



Federal Energy Regulatory Commission

Fiscal Year
2019 Congressional Performance Budget Request

Fiscal Year
2017 Annual Performance Report



Chairman Kevin McIntyre

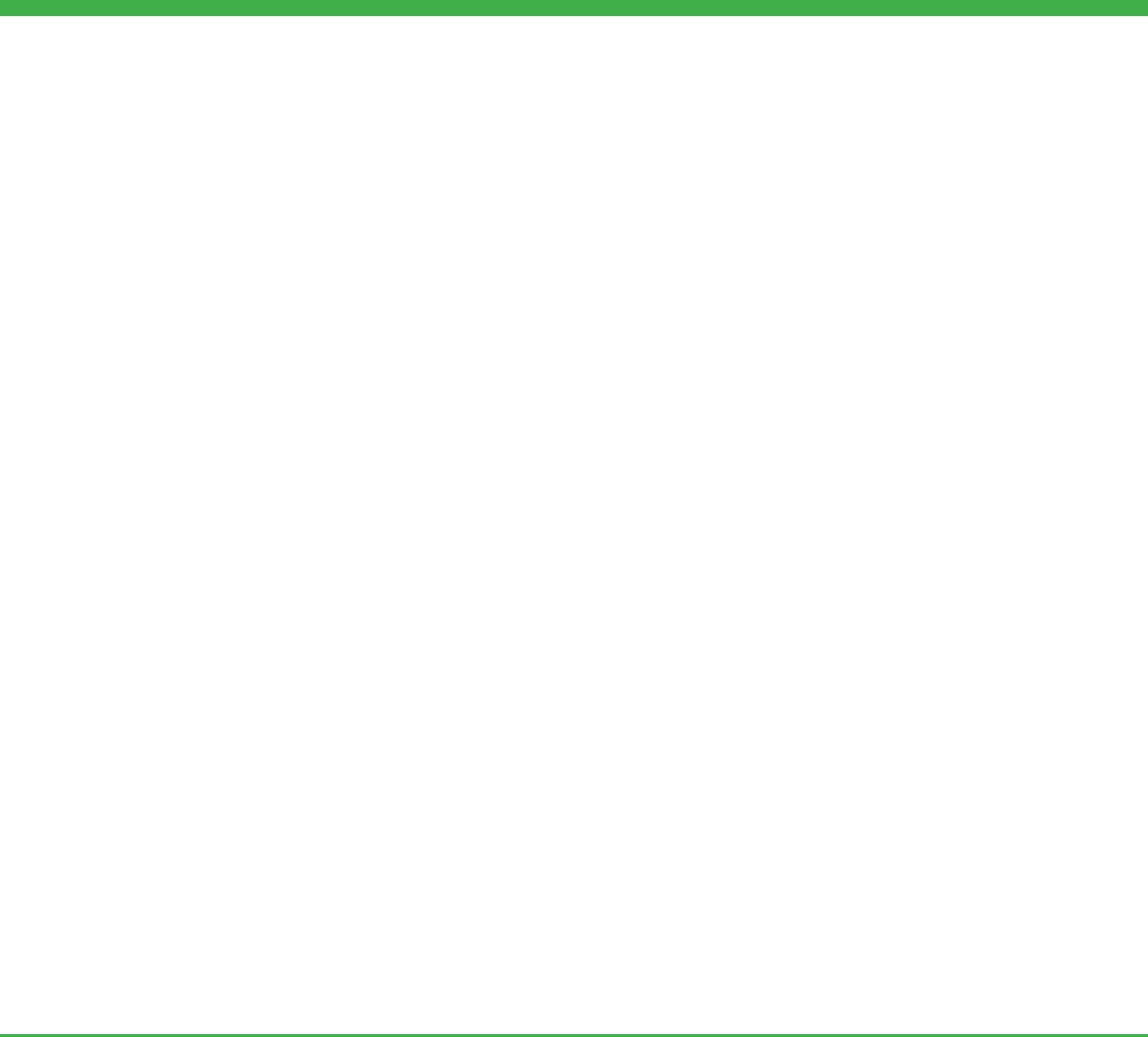
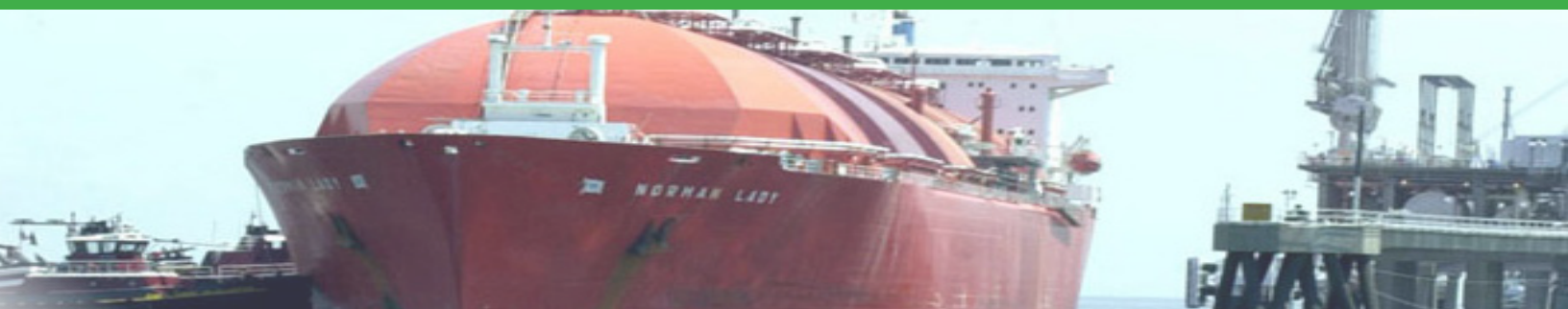




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MISSION

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, \$369,900,000, to remain available until expended: Provided, That notwithstanding any other provision of law, not to exceed \$369,900,000 of revenues from fees and annual charges, and other services and collections in fiscal year 2019 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 2019 so as to result in a final fiscal year 2019 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 2017 Actual	FY 2018 Estimate	FY 2019 Request
Appropriation	\$346,800,000	\$344,444,881	\$369,900,000
Offsetting Collections	(\$346,800,000)	(\$344,444,881)	(\$369,900,000)
Net Appropriation	\$ -	\$ -	\$ -

The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).

FY 2019 Request Summary

The Federal Energy Regulatory Commission (FERC or the Commission) requests an appropriation of \$369,900,000 and 1,465 full-time equivalents (FTEs) to execute its mission in fiscal year (FY) 2019. This funding request is an increase of \$2,300,000, or about 0.6 percent, above the FY 2018 Congressional Budget Request. The Commission's full funding requirement to meet base operating requirements and continuation of the headquarters building modernization effort is \$385,000,000. However, the Commission will apply \$15,100,000 of prior year unobligated budget authority to offset funding requirements in FY 2019.

The Commission allocated 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 normal increases in salaries and benefits in FY 2019. 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 involved environmental review processes 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 further 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.

This budget request includes continued funding for a multi-year building consolidation project. The Commission requests to fund \$16.7 million in FY 2019 which supports the construction of two floors at FERC headquarters. The Commission is required to execute this modernization project pursuant to current GSA and OMB space use policy. Congress approved a Prospectus for the ten-year lease option on the 888 First Street Building (FERC Headquarters). As part of the terms of the Prospectus, the Commission is required to consolidate within the FERC Headquarters building to reduce its overall space utilization by 12 percent, which would include relocating employees currently located at 1100 First Street back to FERC Headquarters. The new lease term commenced on September 30, 2015.

Comparison of FYs 2018 and 2019 by Major Category

Major Category (Dollars in thousands)	FY 2018 Estimate	FY 2019 Request	Difference	Percent Change FY 2018 to FY 2019
Salaries & Benefits	\$246,320	\$251,955	\$5,635	2.3%
Rent	33,595	33,346	(249)	-0.7%
Environmental and Program Contracts	11,358	7,601	(3,757)	-33.1%
Information Technology	41,691	53,662	11,971	28.7%
Administrative (including Travel and Training)	20,377	21,735	1,359	6.7%
Building Modernization	8,616	16,701	8,085	93.8%
Subtotals	\$361,956	\$385,000	\$23,044	6.4%
Application of Prior Year (PY) Budget Authority	(17,511)	(15,100)	2,411	
Totals	\$344,445	\$369,900	\$25,455	7.4%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
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 Strategic Plan. 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 and enables the achievement of the Commission's mission.

Strategic Goal and Objectives (Dollars in thousands)		FY 2017 Actual	FY 2018 Estimate	FY 2019 Request	Percent Change FY 2018 to FY 2019
Goal 1	Funding	\$ 160,014	\$ 168,117	\$ 178,311	6.1%
	FTE	686	687	687	0.0%
Objective 1.1		122,510	129,957	139,863	7.6%
		537	539	539	0.0%
Objective 1.2		37,504	38,160	38,448	0.8%
		149	147	147	0.0%
Goal 2	Funding	\$ 119,532	\$ 127,675	\$ 135,401	6.1%
	FTE	486	496	496	0.0%
Objective 2.1		63,555	67,894	71,340	5.1%
		251	258	258	0.0%
Objective 2.2		55,977	59,781	64,061	7.2%
		235	238	238	0.0%
Goal 3	Funding	\$ 62,017	\$ 66,164	\$ 71,288	7.7%
	FTE	281	283	283	0.0%
Objective 3.1		32,169	34,719	37,396	7.7%
		146	148	148	0.0%
Objective 3.2		14,631	15,580	16,778	7.7%
		66	66	66	0.0%
Objective 3.3		15,217	15,865	17,114	7.9%
		69	68	68	0.0%
TOTAL	Funding	\$ 341,563	\$ 361,956	\$ 385,000	6.4%
	FTE	1,453	1,465	1,465	0.0%
Application of PY Budget Authority		-	(17,511)	(15,100)	
TOTAL	Funding	\$ 341,563	\$ 344,445	\$ 369,900	7.4%
	FTE	1,453	1,465	1,465	0.0%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
Numbers may not add up due to rounding.

Resources by Industry

Regulated Industry (Dollars in thousands)		FY 2017 Actual	FY 2018 Estimate	FY 2019 Request	Percent Change FY 2018 to FY 2019
Electric	Funding	\$ 195,327	\$ 205,406	\$ 219,260	6.7%
	FTEs	838	836	836	0.0%
Hydro	Funding	74,649	80,932	85,144	5.2%
	FTEs	316	325	325	0.0%
Natural Gas	Funding	62,150	65,672	69,880	6.4%
	FTEs	259	262	263	0.3%
Oil	Funding	9,437	9,946	10,715	7.7%
	FTEs	42	42	42	0.0%
Subtotal		\$ 341,563	\$ 361,956	\$ 385,000	6.4%
Application of PY Budget Authority		-	(17,511)	(15,100)	
Total	Funding	\$ 341,563	\$ 344,445	\$ 369,900	7.4%
	FTEs	1,455	1,465	1,465	0.0%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
Numbers may not add up due to rounding.

Object Class Summary

OBJECT CLASS SUMMARY (Dollars in thousands)				
		FY 2017 Actual	FY 2018 Estimate	FY 2019 Request
11.9	Personnel Compensation	\$ 179,318	\$ 186,331	\$ 188,550
12.1	Benefits	57,652	59,989	63,405
13.0	Benefits for Former Personnel	9	-	-
	Sub Total, Personnel Compensation & Benefits	\$ 236,979	\$ 246,320	\$ 251,955
21.0	Travel and Transportation of Persons	3,085	3,584	3,660
22.0	Transportation of Things	1	2	2
23.1	Rental Payments to GSA	33,234	33,595	33,346
23.2	Rental Payments to Others	817	859	891
23.3	Communications, Utilities & Misc. Charges	1,932	1,999	2,045
24.0	Printing and Reproduction	2,411	2,292	2,335
25.1	Advisory and Assistance	8,909	10,159	8,713
25.2	Non-Federal	11,648	12,353	9,924
25.3	Federal	1,616	1,520	1,979
25.4	Operation & Maintenance of Facilities	1,777	1,789	1,835
25.7	Operation & Maintenance of Equipment	28,798	26,628	40,378
26.0	Supplies and Materials	3,424	3,621	3,854
31.0	Equipment	6,652	8,215	5,500
32.0	Leasehold Improvements	-	8,949	18,512
41.0	Grants, Subsidies & Contributions	57	46	46
42.0	Insurance Claims and Indemnities	223	25	25
	TOTAL, OBLIGATIONS	\$ 341,563	\$ 361,956	\$ 385,000
	Application of PY Budget Authority	-	(17,511)	(15,100)
	GROSS BUDGET AUTHORITY	341,563	344,445	369,900
	Offsetting Receipts	(341,563)	(344,445)	(369,900)
	NET BUDGET AUTHORITY	\$ -	\$ -	\$ -

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
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 developed 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 2017 Annual Performance Report has been combined with its FY 2019 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 the current strategic goals and objectives established in the FY 2014 – 2018 Strategic Plan. The Commission is currently in the process of updating its Strategic Plan in accordance with the GPRA Modernization Act of 2010 (GPRAMA) and OMB Circular A-11, for FY 2018 – 2022. Once finalized, the Commission will align its resources and identify performance measures with the updated Strategic Plan.

The performance goals and indicators expressed in Appendix A of this report are aligned to the objectives in the FYs 2014 – 2018 strategic plan and define the level of performance to be achieved¹.

FERC ensures that the performance data presented in this report meets 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:
 - purpose and interpretation of the measure
 - external factors that may impact the measure
 - data collection and storage procedures
 - data quality controls
 - reporting requirements
3. Performance results are calculated and reported according to established procedures, and approved by the office director.
4. Selected performance measures may undergo an independent Verification and Validation Assessment during the four year performance reporting cycle. As needed, an Independent Review Team will prepare a report evaluating the selected performance measure based on the five verification and validation criteria.

¹ The Commission's performance measures are in the process of being updated for the FY 2018 – 2022 Strategic Plan.

Overview of the Federal Energy Regulatory Commission

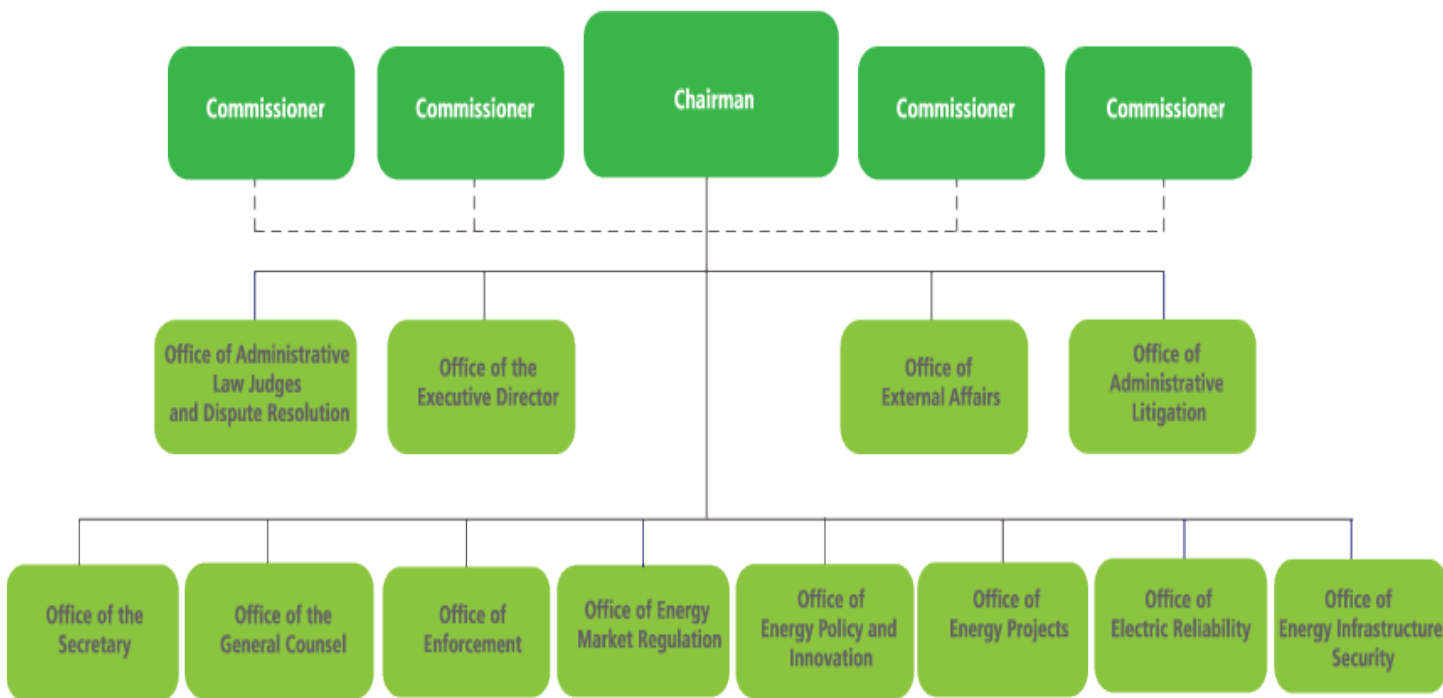
The Commission is an independent regulatory agency within the U.S. Department of Energy. The Commission’s statutory authority centers on major aspects of the Nation’s wholesale electric, natural gas, hydroelectric, and oil pipeline industries.

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, as well as electric utility corporate filings, including requests for approval of mergers and acquisitions.. 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 emerging technologies, 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), working with other governmental agencies, industry, and other stakeholders, identifies and 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 and 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 the Commission; and negotiating settlements that achieve prompt rate reductions for energy consumers, 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



Chairman Kevin McIntyre

Sworn In: December 7, 2017

Term Expires: June 30, 2018



**Commissioner
Cheryl A. LaFleur**

Sworn In: July 13, 2010

Term Expires: June 30, 2019



**Commissioner
Robert F. Powelson**

Sworn In: August 10, 2017

Term Expires: June 30, 2020



**Commissioner
Neil Chatterjee**

Sworn In: August 8, 2017

Term Expires: June 30, 2021



**Commissioner
Richard Glick**

Sworn In: November 29, 2017

Term Expires: June 30, 2022



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-devel-

opmental (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 and 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

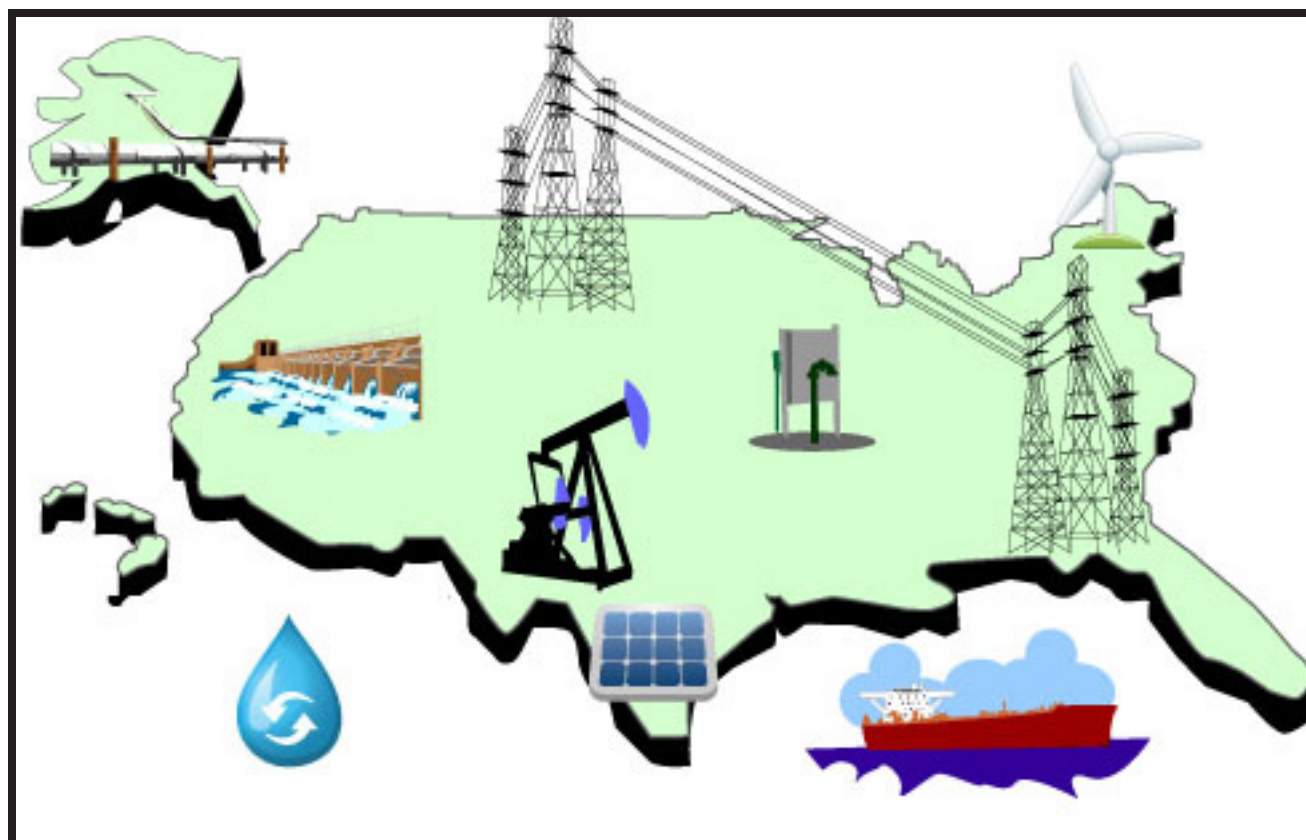
The Commission’s role in regulating the natural gas industry is largely defined by the Natural Gas Act of 1938 (NGA).

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 over-



sees 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 \$1,000,000² 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.

² 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.

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 2017 Actual	FY 2018 Estimate	FY 2019 Request	Percent Change FY 2018 to FY 2019
Objective 1.1	FTE	537	539	539	0.0%
	Funding	\$ 122,510	\$ 129,957	\$ 139,863	7.6%
	Program	89,518	93,543	95,668	2.3%
	Support	32,992	36,415	44,195	21.4%
Objective 1.2	FTE	149	147	147	0.0%
	Funding	\$ 37,504	\$ 38,160	\$ 38,448	0.8%
	Program	28,375	28,275	26,451	-6.5%
	Support	9,129	9,885	11,997	21.4%
Goal 1 Subtotal	FTE	686	687	687	0.0%
	Funding	\$ 160,013	\$ 168,117	\$ 178,312	6.1%
Application of PY Budget Authority		-	(8,133)	(6,993)	
Goal 1 Total	Funding	\$ 160,013	\$ 159,984	\$ 171,318	7.1%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
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 proposed 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 how to address 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 devised a plan for monitoring and reviewing such filings in an organized fashion. Staff reviewed the formula rates in 2016, is currently reviewing the formula rates in 2017 and will continue to review these filings in FYs 2018 and 2019. The Commission will consider what additional steps may be warranted to address any issues identified in the course of these reviews.

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.

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 market rules 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,

RATE AND TARIFF FILINGS BY INDUSTRY

	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	FY 2018 Estimate	FY 2019 Estimate
Electric	6,045	5,446	4,939	5,500	5,500
Gas	1,613	1,609	1,303	1,650	1,650
Oil	727	778	750	750	750

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

capacity and ancillary services markets provide appropriate price signals for new and existing resources, support market evolution, and provide appropriate opportunities to participate for all eligible resources, including emerging technologies.

In reviewing filings, the Commission may determine 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 can facilitate the construction of needed infrastructure in a more 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 through the hearing process 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 2018 and 2019, 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.

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 2018 and 2019, the Commission will continue to 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 due to a number of factors, including 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 allowing 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. The rule promotes competition in anticipation of growing demand for primary frequency response service as a result of a reliability standard that became enforceable 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 requiring 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 reviewed and issued the compliance filings in FY 2017.

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 reviewed filings to comply with the rule in FY 2017 and issued orders in 2017. Additionally, the Commission issued a Notice of Proposed Rulemaking regarding the provision of primary frequency response in November 2016 (Docket No. RM16-6-000). Comments were received in January and February 2017. In August 2017, the Commission issued a Notice of Request for Supplemental Comments. Comments were received in September and October 2017. Work in this proceeding will continue into FYs 2018 and 2019.

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. The Commission held three workshops in 2014 to further explore these issues. 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 2018 and 2019.

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 re-

al-time markets at the same time interval it dispatches energy; (2) settle operating reserve 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 were received in January 2017. All but one of the compliance filings, which is still pending, were accepted by the Commission. Related work will continue in FYs 2018 and 2019.

As part of the price formation initiative, the Commission also 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. In addition to providing an update on the RTO/ISOs' current practices in the five areas, the reports have assisted the Commission 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 has also assisted 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 were received in February 2017, with work continuing into FYs 2018 and 2019. The Commission also issued, in January 2017, a Notice of Proposed Rulemaking regarding uplift cost allocation and transparency. Comments on the proposal were received in April 2017. The Commission is currently reviewing comments on both proposed rules and will determine appropriate next steps. Related work will continue in FYs 2018 and 2019.

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 is-



sued 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 exceed \$1,000/MWh because they have the opportunity to recover these costs. Providing resources the opportunity to recover these costs allows adequate investment in resources, and the participation of resources in RTO/ISO energy markets ensure adequate and reliable energy for consumers.

An Order on rehearing of this rule, Order No. 831-A, was issued on November 9, 2017, along with orders on compliance filings that were received from five RTOs/ISOs in May 2017. One ISO was granted an extension to file its compliance filing. Work is expected to continue into FYs 2018 and 2019.

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. In FY 2016, the Commission issued a Notice of Proposed Rulemaking addressing data collection for analytics and surveillance and market-based rate purposes, proposing that electric market-based rate sellers and entities trading virtual products or holding financial transmission rights provide certain affiliate and asset information to the Commission for collection in an electronic database. By collecting this information in a single database, the Commission would avoid duplication, minimize compliance burdens, and modernize data collection in both its electric market-based rate and its analytics and surveillance programs. Related work will continue in FYs 2018 and 2019.

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 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. 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. The Commission will continue evaluating and monitoring capacity market issues.

In the past few years, the Commission has held technical conferences and received comments to consider how RTOs/ISOs' capacity market rules and structures were supporting the procurement and retention of resources necessary to meet future reliability and operational needs as well as the performance of resources during the 2013-2014 winter. In May 2017, Commission staff convened a technical conference (Docket No. AD17-11-000) to discuss the interplay of state policy goals and wholesale energy and capacity markets and to examine the relative roles of 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 were received in June and July 2017, with work continuing into FYs 2018 and 2019.

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 and 2019, 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 2018 and 2019, the Commission will review the information filed by jurisdictional oil and product pipelines in their financial reports to determine whether the pipelines' earnings are just and reasonable.

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. Related work will continue in FY 2018.

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 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. Related work will continue in FYs 2018 and 2019.

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 is-

sue 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 2017, the Commission's Trial Staff filed 43 pieces of testimony. Thereafter hearings, which can often last over a month, are convened. Following a hearing at which witnesses are cross-examined, the 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 2017, the Commission's Trial Staff filed 42 pre and post hearing briefs. In FY 2017, such proceedings resulted in the issuance of 11 Initial Decisions and 3 Commission opinions or orders on Initial Decisions.

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 factual issues and complex legal 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 2017, 75 full or partial settlements were achieved in cases set for hearing.

Savings to ratepayers from these settlements totaled approximately \$497 million (\$250 million in electric utility matters and \$247 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 2017.

In addition, many matters, docketed and non-docketed, are resolved through the efforts of dispute resolution staff serving as mediators or facilitators. During FY 2017, the dispute resolution staff (inclusive of the landowner helpline) successfully resolved 162 disputes. Three of the disputes were resolved through negotiated (docketed) settlements. In FYs 2018 and 2019, 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 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 ensure no adverse effect on rates, regulation, competition, or inappropriate cross-subsidization.

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

In FY 2016, the Commission issued a Notice of Inquiry (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 proposed merger or acquisition would have an adverse ef-

fect on competition if the transaction were 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. NOI comments were filed in November and December 2016. Staff analyzed the comments during FY 2017 in order to determine next steps. Work is expected to continue into FYs 2018 and 2019.

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 2018 and 2019, as needed.

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 (Docket No. RM17-8-000). 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. The Commission received comments in April 2017. The Commission expects work on these issues to continue into FYs 2018 and 2019.

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.

During FY 2013 through FY 2017, the Commission issued orders addressing all the initial and subsequent transmission planning regions' Order No. 1000 regional compliance filings except one, as well as all the initial and subsequent Order No. 1000 interregional compliance filings. The Commission expects to address the one pending regional compliance filing in FY 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 assess the effectiveness of the Commission's policies in achieving its goals regarding transmission investment and to inform potential policy revisions going forward. Staff described these metrics in a 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 the initial results of these metrics and in October 2017 staff released an updated report. In FY 2018, staff expects to continue to 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 trans-

mission 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. The Commission expects work on these issues to continue into FYs 2018 and 2019.

Energy Imbalance Market

In FY 2014, the Commission approved CAISO's implementation of an Energy Imbalance Market (EIM) 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 (Idaho Power), Powerex Corporation (Powerex), Seattle City Light, Salt River Project, the Balancing Authority of Northern California (on the behalf of the Sacramento Municipal Utility District), and the Los Angeles Department of Water and Power all entered into implementation agreements with CAISO to join the Energy Imbalance Market and have or are expected to file tariff provisions with the Commission to facilitate their participation. Portland General Electric Company commenced EIM operations in October 2017. Idaho Power and Powerex are scheduled to commence EIM operations in April 2018, Seattle City Light, the Balancing Authority of Northern California (for the Sacramento Municipal Utility District), and the Los Angeles Department of Water and Power in April 2019, and Salt River Project in April 2020. 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 2018 and 2019.

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 has considered 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. PJM and MISO have completed their analysis on the implementation of the common interface definition. Currently, the Commission continues to review information concerning issues such as firm flow entitlement freeze date, pseudo-ties, and overlapping congestion charges to understand what, if any, additional steps the Commission could take to improve the efficiency of operations at the PJM/MISO seam. In addition, the Commission continues to review other proceedings related to challenges with the administration and coordination of pseudo-tie resources such as modeling, congestion management, *pro forma* pseudo-tie agreements, and planning and operation of pseudo-ties in the PJM/MISO balancing authority areas.

The Commission also considered the seam between MISO and Southwest Power Pool, Inc. (SPP) in several proceedings. 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 2018 and 2019.

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 over the last several years.

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. Based on the responses to the data request and comments the Commission received from the public, 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). The Commission received comments on the proposed rule in February 2017 with related work expected to continue into FYs 2018 and 2019.

Additionally, 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. Following this technical conference, 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), on January 19, 2017.

Gas-Electric Coordination

Due to historically low natural gas prices, environmental considerations, and other factors, the electric industry has increasingly utilized natural gas as a fuel for generation. Recognizing this trend, the Commission has been exploring the interdependencies of the electric and natural gas industries.

After conducting extensive public outreach and building on prior work, FERC has undertaken efforts that have facilitated greater gas-electric coordination and greater situational awareness on the part of the operators of the bulk power system, in turn promoting more reliable operation of that system. In April 2015, FERC issued Order No. 809, a final rule, to improve the coordination and scheduling of natural gas pipeline capacity with electricity markets. As part of the implementation of those reforms, in October 2016 and March 2017, the North American Energy Standards Board (NAESB) filed reports on the development of new Wholesale Gas Quadrant standards as requested by the Com-

mission. 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 its earlier work, the Commission hosted its third annual panel discussion at its October 2017 Commission meeting, where it heard from all the RTOs and ISOs about their work in improving their system operations and the performance of their markets in preparation for the upcoming winter.

The Commission continues to assess issues, conduct outreach, and evaluate proposals designed to improve coordination and efficiency between the natural gas and electric power industries. This work is expected to continue into FYs 2018 and 2019.

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 2017 Assessment of Demand Response and Advanced Metering Staff Report was released in December 2017.

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 2018 and 2019, the Commission will continue monitoring the development of interoperability standards in the NIST framework process and evaluate standards, as appropriate, to determine whether there is sufficient consensus for adoption.

Objective 1.2

INCREASE COMPLIANCE WITH FERC RULES; DETECT AND DETER 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. In November 2017, the Commission issued its eleventh 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 FY 2018, Commission staff plans to publicly issue an updated version of its "Energy Primer: A Handbook of Energy Market Basics," previously updated in November 2015.

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 markets. 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 markets. 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 hosting regular Electric Quarterly Report User Group meetings, 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 2017, the Commission completed 11 audits of public utilities and natural gas pipelines. These audits resulted in 301 recommendations for corrective actions and directed



\$8.2 million in refunds and \$5.1 million in recoveries. The recommended corrective actions improve and strengthen jurisdictional companies' compliance programs. The major topic areas of the Commission's FY 2018 audits and those anticipated for FY 2019 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 (U.S. GAAP) 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. GAAP 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 2018 and 2019, 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 2017, the Commission approved settlements in five matters. These FY 2017 settlements included almost \$52 million in civil penalties and almost \$42 million in disgorged unjust profits plus interest.

In addition, two Natural Gas Act enforcement matters are pending before the Commission. In FY 2016, the Commission issued an Order to Show Cause under the Natural Gas Act in a 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. A second pending Natural Gas Act matter concerns the Commission's, July 11, 2016, affirmance of 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.

Commission staff are currently litigating in federal district court reviews of Orders Assessing Civil Penalties issued against Richard Silkman and Competitive Energy Services, LLC, for fraud in participation in an RTO's demand response program. Also being litigated 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. In addition, Commission staff are currently litigating in district courts reviews of 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. Another federal district court review of an FY13 Order Assessing Civil Penalty concerning fraud in California electricity markets involving Barclays Bank PLC, Daniel Brin, Scott Connelly, Karen Levine, and Ryan Smith already has been settled in FY18, resulting in a \$70 million civil penalty and \$35 million in disgorgement.

In FY 2017, Commission staff issued five notices of alleged violations, opened 27 new investigations and brought 16 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 2017, the Commission received 80 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 2017, staff resolved 121 self-reports that had been submitted in FY 2017 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 2017, the Commission opened 182 Enforcement Hotline matters, most of which resulted in prompt, informal resolution. Of these, eight were still pending at the end of FY 2017.



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 2017, THE COMMISSION OPENED 182 ENFORCEMENT HOTLINE MATTERS, MOST OF WHICH RESULTED IN PROMPT, INFORMAL RESOLUTION. OF THESE, EIGHT ARE STILL PENDING.

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 2017 Actual	FY 2018 Estimate	FY 2019 Request	Percent Change FY 2018 to FY 2019
Objective 2.1	FTE	251	258	258	0.0%
	Funding	\$ 63,555	\$ 67,894	\$ 71,340	5.1%
	Program	48,151	50,465	50,187	-0.6%
	Support	15,403	17,429	21,152	21.4%
Objective 2.2	FTE	235	238	238	0.0%
	Funding	\$ 55,977	\$ 59,781	\$ 64,061	7.2%
	Program	41,532	43,650	44,484	1.9%
	Support	14,445	16,131	19,578	21.4%
Goal 2 Subtotal	FTE	486	496	496	0.0%
	Funding	\$ 119,532	\$ 127,675	\$ 135,401	6.1%
Application of PY Budget Authority		-	(6,177)	(5,311)	
Goal 2 Total	Funding	\$ 119,532	\$ 121,498	\$ 130,090	7.1%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
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 gas³. Among its many uses, natural gas is a substantial and growing resource for electric power generation, both in the U.S. and in Mexico. Increased exports of LNG and the increase in use of natural gas for electric power generation continued its historic trend in 2017. 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 2017, the Commission conducted the pre-filing review

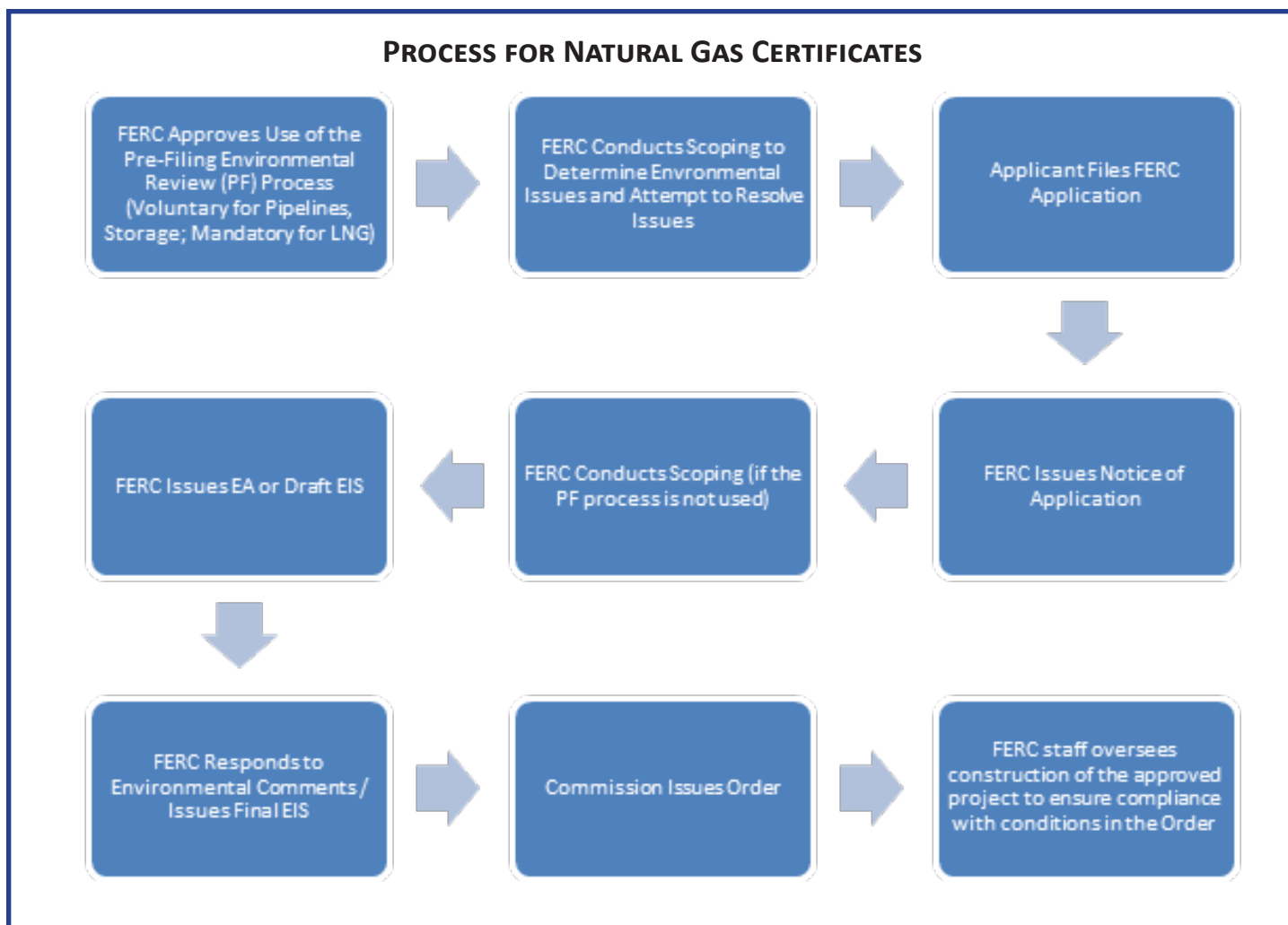
of natural gas pipeline projects and authorized 14 major natural gas pipeline projects, which resulted in approximately 1,086 miles of additional pipeline and over 753,993 horsepower of mainline compression. The Commission expects the number of natural gas pipeline project applications to decrease in FY 2019; however, the level of demand for gas-fired electric generation and LNG exports remain high.

In FY 2017, the Commission conducted the pre-filing review of 10 LNG projects, consisting of both new LNG facilities and modifications of existing LNG facilities. Seven of those projects subsequently filed applications in FY 2017. 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. Based upon industry filings with the Department of Energy and industry information provided during pre-filing meetings with Commission staff, the Commission expects three new LNG export terminal applications to be under review by the Commission through FY 2019.

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

³ 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.



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 2017, Commission staff conducted three 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 2019, the Commission proposes to conduct three 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 2017, FERC staff wrote 338 letters for 53 proceedings to various Indian tribes and Native American organizations and FERC staff held or attended 14 meetings with various tribes and Native American organizations regarding natural gas pipeline and hydropower proceedings. These included Commission staff’s participation in meetings and teleconferences with representatives of various tribes in the New England Region and Northwestern United States Regions 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. Specifically, Commission staff held a two-day tribal conference in New Mexico 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. Furthermore, Commission staff engaged with project sponsors, companies, and environmental consultants regarding communications with Indian tribes by



attending four conferences and training sessions, and updating its “Guidelines for Reporting on Cultural Resources Investigations for Natural Gas Projects.”

Hydropower Program

Pre-Filing & Applications

The pre-filing process typically begins three years prior to the filing of a license application⁴. Throughout this process, Commission staff consults with stakeholders to identify issues, develop study plans, address issues, and ensure that the licensing proposal is complete by the time the application is filed. The Commission anticipates that approximately 70 new pre-filing processes will commence in FY 2019, which will add to the 102 pre-filing processes that will continue into FY 2019 from prior fiscal years. In the course of these processes, the Commission expects its staff to attend 55 scoping and study plan, and tribal consultation meetings, a 250 percent increase from FY 2017.

Commission staff conducts a NEPA analysis on all hydro-power 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 re-

sources, cultural resources, and examines alternatives and makes recommendations for protection, mitigation, and enhancement measures to be included in any license issued. In FY 2017, Commission staff issued 7 environmental documents, with the final environmental document being issued on average about 4 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 40 environmental documents and participate in 11 post-filing public meetings associated with its environmental analysis of hydropower applications in FY 2019.

In FY 2017, the Commission acted on 24 applications representing a total capacity of 830 megawatts. In FY 2017, the Commission received 19 license applications of which 3 were for original projects and 16 were for projects with expiring licenses. In FY 2019, 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 24 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

⁴ The Federal Power Act requires that a relicense application must be filed with the Commission no later than two years before the license expires.

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 2017, there were over 115 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; approving one conventional hydroelectric pilot project to test a two-year licensing process; accepting a license application for the approved pilot project to test a two-year process; and concluding 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 sent 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 2017, the Commission issued 22 letters on these qualifying conduits with an average processing time of 59 days from the date of receiving the initial notice of intent, and met the statutory deadline

for the 15-day initial determination for all notices of intent. In FY 2019, the Commission expects to issue approximately 25 qualifying conduit letters.

In FY 2017, Commission staff completed 3,890 amendment-related filings. These filings included issuing 12 environmental assessments on amendment applications, with an average processing time of 11 months. In FY 2019, the Commission expects to issue approximately 10 environmental assessments on proposed amendments.

Environmental Inspections

The Commission conducts environmental inspections of licensed and exempted projects to evaluate and assess compliance with environmental and public use conditions of licenses. Environmental and public use requirements typically result from terms and conditions specified by the state and federal resource agencies during the licensing and exemption processes. Environmental inspectors look at the required environmental protection and enhancement measures at a project and work with licensees and exemptees to identify common problem areas and assist them with their responsibilities for maintaining compliance with such conditions.

The nature and frequency of environmental inspections at licensed or exempted projects depends on the type of environmental and public use impacts. Generally, those projects with significant environmental or public use requirements such as high recreational use, fish passage facilities, and wildlife mitigation areas are inspected on 5-8 year cycles. The vast majority of projects under the Commission's jurisdiction are inspected much less frequently. In 2017, the Commission inspected 68 hydropower projects; and for 2018, it is projected that the Commission will inspect ap-

THE COMMISSION REGULATES OVER 1,600 NON-FEDERAL HYDROELECTRIC PROJECTS AT OVER 2,500 DAMS AND IMPOUNDMENTS.

TOGETHER, THESE PROJECTS REPRESENT 56 GIGAWATTS OF HYDROELECTRIC CAPACITY, MORE THAN HALF OF ALL THE HYDROPOWER IN THE UNITED STATES.

proximately 75. With over 1,200 projects under the Commission's jurisdiction, the rate at which an environmental inspection occurs at any project over the course of a 35-50 year license term, is limited.

Outreach

In the past several years, Commission staff has held workshops to assist licensees with specific issues. In FY 2017, staff held a Shoreline Management Workshop in Quincy, Washington 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 winter recreation workshop in Duluth, Minnesota that was attended by over 50 individuals representing nearly 25 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 FYs 2018 and 2019.

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 2017, Commission staff conducted outreach sessions with Indian tribes, federal and state agencies, and hydro-power industry personnel to prepare for the increased relicensing workload which began in FY 2016 and will continue beyond FY 2030.

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 2017, Commission staff processed 52- applications for non-project uses of project lands and waters. This included 8 applications for reconfigurations and/or improvements at already approved existing facilities. In the past, the economic downturn 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, especially for use of personal watercraft (PWCs/jet skis). 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.

FAST-41

Commission staff are also an active participant in inter-agency working groups to implement Title 41 of the Fixing America's Surface Transportation Act (FAST-41), enacted in December 2015. In FY 2017, Commission staff assisted in the development of FAST-41 guidance, best management practices, a performance schedule report, and an annual report to Congress. Commission staff consulted with other agencies in the development of Coordinated Project Plans, Permitting Timetables, and project websites on a public Dashboard for seven natural gas pipeline projects, two liquefied natural gas terminal projects, and four hydroelectric projects. Commission staff led quarterly updates of this information with other agencies and project sponsors. Commission staff also provided training sessions to industry on FAST-41 and its implementation for FERC-jurisdictional natural gas projects and hydroelectric projects. In FYs 2018 and 2019, Commission staff will continue its efforts to efficiently implement FAST-41, enhance agency coordination, and publish information on the Dashboard for improved transparency.

Objective 2.2

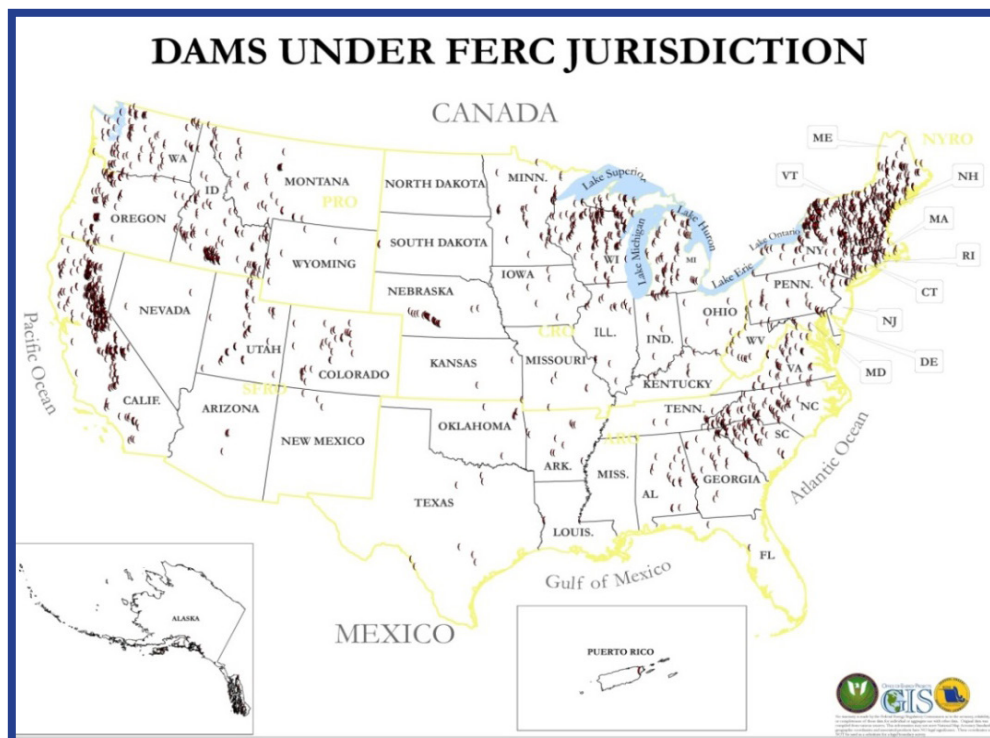
MINIMIZE RISKS TO THE PUBLIC ASSOCIATED WITH FERC-JURISDICTIONAL ENERGY INFRASTRUCTURE.

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. 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.



**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 2019, 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 2019, the Commission will continue implementation of Risk-informed decision making through completion of several 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. Addi-

tionally, Risk-informed decision making will be assessed for use internally within the Commission's dam safety program to potentially optimize the use of resources where they can best be focused. 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 2017, 29 inspections were conducted at the five terminal expansions and one new LNG terminal under construction. Between 30 to 40 construction and pre-operational inspections are anticipated for both FYs 2018 and 2019, as additional construction projects should commence at three LNG terminals and one peak shaving facility. The FY 2019 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 2017, 14 oper-



ational inspections/technical reviews were conducted at six peak-shaving facilities and eight LNG terminals. The number of operational inspections is expected to be 14 in FY 2019.

Reliability of the Bulk Power System

EPAAct 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 Electric Reliability Organization (ERO). The Commission certified the North American Electric Reliability Corporation (NERC) as the ERO. The Commission draws on the substantial expertise of its staff, including electrical engineers with many years of utility industry experience, to facilitate its oversight of those standards. Commission staff analyzes ERO-developed standards to determine whether they support the reliable operation of the grid. The Commission also reviews blackouts and events to determine whether approved 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 they result in effective reliability and 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. Staff engineers review electric rate filings, major Commission rulemakings, and reliability-related cost recovery filings to inform Commission decisions on these items regarding impacts to bulk power system reliability, furthering the Commission's goal of protecting and improving the reliability of the bulk power system. Engineering staff also educates the public on how the bulk power system operates and the Commission's role in overseeing reliability. This ongoing effort led to the publication of a Reliability Primer in FY 2017.

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 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 ap-

proval. All Reliability Standards and formal interpretations by NERC 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, which focus on cyber security. The Commission approved Version 5 of the CIP Reliability Standards, while concurrently directing modifications. The ERO then submitted a proposal to modify the CIP Reliability Standards, seeking approval of additional reliability standards and security controls to address Commission directives. In response to the ERO's proposal to modify the CIP Reliability Standards, the Commission issued a Notice of Proposed Rulemaking and a Final Rule approving the ERO's modifications to the CIP Version 5 Reliability Standards. The Commission also directed a comprehensive study of CIP Version 5 remote access controls, which the ERO delivered on June 30, 2017. To further enhance the reliability of the nation's bulk power system, in October 2017, the Commission proposed new cyber security management controls. The Notice of Proposed Rulemaking proposed mandatory controls and modifications to address risks to low-impact cyber systems. Staff will continue providing support to oversee compliance with these revised and new cyber security Reliability Standards through FY 2019. Commission staff will also undertake through FY 2019 the processing of subsequent compliance filings, as well as several oversight activities to support the revision and improvement of the CIP Reliability Standards.

The Commission proposed the development of a new CIP Reliability Standard for supply chain management security controls to protect the bulk power system from security vulnerabilities and malware threats. The Commission staff also conducted a CIP Supply Chain Risk Management technical conference and 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 2019.

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, the Commission held a Geomagnetic Disturbance (GMD) technical conference, and in September 2016, the Commission issued a Final Rule approving the Stage 2 GMD Reliability Standard with modifications. Commission staff's oversight of the ERO's efforts to address the modifications identified in the Final Rule will be ongoing through FY 2019.

In January 2017, the Commission issued a final rule approving proposed revisions to a Disturbance Control Reliability Standard. The approved reliability standard requires Balancing Authorities to utilize Contingency Reserves to balance resources and demand and return Interconnection frequency within defined limits following a Balancing Contingency Event. Later in 2017, the Commission approved proposed revisions to a reliability standard that clarified and consolidated existing requirements related to frequency control and provided accurate and comprehensive calculation of Reporting Area Control Error. These revisions are important for maintaining bulk power system frequency and the ERO will be conducting follow-up studies addressing system frequency through FY 2018.

In FY 2017, the ERO continued work on making revisions to the Emergency Operations Reliability Standards intended to provide accurate reporting of events to NERC's events analysis efforts, delineate the roles and responsibilities of entities that support system restoration from generators, and clarify the procedures and coordination requirements used in the restoration process of the grid. The Commission issued a Notice of Proposed Rulemaking to approve the ERO's proposal and work will be ongoing in FY 2018.

In September 2016, the ERO submitted a proposal to modify two Standards: a Protection and Control Standard and a Personnel Performance, Training, and Qualifications Standard. These Standards collectively require the reliable and coordinated operation of protection systems and specific training for personnel to reduce the risk of instability and cascading after an event on the bulk power system. Commission staff's consideration and processing of the ERO's proposal will be ongoing through FY 2018.

The Commission regularly explores ways to improve the efficiency and effectiveness of the Reliability Standards, their development, and their implementation. 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 report included a recommendation for five areas of study, one of which was completed in FY 2017. The Commission and ERO staff issued a joint study report – *Planning Restoration Absent SCADA or EMS*– that focused on system restoration plan steps in the absence of system control tools⁵ functionality on system restoration, and identified viable resources, methods and practices that could expedite system restoration despite the loss of such systems. The remaining studies are ongoing in FY 2018 and will continue into FY 2019.

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. 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 enhanced reliability and fewer blackouts and system disturbances.

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 FY 2017, the Commission worked with the ERO and the Regional Entities to conduct audits of compliance with the CIP Version 5 Critical Infrastructure Protection Reliability Standards and Reliability Standard CIP-014-2 pertaining to physical security of critical assets. These audits are continuing in FY 2018.

As the electric grid grows in complexity and technological sophistication, the rate of emerging reliability issues is like-

ly to accelerate. The Commission continues to monitor and analyze the performance of the bulk power system to assess the impact of emerging issues and associated reliability risks that are often extremely difficult to anticipate. In FY 2017, the Commission implemented a final rule and began receiving from the ERO 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 NERC on a mandatory basis. The data will aid the Commission in determining the need for new or modified Reliability Standards and in better understanding NERC's periodic reliability and adequacy assessments. Data analysis and a determination of potential actions is an ongoing effort in FY 2018 and continuing through FY 2019.

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. These processes will continue through FY 2019.

Energy Infrastructure Security

The Commission uses an agile and focused approach to assist regulated entities in protecting energy infrastructure from growing cyber and physical security threats. A rapidly changing energy supply mix and increasing dependency on operational automation indicate the need for this additional approach as cyber and physical threats and attacks are increasing in frequency and complexity and must be mitigated quickly. The Commission actively coordinates with its federal partners as well as regulated entities to spread 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 Office of the Director of National Intelligence, the De-

⁵ Supervisory control and data acquisition (SCADA), Energy Management System (EMS) and Inter-control Center Communications Protocol (ICCP) data.

partment 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, providing an important complement to FERC's regulatory and enforcement responsibilities.

In executing this 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 2017, the Commission staff conducted nine of these onsite assessments and plans to continue to perform them in FYs 2018 and 2019. 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 11 of these briefings in FY 2017, with plans to continue in FYs 2018 and 2019.

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. These activities will continue through FY 2019.

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.

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 2017 Actual	FY 2018 Estimate	FY 2019 Request	Percent Change FY 2018 to FY 2019
Objective 3.1	FTE	146	148	148	0.0%
	Funding	\$ 32,169	\$ 34,719	\$ 37,396	7.7%
	Program	23,199	24,720	25,261	2.2%
	Support	8,969	9,999	12,135	21.4%
Objective 3.2	FTE	66	66	66	0.0%
	Funding	\$ 14,631	\$ 15,580	\$ 16,778	7.7%
	Program	10,597	11,109	11,353	2.2%
	Support	4,033	4,471	5,426	21.4%
Objective 3.3	FTE	69	68	68	0.0%
	Funding	\$ 15,218	\$ 15,865	\$ 17,113	7.9%
	Program	10,988	11,252	11,513	2.3%
	Support	4,230	4,614	5,600	21.4%
Goal 3 Subtotal	FTE	281	283	283	0.0%
	Funding	\$ 62,018	\$ 66,164	\$ 71,288	7.7%
Application of PY Budget Authority		-	(3,201)	(2,796)	
Goal 3 Total	Funding	\$ 62,018	\$ 62,963	\$ 68,492	8.8%

Notes: The amounts included for 2018 reflect the annualized level provided by the continuing resolution (CR).
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 2017, the Commission continued human capital mitigation strategies to account for the potential loss of its staff to retirements. 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 2018 and 2019, the Commission will continue to recruit and hire staff to meet its current and future needs following this strategic approach. 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; and
- 3) Improvement of its cyber security posture.

The Commission continues to implement rigorous IT planning and governance processes which provide enhanced executive oversight of IT programs and projects; a mission focus on IT investment decision-making; and a structured process for managing and evaluating IT investments in support of the mission. This enterprise approach to IT decision making has been successfully sustained and facilitated management consensus to support \$10.1M and \$6.7M in IT capital investments that will be funded and executed in FYs 2018 and 2019, respectively.

With regard to the Commission's ongoing efforts to modernize its core mission and support systems, the Commission began refreshing major components of its IT infrastructure and key business applications in FY 2017. The Commission upgraded its network infrastructure to enable more efficient connectivity between systems and applications at its headquarters, alternate computing, and regional office facilities. In addition, the Commission enhanced its Public Issuance Workflow application, which will provide efficiencies in publishing Commission issuances. FERC also implemented a modern, collaborative intranet platform to maximize employee productivity and knowledge management. The Commission is continuing its efforts to upgrade a major business application called eLibrary that functions as the system of record for all Commission-issued orders, industry filings, and public comments. This system is used by all Commission staff and is the single entry point for the public to access docketed information.

In FY 2018, 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. Additionally, the Commission is enhancing mission critical systems such as eForms, Company Registra-

tion, Virtual Agenda, Electric Quarterly Report Filing, FERC Online, Regional Transmission Organization (RTO) Independent System Operator (ISO) Reporting Databases, Electric Reliability Databases and Geospatial Hydrologic Engineering Centers River Analysis.

In FY 2019, the Commission is planning to initiate implementation of cloud-based processing and storage infrastructure, communications and telephony upgrades. It is the Commission's expectation that these and additional initiatives planned over the next 3 years will assist in the implementation of solutions that will decrease operating costs and also introduce performance enhancing technologies to sustain the Commission's IT environment.

The Commission continues to be ever vigilant in protecting its vital systems and data. The Commission continues to take steps to invest resources in additional security technologies to ensure its infrastructure and ultimately the end users are protected from malicious events. For example, in FY 2017, the Commission implemented a secure file transfer application, Two Factor Authentication and further implemented an Information Governance program to ensure the proper classification of data along with necessary training. The Commission will continue to deploy these technologies through FYs 2018 and 2019 and will support enhancing the security posture while continuing to meet federal requirements.

Headquarters Modernization

In August 2014, the Commission and 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 \$4.8 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 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 effort within the Headquarters facility is planned

to commence in the spring of 2018 and conclude in 2021. The total funding the Commission will require to execute the project, including the purchase of furniture, is estimated to cost approximately \$68 million. In FY 2018, FERC requested approximately \$11.1 million to support ongoing project requirements. It expects to fund the initial phases of construction and associated furniture requirements in FY 2018. The Commission also plans to utilize prior year unobligated budget authority to support additional costs projected in FY 2018 above the FY 2018 congressional request level due to rescheduling of planned phases previously delayed due to funding constraints. In FY 2019, FERC requests approximately \$16.7 million to support ongoing project requirements.

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 take advantage of the building owner's tenant improvement allowances to spread approximately \$8.5 million of 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.

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. In 2017, the Commission developed *Maximizing Employee Performance: FERC Action Plan for FYs 2018-2019* as required in guidance issued by the U.S. Office of Management and Budget (OMB), Executive Office of the President, on the Government-wide priority of Maximizing Employee Performance. This plan looks to capitalize on several efforts in FYs 2018 and 2019.

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. The agency has recently implemented numerous enhancements/functionality to its knowledge collaboration tools that will serve as the vehicle to capture critical organizational knowledge and promote learning. The Commission developed 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 Com-

mission 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. Going forward, 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. In FY 2019, the Commission will be positioned to implement a new performance management system that looks to better set expectations, aligns development activities with performance expectations with the goal of maximizing employee performance.

FERC RANKED NO. 1 OUT OF 25 MID-SIZED AGENCIES IN EMPLOYEE SATISFACTION AND COMMITMENT, ACCORDING TO THE NON-PROFIT PARTNERSHIP FOR PUBLIC SERVICE 2017 BEST PLACES TO WORK IN THE FEDERAL GOVERNMENT SURVEY.

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 2017, results showed that the Commission was one of the top agencies in the federal government, ranking first 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.

The Commission is building on the positive opinions expressed by employees during the previous survey period. The Commission is continuing engagement with its employees on agency survey results. Program offices have established focus group and conducted additional assessments to identify strengths and growth opportunities responsive to survey feedback. Agency efforts in this regard further enhanced the importance of the survey and 79 percent of all eligible employees participated in the FY 2017 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.

Objective

3.3

FACILITATE PUBLIC TRUST AND UNDERSTANDING OF COMMISSON ACTIVITIES BY PROMOTING TRANSPARENCY, OPEN COMMUNICATION, AND A HIGH STANDARD OF ETHICS.

The Commission is committed to organizational excellence through an open and transparent sharing of information with the public that facilitates understanding and acceptance of the Commission's roles and responsibilities. Trust in and understanding of the Commission's roles help reduce the potential for contentiousness toward FERC rules and regulations. The Commission furthers this objective by cultivating relationships with sister government agencies and stakeholder groups, further supporting 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 responsive to the needs of stakeholders. Commission staff must 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 FERC.gov web page is the Commission's primary communication tool and the primary outlet for public outreach. All announcements, updates and news releases are posted there. In FY 2017, the Commission continued work on a complete reconstruction and update of the web page, the scope of which has not been performed on the site since 2001. The goal is to expand usability for the public and stakeholders, and to accommodate new forms of media into the FERC.gov system.

Those new forms of media include video productions and podcasts, which the Commission is using to expand its outreach for the future. Begun in FY 2016, the Commission's video and podcast outreach programs expanded in FY 2017 and are poised for future growth. Most recent videos have introduced viewers to FERC's eFiling and eComment systems so members of the public can submit comments on project proposals or other matters, and have educated viewers about the purpose and procedures related to the monthly Commission meetings. All videos are posted on the Commission's web and YouTube pages, and shared over social media. Staff is exploring use of the video format to explain other Commission processes and policies to the public.

The Commission has successfully adapted its podcast efforts to include topics of great interest to the public and to stakeholders. These podcasts, roughly 10 minutes in length, provide information on FERC actions, policies and process-

FERC LANDOWNER HELPLINE

THE COMMISSION'S LANDOWNER HELPLINE IS ANOTHER EXAMPLE OF HOW THE COMMISSION INTERACTS WITH THE PUBLIC. 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.

es in an entertaining manner. The Commission produced 11 podcasts in FY 2017, prompting news media to report on some of them as part of their continuing news coverage of FERC.

The Commission also emphasizes effective communication with Congress and with state regulators and other officials. Commission staff respond in a timely and transparent manner to all congressional inquiries. Staff also consistently notifies state regulators and other officials when appropriate of Commission actions that are of interest, and frequently offers briefings via conference calls or webinars on major issues.

Finally, staff from various offices participate in information exchanges with international regulatory agencies, particularly focusing 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.

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 30,000. 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.

Appendix A

HISTORICAL PERFORMANCE MEASURES AND ANNUAL TARGETS

The Commission is in the process of updating its Strategic Plan for FY 2018 – FY 2022. The performance measures from the Commission’s current FY 2014 – FY 2018 Strategic Plan are provided in this Appendix.

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 in-

dicating 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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator:								
Percentage change in uneconomic interchange flows	-2.98%	-1.99%	1.54%	-2.12%	-3.84% ⁶	-2.07%	-1.25%	-1.25%

FY 2017 Target: Met

Analysis

The frequency of economic flows improved on all the measured interfaces except for a minor reduction in the frequency of economic flows on the NYISO-PJM interface (a decrease of 0.4% from FY 2016 to FY 2017). PJM and MISO continue their efforts under the Joint and Common Market process to enhance inter-RTO scheduling between those markets. During 2016, Day-Ahead Firm Flow Entitlement Exchange was approved on the PJM-MISO interface, which may be due in part to the day-ahead and real-ahead markets and increase economic flows. Moreover, throughout 2017, PJM and MISO worked to increase communication and market-to-market coordination across their shared interface. The SPP-MISO interface achieved the highest frequency of

economic flows in FY 2017, which reflects the effects of operating experience and recent market rule changes to facilitate economic interchange. In 2016, Coordinated Transaction Scheduling (CTS) was implemented on the interface between NYISO and ISO-NE, which provided a means to increase economic flows on the NYISO/ ISO-NE interface. There appear to be increased economic flows in 2017. In May 2017, NYISO and PJM retired a 1,000 MW ConEd/PSEG wheel (an electric energy delivery arrangement) between the RTOs and replaced it with a similar 400 MW arrangement. The retirement of the ConEd/PSEG wheel in May 2017 did not have a statistically significant influence on economic flows.

⁶ The FY 2016 Actual result was incorrectly reported as “3.08%” in the FY 2016 Annual Performance Report. The correct result, -3.84%, has been included in the table above.

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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Average attendance across all the regions	Data not available	111.6	275.4	293	111.6	293

FY 2017 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 stakeholders⁷ attending the various meetings that staff monitored in each region during FY 2017 divided by the number of regions. The average attendance across all the regions for FY 2017 increased to 293 from 275.4 for FY 2016. The change in FY 2016 and FY 2017 participation numbers was due to an additional meeting being held. 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 75 meetings during FY 2017 and expects to monitor at least the same number of meetings in

FY 2018. Staff found that the stakeholders were active and engaged in the Order No. 1000 process.

Based on the actual participation for FY 2017, staff believes that FY 2018 target should be changed to reflect that participation levels are expected to stay the same. The FY 2018 target is 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 FYs 2016 and 2017 that attendance by stakeholders at the transmission planning meetings is greater in the regions with regional transmission organizations or independent system operators.

⁷ 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 filings, the Commission may determine 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 can facilitate the construction of needed infrastructure in a timelier manner. Further, case resolution

through settlement is likely to be more acceptable to the parties than a litigated result, and therefore eliminates the likelihood of an appeal. While the majority of cases set for hearing in any given fiscal year traditionally are resolved through settlement procedures, many factors affect the percentage of cases resolved through settlement 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 2017 Actual	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%	87.5%	75%	75%

FY 2017 Target: Met

Analysis

The Commission met the target for achieving settlements during FY 2017. Seventy-seven cases were settled (72 full settlements, 3 partial settlements, and 2 case withdrawals from settlement negotiations in 2 docketed proceedings set for hearing) out of 88 resolved cases during the fiscal year.

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, policies, 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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Percentage of audit recommendations implemented within six months of issuance	96%	95%	92%	95%	96%	98%	98%	95%	95%

FY 2017 Target: Met

Analysis

In FY 2017, 98 percent of the 211 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.

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 hydro-power 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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of hydropower orders issued within 24 months	Data not available	80%	94%	89%	96%	85%	90%
FY 2017 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%	76%	90%	90%
FY 2017 Target: Not Met							

Analysis

Each program is required to conduct thorough analysis in an efficient and timely manner, though the processes in which to do so have different elements and unique requirements.

In FY 2017, the Commission expected to issue 85 percent of hydropower orders within either 24 months of issuance of either the Ready for Environmental Analysis Notice or (as appropriate) when all required agency documentation (e.g., mandatory conditions) has been received prior to final NEPA document issuance or 24 months of the date of the filing of the final required agency documentation when the final required agency materials have been received after final NEPA document issuance. In total, 23 out of 24, or 96 percent of hydropower orders were issued within the established timeframe.

Natural gas orders are separated into four categories. Each category has a separate established timeframe, allowing additional time for increasing scope and complexity. In FY 2017, 29 out of 38, or 76 percent of natural gas orders were issued within the established time frames. Four of the nine untimely orders involved facilities and/or resource issues that were larger in scope and complexity involved extensive comments from non-governmental organizations, and required the resolution of complex environmental issues. Three involved protests involving policy issues and two involved LNG projects with issues requiring consultation with the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration.

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 ac-

knowledges 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 2017 Actual	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%	83%	85%	90%

FY 2017 Target: Not 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, and monitors and provides assistance to help the licensees develop and implement a complete program. In FY 2017 207 of 249 licensees, or 83 percent, had an acceptable Owners Dam Safety Program. The Commission will continue to work with Licens-

ees, especially with those who recently received their license, to develop and implement an acceptable Owners Dam Safety Program. Additionally, the Commission is actively working with licensees who have changed Chief Dam Safety Engineers in the past year, in order to continue to ensure their Owners Dam Safety Programs are robust. These actions are designed to help ensure that the Commission meets its target in FY 2018.

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 cer-

tificate/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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Percent of LNG facility recommendations implemented by established time frames	Data not available	91%	100%	100%	90%	90%

FY 2017 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 eight inspections at the eight operational LNG terminals under FERC jurisdiction in FY 2017. In FY 2017, 17 of 17, or 100 percent, of the recommendations were implemented in the established time frames. Two additional rec-

ommendations are due to be implemented in FYs 2018 and 2019 at two of the eight terminals inspected in FY 2017. At this time, the remaining six terminals have no recommendations due in FY 2018, however, this could change as a result of both the FY 2017 and FY 2018 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).

Fiscal Year	FY 2011 Actual	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Actual	FY 2017 Actual	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%	0.30%	0.08%	0.30%	0.25% ⁸	0.10% ⁹	Below 0.5%	Below 0.5%

FY 2017 Target: Met

Analysis

The cumulative FY 2017 ratio of lost firm load to peak load is 0.10 percent, which is below the cumulative annual target (0.5 percent). A total of five firm load loss events met the metric criteria in FY 2017. The cumulative lost firm load is 797 megawatts, with a peak demand of 767,902 megawatts. The total energy not served is approximately 1,339 megawatt-hours. Equipment failure is an initiating cause for two of these five events; protection system misoperations

are identified as initiating or contributing factors in four of these five events, increasing event severity. Although the Commission met the FY 2017 annual target, the Commission will monitor equipment failure and misoperation trends in the next two years, and will consider reasonable mitigation solutions if warranted.

⁸ FY 2016 Actual updated from 0.26% to 0.25% to reflect 2016 peak load.

⁹ FY 2017 Actual is based on 2016 peak load value since the 2017 peak load value is not yet available. FY 2017 actual will be updated to reflect 2017 peak load in the FY 2018 Annual Performance Report.

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 2017 Actual	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 2017 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 seven 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 2017, 137

total hires were made with an average hiring cycle time of 55 days; 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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Cumulative percent reduction in targeted IT costs	-	Baseline	33.0%	21.7%	24.4%	25.7%
Supplemental Information: Targeted IT costs (in millions)	\$24.3	\$24.5	\$16.4	\$19.2	\$18.5	\$18.2

FY 2017 Target: Not Met

Analysis

The FY 2017 actual reductions (savings) were 21.7% which is 2.7% below the 24.4% target. The FY 2016 actual reductions (savings) were 33.0% which is 10.2% above the 22.8% target. These results were primarily accounted for by the change in IT support services. Although the annual target for FY 2017 was not met, the Commission exceeded the annual target for FY 2016 and therefore the Commission is meeting its overall goal of reducing targeted IT costs.

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 recov-

ery 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 2017 Actual	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 2017 Target: Met

Analysis

The activities planned and completed in FY 2016 consisted of final design activities for both the FERC Headquarters and offsite Swing Space (SS). The current CPI for FY 2017 is one (0.99999). The three major milestones scheduled for the FY 2017 performance period were the completion of SS construction, the SS move and the commencement of the headquarters facility construction. Only the SS construction was completed. The other two milestones were not completed due to additional discussions initiated by GSA regard-

ing the project moving forward. This did not impact the CPI because (1) the delay was caused by GSA and (2) GSA has controls in place to hold pricing at current levels for an extended period of time to prevent cost increases.

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 include the timing in which the Commission receives modernization funding.

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.

Performance Goal 3.2.1

Deployment of a Knowledge Management Program¹¹

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 2017 Actual	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 2017 Target: Met

Analysis

The Commission completed four planned milestones in the deployment of a Knowledge Management program in FY 2017. 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 date, 70% of the Commission's occupation-specific competency models have been built and validated by subject matter experts. In FY 2018, the next eight competency models will be developed for the legal and administrative occupational families. In FY 2017, a pilot of the use of the electrical engineering competency model was completed by the Commission's Office of Electric Reliability. The design of this pilot will be replicated for use by other offices where occupation-specific competency models will be used by managers and employees 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 more broadly 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 2017 Actual	FY 2017 Target	FY 2018 Target
Performance Indicator: Employee Satisfaction Favorability Rating	66% positive	65% positive	67% positive	69% positive	71% positive	72% positive	75% positive	69% positive	69% positive

FY 2017 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. Between 2015 and 2017, the Commission developed and grew its 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 are to discuss results with every office and to facilitate and conduct action planning to address results. FERC’s commitment to use FEVS results as a way to engage with employees continues to yield very high participation rates in the survey, 79% in 2017. These efforts have also increased the Commission’s employee satisfaction favorability rating by 3 percentage points from 72% in FY 2016 to 75% in FY 2017.

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.

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 2017 Actual	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%	94%	96%	97%

FY 2017 Target: Not Met

Analysis

The FY 2017 target called for an improvement of three percentage points over the FY 2016 actuals. With an end result of 94% for FY 2017, the Commission fell short of that target by two percentage points. The missed target can be attributed to two factors. FERC set the FY 2017 target at 96%, expecting that an enhanced Publish Issuance Workflow (PIW) application would be deployed early in the fiscal year. The improved PIW application will move virtually all regional office initiated filings from the hard copy (paper) filing channel to the electronic channel. This will represent a significant reduction in processing time, going from days to an hour or less for each issuance. However, the PIW ap-

plication was deployed later than expected which resulted in anticipated improvements for that filing channel not being achieved. A second factor contributing to under-performance was staff turnover. This high visibility function had previously, and consistently, met targets above 99.5%. However, as new staff was brought onboard, there was a natural learning curve which resulted in less efficient processing times as compared to the past. The FY 2018 target of 97% is achievable based on the efforts taken to date to address the two factors affecting FY 2017’s performance results.

Appendix B

WORKLOAD TABLES

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
	P	R	C	P	R	C	P	R	C	P
Pipeline Certificates										
Construction Activity	53	61	49	65	100	100	65	100	100	65
Prior Notice & Abandonments	15	59	61	13	80	80	13	80	80	13
Compliance Filings & Reports	15	385	239	134	400	400	134	400	400	134
Environmental Analysis	75	135	130	80	130	140	70	120	130	60
Compliance & Safety Inspections	0	585	585	0	550	550	0	400	400	0
LNG Inspections	0	14	14	0	14	14	0	14	14	0
Rehearings	16	26	16	26	27	27	26	27	27	26
Complaints	1	1	1	1	1	1	1	1	1	1
Declaratory Orders	0	0	0	0	1	1	0	1	1	0
Remands	1	0	0	1	1	1	1	0	1	0
Dispute Resolution	5	144	135	14	148	152	10	148	148	10

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
	P	R	C	P	R	C	P	R	C	P
Hydropower Licensing										
Original Licenses	28	3	18	13	5	4	14	5	10	9
Relicenses	58	16	8	66	11	37	40	27	40	27
5 MW Exemptions	3	1	1	2	2	3	1	2	1	2
Preliminary Permits	20	48	57	11	50	55	6	50	50	6
Rehearings	6	9	5	10	10	10	10	10	10	10
Declaratory Orders	1	0	0	1	1	1	1	1	1	1
Remands	1	0	0	1	0	1	0	1	1	0
Cases Set for Hearing	0	1	1	0	1	0	1	1	1	1
Dispute Resolution	1	0	1	0	1	1	0	1	1	0

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

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Project Compliance and Administration	P	R	C	P	R	C	P	R	C	P
Amendments	473	2,683	2,613	543	2,696	2,735	504	2,842	2,747	599
Jurisdiction	3	11	9	5	10	13	2	10	12	0
Federal Lands	7	144	116	35	95	110	20	120	125	15
Headwater Benefits	2	118	116	4	121	120	5	122	121	6
Compliance	308	677	865	120	830	839	111	874	871	114
Surrenders, Transfers	20	72	53	39	45	40	44	43	41	46
Conduit Exemptions	4	20	23	1	25	25	1	25	25	1
Environmental Inspections And Assistance	3	49	52	0	59	59	0	73	73	0
Rehearings	6	12	11	7	10	10	7	10	10	7
Complaints	0	1	1	0	1	1	0	1	1	0
Dispute Resolution	0	2	2	0	2	2	0	2	2	0

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Dam Safety and Inspections	P	R	C	P	R	C	P	R	C	P
Operational Inspections	1,276	1,478	436	2,318	1,487	1,097	2,708	1,496	1,006	3,198
Prelicense Inspections	6	1	0	7	8	6	9	6	6	9
Construction Inspections	56	116	65	107	117	93	130	116	89	157
Exemption Inspections	151	118	40	229	211	207	233	171	191	214
Special Inspections	30	141	96	75	152	144	83	138	135	87
Engineering Evaluation & Studies	3,306	10,405	8,379	5,203	10,260	9,160	6,303	10,507	9,386	7,425
Part 12 Reviews	130	205	64	271	177	139	309	176	136	350
Dam Safety Reviews	3	14	6	11	20	19	12	17	16	12
EAP Tests – Functions	49	64	40	73	71	58	86	74	56	104
EAP Tests – Table Top	11	44	28	27	33	28	32	30	28	34

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

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Rates and Tariffs	P	R	C	P	R	C	P	R	C	P
Gas Certificates & Rate Evaluations	70	52	39	83	60	60	83	60	60	83
Market-Based Rates	833	2,480	1,996	1,317	2,700	3,000	1,017	2,900	3,000	917
Cogeneration/Small Power Producers (QF)	162	2,372	2,081	453	1,375	1,375	453	1,375	1,375	453
Dispute Resolution (Electric)	5	4	6	3	10	10	3	12	12	3
Rehearings (Electric)	325	114	103	336	200	250	286	200	250	236
Complaints (Electric)	36	34	17	53	50	55	48	50	55	43
Declaratory Orders (Electric)	16	12	11	17	25	30	12	25	30	7
Remands (Electric)	3	0	0	3	0	1	2	0	1	1
Negotiated Rates	23	622	585	60	625	625	60	625	625	60
Cost-Based Rates	684	3,672	3,539	817	4,200	4,300	717	4,200	4,300	617
Dispute Resolution (Gas)	0	0	0	0	1	1	0	1	1	0
Rehearings (Gas)	29	14	3	40	10	15	35	8	15	28
Complaints (Gas)	2	2	1	3	1	2	2	1	3	0
Declaratory Orders (Gas)	0	0	0	0	1	1	0	1	1	0
Remands (Gas)	2	0	0	2	1	3	0	1	1	0
RTO and ISO Filings	38	219	213	44	250	250	44	250	250	44
Dispute Resolution (Oil)	0	0	0	0	1	1	0	1	1	0
Rehearings (Oil)	34	10	4	40	8	25	23	5	20	8
Complaints (Oil)	1	1	2	0	2	2	0	1	1	0
Declaratory Orders (Oil)	4	10	7	7	18	18	7	20	27	0
Remands (Oil)	0	0	0	0	2	1	1	1	2	0

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Corporate Applications	P	R	C	P	R	C	P	R	C	P
Interlocking Positions, Other Corporate Filings	107	761	765	103	800	800	103	800	800	103
Mergers, Acquisitions & Dispositions	42	212	193	61	235	235	61	235	235	61

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

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Electric Grid Reliability	P	R	C	P	R	C	P	R	C	P
Reliability Standards	100	39	46	93	76	85	84	69	79	74
Interpretations/Erratas of Reliability Standards	12	10	16	6	3	6	3	3	3	3
Reliability Filings by ERO/RE	49	9	6	52	6	29	29	6	18	17
Standards Compliance Audits	2	23	21	4	26	26	4	19	20	3
Notices of Penalty-Violations	40	1,218	1,100	158	1,200	1,258	100	1,800	1,750	150

	FY 2016 Actual	FY 2017 Actual			FY 2018 Estimate			FY 2019 Estimate		
Legal Matters	P	R	C	P	R	C	P	R	C	P
Cases Set for Hearing	79	101	98	82	87	94	75	95	95	75
Settlement Judge Proceedings	40	88	87	62	72	74	60	75	75	60
Appellate Review	105	115	120	100	115	120	95	110	115	90
Audits	26	15	14	27	9	11	25	12	18	19
Accounting	95	392	413	74	427	451	50	430	440	40

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

Appendix C

ACRONYMS AND ABBREVIATIONS

AC	Actual Cost
CAISO	California Independent System Operator Corp.
CIP	Critical Infrastructure Protection
CPI	Cost Performance Index
EIM	Energy Imbalance Market
EISA	Energy Independence and Security Act of 2007
EMS	Energy Management System
EPAct 2005	Energy Policy Act of 2005
ERO	Electric Reliability Organization
EV	Earned Value
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
GAAP	Generally Accepted Accounting Principles
GIS	Geographic Information System
GMD	Geomagnetic Disturbance
GSA	General Services Administration
ICA	Interstate Commerce Act
ICCP	Inter-Control Center Communications Protocol
ISO	Independent System Operator
ISO-NE	Independent System Operator New England, Inc.
IT	Information Technology
LMP	Locational Marginal Price
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
PY	Prior Year
RTO	Regional Transmission Organization
SCADA	Supervisory Control and Data Acquisition
SPP	Southwest Power Pool
SS	Swing Space



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