the place of a hold harmless commitment, and that a hold harmless commitment (or other ratepayer protection) may be unnecessary for some categories of transactions. The Final Policy Statement became effective in August 2016.

In FY 2016, the Commission issued a NOI in Docket No. RM16-21-000 seeking to harmonize its analysis of section 203 transactions with its market-based rate analysis under section 205 of the FPA. Specifically, the Commission requested comments on the potential benefits of expanding the Commission's section 203 analysis to include both a pivotal supplier screen and a market share analysis, similar to the preliminary screens used to evaluate requests for market-based rate authorization, to assess whether the merged entity would have the potential ability to exercise horizontal market power after the transaction has been consummated. The NOI also asked for comments on whether a bright line market share threshold should be established to determine whether a transaction's impact can be determined to be *de minimis* and, if so, how that threshold should be calculated. In addition, the NOI requested comments on how the Commission should analyze so called "serial *de minimis*" transactions in which an entity makes incremental acquisitions of generating capacity that cumulatively could lead to market power, but where no individual transaction raises a competitive concern. Commission staff's consideration and processing of the NOI comments, which were filed in November and December 2016, is underway.

Electric Transmission and Open Access

The Commission requires all public utilities that own, control or operate facilities used for transmitting electric energy in interstate commerce to file open access non-discriminatory transmission tariffs. Open access transmission tariff reform contributes to the Commission's goal of removing impediments to competition in the wholesale bulk power marketplace and bringing more efficient, lower cost power to the Nation's electricity consumers. The Commission will continue to evaluate and make improvements to the open access transmission tariff through FYs 2017 and 2018, as needed.

Increasingly, the Commission is asked to approve requests from prospective developers of transmission facilities based on non-traditional business models, including merchant transmission development. In FY 2013, the Commission issued a policy statement which clarified and refined policies governing the allocation of capacity for new merchant transmission projects and new non-incumbent, cost-based,

participant-funded transmission projects. In May 2014, the Commission initiated a rulemaking proceeding to revisit its rules governing the use of capacity on facilities interconnecting generating units to the transmission grid. In March 2015, the Commission issued Order No. 807, a final rule to remove regulatory inefficiencies and burdens by granting a blanket waiver from Open Access Transmission Tariff requirements to public utilities that would only be subject to those requirements because of their ownership, control, or operation of Interconnection Customer's Interconnection Facilities. The Commission will continue to act on applications by merchant transmission project developers applying the policies as clarified in the policy statement in FYs 2017 and 2018.

In May 2016, the Commission convened a technical conference to discuss certain interconnection issues related to a petition for rulemaking (Docket No. AD14-8-000) as well as other interconnection issues identified by Commission staff. The technical conference focused on five interconnection topics: (1) the current state of generator interconnection queues; (2) transparency and timing in the generator interconnection process; (3) certainty in cost estimates and construction time; (4) other interconnection queue coordination and management issues; and (5) interconnection of electric storage resources. Subsequently, the Commission requested and received post-technical conference comments. Upon consideration of these issues and based in part on the input provided in comments and at the technical conference, the Commission proposed reforms to the interconnection processes in a notice of proposed rulemaking in December 2016. In that notice, the Commission generally proposed reforms falling into three broad categories, which are intended to: (1) improve predictability in the interconnection process; (2) improve transparency by providing more information to interconnection customers; and (3) enhance the interconnection process. Comments were received in April 2017. Sixty-four comments were filed. Work is continuing into FY 2017 and FY 2018.

Electric Transmission Planning

Although ownership of the interstate transmission grid is highly disaggregated, with more than 500 owners, transmission planning must be considered not only on a local basis, but also on a regional basis. To ensure that needed transmission is developed with the interests of all stakeholders in mind, the Commission requires that all public utility transmission providers establish and participate in open and transparent regional transmission planning processes. These processes aim to improve the coordination of transmission planning among utilities and to support the development of an efficient transmission system, facilitating competitive markets by reducing barriers to trade between markets and among regions.

Following an extensive rulemaking process, the Commission issued Order No. 1000 in July 2011, Order No. 1000-A in May 2012, and Order No. 1000-B in October 2012. This rulemaking was designed to correct deficiencies in transmission planning processes and to ensure that Commission-jurisdictional transmission services are provided at just and reasonable rates and on a basis that is just and reasonable and not unduly discriminatory or preferential. Specifically, Order No. 1000 requires public utility transmission providers to improve transmission planning processes and allocate costs for new transmission facilities to beneficiaries of those facilities, thereby aligning transmission planning and cost allocation. The Order No. 1000 transmission planning reforms require each public utility transmission provider to participate in a regional transmission planning process that produces a regional transmission plan and provides for consideration of transmission needs driven by public policy requirements established by local, state or federal laws or regulations. Order No. 1000 also requires that each public utility transmission provider participate in a regional transmission planning process that has a regional cost allocation method that meets six cost allocation principles for the cost of new transmission facilities selected in a regional transmission plan for purposes of cost allocation. In addition, Order No. 1000 establishes interregional coordination and cost allocation requirements for public utility transmission providers in neighboring transmission planning regions. The rule also promotes competition in regional transmission planning processes by removing from Commission-approved tariffs and agreements a federal right of first refusal for transmission facilities selected in a regional transmission plan for purposes of cost allocation, subject to certain limitations.

Public utility transmission providers in all of the proposed Order No. 1000 transmission planning regions submitted their compliance filings addressing the Order No. 1000 requirements in FY 2013. In FY 2013, the Commission issued orders addressing all of the initial regional compliance filings and requiring further compliance filings. In FY 2014, the Commission addressed the requests for rehearing of the orders addressing the initial regional compliance filings and the second round of regional compliance filings. In FY 2015, the Commission issued orders addressing the requests for rehearing of the second round of regional compliance orders and the third round of regional compliance filings, as well as a few of the fourth round of regional compliance filings. In addition, in FY 2015 the Commission addressed the compliance filings made to address the interregional requirements to ensure they meet the requirements of Order No. 1000, and addressed further regional compliance filings. In FY 2016, the Commission issued final compliance orders for all but one of the regional compliance filings and all but one of the interregional compliance filings. In FY 2017, the Commission issued a final compliance order on the last pending interregional compliance filing. The Commission will address the one pending regional compliance filing in FY 2017 or FY 2018. The Commission will also continue to monitor the implementation of the transmission planning reforms adopted in Order No. 1000 to evaluate their effectiveness in FYs 2017 and 2018.

During FY 2015, staff attempted to develop a range of objective and standardized measures of various characteristics of the electric system and its performance to help assess the effectiveness of the Commission's policies in achieving its goals regarding transmission investment and to inform potential policy revisions going forward. These metrics were described by staff in their presentation at the April 2015 open Commission meeting (Docket No. AD15-12-000). Staff considered a range of potentially relevant metrics in three broad categories: (1) metrics designed to evaluate key goals of Order No. 1000; (2) metrics designed to indicate whether appropriate levels of transmission infrastructure exist in a particular region; and (3) metrics designed to permit analysis of the impact of Commission policy changes by comparing key values before and after these changes take place. In March 2016, staff released a report and presented on the initial results of these metrics. In FY 2017, staff will refine the metrics and data used to calculate the metrics.

In addition, in June 2016, the Commission held a technical conference to explore issues related to the competitive transmission development processes, including but not limited to, the use of cost containment provisions, the relationship of competitive transmission development to transmission incentives, and other ratemaking issues as well as issues relating to interregional transmission coordination, regional transmission planning and other transmission development issues (Docket No. AD16-18-000). The Commission requested and received post-technical conference comments. Commission staff is reviewing the comments and expects to continue to explore these issues in FY 2017.

Energy Imbalance Market

In FY 2014, the Commission approved CAISO's implementation of an Energy Imbalance Market allowing neighboring balancing area authorities in the western states to participate in the imbalance energy portion of CAISO's real-time market. The Commission continues to work with CAISO and the Energy Imbalance Market participants to address problems as they arise, and to approve appropriate market design improvements which address identified deficiencies. In May 2015, the Commission conditionally accepted NV Energy's tariff provisions to allow for its participation subject to further compliance obligations. NV Energy began participating in the Energy Imbalance Market in December 2015. In April 2016, the Commission conditionally accepted Puget Sound Energy and Arizona Public Service Company's respective tariff provisions to facilitate their participation in the Energy Imbalance Market. Both entities commenced participation in October 2016. In 2016 and 2017, Portland General Electric Company, Idaho Power Company, Seattle City Light, Salt River Project, and the Balancing Authority of Northern California and the Sacramento Municipal Utility District all entered into implementation agreements with CAISO to join the Energy Imbalance Market and are expected to file tariff provisions with the Commission to facilitate their participation. Portland General Electric Company is slated to join the market in October 2017, followed by Idaho Power in April 2018. The Commission will continue to monitor the implementation, performance and integration of existing and new balancing authority areas participating in the Energy Imbalance Markets as well as any enhancements CAISO proposes to its current Energy Imbalance Market design and processes in FYs 2017 and 2018.

Barriers to Efficient Trading Between Markets

The Commission seeks to identify and remove barriers to efficient trading between regional markets to ensure that trades result in just and reasonable rates. To this end, the Commission in several proceedings is considering issues related to seams between organized wholesale energy markets. For example, at the June 2013 Commission meeting, PJM, MISO, the Organization of MISO States, the Organization of PJM States, and the independent Market Monitors of each RTO made presentations to the Commission on efforts to identify and address any barriers to trade between the PJM and MISO markets through the PJM/MISO Joint and Common Market process. At the meeting, the Commission encouraged PJM, MISO, and their stakeholders to develop an action plan for addressing any barriers to trade between the PJM and MISO markets. In September 2013, PJM and MISO submitted to the Commission a work plan developed with their stakeholders for addressing various initiatives to promote greater coordination of their market operations, through their Joint and Common Market process. In December 2013, the Commission issued an order addressing the proposed work plan and directed staff to participate in the RTOs' Joint and Common Market meetings to aid the Commission in monitoring the RTOs' progress in addressing the initiatives. Consistent with that directive, staff attended these meetings and provided feedback to the Commission regarding progress being made. The Commission invited PJM and MISO, their respective market monitors and state commissioner representatives from both regions to provide a status report at the Commission's January 2015 Commission meeting. In February 2015, the Commission issued an order requesting that PJM, MISO, and their independent market monitors provide further information on certain specific initiatives being addressed in the Joint and Common Market process, and provided an opportunity for interested parties to comment on the information provided by PJM, MISO, and their independent market monitors. As a result of the Commission's monitoring and encouragement, PJM and MISO have developed, and the Commission has accepted, solutions to specific problems noted in the work plan. In April 2016, the Commission issued an order approving a proposal to implement Coordinated Transaction Scheduling between MISO and PJM. MISO and PJM agreed to define a common interface that would be used to calculate prices for interchange transactions. This will result in both PJM and MISO using the same methodology to price energy imported into their respective RTOs. Previously, MISO and PJM had been using different methodologies to price imported energy, resulting in a variety of market inefficiencies. Currently, the Commission is reviewing this information concerning any remaining issues to understand what, if any, additional steps it should take to improve the efficiency of operations at the PJM/MISO seam.

Another example of Commission consideration of such issues is found in several proceedings that involve the seam between MISO and the Southwest Power Pool (SPP). In FY 2016, the Commission accepted an offer of settlement that resolved a long-standing dispute between MISO and SPP over such issues.

The Commission will continue to seek to identify and address barriers to efficient trade between markets as appropriate during FYs 2017 and 2018.

Removing Barriers to Electric Storage Resources Meeting Wholesale Needs

Commission staff has been examining the use of electric storage resources to help meet wholesale electricity needs for some time. In 2010, staff issued a request for comments regarding rates, accounting and financial reporting for new electric storage technologies. Commission staff has also continued to conduct informal outreach on electric storage issues and has addressed electric storage issues in certain cases. In addition, there have also been some key developments in the technology and cost-effectiveness of electric storage resources. At the November 19, 2015 Commission meeting, the Commission hosted an energy storage panel to discuss developments in the electric storage industry and the participation of electric storage resources in the RTO and ISO markets. In light of these developments, staff is examining whether barriers exist to the participation of electric storage resources in the capacity, energy, and ancillary service markets in the RTOs and ISOs potentially leading to unjust and unreasonable wholesale rates.

On April 11, 2016, Commission staff issued data requests to each of the six RTOs/ISOs, seeking information about the rules in their markets that affect the participation of electric storage resources. Staff requested information related to (1) the eligibility of electric storage resources to participate in the capacity, energy and ancillary service markets in the RTOs/ISOs; (2) the technical qualification and performance requirements for market participants; (3) the bid parameters for different types of resources; (4) opportunities for distribution-level and aggregated electric storage resources to participate in the markets; (5) the treatment of electric storage resources when they are receiving electricity for later injection to the grid; and (6) any forthcoming rule changes or other stakeholder initiatives that may affect the participation of electric storage resources in the RTO/ISO markets (AD16-20-000). Concurrently, staff issued a request for comments, seeking comments on whether barriers exist to the participation of electric storage resources in the capacity, energy, and ancillary service markets in the RTOs and ISOs that potentially lead to unjust and unreasonable wholesale rates. Staff received responses from the RTOs/ISOs on May 16, 2016 and comments from the public on

June 6, 2016. Based on the responses to the data request and the comments on those responses, on November 17, 2016, the Commission issued a notice of proposed rulemaking that proposes to require each RTO/ISO to revise its tariff to: (1) establish a participation model consisting of market rules that, recognizing the physical and operational characteristics of electric storage resources, accommodates their participation in the organized wholesale electric markets, and (2) define distributed energy resource aggregators as a type of market participant that can participate in the organized wholesale electric markets under the participation model that best accommodates the physical and operational characteristics of its distributed energy resource aggregation (Docket No. RM16-23-000). Comments on the proposed rule were received in February 2017 with related work continuing into FYs 2017 and 2018.

On November 9, 2016, Commission staff held a technical conference (AD16-25-000) to discuss the utilization of electric storage resources as transmission assets compensated through transmission rates, for grid support services that are compensated in other ways, and for multiple services. Commission staff received post-technical conference comments in December 2016. Based on the technical conference and the post-technical conference comments, the Commission issued a policy statement, Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery (Docket No. PL17-2-000), in January 2017.

Gas-Electric Coordination

Due to historically low natural gas prices, environmental considerations, and other factors, the electric industry has become increasingly reliant on natural gas as a fuel for generation. Since 2012, the Commission has been exploring the interdependencies of these industries.

In March 2014, the Commission initiated steps to improve the coordination and scheduling of natural gas pipeline capacity with electricity markets, culminating in a final rule, Order No. 809, issued in April 2015. Order No. 809 adopted North American Energy Standards Board (NAESB) standards to revise the interstate natural gas nomination timeline. The Commission also revised its regulations to provide additional contracting flexibility to firm natural gas pipeline transportation customers through the use of multi-party transportation contracts. In FY 2016, the Commission addressed the Order No. 809 compliance filings interstate pipelines were required to submit. In Order No. 809, the Commission also asked that "the gas and electric industries, through NAESB, explore the potential for faster, computerized scheduling when shippers and confirming parties all submit electronic nominations and confirmations, including a streamlined confirmation process if necessary." Subsequently, on rehearing, the Commission asked "the industry to begin considering such standards and to submit standards or a report on the development of such standards by October 17, 2016." NAESB submitted a status report on these efforts in October 2016 and in March 2017. The March 2017 report informed the Commission that NAESB was unable to garner the requisite support from stakeholders to develop standards. At this time, nothing further is expected from NAESB to respond to the Commission's request in Order No. 809.

An increased dependence on natural gas for electric generation in several regions has necessitated discussions about different regions' efforts in ensuring adequate and reliable power supply during winter. In addition to April 2014 technical conference mentioned above, the Commission hosted panel discussions with all the RTOs and ISOs at its September 2015 and October 2016 meetings to increase its awareness of the RTOs/ISOs' work in improving their system operations and the performance of their markets in preparation for upcoming winters.

Smart Grid

The Commission continues to encourage the efficient operation of the electric grid, which includes the development of a smart grid. The smart grid concept involves automating the electric grid by outfitting it with smart controls and two-way communications systems. These technologies have the potential to reduce power consumption through demand response, and to improve grid reliability.

The EISA provides roles for NIST and the Commission with respect to development of smart grid interoperability standards. Section 1305 of the EISA directs the Commission to determine if NIST's work in this area has led to sufficient consensus on smart grid interoperability standards and, if so, to initiate a rulemaking through which it may adopt standards and protocols developed by the NIST process to govern the implementation of smart grid technologies. In FYs 2017 and 2018, the Commission will monitor the development of interoperability standards in the NIST framework process and evaluate standards as appropriate to determine whether there is sufficient consensus for adoption.

Performance Goal 1.1.1

Reduce Interchange Flows that are Uneconomic

Description

The percentage change in uneconomic interchange flows (i.e., electricity flowing from a high-cost market to a low-cost market) between adjacent organized markets is one indication of market inefficiency. The extent to which interchange flows instead move in the economic direction from a low-cost market to a high-cost market is one indicator of the Commission's success in accomplishing Objective 1.1 of the Commission's Strategic Plan, which focuses on ensuring just and reasonable rates, terms and conditions.

The reported percentage change for this measure represents the change in the degree to which participants in adjacent organized markets schedule uneconomic interchange. Positive values reported for percentage change indicate that the uneconomic interchange flows increased from the previous year, while negative values reported indicate that uneconomic interchange flows decreased. Since decreases in uneconomic interchange flow are desired, negative values for this measure are desired. As organized markets increase coordination and implement policies and rules that better promote efficiency between adjacent organized markets and remove incentives to schedule uneconomic interchange, the percentage change in uneconomic interchange flow should become negative. However, realistic expectations for improvements from policies that can be implemented from year to year are limited. In fact, there are likely declining marginal returns to such policies, such that the less costly and/or most effective policies are implemented first, and subsequent policies have marginally less effect. As such, this document sets a target for year-over-year improvement, but does not expect the rate of improvement to increase every year.

Fiscal Year	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percentage change in uneconomic interchange flows	-2.98%	-1.99%	1.54%[2]	-2.12%[3]	-3.08%[4]	-1.25%	-1.25%	-1.25%

FY 2016 Target: Met

Analysis

The frequency of economic flows improved on all the measured interfaces, particularly the interface between the SPP and the MISO, which reflects the effects of operating experience and changes in market rules. A particular change was the agreement SPP and MISO reached to manage flows between MISO South and MISO Classic, which affects interface flows between SPP and MISO (and others). On the interface between the ISO-NE and NYISO, Coordinated Transaction Scheduling was implemented, which provided a way to more efficiently schedule hourly interface transactions. Additionally, the Joint and Common Market process between PJM and MISO has continued, which has worked to smooth issues regarding inter-RTO scheduling between those markets. During 2016, Day-Ahead Firm Flow Entitlement Exchange was approved on the PJM-MISO interface, which should help better align the day-ahead and real-ahead markets and increase economic flows.

[2] The FY 2014 value was updated since last year's report to reflect the actual (1.54 percent) versus the preliminary number (1.09 percent). A preliminary number is used because that number was calculated in November, a few months before the RTOs and ISOs finalized their numbers. The RTOs and ISOs usually finalize their numbers the following January.

[3] See previous footnote. The preliminary number was -1.76 percent. The -2.12 percent is now final.

[4] FY 2016 results are final because they were updated in January 2017.

Performance Goal 1.1.2

Participation of stakeholders in regional transmission planning meetings

Description

The measure captures the level of participation of stakeholders in regional transmission planning meetings. Recognizing the importance of transmission planning, the Commission issued Order No. 1000, which requires public utility transmission providers to collaborate in regional transmission planning and take steps to encourage participation by all stakeholders in those planning activities. This measure provides an indication of the potential effectiveness of Order No. 1000 in encouraging greater participation in the regional transmission planning process, which could result in more efficient and cost-effective transmission solutions.

Fiscal Year	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Average attendance across all the regions	Data not available	111.6	275.4	111.6	111.6	111.6

FY 2016 Target: Met

Analysis

Staff estimates a measure of the annual level of participation based on the number of participants attending regional transmission planning meetings. To calculate the level of participation, staff calculated an average attendance number across all the regions based on the total number of stakeholders[5] attending the various meetings that staff monitored in each region during FY 2016 divided by the number of regions. The average attendance across all the regions for FY 2016 was 275.4 with the target figure for FY 2016 at 111.6. Averaging the attendance numbers for the various meetings monitored by staff is a more accurate reflection of attendance than a simple count because stakeholder participation fluctuates between meetings held at different times in the transmission planning cycles. The Order No. 1000 monitoring effort began in earnest during FY 2015. Monitoring for most regions covered only the last nine months of FY 2015 because, during the first part of FY 2015, the Commission was still in the process of addressing the final regional compliance proposals. Staff monitored 74 meetings during FY 2016 and expects to monitor at least the same number of meetings in FY 2017. Staff found that the stakeholders were active and engaged in the Order No. 1000 process. Staff attributes the substantial increase in average attendance partly to the fact that the monitoring effort covered more transmission planning meetings during FY 2016 (74 vs. 41 in FY 2015), but mainly to the continuing progress that the transmission planning regions are making in implementing Order No. 1000. Regions began to place projects out for competitive bidding and stakeholders actively participated, including meeting with Commission staff to express their concerns over the Order No. 1000 processes in their regions.

As the Order No. 1000 transmission planning meetings continue, the target for this measure is expected to stay the same. The FYs 2017 and 2018 targets are based on the Commission's belief that the Commission's Order No. 1000 efforts will lead to a consistent base level of stakeholders in regional transmission planning meetings. While effective transmission planning requires at least a base level of participation, it does not require 100 percent participation. Although the Commission anticipates a consistent base level required for effective planning and targets the same average participation, the Commission anticipates that attendance for each region will vary based on size and interest by non-incumbents. In particular, Commission staff has found from its monitoring during FY 2015 and FY 2016 that attendance by stakeholders at the transmission planning meetings is greater in the regions with regional transmission organizations or independent system operators.

[5] Representatives from the same entity are counted as one participant at a particular meeting regardless of the number of representatives in attendance.

Performance Goal 1.1.3

Cases resolved by settlements

Description

In reviewing some filings, the Commission determines that a trial-type evidentiary hearing or other procedures are needed to bolster the factual record on which the Commission will base its decision. In these instances, the Commission recognizes the value of resolving issues through consensual means where possible. Settling cases benefits energy consumers by dramatically limiting the time, expense, and resources that the Commission and outside parties would otherwise devote to litigating these cases. A settlement not only provides ratepayers reduced rates and refunds far more quickly than litigation, but also provides business certainty and facilitates the construction of needed infrastructure in a timelier manner. Further, the resolution of a case through settlement is likely to be more acceptable to the parties than a litigated result, and therefore reduces the likelihood of an appeal. While the majority of cases set for hearing in any given fiscal year traditionally have settled, many factors affect the percentage of cases settled in a given fiscal year. These include: i) the type and complexity of issues presented; ii) whether the issues are novel or have been addressed by the Commission in the past; and iii) the parties' willingness to settle.

Fiscal Year	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percentage of cases set for hearing, settlement procedures or otherwise resolved by settlements	Data not available	78.4%	92.4%	89.1%	75%	75%	75%

FY 2016 Target: Met

Analysis

The Commission met the target goal for achieving settlements of 75 percent during FY 2016. Ninety cases were settled (73 full settlements, 16 partial settlements, and 1 settlement negotiation resulting in withdrawal in a docketed proceeding) out of 101 resolved cases during the fiscal year.

Objective 1.2

Increase compliance with FERC rules; detect and deter market manipulation.

Oversight and enforcement are essential tools for ensuring that rates, terms and conditions of service are just, reasonable, and not unduly discriminatory or preferential. Whereas regulatory and market means focus on establishing rules and policy, oversight and enforcement focus on increasing compliance of regulated entities and detecting and deterring market manipulation. The Commission's oversight and enforcement program takes proactive steps to detect problems in energy markets and to reduce the probability that violations of applicable laws, the Commission's regulations, or market rules will occur. FERC uses a balanced approach to oversight and enforcement efforts: conduct surveillance and analysis of market trends and data; promote internal compliance programs; employ robust audit and investigation programs; and, when appropriate, exercise the Commission's civil penalty authority to deter violations. FERC also makes certain market data transparent to the public and market participants so that market efficiency is promoted and anomalies and areas of concern may be identified and reported. Two staff white papers were issued in November 2016: *White Paper on Effective Trading Compliance Practices* and *White Paper on Anti-Market Manipulation Enforcement Efforts Ten Years after EPAct*. At the same time, the Office of Enforcement issued its tenth annual Report on Enforcement.

Market Oversight

Today's evolving natural gas and electric markets require increasingly sophisticated data collection and analysis for effective oversight. Both natural gas and electric energy are traded in a variety of ways in a variety of markets which range from extremely complex transactions, requiring in-depth and time consuming data analysis, to relatively straightforward one-to-one transactions. The Commission examines and monitors many elements of the physical energy markets, including the structure and operations of, and interaction between, the natural gas and electric markets, among other things. This regular monitoring of energy markets is designed to maintain market intelligence to identify market anomalies and potential misbehavior, and to promote market efficiency.

Market Monitoring and Surveillance

On an ongoing basis, Commission staff accesses and synthesizes a large variety and quantity of data to review market fundamentals, identify emerging trends, and perform ex-post analysis of market-based rate authorizations and approved mergers and acquisitions. Commission staff reviews this information and develops intelligence on market events as they occur. Analyses of market data also create the ability to identify market outcomes that cannot be readily explained by supply and demand fundamentals. The Commission examines such anomalies to determine, among other things, whether they are indications of market power, or possible fraud or manipulation.

In an effort to improve the Commission's ability to identify market misbehavior as it happens, Commission staff continues the use of algorithmic screening methods to identify potential inappropriate market participant activity. This expanded screening allows the Commission to incorporate data already generated in the markets to more acutely determine market health. To enhance this ability, the Commission collects detailed market-participant level activity data from the RTOs, pursuant to Order No. 760. Commission staff also performs detailed transaction analysis throughout the lifecycle of market manipulation investigations. This forensic analysis, which requires the assessment of millions of lines of sensitive data, allows the Commission to create a complete picture of the trading activities under review. Commission staff is using natural gas market modeling software to aid in uncovering market participant behavior that may be of interest from an enforcement or market efficiency standpoint and is developing the same capability with electric market software that will also aid the Commission in understanding the interplay between the gas and electric markets. The Commission has also commenced an initiative to integrate the different public and non-public market data that it utilizes in an effort to (1) increase usability and accessibility of the data for Commission staff, (2) enhance the insights that can be gathered from the data; and (3) increase the efficiency of the Commission's surveillance and market oversight functions so that it can more quickly detect and prevent misconduct. The models and data integration effort will help the Commission achieve the next level of providing robust market oversight and surveillance.

Commission staff also creates detailed market analytical reports that cover various aspects of energy market dynamics and provide timely evaluations of market conditions.

Outreach and Communication

Commission staff develops and presents its analyses, the annual State of the Markets Report, and seasonal assessments at the Commission's open meetings and subsequently posts this information on the Commission's website.

Commission staff develops and posts on the Commission website various graphs and charts providing the public with easy access to market fundamentals. This process provides the public and state regulators access to and understanding of market information that they may not otherwise obtain and affords the Commission the opportunity to learn of relevant state and regional developments.

In November 2015, Commission staff publicly issued an updated version of its "Energy Primer: A Handbook of Energy Market Basics."

Commission staff is also in frequent communication with jurisdictional entities to ensure they have adequate support for timely and accurate fulfillment of mandatory reporting requirements.

Transparency

In order to meet its statutory obligations under the Federal Power Act, the Natural Gas Act, and the Interstate Commerce Act, the Commission requires that companies participating in markets under its jurisdiction submit annual and quarterly reports regarding jurisdictional sales, financial statements, and operational data. This information is used by the Commission and market participants for a variety of purposes, including evaluating whether existing rates continue to be just and reasonable and for indications that public utilities have obtained market power.

Of particular note is the Electric Quarterly Report, which provides the Commission and the public a record of each transaction under the Commission's jurisdiction in the electric market. Electric Quarterly Report filings are used for ex-post analysis of entities with market based rate authority. Commission staff analyzes the Electric Quarterly Report data to identify participant level activities in the electric market. Commission staff is currently enhancing aspects of the ex-post analysis to include use of other data streams to create a more comprehensive analysis. Commission staff evaluates participants that have triggered flags indicative of market power.

Commission staff is developing a process to replace its current filing format for many of the forms submitted by industry. The new process will replace software that has size and accessibility limitations and will promote continued transparency of the Commission's publicly reported data. The Commission continues to improve the Electric Quarterly Report filing process and alert industry of minor and non-material changes to its Electric Quarterly Report filing requirements by issuing notifications on the Commission's website and sending emails to filers that explain any changes.

Audits

The Commission will continue to use audits to work actively to identify and appropriately address areas of risk. The Commission conducts a variety of audits including, but not limited to, compliance, operational, and financial audits. These audits are undertaken to ensure that jurisdictional companies comply with the Commission's authorizing statutes, orders, rules, and regulations. Also, audits of jurisdictional entities are performed to address accountability, transparency, and any other objectives and goals of the Commission. To enhance industry compliance, the Commission staff reviews jurisdictional entities' compliance programs and provides guidance on enhancing

these programs. The Commission will continue to use a risk-based approach in the preparation of its annual audit plan to address areas of highest priority identified by the Commission.

In FY 2016, the Commission completed 14 audits of public utilities and natural gas pipelines. These audits resulted in 214 recommendations for corrective actions and directed $5.3 million in refunds and recoveries. The recommended corrective actions improve and strengthen jurisdictional companies' compliance programs. The major topic areas of the Commission's FY 2017 audits and those anticipated for FY 2018 include: RTOs/ISOs, formula rates, market-based rates, reliability, affiliated transactions, open access transmission tariffs, gas pipeline tariffs, oil pipeline carriers, mergers and accounting and reporting audits.

Implementation of Recommendations

The Commission continues to stress the importance of timely implementation of audit recommendations. Prompt implementation of recommendations ensures that potential risks or negative impacts of noncompliance are minimized and any refunds are promptly returned. Timely implementation of recommendations also demonstrates a commitment to improve compliance with FERC precedents and strengthen regulatory operations and internal compliance programs. Finally, timely implementation evidences a stronger compliance culture within a company, lowering the risk of future noncompliance.

Outreach

The Commission continues to stress the importance of having a robust compliance program and the timely implementation of audit recommendations, and to discuss trends of noncompliance at industry conferences, meetings, and speaking engagements and in the annual Report on Enforcement. The Commission will continue to engage in formal and informal outreach efforts to promote effective compliance programs and work to ensure that jurisdictional companies properly implement recommended corrective actions.

As a result of these efforts, the Commission anticipates that potential risks of noncompliance will be minimized and any refunds will be promptly issued. The Commission further expects that emphasizing prompt implementation of recommendations and robust compliance programs will lead to a greater culture of compliance and will lead to entities actively addressing and minimizing areas of systematic noncompliance. In support of these goals, the Commission will strive for prompt implementation of the recommendations in its reports.

Accounting

The Commission processes accounting filings and analyzes accounting matters in other filings submitted by regulated entities to ensure compliance with Commission accounting and related financial reporting regulations and to bolster the accuracy, transparency, and usefulness of accounting information for the Commission, regulated entities, and interested parties in the development and oversight of rates. The Commission's accounting program is an instrumental component in ensuring that rates established for jurisdictional companies are just and reasonable and not unduly discriminatory or preferential. The program is designed to evaluate financial, market, and other information filed or reported to the Commission for compliance with the Commission's accounting rules. Additionally, the program will modify its accounting and financial reporting rules, as necessary, to support the development and oversight of rates. The accounting function also is engaged in, and informs the Commission of, emerging accounting issues that affect jurisdictional industries, such as changes in U.S. Generally Accepted Accounting Principles and International Financial Reporting Standards. The Commission also provides informal accounting guidance related to various aspects of Commission accounting, financial reporting, and record retention regulations. These inquiries come from jurisdictional entities, industry stakeholders, and consultants, as well as through the Commission's Compliance Help Desk, Office of External Affairs, Enforcement Hotline, and other Commission offices.

Outreach and Communication

The Commission is also actively engaged in emerging accounting issues that affect jurisdictional industries such as changes to U.S. Generally Accepted Accounting Principles related to accounting for revenues, leases, and employee pensions; the International Accounting Standards Board's project on Rate-Regulated Activities; and the impacts of changes to the natural gas and oil industries related to pipeline integrity management testing requirements imposed by other regulators. The Chief Accountant and other Commission staff also regularly engage in informal meetings with representatives of the regulated industries to discuss relevant accounting topics and Commission actions. Additionally, topics of wide generic interest to the industries are highlighted in the annual Report on Enforcement to better inform them of areas of high risk of noncompliance that the Commission addressed in the current fiscal year.

Investigations

In FYs 2017 and 2018, the Commission will continue to focus on the following investigation and enforcement priorities:

- Fraud and market manipulation;
- Anticompetitive conduct;
- Serious violations of Reliability Standards; and
- Conduct that threatens the transparency of regulated markets.

Conduct involving fraud and market manipulation poses a significant threat to the markets overseen by the Commission and, therefore, to the Commission's efforts to ensure just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions. Further, anticompetitive conduct and behavior that threatens market transparency undermines the confidence that market participants and consumers have in the energy markets.

While most market participants act in good faith and observe the relevant rules and regulations, there are instances in which some participants engage in manipulative behavior or violate known requirements when it is in their economic interest to do so. When such instances are suspected or identified, Commission staff conducts an investigation.

While investigations are non-public activities, the Commission provides guidance to the regulated community where possible, including in the Annual Report on Enforcement. The Commission staff also has regular interactions with regulated entities, conducts outreach efforts, encourages companies to implement effective compliance programs, and releases reports of investigations of alleged fraud or manipulation, when appropriate. Moreover, if Commission staff finds a violation after a non-public investigation, matters become public through a notice of alleged violations, an order approving settlement or an order to show cause. These actions, and the Commission's demonstrated willingness to impose civil penalties or other sanctions where circumstances warrant, act as a deterrent to fraud, market manipulation and other violations. During FY 2016, the Commission approved settlements in six investigative matters. These FY 2016 settlements included over $12.25 million in civil penalties and nearly $5.7 million in disgorged unjust profits plus interest. The Commission also issued Orders Assessing Civil Penalties in two Federal Power Act-related investigations, ordering assessed civil penalties of over $40.5 million and disgorgement of unjust profits plus interest of over $4.4 million. The Commission also issued an Order to Show Cause under the Natural Gas Act in a third matter captioned Total Gas & Power North America, Inc., S.A. Total Gas & Power, Ltd., Aaron hall, and

Therese Tran f/k/a Nguyen, with proposed civil penalties totaling $216 million and disgorgement of $9.18 million. The related reports and responses are pending before the Commission.

In addition, the Commission, on July 11, 2016, affirmed an Initial Decision from an Administrative Law Judge following an investigation of BP America, Inc. for alleged market manipulation involving natural gas trading, ordering BP to pay $20.16 million in civil penalties and disgorgement in the amount of $207,169. That decision is pending rehearing at the Commission. Currently pending in federal district court are reviews of Orders Assessing Civil Penalties issued in FY 2013 against Barclays Bank, PLC and some of its traders for engaging in market manipulation involving the trading of electricity contracts, and against Richard Silkman and Competitive Energy Services, LLC, for fraud in participation in an RTO's demand response program. Also pending in federal district court are reviews of Orders Assessing Civil Penalties issued in FY 2015 against Houlian Chen, Powhatan Energy Fund, LLC, HEEP Fund, LLC, and CU Fund, Inc. for fraud in the collection of marginal loss surplus allocation payments in PJM energy markets; and against City Power Marketing, LLC and K. Stephen Tsingas, also for fraud in the collection of marginal loss surplus allocation payments in PJM energy markets. In addition, district courts are reviewing Orders Assessing Civil Penalties issued in FY 2016 against ETRACOM LLC and Michael Rosenberg for market manipulation of virtual supply transactions and against Coaltrain Energy L.P., Peter Jones, Shawn Sheehan, Robert Jones, Jack Wells, and Jeff Miller for engaging in fraud in the collection of marginal loss surplus payments in PJM energy markets.

In FY 2016, Commission staff issued four notices of alleged violations, opened 17 new investigations and brought 11 investigations to closure. The length of an investigation depends upon its nature and complexity; some close in a few months while others may be ongoing for multiple years. From time to time, the Commission also brings subpoena enforcement actions in federal district court, when appropriate, against entities who do not comply fully with investigative requests. In some cases, the Commission works closely with the Department of Justice and with other federal enforcement agencies.

The Commission continues to receive self-reports of violations from regulated entities and market participants, many of which are resolved without any sanctions. In FY 2016, the Commission received 110 such self-reports. Information gathered from these self-reports is provided to the public and regulated entities in the Commission's Annual Report on Enforcement, which is released following the close of the fiscal year. During FY 2016, staff resolved 126 self-reports that had been submitted in FY 2016 and prior fiscal years.

ENFORCEMENT HOTLINE

The Commission operates an Enforcement Hotline whereby the public or industry participants can anonymously provide information to the Commission concerning potential regulatory violations, market anomalies, or market participant misconduct.

In FY 2016, the Commission opened 198 Enforcement Hotline matters, most of which resulted in prompt, informal resolution. Of these, five are still pending.

Performance Goal 1.2.1

Audit recommendations are implemented within six months of issuance

Description

FERC issues audit reports to regulated entities that include a number of recommendations for corrective actions. These recommendations enforce FERC's regulations governing the Commission's regulation of the jurisdictional aspects of the electric, natural gas, and oil industries. The desired outcome is timely implementation of audit recommendations to help ensure greater compliance with Commission regulations and to reinforce the necessity of a strong compliance culture throughout these industries.

Although a significant majority of recommendations can be implemented within six months, the timeline for completing corrective actions for certain recommendations may exceed the six month target, especially if they involve significant changes to current practices, polices, or procedures (e.g., major software upgrades). FERC considers a recommendation implemented when a company has been presented with the recommendation and it has fully implemented the recommended corrective action or, for particularly complex recommendations, the company has actively and continuously taken steps to implement the recommendation.

Fiscal Year	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percentage of audit recommendations implemented within six months of issuance	96%	95%	92%	95%	96%	98%	95%	95%	95%
FY 2016 Target: Met									

Analysis

In FY 2016, 98 percent of the 194 recommendations issued by FERC were implemented within a six month timeframe.

Achieving the future target results is anticipated to be challenging for several reasons. For example, the Commission is undertaking audits of increasing complexity. As a function of more complex audit topics, the recommendations will likewise be more complex and time consuming. Larger and more complex audits will translate into fewer audit completions and potentially fewer recommendations. This means that the actions, or inactions, of one company could have a far greater influence on the measure. The long-term effects of these developments remain to be seen; however, maintaining a goal of 95 percent reflects Commission staff's effort to maintain a consistently high level of performance.

GOAL 2

PROMOTE SAFE, RELIABLE, SECURE, AND EFFICIENT INFRASTRUCTURE

Promote the development of safe, reliable, secure, and efficient infrastructure that serves the public interest.

Introduction

The NGA and FPA, among other statutory authorities, charge the Commission with the responsibility to promote the development of strong and secure energy infrastructure that operates safely, reliably, and efficiently. The Commission authorizes the construction and operation of interstate natural gas pipelines and storage projects, LNG facilities, and non-federal hydropower projects. Other Commission responsibilities include ensuring the safety of, and compliance with Commission-imposed conditions on, non-federal hydropower projects and LNG facilities throughout their entire life cycle; overseeing the development and review of, as well as compliance with, mandatory reliability and security standards for the bulk power system; and collaborating with regulated entities and other federal and state governmental agencies to identify and seek solutions to cyber and physical threats to FERC-jurisdictional infrastructure.

Strategic Goal and Objectives (Dollars in thousands)		FY 2016 Actual	FY 2017 Estimate	FY 2018 Request	Percent Change FY 2017 to FY 2018
Objective 2.1	**FTE**	261	257	265	3.0%
	Funding	61,693	65,383	70,357	7.6%
	Program	47,608	50,025	51,672	3.3%
	Support	14,085	15,358	18,685	21.7%
Objective 2.2	**FTE**	240	237	241	1.8%
	Funding	54,354	57,693	61,479	6.6%
	Program	41,389	43,547	44,472	2.1%
	Support	12,965	14,146	17,007	20.2%
Goal 2 Subtotal	**FTE**	**501**	**494**	**506**	**2.4%**
	Funding	**116,047**	**123,076**	**131,836**	**7.1%**
Application of PY Budget Authority		(1,897)	(8,156)	-	
Goal 2 Total	**Funding**	**114,150**	**114,920**	**131,836**	**14.7%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate. Numbers may not add up due to rounding.

Objective 2.1

FOSTER ECONOMIC AND ENVIRONMENTAL BENEFITS FOR THE NATION THROUGH APPROVAL OF NATURAL GAS AND HYDROPOWER PROJECTS.

Demand for natural gas in the United States continues at high levels, and natural gas production continues to increase due to the development of shale gas.[6] Among its many uses, natural gas is a substantial and growing resource for electric power generation, both in the U.S. and in Mexico. In addition to increased gas exports to Mexico, LNG exports reached their highest levels in 2016. The responsible development of interstate natural gas infrastructure—pipelines, storage, and LNG facilities—is a critical link in ensuring that natural gas supply can reach market areas.

Interest in developing hydropower projects has also increased, in part because hydropower offers the benefits of a renewable, domestic energy source that supports efficient, competitive electric markets. Hydropower projects may also provide other public benefits such as environmental protection and enhancement, water supply, irrigation, recreation and flood control.

Natural Gas & LNG Programs

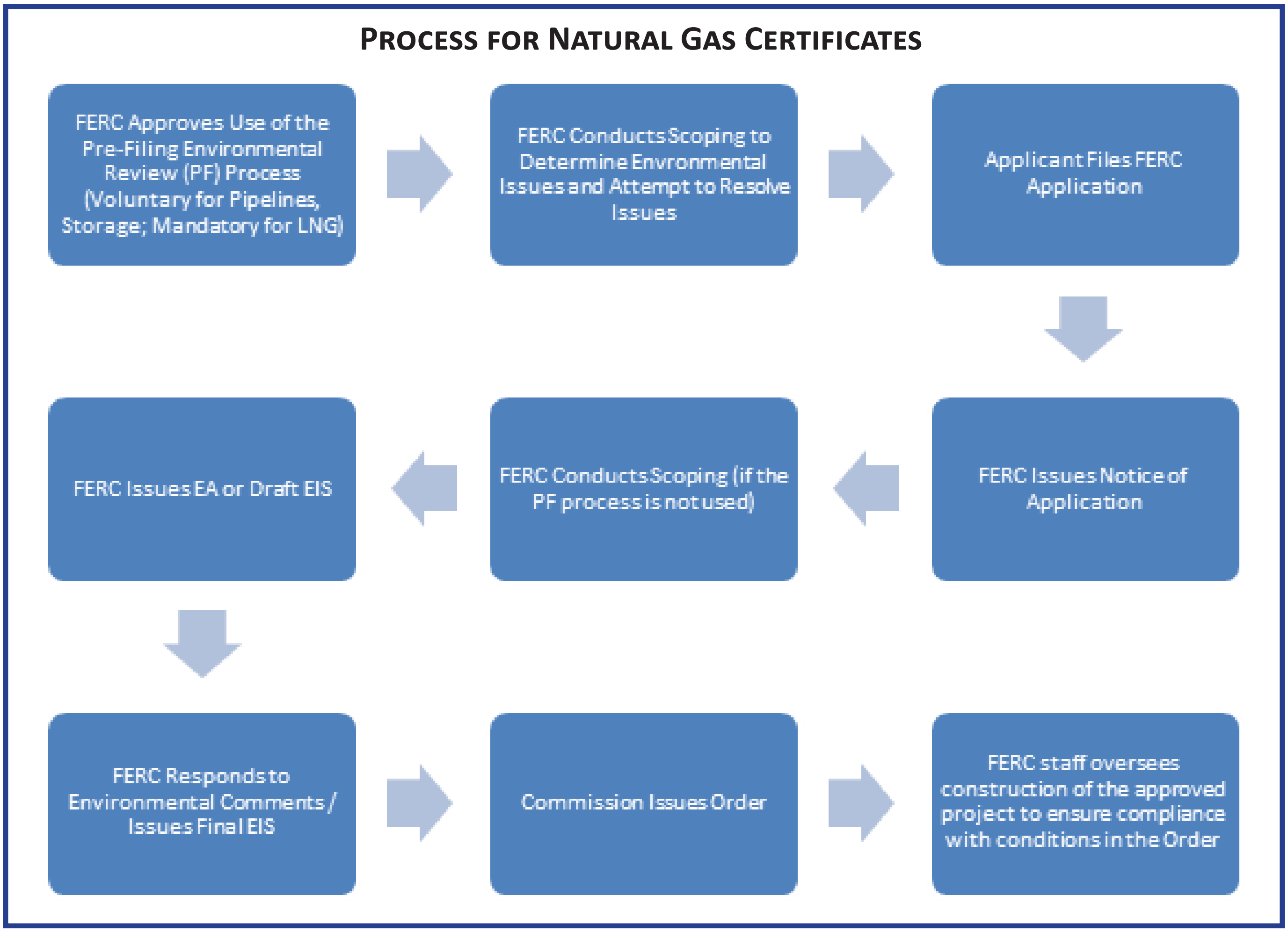
Pre-Filing & Applications

As part of the natural gas pipeline certificate and LNG facility authorization process, the Commission reviews applications to ensure that the proposals are in the public interest. The established pre-filing process engages stakeholders in the identification and resolution of concerns prior to a company filing a formal application with the Commission. Commission staff's participation and initiative in these efforts allows for the filing of more complete applications. Once the application is filed, the Commission is committed to the expeditious completion of the required environmental review consistent with NEPA. At the same time as the environmental review is occurring for natural gas pipeline applications, the Commission is also performing an engineering analysis of proposed facilities and reviewing the application to establish initial recourse rates, as well as to ensure that the proposed tariff complies with the Commission's policies and regulations. The Commission assesses applications for embedded accounting issues in pipeline construction, acquisition, and abandonment transactions, and Commission staff will identify deficiencies in proposed accounting practices and recommend appropriate corrective action. These accounting reviews in certificate filings provide greater certainty to pipelines by providing upfront guidance on accounting entries. Together, these activities enable more efficient and expeditious determination by the Commission.

In FY 2016, the Commission conducted the pre-filing review of 22 natural gas pipeline projects and authorized 44 major natural gas pipeline projects, which resulted in approximately 1,194 miles of additional pipeline and over 1,475,669 horsepower of mainline compression. The Commission expects the number of natural gas pipeline project applications to decrease in FY 2018; however, the level of demand for gas-fired electric generation and LNG exports remain high.

In FY 2016, the Commission conducted the pre-filing review of 16 LNG projects, consisting of both new LNG facilities and modifications of existing LNG facilities. Seven of those projects subsequently filed applications in FY 2016. In addition to other pending LNG projects, this resulted in the Commission's processing of 15 applications for new LNG facilities or modifications to existing LNG facilities – including Sabine Pass Train 1, the first LNG export terminal in the contiguous United States and first export terminal in the last 50 years since the Kenai LNG Plant was placed in service. Based upon industry filings with the Department of Energy and industry information provided during pre-filing meetings with Commission staff, the Commission expects four new LNG export terminal applications and one new LNG peak-shaving facility application to be under review by the Commission through FY 2018.

[6] Shale is a fine grained sedimentary rock which can contain natural gas. Hydraulic fracturing of this rock may release trapped natural gas that can be produced and shipped to consumers. Geologic formations containing shale gas occur throughout the country and are referred to as shale plays.



Outreach

The Commission regularly conducts natural gas environmental training seminars to provide guidance and insight on the Commission's environmental review process and compliance-related matters. These sessions, which provide an opportunity for open dialogue between Commission staff and stakeholders, are attended by state, local and federal agency officials, natural gas company representatives, construction contractors, and consulting firm staff. These sessions provide information on the filing requirements for environmental reports, reporting requirements for blanket certificate projects, new regulations, an overview of the Commission's baseline construction and mitigation measures, and more. The seminars are instrumental in developing the understanding of and successful adherence to the Commission-issued certificates and authorizations. In FY 2016, Commission staff conducted four training seminars and participated in several outreach sessions to natural gas companies and federal permitting agencies, addressing the Commission's certificate and environmental review processes. In FY 2018, the Commission proposes to conduct four natural gas environmental training seminars.

Commission staff has also continued to extend its outreach efforts to federally-recognized Native American tribes to enhance their participation in the Commission's environmental review process for both natural gas pipeline and hydropower projects. In FY 2016, FERC staff wrote 251 letters to various Indian tribes and Native American organizations and FERC staff held 17 meetings with various tribes regarding natural gas pipeline and hydropower proceedings. These included Commission staff's participation in several meetings with representatives of various tribes in the New England Region who are interested in the review of natural gas projects, a consultation meeting with representatives of nine tribes in Oklahoma regarding a variance for the Grand River Dam Authority's Pensacola Project, and a meeting with the Klamath Tribe for the Swan Lake North Pumped Storage Project. Additionally, Commission staff held a one-day tribal conference in Connecticut entitled: "Working Together in Energy: Tribal Interaction with FERC" which included discussion on Indian tribe participation in Section 106 of the National Historic Preservation Act and the hydropower licensing, natural gas pipeline, and LNG authorization processes.

Alaska Natural Gas Pipeline Project

In FY 2016, Commission staff continued to engage in the pre-filing review of the Alaska LNG Project, which consists of a planned LNG export terminal and associated pipeline facilities. As part of the pre-filing review, staff held 13 public scoping meetings along the project pipeline route and in communities affected by the project; received and reviewed a second set of draft resource reports for the Alaska LNG project; participated in government-to government consultations with Native Alaskans, including 9 meetings; conducted field reviews; and participated in numerous interagency meetings. Commission staff also conducted a workshop for Alaska agencies on the FERC process. The project sponsors filed a formal application for the Alaska LNG Project in April 2017. Commission staff are currently identifying any remaining data gaps and will begin preparing a draft environmental impact statement.

Hydropower Program

Pre-Filing & Applications

The pre-filing process typically begins three years prior to the filing of a license application.[7] Throughout this process, Commission staff consults with stakeholders to identify issues, develop study plans, address any issues, and ensure that the licensing proposal is complete by the time the application is filed. The Commission anticipates at least 45 new pre-filing processes will commence in FY 2018, which will add to 90 pre-filing processes that will continue into FY 2018 from prior fiscal years. In the course of these processes, the Commission expects its staff to attend 40 scoping and study plan, and tribal consultation meetings, an 82 percent increase from FY 2016.

Commission staff conducts NEPA environmental analyses for all hydropower project applications. The Commission is responsible for ensuring that the environmental document analyzes the project's effects on potentially affected resources, including geology and soils, aquatic resources (including water quality), terrestrial resources, threatened and endangered species, recreation, land use and aesthetic resources, cultural resources, and examines alternatives and makes recommendations for protection, mitigation, and enhancement measures to be included in any license issued. In FY 2016, Commission staff issued 21 environmental documents, with the final environmental

[7] The Federal Power Act requires that a relicense application must be filed with the Commission no later than two years before the license expires.

document being issued on average about 10 months after the date that reply comments were due on the Notice of Ready for Environmental Analysis. The Commission expects its staff to issue about 50 environmental documents and participate in 17 post-filing public meetings associated with its environmental analysis of hydropower applications in FY 2018. The Commission expects to increase the use of its hydropower environmental and engineering services contract to respond to the anticipated increase in workload.

In FY 2016, the Commission acted on 35 applications representing a total capacity of 3,415 megawatts. In FY 2016, the Commission received 28 license applications of which 6 were for original projects and 22 were for projects with expiring licenses. The Commission also received two applications for small hydropower project exemptions. In FY 2018, the Commission expects to receive a combined 6 original license and small hydropower exemption applications due to a continued interest in developing new projects, and 12 relicense applications.

In addition to license applications, the Commission processes preliminary permit applications and monitors compliance with issued permits. A permit guarantees the holder "first-to-file" status for a particular site in cases where multiple applications are received by the Commission for a hydropower license. Permits also allow the holder to study a particular site for up to three years. A permit does not authorize construction, nor is a permittee required to apply for, or receive, a license. In FY 2016, there were over 130 permits in effect.

The Hydropower Regulatory Efficiency Act of 2013 made a number of changes regarding the Commission's regulation of hydropower projects, such as directing the Commission to investigate the feasibility of a two-year licensing process for hydropower development at non-powered dams and closed-loop pumped storage projects. Consistent with this directive, prior year efforts included: soliciting public opinion; developing a two-year process plan, schedule, and criteria for identifying projects that may be appropriate for a two-year licensing process; and approving one conventional hydroelectric pilot project to test a two-year licensing process; and accepting a license application for the approved pilot project to test a two-year process. In FY 2016, the Commission concluded the two-year process with issuance of a license for the pilot project. In FY 2017, the Commission held a technical conference to receive comments on the pilot process and will send a report to Congress in May on the results of these efforts.

The Hydropower Regulatory Efficiency Act also exempts certain conduit hydropower facilities from the licensing requirements of the Federal Power Act. The Commission is required to determine whether proposed projects meet the criteria to be considered "qualifying conduit hydropower facilities." Qualifying conduit hydropower facilities are not required to be licensed or exempted by the Commission; however, any person, State, or municipality proposing to construct a facility that meets the criteria must file a Notice of Intent to Construct a Qualifying Conduit Hydropower Facility with the Commission. In FY 2016, the Commission issued 22 letters on these qualifying conduits. In FY 2018, the Commission expects to issue approximately 25 qualifying conduit letters.

The Commission regulates over 1,600 non-federal hydroelectric projects at over 2,500 dams and impoundments.

Together, these projects represent 54 gigawatts of hydroelectric capacity, more than half of all the hydropower in the United States.

Outreach

In the past several years, Commission staff has held workshops to assist licensees with specific issues. In FY 2016, staff held a Shoreline Management Workshop in Lake of the Ozarks, Missouri that was attended by over 80 individuals representing nearly 30 licensees from across the country to discuss shoreline uses and management along project reservoirs, including resource protection measures, non-conforming structures, marina development, and public outreach. Staff also held a recreation workshop in Spokane, Washington that was attended by over 60 individuals representing nearly 30 licensees to discuss operation and maintenance of recreation facilities, recreation plan compliance, monitoring, and public safety at the sites. In addition, staff has been working with several licensees on-site to review recreation plans and compliance. These workshops and site visits also provide an opportunity to discuss innovations and trends in public recreation, as well as discuss safety of recreation users. Based on the feedback from these workshops and site visits, Commission staff anticipates providing additional recreation and shoreline management workshops and site visits in FY 2018.

The Commission also regularly conducts hydropower licensing training sessions to provide guidance on how to obtain a license or exemption and how to effectively participate in the licensing and exemption processes. The sessions are typically attended by prospective licensees, federal and state natural resource agency personnel, Indian tribes, and members of the public, and cover such topics as what licensing process to use, when to file comments and recommendations for license or exemption conditions, and how to officially intervene in a license or exemption proceeding. In FY 2016, Commission staff conducted outreach sessions with Indian tribes, federal and state agencies, and hydropower industry personnel to prepare for an increasing relicensing workload beginning in FY 2016.

Over the last few years, there has been increased interest in the development of non-federal hydropower projects at dams and related facilities owned by the U.S. Army Corps of Engineers (Corps). To streamline the processing of federal licensing and permit applications for non-federal hydropower projects at Corps' facilities, in FY 2016, FERC and Corps revised a Memorandum of Understanding between the agencies to incorporate guidance for the agencies and developers to use to facilitate concurrent agency processing, including preparation of a single NEPA document to be used by both agencies.

Shoreline Management and Recreation

Licensees may, with Commission approval, authorize specific uses and occupancies of the licensee-controlled lands along the project reservoir shoreline that are not related to hydroelectric power production or other project purposes (i.e., non-project uses). Examples of non-project uses include, but are not limited to: commercial marinas, private residential boat docks and marinas, shoreline erosion control structures, water withdrawal facilities, utility lines, access roads, bridge crossings, and significant dredging activities. In FY 2016, Commission staff processed 56 applications for non-project uses of project lands and waters. This included 9 applications for reconfigurations and/or improvements at already approved existing facilities. In the past, the economic downturn of the late 2000s resulted in an increase in the number of applications for changes to previously-approved facilities, and fewer applications for new facilities. Now, there is a greater number of applications for new facilities. Commission staff expects this trend to continue in the coming years.

In order to ensure that licensees properly manage licensee-owned lakeshore lands in a manner consistent with license requirements and purposes, some licensees prepare and file shoreline management plans. A shoreline management plan is essentially a land use plan, in which a licensee, in consultation with stakeholders and subject to Commission approval, provides for the management of multiple resources and uses of the project shoreline and determines what types of development and environmental protection are appropriate on the licensee's shoreline lands. Shoreline management plans typically guide development and use of project shorelines for recreation, habitat protection, erosion control, and other uses. Not all projects require shoreline management plans; these plans are generally required where it appears that the project's shoreline may be subject to competing developmental pressures such that public access or environmental resources are at risk. A shoreline management plan is only applicable to lands owned or controlled by a licensee, and has no effect on privately-owned lands in which a licensee has no interest.

Performance Goal 2.1.1

Hydropower and Natural Gas Orders Issued Within Established Timeframes

Description

FERC-regulated entities must obtain authorization before beginning the construction of natural gas pipeline, natural gas storage, LNG, and hydropower facilities and before implementing measures required from relicensing a hydropower facility. In order to maximize both the economic and environmental benefits of these projects, the Commission must process applications in an efficient and timely manner and ensure that its authorizations are based on thorough environmental analysis. FERC has established timeframes that balance the competing demands of timeliness and thorough analysis.

Fiscal Year	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of hydropower orders issued within 24 months	Data not available	80%	94%	89%	75%	75%	75%
FY 2015 Target: Met							
Performance Indicator: Percent of natural gas orders issued within the appropriate timeline depending upon the category of the filing	Data not available	92%	88%	96%	90%	90%	90%
FY 2016 Target: Met							

Analysis

The FY 2016 result reflects the Commission's emphasis on consistently meeting its established timeframes in order to maximize the economic and environmental benefits of the proposed for hydropower and natural gas pipeline projects. While each program is required to conduct thorough analysis in an efficient and timely manner, the processes in which to do so have different elements and unique requirements.

In FY 2016, the Commission expected to issue 75 percent of hydropower orders within 24 months of issuance of either the Ready for Environmental Analysis Notice or the Notice of Application (as appropriate) when all required agency materials have been received. For the 11 hydropower applications where required agency documentation was filed prior to the issuance of the NEPA document, 64 percent of the orders were issued within 24 months from the date of Ready for Environmental Assessment notice or the Notice of Application was issued by the Commission. For the 25 hydropower applications where required agency documentation was filed after the issuance of the NEPA document, 100 percent of the orders were issued within 24 months from the date of the filing of final required documentation by the agencies. In total, 32 out of 36, or 89 percent of hydropower orders were issued within the established timeframe.

Gas orders are separated into four categories, based on scope of the facilities proposed and complexity of the case. Each category has a separate established timeframe, allowing additional time for increasing scope and complexity. In FY 2016, 66 out of 69, or 96 percent of gas orders were issued within the established timeframes. Applications that utilized the pre-filing process effectively, providing robust applications with a well-defined/finalized project, thorough and complete responses to all comments made during the scoping period and on the draft resource reports, and that were filed by applicants who consulted with other agencies early in the process were issued timely. Two of the three untimely orders involved facilities and/or resource issues that were larger in scope and complexity. One involved extensive comments from non-governmental organizations and required the resolution of complex environmental issues. One involved a storage project with complex geologic issues and the applicant failed to share relevant data with other parties to the proceeding. The third untimely project was due to a delay in the response time from another Federal agency. The Commission continues to emphasize the value of the pre-filing process and regularly meets and advises about the process.

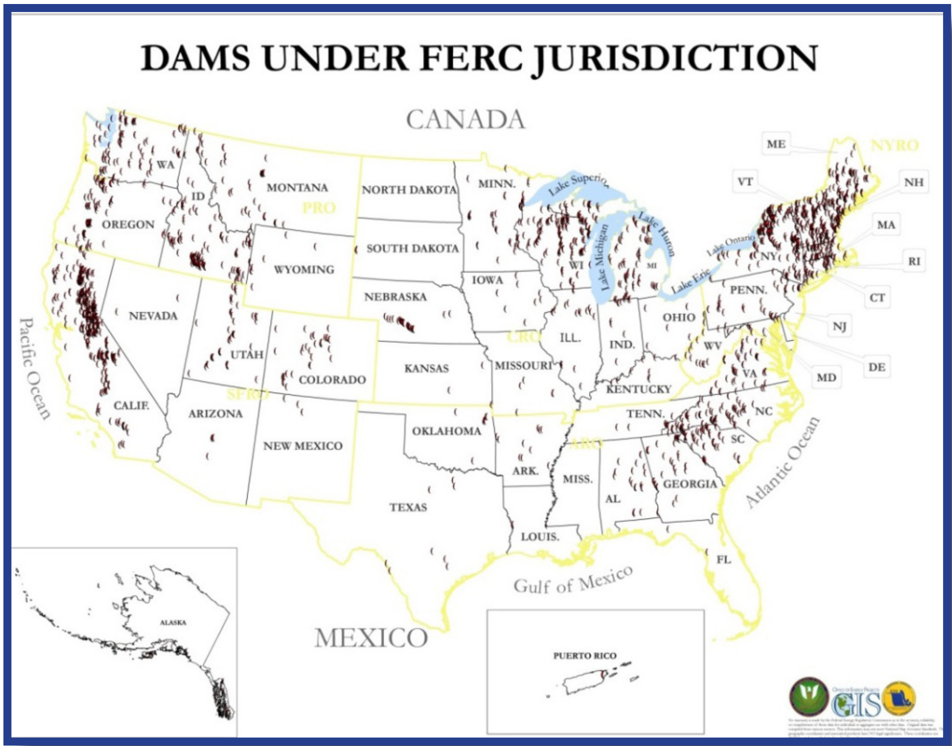
Objective 2.2

Minimize risks to the public associated with FERC-jurisdictional energy infrastructure.

In addition to reviewing applications and issuing orders with respect to construction, operation, and modification of natural gas facilities and non-federal hydropower facilities, the Commission has other responsibilities concerning energy infrastructure subject to its jurisdiction. For LNG facilities, the Commission evaluates the design of proposed facilities to assess whether the facilities would have a public safety impact, and ensures that appropriate mitigation or protection measures are included in the design. These responsibilities also include ensuring the safety of non-federal hydropower projects throughout their entire life cycle; overseeing the development and review of, as well as compliance with, mandatory reliability and security standards for the bulk power system; and collaborating with regulated entities and other governmental agencies at the federal and state levels to identify and seek solutions to threats to FERC-jurisdictional infrastructure from cyber and physical attacks. Through these actions, the Commission minimizes risks to the public associated with jurisdictional infrastructure.

Hydropower

Failure of a non-federal hydropower project potentially can result in significant safety, environmental, and economic consequences. In February 2017, the spillways at Oroville Dam were severely damaged, leading to a very large emergency response that included Commission staff. Catastrophic failure of the spillways was averted. The Commission directed the Licensee to design and construct emergency stabilization measures, convene an Independent Board of Consultants, and to implement an independent forensic analysis of the spillway incident. The Commission has also hired a group of Consultants to perform an assessment of the Commission's dam safety program's performance at Oroville Dam since construction and to recommend any improvements necessary to prevent similar incidents from occurring in the future. Construction of repairs to the spillways is expected to continue through FY 2018.



The Frequency of Dam Inspections As Determined by its Hazard Potential Classification

Hazard Potential Classification	Possible Effects	Inspection Schedule
High	Loss of human life	Annually
Significant	Environmental and economic loss	Annually
Low	None Expected	Every 3 years

To fulfill its responsibility for ensuring the safety of these non-federal projects, the Commission relies on physical inspections for detecting and preventing potential catastrophic structural failures, thereby protecting the public against the risk associated with such an event. Commission engineers are highly trained and work closely with local and other federal officials at all stages of project development and operation. Before projects are constructed, the designs, plans, and specifications of the proposed facility are reviewed and approved. Through regularly scheduled and comprehensive inspections during construction and operation, Commission engineers verify that dams meet stipulated design criteria, identify necessary remedial modifications or required maintenance, and ensure compliance with requirements. This approach allows the Commission to ensure the safety of the public, as well as the continued operation of the facilities to meet the energy demands of the nation. In FY 2018, the Commission expects to conduct approximately 2,000 inspections.

In addition to conducting inspections, the Commission's dam safety program includes other components to minimize risk to the public. Dam safety engineering guidelines are published to provide guidance to licensee- or consultant-conducted inspections and analyses. The guidelines include the procedures and criteria for the engineering evaluation and analysis of hydropower projects. The Commission's surveillance and monitoring component provides methods to better identify and solve dam safety issues and improves coordination, abilities, and trust among all stakeholders. Another component of the dam safety program is the emergency action plans, which are required for all jurisdictional dams. Emergency action plans require the development, maintenance, and periodic testing of project-specific plans for emergency response, including ensuring coordination and cooperation among the dam owners, state, and local emergency management agencies, and the Commission.

The Commission also requires comprehensive inspections and engineering evaluations of the high and significant hazard potential dams by independent consultants every five years. All independent consultant inspection reports are thoroughly reviewed and evaluated by the Commission to determine whether additional studies are required or if remedial measures are necessary. The Commission reviews approximately 200 independent consultant reports each year to make certain the structural integrity of the jurisdictional dams is maintained or improved as appropriate. The Commission expects the number of independent consultant inspection report reviews to remain steady through FY 2018.

Risk-informed decision making provides the capability to assess non-traditional failure modes, levelize risk across different loading conditions, focus inspections and surveillance on the specific potential failure modes and monitoring programs at projects, and guide remediation projects to provide an overall reduced level of risk to the public. In FY 2018, the Commission will continue implementation of Risk-informed decision making through pilot projects, and continue to train Commission staff, dam owners, and consultants in risk assessment procedures, methodologies and tools. Refinement of the guidelines and procedures will continue to be carried out in an open, collaborative process with representatives of the hydropower industry, including Commission-regulated licensees. These efforts will run parallel to the traditional dam safety inspections and together will ensure public safety.

Liquefied Natural Gas

The Commission's LNG review and oversight program evaluates the design of proposed LNG facilities to assess whether the facility would have a public safety impact. This is done through a comprehensive environmental and engineering review process that includes working very closely with other federal agencies such as the U.S. Coast Guard and the Department of Transportation which establish and enforce the LNG safety and security standards. If a facility is authorized, the Commission is responsible for conducting inspections during construction and subsequently, during facility operation, to ensure compliance with the requirements included in the Commission authorization. While facilities are under construction, Commission engineers conduct inspections at least once every twelve weeks. In FY 2016, 35 inspections were conducted at the four terminal expansions and one new LNG terminal under construction. At a minimum, 35 construction and pre-operational inspections are anticipated for both FYs 2017 and 2018, as additional construction projects should commence at three LNG terminals and one peak shaving facility. The FY 2018 number of inspections may also increase depending on market conditions, as well as the number of approved LNG export facilities that move forward with construction in the next 18 months.

Once in operation, jurisdictional peak-shaving plants are inspected once every other year and LNG import or export terminals are inspected once each year. In FY 2016, 15 operational inspections/technical reviews were conducted at seven peak-shaving facilities and eight LNG terminals. The number of operational inspections is expected to be 15 in FY 2018.

Reliability of the Bulk Power System

EPAct 2005 amended the FPA to charge FERC with overseeing the development and enforcement of mandatory reliability standards applicable to the bulk power system through an ERO. The Commission draws on the substantial experience of its staff, including electrical engineers with many years of experience in the utility industry, to facilitate its oversight of those standards. Commission staff analyzes standards proposed by the ERO to determine whether those standards support the reliable operation of the grid. Once the standards are approved, the Commission oversees compliance with and enforcement of reliability standards that, collectively, apply to all users, owners, and operators of the bulk power system. The Commission also reviews major blackouts and events to determine whether standards were violated or should be changed to help prevent future blackouts. In addition to conducting its own audits, investigations, and enforcement actions, the Commission oversees audits, investigations, and proposed penalties of the ERO and the ERO regional entities to help ensure that their efforts will result in strong compliance with mandatory standards. The Commission also communicates with various federal and state agencies, international entities and industry participants on emerging reliability and security issues. Finally, staff engineers review electric rate filings, major Commission rulemakings, and reliability-related cost recovery filings for any impacts they may have on bulk power system reliability. In this capacity, engineering staff performs necessary technical and policy analysis for input into electric orders to further the Commission's goal of protecting and improving the reliability of the bulk power system.

The Commission will continue to encourage innovative approaches to system reliability, security, and resilience that will improve the bulk power grid's ability to withstand and recover from abnormal events.

Reliability Standards

The Commission monitors and participates in the development of mandatory Reliability Standards for the North American bulk power system, primarily through regulatory oversight of the ERO and the eight Regional Entities.

The ERO, among other tasks, is responsible for proposing mandatory Reliability Standards and interpretations of approved standards that provide for reliable operations of the bulk power system for the Commission's review and approval. All Reliability Standards and interpretations must be submitted for Commission approval in order to become mandatory and enforceable in the contiguous United States.

The ERO develops these standards through an open and inclusive process that involves extensive negotiation, consultation and coordination among many stakeholders. The eight Regional Entities may also develop and propose regional Reliability Standards. The Commission does not have statutory authority to write Reliability Standards. If the Commission does not approve a Reliability Standard or an interpretation of a Reliability Standard, it may remand the filing to the ERO for reconsideration. The Commission may direct the ERO to develop and submit a new or modified Reliability Standard on a specific matter.

One illustration of this process involves the ERO's Critical Infrastructure Protection (CIP) Reliability Standards. The Commission previously approved Version 5 of the CIP Reliability Standards, which focuses on cyber security, while concurrently directing modifications. In February 2015, the ERO submitted a proposal to modify the CIP Reliability Standards, seeking approval of additional reliability standards and security controls to address Commission directives. In July 2015, the Commission issued a Notice of Proposed Rulemaking on the ERO's proposal, and in January 2016, the Commission issued a Final Rule approving the ERO's modifications to the revised CIP Version 5 Reliability Standards, which became effective in the U.S. on July 1, 2016. Staff will continue providing support to oversee the compliance with these revised and new cyber security Reliability Standards through FY 2018. Commission staff will also undertake through FY 2018 the processing of subsequent compliance filings, as well as several oversight activities to support the revision and improvement of the CIP Reliability Standards.

Also, in July 2015, the Commission proposed the development of a new Reliability Standard for supply chain management security controls to protect the bulk power system from security vulnerabilities and malware threats. In January 2016, Commission staff conducted a CIP Supply Chain Risk Management technical conference. In July 2016, the Commission issued a Final Rule directing the ERO to develop a new or modified Reliability Standard to address several reliability gaps relating to security controls for the bulk power system supply chain. Commission staff's oversight of the ERO's efforts to address concerns identified in the Final Rule, as well as subsequent filings, will be ongoing through FY 2018.

Following a 2015 cyber attack on the electric grid in Ukraine, in July 2016, the Commission issued a Notice of Inquiry that sought comment on the impact of possible modifications to the CIP Reliability Standards regarding the cybersecurity of Control Centers used to monitor and control the bulk electric system in real-time. While certain controls in the CIP Reliability Standards may reduce the risk of such attacks, cyber systems used to operate and maintain interconnected networks, unless adequately protected, may be vulnerable to cyber attack. Commission staff's consideration and processing of the Notice of Inquiry comments will be undertaken in FY 2017.

A review of bulk power system disturbances and risks may necessitate development of a new Reliability Standard or modifications to the existing Reliability Standards. For example, during FY 2013 the Commission approved a Final Rule directing the ERO to develop a set of Reliability Standards to address the impact of geomagnetic disturbances (GMD) on the bulk power system in two stages. In November 2013, the ERO submitted a Geomagnetic Disturbance Operations Reliability Standard (Stage 1). In June 2014, the Commission issued a Final Rule approving the GMD Reliability Standard. In January 2015, the ERO submitted the Stage 2 Reliability Standard (Transmission System Planned Performance for Geomagnetic Disturbance Events). In May 2015, the Commission issued a Notice of Proposed Rulemaking to approve the Stage 2 Reliability Standard with modifications. In March 2016, Commission staff held a GMD technical conference, and in September 2016, the Commission issued a Final Rule approving the Stage 2 Reliability Standard with modifications. Commission staff's oversight of the ERO's efforts to address the concerns identified in the Final Rule concerning the GMD Reliability Standard will be ongoing in FY 2018.

The Commission issued a Final Rule in FY 2016 approving the ERO's proposed revisions to the Real Power Balancing Performance Reliability Standard to ensure actions are taken to keep energy supply and load (demand) continually balanced to maintain interconnection frequency. The Commission also issued a Notice of Proposed Rulemaking in FY 2016 on the ERO's proposed modifications to another reliability standard to ensure applicable entities balance resources and demand, and return their Area Control Error to defined values following a Reportable Balancing Contingency Event such as the tripping of a large power plant. In FY 2017, the Commission issued a Final Rule approving the ERO modifications. Commission staff's oversight of the ERO's efforts to address the concerns identified in the Final Rule will be undertaken in FY 2018.

In November 2013, the Commission issued a Notice of Proposed Rulemaking to remand the ERO's proposed

revisions to the Transmission Operations and Interconnection Reliability Operations and Coordination Standards. The Transmission Operations Reliability Standards address the reliability goal of ensuring that the transmission system is operating within appropriate limits. The Interconnection Reliability Operations and Coordination Standards detail the responsibilities and authorities of a reliability coordinator. In March 2015, the ERO filed revisions to the standards in response to the Notice of Proposed Rulemaking. In FY 2016, the Commission issued a Final Rule approving the ERO's revisions to the Transmission Operations and Interconnection Reliability Operations and Coordination Standards and directed the ERO to make modifications to the standards. Commission staff's oversight of the ERO's efforts to address the concerns identified in the Final Rule were completed in FY 2017.

In September 2016, the Commission issued a Notice of Proposed Rulemaking to approve the ERO's proposed revisions to the Balancing Authority and Control Standard which requires balancing authorities to have and to periodically test backup power supplies at primary control centers and other critical locations in order to ensure continuous operation of Automatic Generation Control and vital data recording equipment during loss of normal power supply. Commission staff's consideration and processing of the Notice of Proposed Rulemaking will be ongoing in FY 2017 and may continue into FY 2018.

In January 2017, the Commission issued a Notice of Proposed Rulemaking to approve the ERO's Protection and Control Standard that requires remedial action schemes to not introduce unintentional or unacceptable reliability risks to the bulk electric system. Commission staff's consideration and processing of the Notice of Proposed Rulemaking will be ongoing in FY 2017 and FY 2018.

The Commission will continue to explore ways to improve the efficiency and effectiveness of the Reliability Standards development and implementation process. For example, the Commission annually holds a reliability technical conference to discuss the state of reliability, ERO performance and emerging issues related to the bulk power system. Also, in FY 2016, Commission and ERO staff issued the NERC-FERC-Regional Entity Joint Review of Restoration and Recovery Plans report. This report assessed registered entities' plans for restoration and recovery of the bulk power system following a widespread outage or blackout, and evaluated the efficacy of the relevant Reliability Standards in maintaining reliability. The joint staff review team identified several opportunities for improving system restoration, cyber incident response, recovery planning and readiness. The team also recommended further studies to facilitate a deeper understanding of related issues, such as the impact on timely system restoration of the loss of a SCADA system, black start resource availability and testing, and the use of direct current facilities for restoration, among others. The studies will continue into FY 2018.

Reliability Compliance and Enforcement

The Commission monitors and participates in the enforcement of the Reliability Standards, primarily through its oversight of the ERO and Regional Entities. As part of that role, the Commission monitors the ERO's reports on the performance of the bulk power system from information gathered from the ERO, Regional Entities, and registered entities.

In addition, as part of its outreach effort in the compliance program, the Commission regularly provides guidance to the industry on both technical and process issues at numerous regional conferences and meetings, with a goal of facilitating higher levels of bulk power system reliability. Similarly, Commission staff routinely coordinates with the ERO regarding technical and process issues relating to event analyses, investigations, violations, and mitigation activities.

The Commission also performs independent compliance audits and conducts independent or joint investigations or inquiries of significant blackouts, system disturbances, cyber security incidents, and other reliability and security issues, as warranted. For example, in FYs 2017 and 2018, the Commission will work with the ERO and the Regional Entities to conduct audits of the CIP Version 5 Critical Infrastructure Protection Reliability Standards and Reliability Standard CIP-014-1 pertaining to physical security of critical assets.

Rigorous audits and investigations of potential violations coupled with appropriate and adequate mitigation plans should lead to a culture of compliance, self-reporting and internal controls, which should lead to better reliability and fewer blackouts and system disturbances.

As the electric grid grows in complexity and technological sophistication, the rate of emerging reliability issues is likely to accelerate. The Commission continues to monitor and analyze the performance of the bulk power system to assess the impact of emerging issues. Although the Commission attempts to maintain awareness of these emerging issues and associated reliability risks, including system disturbances or outages, they are extremely difficult to anticipate. In FY 2016, the Commission issued a final rule requiring the ERO to provide the Commission, and Commission staff, access to certain transmission and generation outage data, as well as protection system misoperation data on a non-public and ongoing basis, limited to data regarding U.S. facilities provided to the North American Electric Reliability Corporation (NERC) on a mandatory basis. The data will provide the Commission with information necessary to determine the need for new or modified Reliability Standards and to better understand NERC's periodic reliability and adequacy assessments. The aforementioned final rule became effective in February 2017. Related analysis and a determination of potential actions will be an ongoing effort in FY 2017 and continuing through FY 2018.

The ERO is authorized to impose, after notice and opportunity for a hearing, penalties for violations of the Reliability Standards, subject to Commission review and approval. When a Regional Entity or the ERO identifies a violation of a Reliability Standard, whether through self-reports, audits, investigations, or complaints, the ERO either handles it: (1) outside of its enforcement processes as a compliance exception or through its enforcement processes using its Find, Fix, Track and Report program; or (2) by filing a notice of penalty for Commission approval. All of these processes include a record supporting a finding of noncompliance with one or more Reliability Standards, and a description of actions taken or to be taken to remedy the violation(s) and prevent a recurrence. Notices of Penalty add the proposed penalties and sanctions, as well as the documentation and rationale supporting the penalties. The entity subject to a Notice of Penalty may appeal the violations or penalty to the Commission.

Rigorous audits and investigations of potential violations coupled with appropriate and adequate mitigation plans should lead to a culture of compliance, self-reporting and internal controls, which should lead to better reliability and fewer blackouts and system disturbances.

Energy Infrastructure Security

Growing cyber and physical security threats, along with increasing operational automation and a rapidly changing energy supply mix, demand an agile and focused approach to energy infrastructure security. The Commission is actively coordinating with its federal partners as well as regulated entities to create awareness of threats, activities, and capabilities of entities that may initiate a cyber or physical attack on jurisdictional energy infrastructure. Our partners include the Department of Defense, the Department of Homeland Security, the Department of Energy, and the Federal Bureau of Investigation among many others. This proactive collaboration allows the Commission to support the development and encourage implementation of effective tools and techniques to enhance protection of jurisdictional energy infrastructure. Commission staff, with its extensive technical expertise including highly-skilled electrical engineers and IT specialists, provides a unique perspective that draws on both decades of regulatory experience as well as extensive operational experience. The Commission's contributions help reduce the risk of cyber and physical security threats to vital energy infrastructure and facilitate the sharing of best practices, promoting an important complement to FERC's regulatory and enforcement responsibilities.

In coordination with its collaborative role, Commission staff proactively examines threats and potential vulnerabilities in the cyber and/or physical security posture of jurisdictional facilities through onsite security assessments. These assessments better enable facility owners and operators to recognize current threats, potential attack vectors, potential counter measures and effective practices to minimize potential impacts and recovery time should a facility be compromised. In FY 2016, the Commission staff conducted eight of these onsite assessments and plans to continue to perform them in FYs 2017 and 2018. In addition, Commission staff also provides timely and effective security threat briefings and presentations in both classified and unclassified settings to strategic partners, including state commissions that also have jurisdictional oversight of the energy infrastructure. The Commission staff conducted 10 of these briefings in FY 2016, with plans to continue in FYs 2017 and 2018.

Lastly, it is important to understand the impact that some individual facilities may have on the resilience of critical infrastructure systems, as well as the risk of disruption to those systems from threats and vulnerabilities through cyber and physical attacks. To these ends, the Commission will use its analysis and assessment capabilities as appropriate in support of analyzing infrastructure threats and vulnerabilities to identify particularly critical equipment across the Commission's jurisdictional infrastructures. The Commission will then conduct outreach to facility owners and operators to promote security improvements at those facilities.

Performance Goal 2.2.1

Hydropower facilities have approved dam safety programs

Description

To safeguard public safety, environment, and hydroelectric facilities, licensees with hydropower dams designated as high and significant hazard potential are required to implement an Owner's Dam Safety Program that complies with Commission regulations. In 2012, the Commission began requiring licensees with high and significant hazard potential dams to develop and implement an acceptable Owner's Dam Safety Program that is robust and focused, which acknowledges the dam safety responsibilities at each level of the licensee's organization, establishes protocols for internal and external dam safety communication, and has clear designation of dam safety responsibilities among the licensee's staff. The effectiveness of Objective 2.2 is evident by the total percentage of licensees that are able to maintain compliant Owner's Dam Safety Programs.

Fiscal Year	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of high or significant hazard hydropower facilities that have approved dam safety programs	Data not available	64%	78%	84%	80%	85%	90%
FY 2016 Target: Met							

Analysis

The Commission continues to emphasize the requirement for licensees to have an acceptable Owners Dam Safety Program at every annual inspection of a high or significant hazard dam. FERC continues to monitor and provide assistance to help the licensees develop and implement a complete program. As a result of these efforts, 16 additional Dam Safety Programs were found acceptable in FY 2016 resulting in a 6 percent increase from FY 2015. Currently, several licensees have Owners Dam Safety Programs that are under review and are expected to be approved in FY 2017.

Performance Goal 2.2.2

LNG facility recommendations implemented by established time frames

Description

In order to minimize risks to the public and to ensure reliable infrastructure, LNG terminals are inspected annually to ensure that they are being maintained and operated in a manner consistent with the Commission's certificate/authorization for the life of the facility. The Commission issues a letter after each LNG inspection that lists any recommendations for safe and reliable operation and a timeline for completing these items. Companies are responsible for completing these items on time to ensure that the facility continues to be in compliance with the Commission's certificate/authorization. The Commission makes a concerted effort to craft recommendations that clearly identify equipment or operational issues/improvements with practical timelines for completion. FERC also works with the facilities as needed to ensure that they understand the recommendations and how they can be implemented. Accordingly, the percentage of recommendations implemented within established timeframes provides a measure of the Commission's impact on LNG facility safety and reliability and thus serves as an indicator of the Commission's effectiveness in achieving Objective 2.2.

Fiscal Year	**FY 2014 Actual**	**FY 2015 Actual**	**FY 2016 Actual**	**FY 2016 Target**	**FY 2017 Target**	**FY 2018 Target**
Performance Indicator: Percent of LNG facility recommendations implemented by established time frames	Data not available	91%	100%	90%	90%	90%
FY 2016 Target: Met						

Analysis

The reported percentage for this measure represents timely compliance with Commission-issued LNG recommendations for in-service NGA Section 3 LNG facilities. The Commission conducted seven inspections at the eight operational LNG terminals under FERC jurisdiction in FY 2016. In FY 2016, one recommendation was due to be implemented to improve the safety and reliability of the facilities. One hundred percent (1 of 1) of the recommendations were implemented in the established time frames. Sixteen additional recommendations are due to be implemented in FY 2017 at three of the eight terminals inspected in FY 2016. At this time, the remaining five terminals have no recommendations due in FY 2017, however, this could change as a result of the FY 2017 inspections.

Performance Goal 2.2.3

The amount of lost firm load megawatts in a given year resulting from bulk power system transmission related events (unplanned outages), excluding weather related outages

Description

The annual amount of lost load resulting from unplanned disturbances on the bulk power system other than severe weather provides a measure of FERC's impact on system reliability and serves as an indicator of the Commission's effectiveness in achieving its Objective 2.2 to minimize risks to the public associated with FERC-jurisdictional energy infrastructure.

The maximum desired threshold of bulk power system, non-weather related megawatt lost in the US is set to be 0.5 percent normalized on an annual US actual peak load value. Based on this metric, any fiscal year with a major blackout event that has more than 0.5 percent of load loss or multiple events of lesser magnitude that cumulatively exceed 0.5 percent will be considered a poor performance year (weather-related events are not included in this calculation).

This threshold is established so that an event equivalent in size to past major blackouts (such as those experienced in the Northeast in 2003, Florida in 2008, or the Southwest in 2011) would indicate a poor performance year. Monitoring and re-evaluating this threshold is needed as more data and experience are gained in the next several years. In addition, the threshold is a representative of average grid performance from 2009-2013, excluding major blackout events. In general, the number of bulk power system level outage events captured by this metric (uncontrolled outages directly impacting end-user customers in excess of 50 megawatts) has been small, indicating that bulk power system reliability remains adequate. However, even these small events can indicate emerging issues that may require the Commission to take action.

Fiscal Year	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Lost firm load megawatts resulting from bulk power system transmission related events, excluding weather related outages	1.5%	0%	0.3%	0.08%	0.30%[8]	0.26%[9]	Below 0.5%	Below 0.5%	Below 0.5%

FY 2016 Target: Met

Analysis

The cumulative FY 2016 ratio of lost firm load is 0.30 percent, which is below the cumulative annual target (0.5 percent). A total of ten firm load loss events met the metric criteria in FY 2016. The cumulative lost firm load is 1,948 megawatts, out of 748,959 megawatts. The total energy not served is approximately 3,266 megawatt-hours. Equipment failure is an initiating cause for six of these 10 events; protection system misoperations are identified as initiating or contributing factors in seven of these 10 events, increasing event severity.

Although the Commission met the FY 2016 annual target, staff recommends monitoring equipment failure and misoperation trends in the next two years, and considering reasonable mitigation solutions if warranted.

[8] FY 2015 Actual updated from 0.31% to 0.30% to reflect 2015 peak load.

[9] FY 2016 actual is based on 2015 peak load value since the 2016 peak load value is not yet available. FY 2016 actual will be updated to reflect 2016 peak load in the FY 2017 Annual Performance Report.

GOAL 3

MISSION SUPPORT THROUGH ORGANIZATIONAL EXCELLENCE

Achieve organizational excellence by using resources effectively, adequately equipping Commission staff for success, and executing responsive and transparent processes that strengthen public trust.

Introduction

The public interest is best served when the Commission operates in an efficient, responsive and transparent manner. The Commission achieves this operational state by maintaining processes and providing services in accordance with governing statutes, authoritative guidance, and prevailing best practices. The Commission staff, while serving in different component offices, must work collaboratively and execute processes that work in concert with each other to produce the high quality results expected by the American people. In accomplishing this state, the Commission will use its resources efficiently, empower its employees, and earn the public trust. These essential outcomes are indicative of a model regulatory agency.

Strategic Goal and Objectives (Dollars in thousands)		FY 2016 Actual	FY 2017 Estimate	FY 2018 Request	Percent Change FY 2017 to FY 2018
Objective 3.1	**FTE**	147	144	147	2.2%
	Funding	30,330	31,885	35,272	10.6%
	Program	22,413	23,304	24,911	6.9%
	Support	7,917	8,581	10,361	20.7%
Objective 3.2	**FTE**	64	63	64	1.6%
	Funding	13,418	14,107	15,492	9.8%
	Program	9,956	10,326	10,952	6.1%
	Support	3,462	3,781	4,540	20.1%
Objective 3.3	**FTE**	75	74	72	-3.3%
	Funding	15,466	15,982	16,889	5.7%
	Program	11,441	11,570	11,846	2.4%
	Support	4,025	4,412	5,043	14.3%
Goal 3 Subtotal	**FTE**	**286**	**281**	**283**	**0.6%**
	Funding	**59,214**	**61,974**	**67,653**	**9.2%**
Application of PY Budget Authority		(968)	(4,107)	-	
Goal 3 Total	**Funding**	**58,246**	**57,867**	**67,653**	**16.9%**

Notes: The FY 2017 Estimate column reflects the annualized continuing resolution (CR) rate. Numbers may not add up due to rounding.

Objective 3.1

Manage Commission resources effectively and efficiently.

The Commission continues to prioritize resource allocations and make prudent investments in relation to specific program activities and challenges, and these investments are expected to yield returns that directly benefit the agency's mission. Additionally, federal statutes require the Commission to recover its operating costs from the entities it regulates. The Commission must do this in a manner that avoids unnecessarily increasing the cost of energy to consumers. Given these considerations, the Commission must be steadfast in its commitment to use its resources in an effective and efficient manner. In meeting this commitment, the Commission will make continued investments in its human capital, IT resources, and physical infrastructure. These investments will facilitate mission accomplishment while providing measurable efficiencies in future operating cycles. The following projects and initiatives detail the types of investments the Commission is planning to make.

Human Capital Management

In FY 2016, the Commission continued human capital mitigation strategies to account for the potential loss of its staff to retirement by FY 2018. The agency developed extensive analyses of recruiting and employment data which it leveraged to formulate strategic hiring plans. This approach has enabled the agency to target and mitigate critical staffing vulnerabilities ahead of forecasted attrition. Additionally, this strategic process has enabled the Commission to target additional skill sets required to meet evolving mission related demands. With the agency increasing its use of analytics and data-modeling to inform regulatory policy decisions, the Commission has been aggressively recruiting professionals that possess the capabilities to analyze and evaluate complex energy data. In FYs 2017 and 2018, the Commission will continue to recruit and hire staff to meet its current and future needs. The agency will increasingly leverage social media platforms to market employment opportunities in addition to its use of more traditional recruiting strategies. Finally, the Commission will execute its hiring processes in a manner that minimizes hiring cycle times in line with established targets and maximizes the use of allocated financial resources.

Information Technology Management

In supporting the agency's mission to assist consumers in obtaining reliable, efficient and sustainable energy services, the Commission will pursue a number of projects that will advance priority information technology initiatives. Over the next three fiscal years, the Commission will invest heavily to support the:

1) Modernization of core mission and support systems;
2) Expansion of existing data analytics and visualization capabilities;
3) Improvement of its cyber security posture; and
4) Implementation of a more rigorous IT planning and governance environment.

In FY 2015, the Commission initiated plans to migrate a major business application to a cloud-based service solution. The Commission uses a suite of hardware and software called eLibrary that functions as the system of record for all Commission-issued orders, industry fillings, and public comments. This system is used by all Commission staff and is the single entry point for the public to access docketed information. The system was put into production over 15 years ago and is no longer optimal for the Commission's IT infrastructure. Transition to the new eLibrary infrastructure will begin in FY 2018. Concurrently, integration design efforts for the FERCOnline application suite and the Public Issuance Workflow (PIW) that interact with the eLibrary solution began in FY 2015 and will continue into FY 2018. These integration projects will enable existing IT investments to integrate with the new cloud based eLibrary application. Additionally, the Commission was awarded a contract to replace the Commission's network infrastructure that will enable more efficient connectivity between systems and applications at Commission headquarters, the alternate computing facility, regional offices, and remote user locations.

The Commission plans to continue to promote a federal Cloud First strategy with the modernization of the Commission's website, FERC.gov. Modernization will improve usability, content, navigation and design to make the site mobile friendly and to place its content in the cloud with content management that includes record retention and management. The project also would add dynamic GIS mapping for such items as Project Search, and dynamic databases that update citizens, congressional staff, and Commission staff. In FY 2016, a contract for requirements gathering and Cloud and content/data management cost/benefit, alternatives analysis was awarded. Implementation of the new site is planned for FY 2018. Additionally, the Commission initiated implementation of cloud-based processing and storage infrastructure and will balance its financial and security needs to find appropriate solutions that will span the next few years. It is the Commission's expectation that these initiatives will assist in the design of solutions that will ultimately decrease the costs associated with maintaining its technology environment.

The Commission continues to be ever vigilant in protecting its vital systems and data. In FY 2016, the Commission took steps to invest resources in more security technologies to ensure its infrastructure and ultimately the end users are protected from malicious events. The Commission will continue to deploy these technologies through FYs 2017 and 2018 and will support enhancing the security posture while continuing to meet federal requirements.

Headquarters Modernization

In August 2014, the Commission and the General Services Administration (GSA) executed a 10-year renewal option on the Commission's Headquarters building. Congressional authorization for the lease extension requires the Commission to reduce the amount of space it currently utilizes to support its Washington, D.C., based operations. As required by the Prospectus, GSA and the Commission have developed a plan to reduce the amount of space it currently utilizes. As part of this consolidation effort, the Commission will relocate employees currently housed within a separate facility in downtown Washington, D.C., to the Commission's Headquarters building. This reduction will yield approximately $1.5 million to $2.7 million in savings annually to the federal government based on forecasted market rates for the local area.

While achieving the required space reductions, the Commission will modernize the floor configurations to an open environment that will leverage more natural light and provide for enhanced collaboration and additional conferencing capabilities. The project will require substantial renovation to the headquarters building and is currently in the design phase. The Commission has funded initial project requirements associated with planning, design and contractor support necessary to reconfigure the Commission's office space in a manner that meets the mandated reduction goals by the end of the project schedule. The multiyear construction project of the Headquarters facility is planned to commence in the fall of 2017. With the enactment of the Commission's full FY 2017 appropriation, the Commission expects to fund an additional $16.2 million for this effort above amounts originally planned under the annualized continuing resolution. The FY 2018 request includes $11.1 million to continue the modernization effort.

The Commission is utilizing all available options to limit the impact the project has on its budget request in any one fiscal year. To this end, the Commission will potentially take advantage of the building owner's tenant improvement allowances to spread approximately $8.5 million of these project costs over the next 10 years. The Commission will aggressively manage the associated project schedule to avoid additional costs as a result of potential project delays. The timely funding of project requirements will mitigate the risks of such costs as the effort progresses forward. The current contractor estimates also factor in an additional 10 percent contingency to mitigate associated project risks.

Performance Goal 3.1.1

Average hiring cycle time

Description

The Commission must ensure planned staffing levels are sufficiently maintained to ensure efficient utilization of its financial resources. The Commission allocates over two-thirds of its budget to employee compensation. Any undue lapse in recruiting and hiring new employees impacts the ability of the agency to balance its expenditures with its recovery of its annual appropriation, as required by statute.

The Commission will take action to reduce the amount of time it takes to fill vacancies. Accordingly, the average hiring cycle time is a measure of the Commission's performance in this regard and serves as an indicator of the Commission's success in achieving Objective 3.1. The target for this measure is to maintain the average hiring cycle time of 55 days from need validation to offer.

Fiscal Year	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Average Hiring Cycle Time	69 days	56 days	54 days	55 days	50 days	54 days	55 days	55 days	55 days

FY 2016 Target: Met

Analysis

Since the implementation of the Smart Hire automated hiring system by Monster Government Solutions in April 2011, the Commission continues to improve the hiring process. Prior to Smart Hire's implementation, the hiring process was completed manually. Over the five years since implementation, the staffing and recruiting teams partnered with Commission program offices to develop ways to strategically decrease the hiring cycle time while hiring increasing numbers of highly qualified candidates.

In FY 2016, 142 total hires were made with an average hiring cycle time of 54 days leading to a 99 percent FTE utilization rate in FY 2016; this demonstrates the progress made and success in reducing the overall hiring cycle time. With a continued focus on strategic recruitment initiatives and streamlined hiring processes, we expect to continue meeting and/or exceeding the 55-day target in the future.

Performance Goal 3.1.2

Reduction in targeted information technology costs

Description

In order to support the Commission's operations, we must deliver secure and effective technology solutions at a reasonable cost. With the ability to deploy emerging technologies that provide for lower cost IT solutions, the Commission is targeting a reduction in current costs for labor acquired through its IT support services contract. These savings will allow the Commission to reprogram funding to meet other mission-critical IT needs. Accordingly, the ability of the Commission to reduce targeted IT costs is a measure of its performance and serves as an indicator of the Commission's success in achieving Objective 3.1.

The percent reduction in targeted IT costs is calculated cumulatively on FY 2015 baseline costs. A higher percent is an indication of greater savings as compared to the base year.

Fiscal Year	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Cumulative percent reduction in targeted IT costs	-	Baseline	33.0%	22.80%	24.40%	25.7%
Supplemental Information: Targeted IT costs (in millions)	$24.3	$24.5	$16.4	$18.9	$18.5	$18.2

FY 2016 Target: Met

Analysis

The FY 2016 actual reductions (savings) were 33.0 percent which is 10.2 percent above the 22.8 percent target. These results were primarily accounted for by the change in IT support services.

Performance Goal 3.1.3

Time and cost of building modernization on schedule and budget

Description

The Commission has established a design plan and budget for an extensive consolidation effort within its headquarters facility. This multi-million dollar renovation effort began in FY 2015 and will continue through FY 2020. The Commission has partnered with the GSA, private contractors and the facility owner to execute the required work. It is imperative that management closely monitor project performance relative to schedule and resources given the significant investment and the numerous entities involved.

Accordingly, the extent to which the modernization effort is completed within budget is the primary measure of the Commission's performance in managing the project and serves as an indication of its effectiveness in achieving Objective 3.1. While schedule performance remains important to the overall effort, there are a number of constraints and external factors that make the measurement and reporting of schedule performance less of an indicator of the overall project's performance. The project funding will be requested in phases, primarily to limit the amount of resources required in each fiscal year for project construction. This strategy enables the Commission to spread the recovery of these costs over the life of the project, thereby more effectively aligning its assessment methodology with its requirement to recover its annual appropriation from regulated entities. Although this funding approach enables the Commission to amortize and recover the project's costs, it also creates a high risk of uncertainty in the schedule for later phases of the project, as annual appropriation decisions are beyond the control of the Commission and GSA. To mitigate the impact of these risks, the Commission will factor in sufficient contingency within the project budget. Moreover, the Commission will provide supplemental data to report on the project's schedule.

The Cost Performance Index (CPI) is used as the primary indication of project performance relative to managing cost and budget. Specifically, Earned Value (EV), the value of the work completed, and Actual Cost (AC), the actual cost incurred to complete the work will be assessed in order to produce the Cumulative CPI. Cumulative CPI is calculated as follows: Cumulative CPI = EV / AC. A value higher than one indicates a favorable condition, while a value under one would be considered unfavorable.

Fiscal Year	FY 2014 Actual	FY 2015 Actual[10]	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Cost Performance Index (CPI)	Data not available	1.0	1.0	1.0	1.0	1.0

FY 2016 Target: Met

Analysis

The activities planned and completed this performance period consist of design activities for both the FERC Headquarters and offsite Swing Space (SS). The current CPI for this performance period is one (0.99999). While the target was met for this performance period, certain external factors could have negative schedule implications in future performance periods, and it is uncertain how those implications would translate to the CPI for those periods. The factors included budgetary uncertainty caused by a continuing resolution and delays in SS construction. The delay in construction of the SS did not affect the FERC Headquarters design effort, but may impact the overall construction schedule in future periods. There were three major milestones scheduled for the FY 2016 performance period which includes procurement of furniture and move management services and completion of headquarters and SS design. All three milestones were accomplished, though the procurement of furniture and move management services occurred approximately one month later than scheduled, attributable to review and revision periods of statement of works taking longer than anticipated.

[10] Based on timing of when the values used to calculate the CPI were made available, the FY 2015 performance period captures information through the first quarter of FY 2016.

Objective 3.2

Empower Commission employees to drive success.

Commission employees are directly responsible for achieving the Commission's mission. On an annual basis, the Commission allocates over two-thirds of its budget to directly cover the compensation costs of its employees. Given this significant investment, the Commission places extremely high value on its employees and is focused on ensuring their success. The Commission seeks to become an employer of choice for individuals who can contribute a diverse set of needed skills. With this objective in mind, the Commission recognizes that a model regulatory organization must ensure that its employees are equipped with the requisite tools and services they need to accomplish the mission. The Commission also provides a safe and secure working environment for its employees to enable the execution of the Commission's mission.

Corporate Knowledge Management

The Commission will invest heavily in succession and knowledge management activities to ensure the agency equips employees with the requisite knowledge to meet strategic demands going forward. It will develop a knowledge management program to mitigate the risks associated with 30 percent of the agency's workforce being eligible for retirement in the next five years. In FY 2016, the agency implemented numerous enhancements/functionality to its knowledge collaboration tools that will serve as the vehicle to capture critical organizational knowledge and promote learning. In FY 2017, the Commission will continue to develop a uniform approach that will seek to preserve corporate information and make it accessible to all Commission employees. These delivery mechanisms will provide information and training to Commission employees in a cost-effective and easily repeatable fashion. Such a strategy will ensure employees possess the specialized skills and knowledge required to successfully support the agency's mission. In FY 2018, the agency will continue to empower Commission employees and prepare them for success by continuing to build out competency models, create training needs assessments and career paths, as well as obtain feedback from staff in an effort to adequately equip employees for success.

Federal Employee Viewpoint Survey (FEVS) and Other Employee Outreach Activities

It is imperative that the Commission be fully aware of employees' most critical needs. This knowledge will ensure that the agency adequately empowers its employees to meet their mission responsibilities. To this end, the Commission will utilize results from the annual FEVS to assess employee perceptions relative to performance management. In FY 2016, results showed that the Commission was one of the top agencies in the federal government, ranking fourth out of all mid-sized agencies and departments relative to employee engagement. Employees rated the agency's leadership efforts favorably regarding the creation of work which ensures employees can reach their potential, contribute to the success of the agency environment, and ultimately the entire federal government.

FERC ranked No. 4 out of 27 mid-sized agencies in employee satisfaction and commitment, according to the nonprofit Partnership for Public Service 2016 Best Places to Work in the Federal Government survey.

The Commission is building on the positive opinions expressed by employees during the previous survey period. In FY 2016, the Commission engaged its employees in discussions about agency survey results. Program offices established focus group sessions to discuss strengths and growth opportunities conveyed through these results. Agency efforts in this regard further enhanced the importance of the survey and 82 percent of all eligible employees participated in the FY 2016 survey. Going forward, the Commission will analyze its annual results and conduct additional employee outreach activities to gauge the effectiveness of its employee-related processes and services. The agency will develop action plans to address any areas not favorably rated and take corrective action to improve processes and services that impact related employee perceptions.

Safety and Security of Commission Employees and Assets

The Commission is dedicated to ensuring that its employees and Commissioners are able to carry out the Commission's mission in a safe and secure environment. Over the last several years, Commission employees and Commissioners have been exposed to increasing levels of antagonism from groups opposing development of new natural gas infrastructure. Staff has faced such antagonism while conducting field activities, participating in public forum events, and at the Commission's facilities. Commissioners have also been targeted at public speaking engagements and elsewhere. In response to these developments, the Commission has increased its coordination with federal, state, and local law enforcement entities to ensure the safety and security of staff, Commissioners, and members of the public in these various forums. The Commission anticipates that such demonstrations of antagonism will continue to increase in frequency and intensity. The Commission will continue to invest resources and expand its capabilities to address these potential and actual threats.

Performance Goal 3.2.1

Deployment of a Knowledge Management Program[11]

Description

The deployment of this program ensures knowledge is shared across the Commission and an environment of continuous learning is present to address the retirement eligibility of 30 percent of the current workforce within the next five years. The Commission must maintain a highly skilled workforce to address its regulatory responsibilities. A knowledge management program provides employees a means to share critical information across the Commission and involves an analysis of the competencies necessary to perform their job requirements. The Commission also will deploy automated collaboration tools to capture and share knowledge gathered across the Commission. The entire deployment of the knowledge management program will be tracked against pre-established milestones. The percent of those milestones that are met is a measure of the Commission's performance in deploying the program and an indication of its accomplishment of Objective 3.2.

Fiscal Year	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of milestones that are met in the deployment of a knowledge management program using automated tools	Data not available	Resource planning completed.	83%	100%	100%	100%	100%
FY 2016 Target: Met							

Analysis

The Commission completed six planned milestones in the deployment of a Knowledge Management program. Knowledge Management ramped up in early 2015 after the Commission awarded the contract to ICF International LLC. A project plan was developed describing the planned schedule, technical approach, and steps in the work process, including the methodology and project tasks, critical linkages between tasks, staffing requirements, and the time requirements of Commission personnel who are necessary to complete each task. The goal of the program is to accurately assess the training and development needs of all FERC employees to ensure that future training offerings appropriately address needs, close skill gaps, and provide employees with trainings they value most.

To ensure that FERC-specific jobs are correctly represented in the training needs assessment, we first conducted a job tasks analyses of all Commission occupations. Our contractors worked with staff from each program office. Now we are completing occupation-specific competency models that managers and employees will ultimately use to discover the skills required at the various levels of advancement at FERC, and as a resource for their career development.

[11] In the FY 2014 – 2018 Strategic Plan, this performance goal was established to measure the deployment of a competency based training program. In FY 2015, this measure was modified to measure the deployment of a knowledge management program to expand the scope of our original efforts to look broader at capturing critical organization knowledge and use it to promote learning.

Performance Goal 3.2.2

Employee Satisfaction Favorability Rating

Description

The Commission must ensure that employee performance is aligned with the Commission's strategic goals and that employees have the resources they need to accomplish the Commission's goals. Thus, this measure uses the results of the FEVS to measure employee perceptions on the Commission's performance management system and the adequacy of resources.

Fiscal Year	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Employee Satisfaction Favorability Rating	67% positive	66% positive	65% positive	67% positive	69% positive	72% positive	69% positive	69% positive	69% positive

FY 2016 Target: Met

Analysis

This rating is defined as the weighted average of the percentage of employees who responded favorably to fifteen selected questions related to performance management and adequacy of resources in the FEVS. From FY 2015 to FY 2016, this rating increased by one percentage point. Between 2015 and 2016, the Commission developed and grew our FEVS effort into an **Employee Engagement Program** that helps senior executives lead more effectively and increases employee satisfaction and productivity. The two facets of this program were to discuss results with every office and facilitate and conduct action planning to address results. These efforts not only yielded the highest participation rate ever, 82 percent for the Commission in the 2016 FEVS, but it also increased our employee engagement index by 1.3 percent and our global job satisfaction index by 2.7 percent.

Each office and component within the Commission plays an important role in ensuring employee satisfaction and adequacy of resources (e.g., providing sufficient training to employees). To ensure continued success with meeting this target, the Commission has and will continue our employee engagement efforts to communicate the results of each program office's FEVS and work to improve the work environment. The Commission will also continue to provide each office with guidelines to help them develop action plans to address any areas not favorably rated and take corrective actions.

Objective 3.3

Facilitate public trust and understanding of Commission activities by promoting transparency, open communication, and a high standard of ethics.

Facilitating understanding of how the Commission carries out its responsibilities and maintaining public trust in the Commission are important components of the Commission's commitment to organizational excellence. Trust and understanding increase acceptance of Commission decisions and reduce the potential for contentiousness toward FERC rules and regulations, thus enabling the creation and enforcement of policy. The Commission advances this objective by promoting transparency and open communication with respect to conduct of the Commission's business, thereby increasing awareness and understanding of the Commission's activities. The Commission furthers this objective by cultivating relationships with sister government agencies and stakeholder groups, an activity that supports understanding of Commission procedures and actions. The Commission also promotes a high standard of ethics, which encourages public confidence in the Commission's activities and ability to fulfill its responsibilities.

Commission staff is highly interactive and responsive to its stakeholders. For example, it is essential that Commission staff communicate clearly and concisely with the media so that stakeholders and the public can be aware of and understand the Commission's actions. To that end, Commission staff consistently provides detailed background material on Commission meeting orders to help the media, stakeholders and the public understand complex matters, and posts links to the actual orders to the Commission's web page as quickly as possible after each meeting.

The Commission's FERC.gov web page is its primary communication tool. All Commission announcements, updates and new releases are posted there; the web page is the primary feed for all Commission public media sites. In FY 2016, the Commission began preparing for a complete reconstruction and update of the web page, the scope of which has not been performed on the FERC.gov page since 2001. The goal is to expand usability for the public and stakeholders and accommodate new forms of media into the FERC.gov system.

Research into public outreach shows that video is the outreach tool of the future. To that end, the Commission in FY 2016 expanded its public information program to video, with the introduction of a three-minute "What is FERC?" video geared toward the public, particularly individuals who are affected by proposed natural gas and hydro projects that come before the Commission. The video introduces viewers to the Commission, what it does and how to participate in its process. The video is posted on the Commission's web page, its YouTube page and shared over social media. This was followed up by videos explaining specifically how members of the public can comment and look up specific information at FERC.gov. Staff also are exploring using the video format to explain other Commission processes and policies to the public.

FERC LANDOWNER HELPLINE

The Commission's Landowner Helpline is another example of how the Commission promotes transparency. The Landowner Helpline assists landowners with issues relating to the construction or operation for FERC jurisdictional facilities.

Issues addressed include, for example:

- Responding to requests for information
- Responding to requests for assistance to facilitate resolution of disputes relating to restoration (such as land after construction)
- Responding to other complaints.

The Landowner Helpline also facilitates resolving landowner issues involving environmental, recreational, and other matters relating to a FERC jurisdictional hydroelectric project.

The Commission is taking advantage of another new and expanding tool to enhance its public communications efforts: podcasts. Commission staff is producing podcasts that provide, in an entertaining manner, information on FERC actions, policies and processes and have successfully produced nearly ten podcasts thus far.

Communicating with Congress on the Commission's actions also is an important priority, and staff pays particular attention to orders that affect individual members and their constituents, notifying them when significant decisions or milestones arise. Additionally, the Commission responds in a timely and transparent manner to all Congressional inquiries.

Communication with state officials, particularly state regulators, also is a priority for the Commission. Staff consistently notifies the appropriate regulators and other state officials of Commission actions that are of interest, and frequently offers briefings via conference calls or webinars on major issues.

Finally, staff from various offices participates in information exchanges with international regulatory agencies with a particular focus on wholesale market design issues. Such meetings allow staff to share and learn best practices, and to discuss emerging challenges in the respective energy markets. Topics include but are not limited to: the development of new market designs; issues of capacity and resource adequacy; zonal and nodal pricing; coordination between transmission system operators; transmission planning and cost allocation; integration into the electric grid of variable energy resources, distributed energy resources, demand response; and natural gas scheduling practices and market operations.

Through the use of the Commission's eLibrary and eSubscription web pages, the public can obtain extensive information concerning documents both submitted to and issued by the Commission. The Commission seeks to ensure that all filings and Off-the-Record Communication (*Ex Parte*) submitted to and from the Commission are publicly noticed timely and accurately. The Commission continues to make the maintenance and implementation of effective filing procedures a high priority, therefore, the timely processing of incoming documents ensures the information is channeled to Commission staff for prompt review and action. As a result, timely and accurate Commission issuances, such as notices, orders, and major rules, continue to promote the flow of information through all levels of the agency and to all interested parties.

The Commission continues to expand its following on social media. Since launching its social media program in 2011, FERC's Facebook, Twitter, LinkedIn and Flickr followers have grown to more than 25,000. The Commission's success in this arena has led all of the Commissioners to start up their own Twitter feeds, and the Commission's Human Resources Division to launch its own FERC Career Twitter feed. In addition to following the Commission's news-related postings, thousands of people and institutions are reposting Commission information to other websites, which further increases awareness and understanding of the Commission's activities

In addition, the Commission's ethics program aims to promote the highest standards of ethical conduct by determining whether employees' activities conform to statutes and regulations that set standards of conduct for federal employees. The Commission continues to utilize innovative annual ethics training, which has been recognized repeatedly for excellence among government agencies. To promote transparency and public confidence in the Commission's programs, Commission staff responds to requests under the Freedom of Information Act, 5 U.S.C. § 552. The Commission seeks to issue responses to 85 percent of such requests within the statutory time frame of 20 business days, excluding statutory-authorized extensions.

Performance Goal 3.3.1

Disseminate Commission filings and issuances to the public within established timeframes

Description

Timely communication with stakeholders helps to demonstrate a spirit of transparency and openness that is essential to maintaining public trust and understanding. Accordingly, the Commission has established timeframes for responding to requests for information, for disseminating policy decisions and actions, for the issuance of approved orders, and for public notification of filings submitted to the Commission as well as Off-the-Record Communications (Ex Parte) submitted to and from the Commission. The extent to which the Commission meets these timelines is an indication of its performance with regard to timely communication and serves as an indicator of the Commission's effectiveness in achieving Objective 3.3.

Targets are set for each filing channel, varying by channel. These differing thresholds reflect the relative importance of the type of document, the extent to which the documents are processed electronically, and the degree of control which FERC exercises over the document filing channel.

Fiscal Year	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2016 Target	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of Commission filings and issuances that are disseminated to the public within established timeframes	Data not available	81%	87%	93%	92%	96%	97%

FY 2016 Target: Met

Analysis

The FY 2016 target called for an improvement of five percentage points over the FY 2015 actual result. The Commission has exceeded that target by one percentage point. Improvements were noted for each of the filing channels. However, there is still room for improvement for the regional office paper filings. When filings move from the paper to the electronic channel, FERC can more readily and speedily publish these for public consumption, which in turn improved the overall statistical performance result. Our long-term plan for further improving results on this metric centers upon an upgrade to the eIssuance application, PIW, which is scheduled for a March 2017 deployment. The improved PIW realignment will move virtually all regional office initiated filings to the electronic channel, which in turn, will place the Commission on the path to meeting the higher goals in FY 2017 and FY 2018 of disseminating Commission filings and issuances to the public within established timeframes.

Appendix A

Workload Tables

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Pipeline Certificates	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Construction Activity	95	53	95	53	110	110	53	100	100	53
Prior Notice & Abandonments	13	38	36	15	90	90	15	80	80	15
Compliance Filings & Reports	0	425	410	15	400	400	15	400	400	15
Environmental Analysis	84	105	114	75	120	130	65	130	140	55
Compliance & Safety Inspections	0	407	407	0	400	400	0	400	400	0
LNG Inspections	0	15	15	0	14	14	0	16	16	0
Rehearings	24	39	29	34	27	27	34	27	27	34
Complaints	1	4	4	1	1	1	1	1	1	1
Declaratory Orders	0	1	1	0	1	1	0	1	1	0
Remands	2	1	2	1	2	2	1	1	1	1
Dispute Resolution	4	133	132	5	135	135	5	133	133	5

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Hydropower Licensing	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Original Licenses	44	6	22	28	10	19	19	10	15	14
Relicenses	50	22	14	58	20	17	61	12	20	53
5 MW Exemptions	1	3	1	3	3	1	5	3	5	3
Preliminary Permits	44	85	109	20	75	75	20	50	60	10
Rehearings	11	25	25	11	25	25	11	25	25	11
Declaratory Orders	1	1	1	1	1	1	1	1	1	1
Remands	1	1	1	1	1	1	1	0	1	0
Cases Set for Hearing	0	0	0	0	1	0	1	1	1	1
Dispute Resolution	1	1	1	1	1	2	0	1	1	0

Key: P = Pending at year-end; R = Received; C = Completed

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Project Compliance and Administration	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Amendments	531	2,481	2,539	473	2,440	2,432	481	2,578	2,529	530
Jurisdiction	6	5	8	3	7	8	2	8	5	5
Federal Lands	1	72	66	7	104	98	13	95	96	12
Headwater Benefits	3	116	117	2	119	118	3	121	120	4
Compliance	78	1,244	1,014	308	1,045	1,056	297	1,061	1,104	254
Surrenders, Transfers	27	39	46	20	45	46	19	38	41	16
Conduit Exemptions	4	22	22	4	28	29	3	26	27	2
Environmental Inspections & Assistance	0	65	62	3	70	71	2	80	79	3
Rehearings	16	15	25	6	15	15	6	5	8	3
Complaints	1	1	1	1	1	1	1	1	1	1
Dispute Resolution	0	17	17	0	3	3	0	3	3	0

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Dam Safety and Inspections	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Operational Inspections	1,239	1,522	1,485	1,276	1,607	1,528	1,355	1,689	1,575	1,469
Prelicense Inspections	10	8	12	6	11	10	7	12	10	9
Construction Inspections	51	114	109	56	100	75	81	87	46	122
Exemption Inspections	291	185	325	151	167	292	26	137	163	0
Special Inspections	72	122	164	30	106	136	0	75	75	0
Engineering Evaluation & Studies	2,938	8,792	8,424	3,306	9,614	8,997	3,923	10,447	9,667	4,703
Part 12 Reviews	188	147	205	130	147	216	61	141	202	0
Dam Safety Reviews	11	16	24	3	19	22	0	19	19	0
EAP Tests – Functions	32	86	69	49	95	80	64	104	91	77
EAP Tests – Table Top	26	14	29	11	21	29	3	24	19	8

Key: P = Pending at year-end; R = Received; C = Completed

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Rates and Tariffs	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Gas Certificates & Rate Evaluations	140	55	80	70	75	75	70	75	75	70
Market-Based Rates	1,076	2,827	3,070	833	2,900	3,000	733	2,900	3,000	633
Cogeneration/Small Power Producers (QF)	138	2,042	2,019	161	1,375	1,375	161	1,375	1,375	161
Dispute Resolution (Electric)	4	13	12	5	18	18	5	16	18	3
Rehearings (Electric)	435	225	335	325	200	250	275	200	250	225
Complaints (Electric)	48	37	49	36	50	60	26	50	60	16
Declaratory Orders (Electric)	20	17	21	16	25	30	11	25	30	6
Remands (Electric)	5	0	2	3	0	2	1	0	1	0
Negotiated Rates	40	601	616	25	625	625	25	625	625	25
Cost-Based Rates	847	4,191	4,353	685	4,200	4,300	585	4,200	4,300	485
Dispute Resolution (Gas)	0	0	0	0	3	3	0	2	2	0
Rehearings (Gas)	37	26	34	29	15	30	14	10	15	9
Complaints (Gas)	2	0	2	0	1	1	0	1	1	0
Declaratory Orders (Gas)	3	1	4	0	1	1	0	1	1	0
Remands (Gas)	4	0	2	2	1	1	2	1	3	0
RTO and ISO Filings	77	210	250	37	300	300	37	300	300	37
Dispute Resolution (Oil)	0	1	1	0	1	1	0	1	1	0
Rehearings (Oil)	39	4	9	34	5	35	4	4	8	0
Complaints (Oil)	-1	5	3	1	3	4	0	4	4	0
Declaratory Orders (Oil)	6	16	18	4	17	21	0	18	18	0
Remands (Oil)	0	0	0	0	2	1	1	0	1	0

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Corporate Applications	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Interlocking Positions, Other Corporate Filings	92	795	781	106	800	800	106	800	800	106
Mergers, Acquisitions & Dispositions	41	201	200	42	235	235	42	235	235	42

Key: P = Pending at year-end; R = Received; C = Completed

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Electric Grid Reliability	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Reliability Standards	110	77	87	100	77	88	89	70	79	80
Interpretations/Erratas of Reliability Standards	12	3	3	12	6	6	12	3	6	9
Reliability Filings by ERO/RE	45	19	15	49	18	20	47	18	20	45
Standards Compliance Audits	3	12	13	2	27	22	7	27	22	12
Notices of Penalty-Violations	41	931	932	40	890	880	50	890	880	60

	FY 2015 Actual	FY 2016 Actual			FY 2017 Estimate			FY 2018 Estimate		
Legal Matters	**P**	**R**	**C**	**P**	**R**	**C**	**P**	**R**	**C**	**P**
Cases Set for Hearing	79	101	98	82	100	100	82	100	100	82
Settlement Judge Proceedings	40	88	87	41	80	80	41	80	80	41
Appellate Review	105	115	120	100	110	120	90	120	125	85
Audits	26	15	14	27	18	22	23	16	20	19
Accounting	95	392	413	74	408	400	82	405	410	77

Key: P = Pending at year-end; R = Received; C = Completed

Appendix B

Acronyms and Abbreviations

CAISO	California Independent System Operator Corp.
CIP	Critical Infrastructure Protection
Corps	U.S. Army Corps of Engineers
CPI	Cost Performance Index
CR	Continuing Resolution
EISA	Energy Independence and Security Act of 2007
EPAct 2005	Energy Policy Act of 2005
ERO	Electric Reliability Organization
FERC or the Commission	Federal Energy Regulatory Commission
FEVS	Federal Employee Viewpoint Survey
FPA	Federal Power Act
FPC	Federal Power Commission
FTE	Full-Time Equivalent
FY	Fiscal Year
GMD	Geomagnetic Disturbance
GSA	General Services Administration
ICA	Interstate Commerce Act
ISO	Independent System Operator
ISO-NE	Independent System Operator New England, Inc.
IT	Information Technology
LNG	Liquefied Natural Gas
MISO	Midcontinent Independent Transmission System Operator, Inc.
NAESB	North American Energy Standards Board
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NGA	Natural Gas Act of 1938
NGPA	Natural Gas Policy Act of 1978
NIST	National Institute of Standards and Technology
NOI	Notice of Inquiry
NYISO	New York Independent System Operator, Inc.
PIW	Public Issuance Workflow
PJM	PJM Interconnection, LLC
RTO	Regional Transmission Organization
SPP	Southwest Power Pool
SS	Swing Space

Office of External Affairs
888 First Street, NE
Washington, D.C. 20426

202-502-6088
1-886-208-3372 (toll-free)
202-502-8659 (TTY)

www.FERC.gov