FEDERAL ENERGY REGULATORY COMMISSION

FY 2022 CONGRESSIONAL JUSTIFICATION

FY 2022 PERFORMANCE BUDGET REQUEST

FY 2021 ANNUAL PERFORMANCE PLAN

FY 2020 ANNUAL PERFORMANCE REPORT

Chairman Richard Glick

May 28, 2021

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INTRODUCTION

ABOUT THE FEDERAL ENERGY REGULATORY COMMISSION

OVERVIEW

The Federal Energy Regulatory Commission (FERC or the Commission) is an independent agency that regulates the transmission and wholesale sale of electricity and natural gas in interstate commerce, as well as the transportation of oil by pipelines in interstate commerce. FERC also reviews proposals to build interstate natural gas pipelines, natural gas storage projects, and liquefied natural gas (LNG) terminals, and FERC licenses non-federal hydropower projects. Congress assigned these responsibilities to FERC in various laws including, the Federal Power Act, enacted 100 years ago, the Public Utility Regulatory Policies Act of 1978, the Natural Gas Act, the Natural Gas Policy Act of 1978, and the Interstate Commerce Act. More recently, as part of the Energy Policy Act of 2005, Congress gave FERC additional responsibilities to protect the reliability and cybersecurity of the bulk-power system through the establishment and enforcement of mandatory reliability standards, as well as additional authority to enforce FERC regulatory requirements through the imposition of civil penalties and other means.

While the Commission has many statutory responsibilities, there are areas outside its responsibilities which fall to other federal agencies or state public utility commissions. Some examples are outlined below.

What FERC Does	What FERC Does Not Do
Regulate the transmission and wholesale sale of electricity in interstate commerce	Regulate retail electricity and natural gas sales to consumers
Review certain mergers and acquisitions and corporate transactions by electricity companies	Approve physical construction of electric generation facilities
Regulate the transmission and sale of natural gas for resale in interstate commerce	Regulate many activities of state and municipal power systems, federal power marketing agencies and most rural electric cooperatives
Regulate the transportation of oil by pipelines in interstate commerce	Regulate nuclear power plants
Approve the siting and abandonment of interstate natural gas pipelines and storage facilities	Issue State Water Quality Certificates
Review the siting application for electric transmission projects under limited circumstances	Oversee the construction of oil pipelines
Assess the operation and reliability of proposed and operating LNG terminals	Abandonment of service as related to oil facilities
License and inspect private, municipal, and state hydroelectric projects	Mergers and acquisitions as related to natural gas and oil companies
Protect the reliability of the high voltage interstate transmission system through mandatory reliability standards	Responsibility for pipeline transportation on or across the Outer Continental Shelf or for pipeline safety
Monitor and investigate energy markets	Regulate local distribution pipelines of natural gas
Enforce FERC regulatory requirements through imposition of civil penalties and other means	Development and operation of natural gas vehicles
Oversee environmental matters related to natural gas and hydroelectric projects and other matters	Reliability problems related to failures of local distribution facilities
Administer accounting and financial reporting regulations and conduct of regulated companies	Tree trimmings near local distribution power lines in residential neighborhoods

THE ORGANIZATION

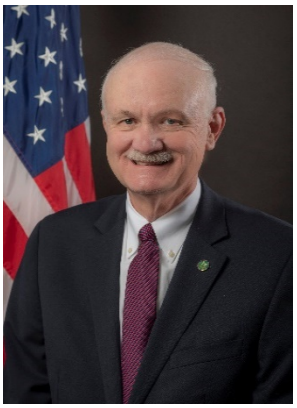
FERC is composed of up to five commissioners who are appointed by the President of the United States with the advice and consent of the Senate. Commissioners serve staggered five-year terms and have an equal vote on the orders through which FERC acts. The President appoints one of the commissioners to be the chairman of FERC, the administrative head of the agency. FERC is a bipartisan body; no more than three commissioners may be of the same political party. To carry out its authorities, the Commission has approximately 1,465 staff that are organized into 12 offices. Commission staff are located primarily in the Washington, DC region, with several field offices across the country.

Chairman
Richard Glick

Commissioner
Neil Chatterjee

Commissioner
James Danly

Commissioner
Allison Clements



Commissioner
Mark C. Christie

FY 2018 – 2022 STRATEGIC PLAN

MISSION: ECONOMICALLY EFFICIENT, SAFE, RELIABLE, AND SECURE ENERGY FOR CONSUMERS

Assist consumers in obtaining economically efficient, safe, reliable, and secure energy services at a reasonable cost through appropriate regulatory and market means, and collaborative efforts.

GOAL 1: ENSURE JUST AND REASONABLE RATES, TERMS, AND CONDITIONS

Objective 1.1: *Establish Commission rules and policies that will result in just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of jurisdictional service.*

Objective 1.2: *Increase compliance with FERC rules; detect and deter market manipulation.*

GOAL 2: PROMOTE SAFE, RELIABLE, AND SECURE INFRASTRUCTURE

Objective 2.1: *Facilitate benefits to the nation through the review of natural gas and hydropower infrastructure proposals.*

Objective 2.2: *Minimize risks to the public associated with FERC-jurisdictional energy infrastructure.*

GOAL 3: MISSION SUPPORT THROUGH ORGANIZATIONAL EXCELLENCE

Objective 3.1: *Manage resources effectively through an engaged workforce.*

Objective 3.2: *Facilitate public trust and understanding of Commission activities by promoting transparency, open communication, and a high standard of ethics.*

To read the full Strategic Plan, visit: https://www.ferc.gov/about/what-ferc/strategic-documents/strategic-plan

THE COMMISSION'S FUNDING

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, $463,900,000, to remain available until expended: Provided, That notwithstanding any other provision of law, not to exceed $463,900,000 of revenues from fees and annual charges, and other services and collections in fiscal year 2022 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 the fiscal year 2022 so as to result in a final fiscal year 2022 appropriation from the general fund estimated not more than $0.

FULL COST RECOVERY

The Federal Energy Regulatory 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 2020 Actual	FY 2021 Request	FY 2022 Request
Appropriation	$382,000,000	$404,350,000	$463,900,000
Offsetting Collections	($382,000,000)	($404,350,000)	($463,900,000)
Net Appropriation	$ -	$ -	$ -

Note: Numbers may not add up due to rounding

FY 2022 REQUEST SUMMARY

The Federal Energy Regulatory Commission requests an appropriation of $463,900,000 and 1,465 full-time equivalents (FTEs) to execute its mission in fiscal year (FY) 2022. This funding request is an increase of $59,550,000, or about 14.7 percent, above the FY 2021 Congressional Budget Request. The Commission's full funding requirement to meet base operating requirements is $452,024,500 and funding required for continuation of the headquarters building modernization effort is $11,875,500.

The Commission allocates 62% of its budget to directly cover personnel compensation costs of its employees on an annual basis. The Commission's request reflects an increase of $14.0 million or 5.2 percent above the FY 2021 Congressional Request level to provide the necessary resources to support cumulative increases in salaries and benefits. The 2022 budget estimate for personnel compensation accounts for the cumulative effect of the January 2020 pay raise. In addition, the 2022 budget estimate accounts for the 1% pay raise in January 2021 and an estimated 2.7% pay raise in January 2022. Furthermore, the Commission's request for personnel compensation provides for non-SES/SL/ST awards spending in FY 2022 at 2.5 percent of requested non-SES/SL/ST salary spending.

The request also provides continued funding for program contracts associated with statutorily required workload with hydropower and natural gas infrastructure, including environmental reviews, public outreach, stakeholder engagement, construction oversight, and expert witness contractor assistance in the Commission's enforcement program.

Additionally, the Commission's request includes $100.0 million in FY 2022 to support information technology (IT) investments. This is an increase of $38.1 million, or 62%, over the FY 2021 request level. This increase provides an additional $5.7 million related to IT investments for mission delivery and $32.4 million for IT investments to support IT infrastructure, security and management. The Commission's overall IT infrastructure must meet the demands and keep pace with the frequent advances in technology; proactively monitor and mitigate emerging cybersecurity threats; and adhere to federal requirements. The Commission has made tremendous strides in modernizing its IT infrastructure and legacy dependent applications to execute its core mission and effectively engage its stakeholders. However, many of the Commission's systems and applications are still relying on outdated technologies and aging physical infrastructure that often are no longer supported by vendors, leaving the requisite resources and expertise needed to operate and maintain these legacy systems costly and difficult to find. Until the Commission modernizes these remaining applications, it will bear a higher cost of ownership to support its legacy IT systems. The highly customized nature of these outdated systems and applications require updates often and result in expensive, resource-intensive solutions that address operational requirements while meeting emerging cybersecurity threats that could impact the availability of critical services for timely mission delivery.

In 2022, the Commission will continue its goal of providing a best in class IT environment for the Commission and its stakeholders. Outdated technology-based systems and mission applications will be migrated to a more secure cloud-based environments. By modernizing the Commission's IT portfolio using cloud platforms, the overall security posture, resiliency and availability of the FERC application portfolio will be greatly improved.

The use of cloud platforms increases the unfettered access to the Commission's applications, enhances access to real-time data for decision making, and provides for availability of services regardless of location. In order to support these digital transformation efforts, the Commission has executed a multi-year contracting strategy to bring leading edge support services for upgrading the core IT infrastructure, execute daily operations of its IT environment, modernize all core mission applications to cloud based platforms, and invest in an enterprise data analytics program. The investments in these support services will ensure the Commission continues to drive innovation for effective delivery of IT for its stakeholders, provide for highly secure and resilient applications, and make timely data driven decisions to support mission needs.

In December 2020, Congress directed the Commission to provide, by June 25, 2021, to the Committees on Appropriations of both Houses of Congress a report on the Commission's progress towards establishing the Office of Public Participation (OPP), including an organizational structure and budget for the office, beginning in fiscal year 2022. The Commission intends to establish and operate the OPP to "coordinate assistance to the public with respect to authorities exercised by the Commission," including assistance to those seeking to intervene in Commission proceedings, pursuant to section 319 of the Federal Power Act (FPA). 16 U.S.C. § 825q–1. The Commission is currently analyzing feedback from a broad array of public stakeholders regarding the establishment and operation of the OPP. This feedback will inform the office's mission and functions, structural design and supporting resource requirements. The Commission is in the final stages of this process and will provide a report to Congress on our program requirements in June.

This budget request includes continued funding for a multi-year headquarters building modernization project. The Commission requests to fund $11.9 million in FY 2022 to support the costs associated with ongoing construction activities as well as with information technology enhancements necessary due to construction at FERC headquarters. Current construction costs have increased significantly since original estimates were developed. 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). The new lease term commenced on September 30, 2015. 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. As a result of these modernization efforts, the Commission will consolidate all National Capital Region lease locations into the headquarters building and reduce its real estate footprint by approximately 123,000 square feet. At the current market rate, the reduction in space would result in estimated annual rent savings of approximately $6.4 million.

FUNDING TABLES

RESOURCES BY STRATEGIC GOALS AND OBJECTIVES

Strategic Goal and Objectives (Dollars in thousands)		FY 2020 Actual	FY 2021 Request	FY 2022 Request	Percent Change FY 2021 to FY 2022
Goal 1	**Funding**	**172,835**	**182,261**	**213,353**	**17.1%**
	FTE	**661**	**663**	**671**	**1.2%**
Objective 1.1		134,307	141,058	165,510	17.3%
		519	531	530	-0.2%
Objective 1.2		38,528	41,203	47,843	16.1%
		141	132	141	6.9%
Goal 2	**Funding**	**129,682**	**142,757**	**160,169**	**12.2%**
	FTE	**483**	**501**	**498**	**-0.6%**
Objective 2.1		66,773	76,274	82,292	7.9%
		246	262	254	-2.9%
Objective 2.2		62,909	66,483	77,877	17.1%
		237	239	244	2.1%
Goal 3	**Funding**	**77,722**	**79,332**	**90,378**	**13.9%**
	FTE	**308**	**301**	**296**	**-1.7%**
Objective 3.1		59,719	60,787	68,113	12.1%
		236	230	221	-4.1%
Objective 3.2		18,003	18,545	22,265	20.1%
		72	71	75	6.0%
TOTAL	**Funding**	**380,239**	**404,350**	**463,900**	**14.7%**
	FTE	**1,451**	**1,465**	**1,465**	**0.0%**

Note: Numbers may not add up due to rounding

RESOURCES BY REGULATED INDUSTRY

Regulated Industry (Dollars in thousands)		FY 2020 Actual	FY 2021 Request	FY 2022 Request	Percent Change FY 2021 to FY 2022
Electric	Funding	$ 216,177	$ 226,922	$ 263,601	16.2%
	FTEs	823	823	828	0.6%
Hydro	Funding	84,790	88,828	103,488	16.5%
	FTEs	324	327	330	0.8%
Natural Gas	Funding	68,292	78,437	83,575	6.6%
	FTEs	261	277	265	-4.3%
Oil	Funding	10,981	10,163	13,237	30.2%
	FTEs	43	38	42	12.8%
Total	**Funding**	**$ 380,239**	**$ 404,350**	**$ 463,900**	**14.7%**
	FTEs	**1,451**	**1,465**	**1,465**	**0.0%**

Note: Numbers may not add up due to rounding

COMPARISON OF FYS 2021 AND 2022 BY MAJOR CATEGORY

Major Category	FY 2021 Request	FY 2022 Request	Difference	Percent Change FY 2021 to FY 2022
FTEs	1,465	1,465	-	0.0%
Salaries & Benefits	271,890,200	285,918,700	14,028,500	5.2%
Rent	30,335,900	32,036,400	1,700,500	5.6%
Environmental and Program Contracts	9,659,300	10,331,000	671,700	7.0%
Information Technology	61,891,100	100,006,900	38,115,800	61.6%
Administrative (including Travel and Training)	21,500,000	23,731,500	2,231,500	10.4%
Building Modernization	9,073,500	11,875,500	2,802,000	30.9%
Totals	**$ 404,350,000**	**$ 463,900,000**	**$ 59,550,000**	**14.7%**

Note: Numbers may not add up due to rounding

OBJECT CLASS SUMMARY

Object Class (Dollars in thousands)		FY 2020 Actual	FY 2021 Request	FY 2022 Request
11.9	Personnel Compensation	$ 196,635	$ 203,875	$ 211,322
12.1	Benefits	67,096	68,015	74,597
13.0	Benefits for Former Personnel	81	-	-
	Sub Total, Personnel Compensation & Benefits	$ 263,812	$ 271,890	$ 285,919
21.0	Travel and Transportation of Persons	1,221	3,697	3,901
22.0	Transportation of Things	10	2	1
23.1	Rental Payments to GSA	33,033	30,336	32,036
23.2	Rental Payments to Others	852	920	1,265
23.3	Communications, Utilities & Misc. Charges	2,018	4,150	6,273
24.0	Printing and Reproduction	1,766	1,631	1,630
25.1	Advisory and Assistance	11,911	15,452	21,237
25.2	Non-Federal	12,214	14,006	18,147
25.3	Federal	1,844	1,818	1,834
25.4	Operation & Maintenance of Facilities	2,041	2,014	2,010
25.7	Operation & Maintenance of Equipment	31,870	37,070	57,221
26.0	Supplies and Materials	4,479	5,157	4,961
31.0	Equipment	12,740	10,651	15,969
32.0	Leasehold Improvements	426	5,558	11,497
41.0	Grants, Subsidies & Contributions	-	-	-
42.0	Insurance Claims and Indemnities	2	-	-
	TOTAL, OBLIGATIONS	$ 380,239	$ 404,350	$ 463,900
	GROSS BUDGET AUTHORITY	380,239	404,350	463,900
	Offsetting Receipts	(380,239)	(404,350)	(463,900)
	NET BUDGET AUTHORITY	$ -	$ -	$ -

Note: Numbers may not add up due to rounding

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.

The nation's security and economic prosperity depend on maintaining economically efficient, safe, reliable, and secure energy services at a reasonable cost for consumers. FERC's jurisdiction includes the wholesale sale and transmission of electricity and natural gas in interstate commerce, as well as the transportation of oil by pipeline in interstate commerce. FERC's regulation ensures just and reasonable rates, terms, and conditions for those jurisdictional services.

In carrying out its regulatory role, FERC uses a range of ratemaking activities as well as market oversight and enforcement. FERC's orders, rules, and policies use both market- and cost-based ratemaking means to regulate energy service providers' rates and practices. Through these efforts, FERC ensures that consumers have reasonable access to the services they need and that service providers are appropriately compensated.

Fraud, market manipulation, and other violations pose a significant threat to the markets overseen by the Commission, and the financial harm imposed by such actions is ultimately borne by consumers. The Commission's enforcement activities include both promoting compliance and detecting and deterring market manipulation. Promoting compliance and inhibiting market misconduct strengthen markets and increase market confidence.

Strategic Goal and Objectives (Dollars in thousands)		FY 2020 Actual	FY 2021 Request	FY 2022 Request	Percent Change FY 2021 to FY 2022
Objective 1.1	**FTE**	**519**	**531**	**530**	**-0.2%**
	Funding	**$ 134,307**	**$ 141,058**	**$ 165,510**	**17.3%**
Program		95,994	95,149	106,987	12.4%
Support		38,313	45,909	58,523	27.5%
Objective 1.2	**FTE**	**141**	**132**	**141**	**6.9%**
	Funding	**$ 38,528**	**$ 41,203**	**$ 47,843**	**16.1%**
Program		28,111	29,763	32,220	8.3%
Support		10,417	11,440	15,623	36.6%
Goal 1 Total	**FTE**	**661**	**663**	**671**	**1.2%**
	Funding	**$ 172,836**	**$ 182,261**	**$ 213,353**	**17.1%**

Note: Numbers may not add up due to rounding

OBJECTIVE 1.1: ESTABLISH COMMISSION RULES AND POLICIES THAT WILL RESULT IN JUST, REASONABLE, AND NOT UNDULY DISCRIMINATORY OR PREFERENTIAL RATES, TERMS, AND CONDITIONS OF JURISDICTIONAL SERVICE.

Electricity, natural gas, and oil are vital resources that fuel economic activity and help to meet the nation's energy needs. Through the Federal Power Act, the Public Utility Regulatory Policies Act of 1978, the Natural Gas Act, the Natural Gas Policy Act of 1978, and the Interstate Commerce Act, 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 exercising this authority is to ensure that the rates, terms, and conditions for wholesale sales and transmission of electric energy and 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.

FERC carries out these responsibilities by issuing orders and establishing rules and policies that continually balance 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. FERC leverages competitive market forces to promote efficiency for consumers where appropriate. When competitive market conditions do not exist or competitive forces are inadequate to ensure just and reasonable rates, FERC relies on cost-based rate-setting mechanisms.

In exercising its authority, FERC ensures that interested stakeholders have the opportunity to provide their views and that the Commission's ultimate decisions are adequately supported by the public record. If additional information is needed to make a decision, the Commission has a number of procedural options to supplement the record, including data requests, deficiency letters, technical conferences/workshops, or additional briefings. If there are issues of material fact that cannot be resolved based on the record before the Commission, the Commission may set a matter for hearing and/or settlement judge procedures. Stakeholder engagement and transparency help FERC establish rules and policies that result in just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of service.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 1.1. The status of this Strategic Challenge and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: CHANGES IN ENERGY SUPPLY AND DEMAND

Overview. Changes in both energy supply and demand are having an impact on the fuel mix of resources participating in wholesale electric markets, the dynamics of competitive markets, incentives for investment in infrastructure, and the security and resilience of the bulk-power system. These changes create new challenges and increase the complexity of maintaining just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of jurisdictional service.

FY 2020 Results. In FY 2020, the Commission took several notable actions to address this challenge from multiple perspectives. For example, the Commission continued to focus on promoting market competitiveness by removing barriers to market participation by technologies that can bring economic benefits to consumers, as well as enhancing bulk-power system reliability, security, and resilience. In the first quarter of FY 2020, the Commission issued orders on all six of the Order No. 841 regional transmission organization (RTO) and independent system operator (ISO) compliance filings. Order No. 841 amended Commission regulations to remove barriers to the participation of electric storage resources in the competitive wholesale electric markets operated by RTOs/ISOs. In the summer of 2020, the Commission issued orders on the further RTO/ISO compliance filings as directed in the initial Order No. 841 compliance orders. As discussed further in the Objective 1.1 Performance Measure, Commission action on those filings will put in place market rules for each RTO/ISO that remove barriers to the participation of electric storage resources in wholesale electric markets.

In FY 2020, the Commission issued Order No. 872, a final rule revising its regulations implementing the Public Utility Regulatory Policies Act of 1978 (PURPA), which reformed rules for how public utilities can meet their PURPA obligations and updated rules for participation of qualifying facilities. In addition, the Commission issued Order No. 2222, a final rule to remove barriers to the participation of distributed energy resource aggregations in the capacity, energy, and ancillary service markets operated by RTOs and ISOs. Parties have sought rehearing of this rule.

In FY 2020, the Commission also conducted outreach related to changes in energy supply and demand. For example, the Commission has conducted outreach regarding considerations related to state adoption of mechanisms to price carbon dioxide emissions, commonly referred to as carbon pricing, in regions with Commission-jurisdictional organized wholesale electricity markets. In September 2020, the Commission held a technical conference on these issues.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission addressed requests for rehearing of Order No. 872, which adopted revisions to FERC's regulations implementing PURPA. In FY 2021, the Commission also addressed requests for rehearing of Order No. 2222 which removed barriers to the

participation of distributed energy resource aggregations in organized wholesale electric markets. In FY 2022, the Commission will continue to evaluate the impacts of these reforms.

In addition, in FY 2021, Commission staff will evaluate the information that it received in its FY 2020 outreach. For example, the Commission will continue its analysis of hybrid resources and consider public comment on offshore interconnection challenges. In FY 2021 the Commission issued a Policy Statement to clarify how it will approach filings under section 205 of the FPA that seek to incorporate a state-determined carbon price in organized wholesale electricity markets. The Commission's efforts will directly impact participation in the power industry, including new participants seeking entry into wholesale electric markets. As regulated entities comply with orders, the Commission expects to see changes in electric market access by different technologies, changes in the incentives for market participants to provide key services and products, changes in infrastructure investment, and reduced regulatory burdens.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years. Technology is changing rapidly, potentially presenting new ways in which services needed in competitive wholesale electric markets could be provided. Economic changes also could affect the extent to which development at scale of a new technology is seen as a viable enterprise. The Commission expects that these factors will continue to be relevant over the next two years, and the Commission will continue to take them into account while implementing its responsive actions.

CORE FUNCTIONS

In addition to being responsive to this strategic issue, FERC carries out its responsibilities in this objective through two core functions.

CORE FUNCTION 1.1.1: EVALUATE EXISTING COMMISSION RULES AND POLICIES IN LIGHT OF EMERGING ISSUES AND CHANGING CIRCUMSTANCES TO DETERMINE WHETHER MODIFICATION OF SUCH RULES AND POLICIES IS NECESSARY OR NEW RULES OR POLICIES NEED TO BE DEVELOPED.

To adapt to emerging issues and changing circumstances in the electric, natural gas, and oil industries, FERC evaluates existing rules and policies to assess whether they continue to ensure just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of service. This evaluation allows FERC to develop or modify its existing rules and policies to improve economic efficiency and operations in markets. This evaluation also enables FERC to ensure adequate compensation for resources responding to system needs, to remove barriers to resources accessing wholesale markets and the grid, and to ensure that consumers have reasonable access to the services that they need.

FERC accomplishes its ongoing review of existing rules and policies in a number of ways. Based on its knowledge and experience with the industries that it regulates, FERC may gather information through technical conferences or other means of outreach with stakeholders. FERC also keeps informed of national and international events and trends, and draws on its knowledge and experience with its jurisdictional industries to detect important recurring or emerging issues. FERC gathers data and uses it to perform economic,

engineering, and technical analyses of the energy markets to inform policy recommendations. In addition, FERC researches energy market design issues and evaluates the outcomes of recent policy changes on market participant behavior and market operations.

Where necessary, the Commission will pursue changes to its regulations through rulemaking proceedings. In some instances, the Commission on its own initiative will institute a rulemaking to address new concerns or trends in the industry. In other instances, the regulated community or other stakeholders will petition the Commission for changes to its regulations. FERC engages in a transparent rulemaking process to pursue changes to its regulations. A process of notice and comment maintains transparency and ensures stakeholder input. Through staff reports and white papers, technical conferences and workshops, and presentations and speeches, FERC also provides guidance to the regulated community and other stakeholders.

By remaining aware and responsive, FERC can adjust existing policies and develop new policies to ensure that consumers have reasonable access to needed services and that service providers are appropriately compensated in a rapidly changing marketplace.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Wholesale sales
- Transmission and transportation
- Corporate activities and mergers

WHOLESALE SALES

FERC regulates markets for the wholesale sales of electric energy, capacity, and ancillary services to ensure that rates are just and reasonable. Specific areas of impact within wholesale sales include:

- Electric market-based rates and cost-based rates
- Energy markets, capacity markets, and ancillary services
- Emerging technologies

ELECTRIC MARKET-BASED RATES AND COST-BASED RATES

Overview. The Commission uses both market- and cost-based ratemaking means to regulate wholesale electricity rates. Where appropriate, FERC leverages competitive market forces by granting sellers market-based rate authorization. In other cases, the Commission relies on cost-based rate-setting authority by allowing sellers to charge rates that recover their costs and earn a fair return.

FY 2020 Results. With regard to electric market-based rates, the Commission addressed in FY 2020 requests for rehearing and clarification of two significant rulemakings, Order Nos. 861 and 860, largely upholding the determinations in these two proceedings. Order No. 861 revised Commission regulations to eliminate the requirement for market-based rate sellers to submit horizontal market power screens for certain RTO/ISO

energy, capacity, and ancillary services markets and submarkets that are subject to Commission-approved monitoring and mitigation. In Order No. 860, the Commission revised its regulations in order to collect certain information currently filed in the electric market-based rate program in a consolidated and streamlined manner through a relational database. In May 2020, the Commission granted a six-month extension of time for the deployment of Order No. 860 market-based rate relational database and initial baseline submission in light of the COVID-19 pandemic.

FYs 2021 and 2022 Planned Results. The Commission will continue building and testing the market-based rate relational database with an expected "go-live" date in 2021. In FYs 2021 and 2022, the Commission will also continue to evaluate the impact of changes to the market-based rate program as a result of these final rules, including evaluating the efficiency of how public utilities make their market-based rate filings, and determine if further action is warranted.

ENERGY MARKETS, CAPACITY MARKETS, AND ANCILLARY SERVICES

Overview. The Commission impacts the efficiency, transparency, access, and market signals in these markets through a diverse range of regulatory activities.

FY 2020 Energy Market Results. In FY 2020, the Commission approved the compliance filings for the orders directing market rule changes regarding pricing practices for fast-start resources in two RTOs/ISOs: (1) Southwest Power Pool, Inc. (SPP); and (2) New York Independent System Operator, Inc. (NYISO). These compliance filings were in response to Commission-initiated proceedings investigating fast-start pricing practices in three RTOs/ISOs (SPP, NYISO, and PJM Interconnection. L.L.C. (PJM)) to ensure more efficient pricing by allowing prices to reflect the marginal cost of serving load and allowing fast-start resources to recover a portion of their costs through the market rather than through out-of-market uplift payments. The Commission held in abeyance PJM's fast-start pricing compliance filing after the Commission determined that market rule changes were required for PJM's five-minute dispatch and pricing; these market rule changes would have affected PJM's proposed fast-start pricing market rule changes which were required to comply with the Commission's compliance directive.

In addition, in FY 2020, RTOs/ISOs began posting transparency reports required by Order No. 844. The Commission had issued Order No. 844 in 2018 to address the Commission's concern that existing reporting practices were insufficiently transparent and therefore resulted in unjust and unreasonable rates. Order No. 844 established monthly reporting requirements for all RTOs/ISOs in order to increase transparency by detailing their uplift payments and operator-initiated commitments. The Commission uses the information from the RTO/ISO postings to analyze market design, review market performance, and conduct event analysis.

FYs 2021 and 2022 Energy Market Planned Results. In FY 2021, the Commission will continue its evaluation of fast-start pricing market rule changes, including resolution of PJM's fast-start pricing proceeding. In FYs 2021 and 2022, each RTO/ISO will continue to post the reports required by Order No. 844. The Commission will continue to use the information posted to analyze market design, review market performance, and conduct event analysis.

FY 2020 Capacity Markets Results. In some regions of the United States, the RTO/ISO operates a centralized capacity market that is the region's primary means for ensuring that adequate resources are available to meet peak electric needs at just and reasonable rates. In FY 2020, the Commission took significant steps with respect to issues in several of those capacity markets.

Recognizing that New England faces unique fuel security challenges, the Commission previously directed ISO New England Inc. (ISO-NE) to submit tariff revisions that would allow a cost-of-service agreement for fuel security and to develop permanent market-based tariff improvements to address regional fuel security in the long term.

Specifically, in FY 2020, the Commission issued further orders on cost-of-service compensation for the continued operation of certain natural gas-fired generating units in the ISO-NE capacity market, as well as ISO-NE's long-term fuel security solution.

In addition, the Commission in FY 2020 continued its examination of how to ensure that the rules governing the PJM capacity market sufficiently ensure resource adequacy. With respect to PJM's centralized capacity market, the Commission, on December 19, 2019, directed PJM to take specified steps to address the market impact of state-subsidized electric generation resources.

FYs 2021 and 2022 Capacity Markets Planned Results. In FYs 2021 and 2022, the Commission anticipates continuing its activities as to centralized capacity markets that ensure adequate resources are available to meet peak electric needs at just and reasonable rates. In FY 2021, the Commission initiated a series of technical conferences to explore among other issues, how capacity markets can better accommodate state public policies and different options for more durable market designs.

EMERGING TECHNOLOGIES

Overview. Where emerging technologies are capable of providing services needed in the competitive wholesale electric markets, the Commission seeks to remove barriers to such technologies' participation in those markets as a means of promoting greater competition and, in turn, just and reasonable rates. This core function thus relates closely to the Strategic Challenge presented above for Objective 1.1.

FY 2020 Results. The Commission's actions in FY 2020 with respect to removing barriers to participation of electric storage resources in competitive wholesale electric markets are discussed above under the Strategic Challenge for Objective 1.1. In addition to the discussion above, the Commission took additional actions regarding emerging technologies. For example, in July 2020, Commission staff held a technical conference regarding projects that are comprised of more than one resource type at the same plant location (hybrid resources). Commission staff then issued a notice requesting post-technical conference comments on the issues covered at the technical conference.

FYs 2021 and 2022 Planned Results. In FY 2021, Commission staff will evaluate the comments received after the hybrid resources technical conference, the RTO/ISO reports due in July 2020, and subsequent public comment on the RTO/ISO reports, to make any recommendations about further actions that the Commission

could take on these issues. In January 2021, the Commission directed the RTOs/ISOs to submit informational reports on the status of efforts to accommodate hybrid resources into interconnection queue and market process.

TRANSMISSION AND TRANSPORTATION

FERC regulates the transmission and transportation of electricity and natural gas in interstate commerce, as well as the transportation of oil by pipelines in interstate commerce. Specific areas of impact within transmission and transportation include:

- Electric transmission rates
- Gas transportation/storage rates
- Oil transportation rates

ELECTRIC TRANSMISSION RATES

Overview. The Commission's statutory authority covers rates for the transmission of electricity in interstate commerce, as well as planning processes for electric transmission facilities and interconnection to the electric grid. Through these activities, the Commission provides financial signals for needed investment in electric transmission facilities and ensures that electric transmission rates are just and reasonable.

FY 2020 Results. The return on equity (ROE) available to a prospective developer of electric transmission facilities is one important consideration in investment decisions.

The Commission took steps to provide certainty with respect to ROEs for electric transmission facilities. In November 2019, the Commission issued Opinion No. 569 which established a new base ROE as applied to transmission owners in the Midcontinent Independent System Operator, Inc. (MISO) region. In May 2020, the Commission issued Opinion No. 569-A which adopted further changes to the base ROE methodology.

In March 2020, the Commission issued a NOPR proposing to revise its electric transmission incentive policy to stimulate the development of transmission infrastructure needed to support the nation's evolving generation resource mix, technological innovation, and shifts in load patterns. Comments on the NOPR were due in July 2020. In a related effort to provide incentives for the development of reliable transmission infrastructure, on June 18, 2020, FERC staff issued a white paper discussing a potential new framework for providing transmission incentives to utilities for cybersecurity. Initial comments on the paper were due in August 2020 and the reply comments were due in September 2020.

In November 2019, to further address changes needed to respond to the Tax Cuts and Jobs Act of 2017, the Commission issued a final rule (Order No. 864) to revise public utility transmission formula rates and account for future federal income tax changes. In April 2020, the Commission issued Order No. 864-A, an order denying rehearing and granting clarification of Order No. 864. The compliance filings are being filed with the Commission on a rolling basis (starting in February 25, 2020 and continuing into FY 2021), consistent with the requirements of Order No. 864; Commission staff began its evaluation of the compliance filings made to date.

The Commission continues to review further filings on compliance required by Order Nos. 845 and 845-A, which amended the *pro forma* Large Generator Interconnection Procedures and Agreement. The Commission has issued orders on 42 of the initial compliance filings, which represents 100% of the total number of initial compliance filings submitted. The Commission has acted on 36 of the further compliance filings, which represents 86% of the total number of further compliance filings submitted.

In October 2019, the Commission received post-technical conference comments related its technical conference on managing transmission line ratings that addressed matters raised in a FERC staff whitepaper on the same topic. In November 2019, the Commission received reply comments. Commission staff analyzed the comments and reply comments received during FY 2020.

In the 2020 Further Consolidated Appropriations Act, Congress directed FERC to "to provide to the Committees on Appropriations of both Houses of Congress not later than 180 days after enactment of this Act a study and report outlining the barriers and opportunities for high voltage transmission, including over the nation's transportation corridors. The report shall examine the reliability and resilience benefits, permitting barriers, and any barriers in state or federal policy or markets."[1] In FY 2020, FERC staff submitted a report to Congress outlining the barriers and opportunities for high voltage transmission, including over the nation's transportation corridors by the June 18, 2020 deadline. The report enumerated multiple benefits of high voltage transmission including potentially improving the reliability and resilience of the transmission system.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to monitor and evaluate these issues. The Commission took further action with respect to the base ROE methodology, including addressing pending rehearing requests as to Opinion No. 569-A (as to the MISO region) and will address the base ROE issues in individual cases for other regions, applying the new methodology as appropriate. In FY 2021, the Commission will take further action with respect to its NOPR on electric transmission incentives policy. On April 15, 2021, the Commission issued a supplemental NOPR proposing to modify the incentive proposed for transmitting and electric utilities that join Transmission Organizations. In FY 2022, the Commission will monitor and evaluate the impacts of any reforms. The Commission expects to issue orders on the remaining second round filings on compliance with Order No. 845, *pro forma* Large Generator Interconnection Procedures and Agreement in FY 2021, as well as all third-round filings on compliance. In FYs 2021 and 2022, the Commission will continue its evaluation of, and begin issuing orders on, Order No. 864 compliance filings, related to revisions in public utility transmission formula rates and accounting for future federal income tax changes. The Commission will also continue to monitor for any tax-related legislation or regulations from other agencies that could warrant further Commission action. In November 2020, the Commission issued a notice of proposed rulemaking on managing transmission line ratings. In FYs 2021 and 2022, the Commission will evaluate comments received in response to the NOPR. In October 2020, the Commission held a technical conference to discuss whether existing Commission transmission,

[1] Further Consolidated Appropriations Act, 2020, Pub. L. No. 116-94 (Dec. 20, 2019). The House Committee on Appropriations included this reporting requirement in House Report 1865, passed December 17, 2019.

interconnection, and merchant transmission facility frameworks in RTOs/ISOs can accommodate anticipated growth in offshore wind generation in an efficient and effective manner that safeguards open access transmission principles and to consider possible changes or improvements to the current framework should they be needed to accommodate such growth. In FY 2021, the Commission will continue to evaluate these issues.

GAS TRANSPORTATION/STORAGE RATES

Overview. The Commission facilitates the interstate transportation of natural gas by ensuring that the rates with respect to natural gas transportation and storage are just and reasonable.

FY 2020 Results. In FY 2020, the Commission issued orders addressing pending FERC Form No. 501-G filings, the informational cost and revenue study required as a result of the Tax Cuts and Jobs Act of 2017.

In FY 2020, the Commission issued a Policy Statement on determining ROE for natural gas and oil pipelines that, with certain exceptions to account for the differences among the industries, applies the same methodology used for analyzing electric utility ROEs under FPA section 206 as set forth in the Opinion No. 569 proceeding discussed above. The Commission will continue to address the base ROE issues in individual cases, applying the new methodology as appropriate.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue its annual review of the justness and reasonableness of interstate natural gas pipeline rates by analyzing cost and revenue information included in the pipelines' FERC Form No. 2 annual reports.

OIL TRANSPORTATION RATES

Overview. The Commission oversees rates for transportation of oil by pipeline to ensure that the rates allow pipeline companies to recover costs and are just and reasonable. The Commission established an indexing rate methodology 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. The current index methodology extends through June 30, 2021.

FY 2020 Results. Every year, the Commission calculates an annual index for oil pipelines to change their ceiling levels and adjust their rates accordingly. The calculation reflects the annual changes in the Producer Price Index for Finished Goods (PPI-FG), published by the Bureau of Labor Statistics. In FY 2020, the Commission posted the calculation of this year's index (1.020139), which is the percent change of the 2018 and 2019 PPI-FG plus an adder of 1.23, as adopted in the last five-year index review (issued in December 2015). The Commission received approximately 320 annual index filings from oil pipeline companies by May 31, 2020.

In June 2020, the Commission issued an NOI initiating the 2020 five-year review of the oil pipeline index in Docket No. RM20-14-000. Commenters were invited to submit comments regarding the Commission's proposal and any alternative methodologies for calculating the index level.

In FY 2020, the Commission also issued an NOI seeking comments on the standard applied to complaints against oil pipeline index rate changes. The Commission also clarified that an initial committed rate must meet the requirements for initial rates for a new service under 18 C.F.R. § 342.2(a), file a cost-of-service rate, or 18 C.F.R. § 342.2(b), file a sworn affidavit. This issue has arisen in a series of petitions for declaratory orders and tariff filings. In FY 2020, the Commission continued to evaluate how oil pipelines can comply with the initial rate requirement.

Finally, the Commission continued to review the income tax allowance policy with respect to various partnership forms. The Commission continues to address the income tax allowance issues in individual cases, as appropriate.

FYs 2021 and 2022 Planned Results. The Commission will continue to evaluate these issues in FYs 2021 and 2022. In FY 2021, the Commission will complete its five-year review of the oil pipeline index to determine the methodology to be used for the calculation of the annual oil pipeline index for 2021-2025. The Commission will also evaluate next steps for its examination of the standard applied to complaints against oil pipeline index rate changes.

The Commission will also continue to address the base ROE, income tax allowance issues, and other rate issues for oil pipelines presented in pending proceedings.

CORPORATE ACTIVITIES AND MERGERS

Overview. FERC oversees securities issuances, interlocking directors, and mergers and acquisitions within the electric markets to ensure that their potential effect on competition, rates, and regulations is consistent with the public interest, and that there is no inappropriate cross-subsidization.

FY 2020 Results. In FY 2020, the Commission continued implementation of Order No. 855 regarding legislation that changed section 203(a)(1)(B) of the FPA concerning acquisitions of jurisdictional facilities valued at $10 million or less. The final rule's implementation requires the Commission to track certain filing related data and report to Congress on the legislation's effect consistent with Congressional direction. In May 2020, the Commission issued an initial report, subject to notice and comment, on the changes to FPA section 203. The final version of the "Report Assessing the Effects of the Amendment to Section 203 of the Federal Power Act" was submitted to Congress on August 24, 2020. The report generally noted that since the change to section 203(a)(1)(B), the Commission has seen a reduction in the overall number of section 203 filings from previous years, and seen fewer filings requesting authorization for transactions under section 203(a)(1)(B).

FYs 2021 and 2022 Planned Results. The number of filings related to mergers and acquisitions depends on multiple external factors outside of the Commission's control. In this respect, the Commission does not plan for a particular number of merger and acquisition filings. The Commission's planning for FYs 2021 and 2022 is in regard to maintaining sufficient capacity to process the filings received based on prior year levels.

CORE FUNCTION 1.1.2: ANALYZE AND ACT UPON FILINGS IN A FAIR, CLEAR, AND TIMELY MANNER. WHERE FILINGS DO NOT PROVIDE THE COMMISSION WITH SUFFICIENT INFORMATION TO ACT UPON THEIR MERITS, FACILITATE SETTLEMENTS OF DISPUTES OR, IN THE ABSENCE OF SETTLEMENT, DEVELOP AN ADEQUATE RECORD FOR COMMISSION ACTION.

To maintain just, reasonable, and not unduly discriminatory or preferential rates, terms, and conditions of service, FERC analyzes and takes appropriate action on applications to change existing or implement new rates, terms, and conditions of service. Jurisdictional entities have tariffs on file with the Commission that state what rates they can charge for jurisdictional services, as well as establish the terms and conditions of service.

FERC may also conduct an independent review of tariff provisions and rates (i.e., a review not initiated by a jurisdictional entity's filing) either pursuant to a stakeholder complaint or on its own motion.

FERC advisory staff develops recommendations to the Commission regarding potential actions to enable the Commission to issue a fair, clear, and timely order accepting, modifying, suspending, setting for hearing, or rejecting the rates, terms, and conditions of service.

Some issues are not easily resolved. If additional information is needed to make a decision, the Commission has a number of procedural options to supplement the record, including data requests, deficiency letters, technical conferences/workshops, or additional briefing. If there are issues of material fact in dispute based on the record before the Commission, the Commission may elect to set a matter for hearing and/or settlement judge procedures.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Analyze and act on filings
- Outreach and analysis
- Hearing and settlement judge procedures

ANALYZE AND ACT ON FILINGS

Overview. Each year, the Commission receives thousands of filings regarding the rates, terms, and conditions for jurisdictional services. These filings come from a variety of sources including jurisdictional public utilities, natural gas pipelines, and oil pipelines requesting changes to their rates or tariff provisions, or for the establishment of new rates or services, third-party complaints and requests for Commission action, and the Commission acting on its own motion. Commission staff uses qualitative and quantitative analysis, as appropriate, to inform the Commission's decision making on both an *ex ante* and *ex post* basis.

FY 2020 Results. The table below shows the actual number of rate filings made pursuant to Federal Power Act section 205, Natural Gas Act section 4, and Interstate Commerce Act section 6 for FYs 2017–2020.

	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Estimate	FY 2022 Estimate
Electric	4,939	4,525	5,397	5,769	5,700	5,700
Gas	1,303	1,451	1,933	1,463	1,500	1,500
Oil	750	862	875	916	920	1,220

Included in the electric filings shown in the table above, in FY 2020, the Commission processed approximately 2,800 filings regarding electric market-based rate authority, which is slightly higher than a typical year and the Commission reviewed approximately 2,850 proposals for electric cost-based rates.

The Commission also processes complaints, market-based rate applications, waiver requests, and rulemaking requests related to the natural gas pipeline and oil pipeline transportation industries. In addition, the Commission receives approximately 20 oil-related petitions for declaratory order per fiscal year. These petitions address rate structures for significant and new capacity pipeline projects.

FYs 2021 and 2022 Planned Results. The table above also shows the estimated number of filings for FYs 2021 and 2022. The Commission does not have control over the number of filings from industry or third parties. Moreover, the number of yearly filings is a function of multiple factors that make it difficult to predict how many filings the Commission will receive in future years. Accordingly, rather than anticipating a specific number of filings in any given year, the Commission plans to maintain sufficient resources in FYs 2021 and 2022 to process a similar number of filings as in prior years. The Commission will continue to dedicate a significant amount of resources to the analysis of rate and tariff filings, made pursuant to Federal Power Act section 205, Natural Gas Act section 4, and Interstate Commerce Act section 6, consistent with its statutory authority.

OUTREACH AND ANALYSIS

Overview. The Commission and its staff undertake a variety of outreach and technical analyses on issues that do not necessarily present themselves in docketed proceedings. This is particularly true for emerging issues and trends in the industries that the Commission regulates. Commission staff routinely monitors and analyzes the energy markets to identify and evaluate significant market events and trends to inform potential market rule changes.

FY 2020 Results. In the spring of 2020, the Commission took several, proactive steps to help regulated entities manage their potential regulatory-related burdens during the COVID-19 pandemic. For example, the Commission granted an extension of time for certain deadlines for filings submitted to the Commission for those entities that were unable to meet deadlines due to steps they have taken to meet the emergency conditions. The Commission also shortened the comment period for certain filings with the Commission to help expedite the Commission's review of certain filings that may be necessary in light of the COVID-19

pandemic. The Commission also waived through January 29, 2021, the Commission's regulations that require that filings with the Commission be notarized or supported by sworn declarations. In addition, on April 2, 2020, the Commission issued a policy statement to provide guidance to all Commission-regulated industries that the Commission will expeditiously review and act on requests for relief, including but not limited to, requests for cost recovery necessary to assure business continuity of the regulated entities' energy infrastructure in response to the national emergency. Further, on May 8, 2020, the Commission issued a second policy statement to give additional guidance to oil pipelines during the COVID-19 emergency. In the policy statement, the Commission committed to act expeditiously on any oil pipeline requests for temporary waivers of or extensions of time to comply with certain FERC regulations where necessary and appropriate, including cost-of-service filing requirements, reporting requirements, record-keeping requirements, accounting regulations, and depreciation studies.

In July 2020, the Commission also held a Commissioner-led technical conference to consider the ongoing, serious impacts that the emergency conditions caused by COVID-19 are having on various segments of the United States' energy industry. After the technical conference, a notice requesting post-technical conference comments was issued, requesting comments within 45 days. Commission staff are evaluating both the input received at the technical conference and those post-technical conference comments.

The Commission also conducted other outreach and analysis in FY 2020. For example, in light of recommendations in the Government Accountability Office's 2017 report on capacity market performance, in FY 2020, Commission staff had informal contact with stakeholders to discuss proposed revisions to improve the quality of data that the Commission collects and to enhance its Common Metrics Report by including capacity market metrics. Commission staff issued a new Notice of Information Collection Request, which proposed revisions to the current metrics, and included new metrics related to capacity markets. These proposed revisions and new metrics were meant to improve the quality of data collected for its Common Metrics Report, including significant changes to the metrics themselves, as well as improving survey design for greater end-user ease of use. In April 2020, the Office of Management and Budget approved this request. In May 2020, the Commission issued a Formal Notice requesting information on performance metrics related to the Common Metrics Report. ISOs, RTOs, and utilities in regions outside ISOs and RTOs are encouraged to submit responsive information by October 30, 2020. The Commission received responsive information from ISOs, RTOs, and non-ISO/RTO regions and are using these data to prepare the next Common Metrics Report.

Also, in December 2019, Commission staff issued the 2019 Assessment of Demand Response and Advanced Metering. This is Commission staff's fourteenth annual report on demand response and advanced metering in response to a Congressional directive in the Energy Policy Act of 2005.

In June 2020, Commission staff hosted a software conference, bringing together experts from diverse backgrounds and experiences—including electric system operators, software developers, and representatives from government, research centers, and academia—for the purposes of stimulating discussion, sharing information, and identifying fruitful avenues for research concerning the technical aspects of improved software for increasing efficiency and resilience of the bulk-power system.

In FY 2020, Commission staff prepared several assessments of the energy markets: in October 2019, an assessment of energy market preparedness for the upcoming winter; in March 2020, the Annual State of the Market report for the previous year; and, in May 2020, an assessment of energy markets and electric reliability for the upcoming summer. All were posted on the Commission's website for the public. In June 2020, Commission staff also posted an updated Energy Primer, a comprehensive guide for the public on the workings of the energy markets. Commission staff conducts regular outreach to independent market monitors for RTOs and ISOs to review the impact of approved market rule changes or other market events.

The Commission has continued its international outreach work in FY 2020. Commission staff met regularly with international regulators to share information on energy topics that are of common interest. In FY 2020, for example, to discuss market design issues, staff held two videoconferences with European regulators and more than 25 video conferences with Indian regulators. Several of the engagements with India are part of the Flexible Resources Initiative that FERC is co-leading with the U.S. Department of State.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to monitor and evaluate these and new issues. Specifically, Commission staff expects to take further action with respect to the Common Metrics Report in FYs 2021 and 2022. In FY 2021, FERC staff will perform quality checks on the data received through its information request, organize the data for inclusion in the Common Metrics Report, and produce the next report installment. In FY 2022, the Commission will continue evaluating these issues, and again issue a Formal Notice requesting information on performance metrics.

Commission staff expects to also issue an annual report on the Assessment of Demand Response and Advanced Metering in both FYs 2021 and 2022. Commission staff expects to hold industry software conferences in both FYs 2021 and 2022. In FYs 2021 and 2022, Commission staff will continue to produce public reports such as the Annual State of the Market Report and Seasonal Assessments on market performance and long-term market trends and provide meaningful insight to the public on energy markets. Commission staff will continue to conduct regular outreach to independent market monitors for RTOs and ISOs to review the impact of approved market rule changes or other market events. Finally, Commission staff also plans to continue international information exchanges in FYs 2021 and 2022.

HEARING AND SETTLEMENT JUDGE PROCEDURES

Although the Commission is able to analyze and act on the majority of filings, there are cases where there are disputed issues of material fact that the Commission determines should be set for hearing and settlement judge procedures. In hearings, Commission trial staff helps develop the factual and legal record for administrative law judge action and Commission review. The administrative law judges guarantee due process and act impartiality and independent of the Commission in issuing a decision.

SETTLEMENT

Overview. The Commission recognizes the value of resolving issues through consensual means and encourages settlements where possible. Consensual resolution dramatically limits the time, expenses, and resources the

Commission and outside parties would otherwise devote to litigating these cases. It further avoids the time and expense associated with appealing a Commission decision to the courts. Finally, settlement of a proceeding provides business certainty, which facilitates investment in needed energy infrastructure. Commission staff—including administrative law judges (serving as settlement judges), trial staff, and dispute resolution staff—all play important roles in resolving matters without full litigation. Settlement negotiations frequently take months, often involve numerous highly technical factual issues and complex legal questions, and require a delicate balancing of many different interests of filing parties and parties representing a variety of stakeholders, including state commissions, residential energy consumers, local distribution companies, natural gas companies, public utilities, industrial and small commercial energy users, energy marketers, energy producers, and power generators. All settlements require Commission review and approval.

After a settlement judge is appointed, trial staff and parties conduct informal information exchanges to secure the information needed to develop fact-based settlement positions. The settlement judge facilitates or acts as a mediator to help the parties reach a consensual resolution. During the settlement judge proceedings, the judge reports to the Commission on the progress of the proceedings. If a settlement is reached, the judge certifies the settlement to the Commission. If, when using the settlement judge procedures, the negotiations reach an impasse, settlement negotiations may continue with the trial staff, but the Commission's chief administrative law judge will terminate settlement judge procedures and appoint a presiding administrative law judge to conduct a hearing and issue an initial decision.

During settlement judge proceedings, trial staff plays a vital role helping parties reach a consensual resolution, particularly outside of settlement conferences or after settlement negotiations reach an impasse. In addition trial staff also is actively involved in comprehensive settlement negotiations as a participant and utilizes legal and technical knowledge and skills in an effort to structure the resolution of the numerous issues that must be decided in order to secure a settlement that is both consistent with the public interest and mutually acceptable to all parties.

FY 2020 Results. In FY 2020, settlement judge procedures resulted in settlement judges convening 375 settlement conferences and certifying 79 full or partial settlements to the Commission for final review and approval. Those settlements represented approximately 91% of the resolved cases that were set for hearing and/or settlement judge procedures. With participation ranging from two to 250 or more parties, negotiations took an average of six to nine months to complete and involved primarily rates, market power, terms and conditions of service, and market rules applications. Commission trial staff used its expertise in engineering, finance, depreciation, market power, cost-of-service and rate-design matters in negotiations with regulated entities and intervenors to reach settlement agreements.

In addition, many matters are resolved through the efforts of dispute resolution staff serving as mediators or facilitators. During FY 2020, the dispute resolution staff (inclusive of the Landowner Helpline) successfully resolved 98 disputes.

FYs 2021 and 2022 Planned Results. While the Commission determines the cases that are set for hearing and settlement judge procedures, these decisions are functions of the filings, requests, and issues put before it. In this respect, the Commission does not plan for a particular number of cases to be set for hearing and settlement judge procedures. Similarly, although the Commission may encourage settlements, it is up to the parties to reach an agreement. Accordingly, in FYs 2021 and 2022, the Commission will monitor its workload to ensure sufficient resources are available.

HEARINGS

Overview. In instances where a settlement cannot be achieved, the case proceeds to hearing. The presiding judge convenes prehearing conferences, resolves discovery disputes, issues subpoenas, and issues orders. During the hearings, which can be lengthy, judges admit evidence, rule on motions and objections, and ensure the compilation of a record upon which judges can issue an initial decision. The judge ensures due process is afforded to all case participants. The Commission's trial staff and the parties conduct comprehensive discovery and file several rounds of expert testimony and exhibits addressing the matters that are the subject of the hearing. The trial staff and parties introduce evidence, conduct direct and cross-examination of witnesses, and undertake oral argument on issues that arise. Following the hearing, 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 certifies the record to the Commission, which consists of all official exhibits, transcripts, evidence, and orders entered in the proceeding. If a participant contests the initial decision, trial staff and parties may file further briefs with the Commission, after which the Commission issues its final decision in the case. The Commission can affirm (in part or in full) or reject the initial decision.

FY 2020 Results. In FY 2020, presiding judges convened nine hearings and issued five initial decisions. The nine hearings consisted of a total of 55 days of hearing and the records certified with the five initial decisions consisted of a total of 1,046 exhibits and 6,032 pages of transcript. Due to the COVID-19 pandemic, six of those hearings were conducted virtually, using computer technologies. Since the Commission headquarters building was closed, the presiding judge as well as the participants conducted the hearing from their homes or other locations. In FY 2020, Commission trial staff filed 67 pieces of testimony and 22 pre- and post-hearing briefs. In addition, trial staff prepared three briefs and three supporting affidavits in two paper-hearing proceedings ordered by the Commission, and also prepared four affidavits concerning two contested settlements.

FYs 2021 and 2022 Planned Results. While the Commission determines the cases that are set for hearing and settlement judge procedures, these decisions are a function of the filings, requests, and issues put before it. In this respect, the Commission does not plan for a particular number of cases to be set for hearing and settlement judge procedures. Similarly, although the Commission may encourage settlements, it is up to the parties to reach an agreement. Accordingly, in FYs 2021 and 2022 the Commission will monitor its workload to ensure sufficient resources are available.

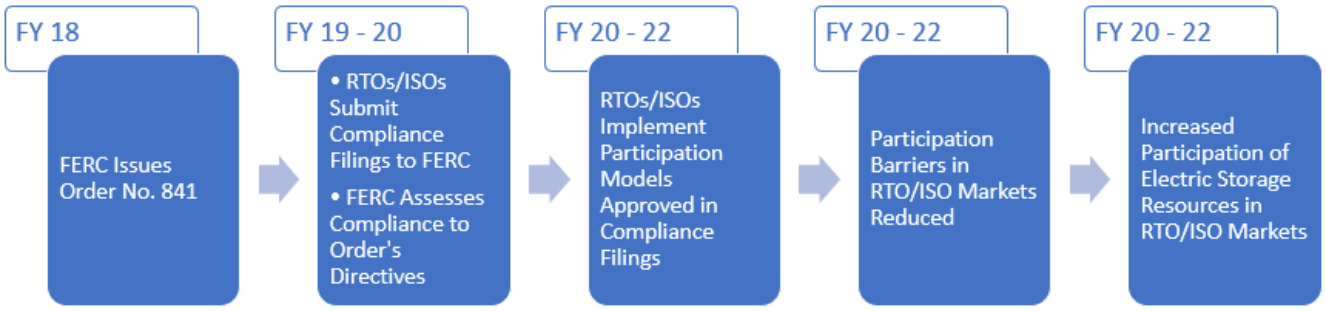
PERFORMANCE MEASURES

Commission staff will use the following measure to assess performance in Objective 1.1. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: THE DEGREE TO WHICH ELECTRIC STORAGE RESOURCES ARE PARTICIPATING ANNUALLY IN ORGANIZED WHOLESALE ELECTRICITY MARKETS OPERATED BY RTOS AND ISOS AFTER THE ISSUANCE AND IMPLEMENTATION OF ORDER NO. 841

Overview. Order No. 841 is designed to remove barriers to the participation of electric storage resources in organized wholesale electric markets.[2] The entrance of these resources into organized wholesale electric markets will help to promote competitiveness and enhance bulk-power system resilience. An increase in both the number of electric storage resources participating in wholesale electric markets and in the total capacity of those resources is taken as a proxy for increased market participation, which, in turn, the Commission expects to be associated with increased competition in wholesale electric markets.

Because Order No. 841 does not direct participation, the total number and capacity of electric storage resources participating in wholesale electric markets is only an indirect measure of the order's outcome. The Commission anticipates that increases in both numbers will provide insight into Order No. 841's impact. However, it should also be noted that the participation of electric storage resources is dependent on numerous other factors not measured here, such as economic conditions, technological advances, and generator interconnection queues for access to the transmission system. The following graphic illustrates the chain of influence for Order No. 841 and general timeframe for each stage, noting that the compliance process remains ongoing (as further detailed below).



This performance measure has two parts: (1) in the interim period, the Commission measured its ability to act on 75% of the six RTO/ISO compliance filings by the end of FY 2020; and (2) beginning in FY 2020, as some RTOs/ISOs began to implement their respective participation models, the Commission measured the degree of participation of electric storage resources in at least three of the six RTOs/ISOs on an annual basis (by fiscal

[2] The EIA predominately uses the term "energy storage" resource in its data. However, in order to use consistent terminology, FERC uses the term "electric storage" resource.

year). To have met the goals of the second part of the measure, the actual count and MW figures must equal or exceed the forecasted targets in at least three of the six RTOs/ISOs.

An interim measurement was necessary because the participation models developed by the RTOs/ISOs in response to Order No. 841 must be accepted by the Commission, and an effective date approved by the Commission, before they could be implemented. This interim measurement provided supplemental information to aid the interpretation of the performance measures.

To assess the degree of participation, the second part of the performance measure reports both the total number (count) and total amount (MW) of electric storage resources participating in at least three of the six RTO/ISO markets. Order No. 841 defined an electric storage resource as "a resource capable of receiving electric energy from the grid and storing it for later injection of electric energy back to the grid." The Commission uses data collected by the U.S. Energy Information Administration's (EIA) 860M (Monthly Electric Generator) survey.

For the purposes of these calculations, Commission staff has defined generators within the EIA 860M dataset with the following prime movers as an electric storage resource: 1) battery; 2) compressed air; 3) concentrated solar power;[3] and 4) flywheel. This assessment does not include pumped hydroelectric resources, as no new pumped hydro has come online in the past five years. Further, the Commission includes only electric storage resources that are operational in the balancing authorities of the six jurisdictional RTOs/ISOs in the FY 2020 actual calculations. For the FY 2021 target, staff includes electric storage resources in both the operational and planned categories that are located within the balancing authorities of the six RTO/ISOs as of December 2019. For the FY 2022 target, staff includes electric storage resources in both the operational and planned categories that are located within the balancing authorities of the six RTO/ISOs with the data available as of October 2020.

Targets and Actual Results Tables

Percentage of RTO/ISO compliance filings acted on by the Commission					
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**
Not Applicable	Not Applicable	Not Applicable	Not Applicable	75%	100%
FY 2020 Target: Met					

[3] Concentrated solar power is classified by the EIA prime mover code "CP". The "concentrated solar power" prime mover description is distinct from the "photovoltaic" prime mover code (PV) and, in the EIA 860m instructions, is fully described as "Energy Storage, Concentrated Solar Power"

Number of electric storage resources participating in RTO/ISO electric markets								
RTO/ISO	**FY 2016 Actual**	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
CAISO	14	24	30	43	50	51	63	84
ISO-NE	1	6	10	20	33	32	35	53
MISO	3	4	5	10	11	11	14	15
NYISO	1	2	3	6	8	7	11	13
PJM	21	25	26	29	29	29	29	29
SPP	1	2	2	5	5	6	5	6
FY 2020 Target: Met								

Total amount (MW) of electric storage resources participating in RTO/ISO electric markets								
RTO/ISO	**FY 2016 Actual**	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
CAISO	18	130	181	210	222	474	895	2,618
ISO-NE	2	23	27	51	93	80	123	161
MISO	22	22	23	40	45	45	54	64
NYISO	20	21	26	53	75	57	391	284
PJM	247	261	262	322	322	322	322	322
SPP	1	2	2	15	15	25	15	25
FY 2020 Target: Met								

FY 2020 Results. The Commission met its interim metric goal of completing at least 75% of the initial compliance filings by FY 2020. During FY 2020, the Commission evaluated the RTOs'/ISOs' second round Order No. 841 compliance filings submitted between December 2019 and February 2020. The Commission has now responded to all compliance filings submitted by RTO/ISOs.

Across the six FERC-jurisdictional RTO/ISO markets, the total amount of operating electric storage capacity, excluding pumped storage was 1003 MW by the end of FY 2020. The total FY 2020 target was 772 MW. Moreover, the total FY 2020 electric storage capacity (MW) by RTO/ISO was at least equal to the FY 2020 target in CAISO, MISO, PJM, and SPP. Additionally, 136 electric storage units were operational in the six

RTOs/ISOs by the end of FY 2020, compared to a targeted 136 units. The count of FY 2020 electric storage resources by RTO/ISO was also at least equal to the FY 2020 target in CAISO, MISO, PJM, and SPP by the end of FY 2020. Several factors may contribute to electric storage capacity equaling or exceeding the target. First, higher than expected intermittent resource penetration levels have created an increased need for electric storage to smooth out production from intermittent resources. Second, there has been an increasing trend towards hybrid resources, which typically combine electric storage with an intermittent resource such as wind or solar behind a single point of interconnection. In this type of resource, the interconnection configuration of certain hybrid resources has caused the electric storage components of those hybrid resources to be classified as separate electric storage resources in the EIA data. Third, as a result of improvements to electric storage technology, it is also possible that some electric storage units were able to build larger batteries than initially planned causing electric storage capacity to exceed the targeted capacity.

FYs 2021 and 2022 Planned Results. The interim metric provides context for, but is not directly applicable to, FY 2021 and 2022; this is because the interim metric stops with FY 2020 and has been completed. For FYs 2021 and 2022, the Commission will continue to evaluate the second part of this metric, which is the degree of participation of electric storage resources in the six RTOs/ISOs, relative to forecasted targets. The FY 2021 target for electric storage capacity (amount) is 1,800 MW and 157 resources across the six RTOs/ISOs. The FY 2022 target for electric storage capacity (amount) is 3,474 MW and 200 resources across the six RTOs/ISOs. As detailed above, this metric requires that actual figures for these years exceed the forecasted target in at least three of the six regional markets.

Monitoring Risk Factors. A number of significant risks factors exist that could cause actual electric storage capacity to be lower than the established targets. Delays in the RTO/ISO compliance process could affect the implementation of Order No. 841 reforms in the RTO/ISO markets; for example, in light of the COVID-19 pandemic, the Commission provided longer deadlines for the RTOs/ISOs to comply with the directives in the second round of compliance orders, issued in July and August 2020. RTO/ISO implementation of Commission-approved tariff revisions in some regions will also be delayed due to software upgrades or system changes. In addition, electric storage growth is dependent on a wide variety of factors, such as aggregate economic growth, electric demand levels, the cost of electric storage resources, and intermittent resource growth. Likewise, the rates of technical improvement, supply chain risks, and state electric storage procurement mandates can affect future electric storage growth. The COVID-19 pandemic has also had an impact on investments in the energy infrastructure, including electric storage, that staff continues to track. While most of these risks are outside of the Commission's control, staff will continue to monitor them in order to understand and interpret the measure's results.

OBJECTIVE 1.2: INCREASE COMPLIANCE WITH FERC RULES; DETECT AND DETER MARKET MANIPULATION.

FERC has oversight and enforcement responsibilities that focus on compliance of regulated entities under the Federal Power Act, Natural Gas Act, Natural Gas Policy Act of 1978, and Interstate Commerce Act. In addition, the Federal Power Act and Natural Gas Act provide FERC specific authority to prohibit and sanction market manipulation. The Energy Policy Act of 2005 in particular increased both the Commission's responsibilities and its penalty authority.

Within the compliance focus of this objective, FERC gathers and analyzes information about market fundamentals, behavior, and trends in order to take proactive steps to reduce the probability that violations of applicable laws, the Commission's regulations, or market rules will occur. FERC also promotes regulated entities' internal compliance programs and employs a robust audit program to identify problems and provide recommendations to improve compliance. FERC also makes market and audit 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.

To detect and deter fraud and market manipulation, FERC uses market surveillance and other information sources to identify indications of potential violations. FERC then conducts investigations and, when appropriate, exercises the Commission's civil penalty authority to discourage violations.

Increasing compliance helps safeguard fair and competitive markets for providers and consumers. A strong and prudent enforcement program deters market manipulation and increases confidence in the regulated markets. These complementary approaches strengthen energy markets and, ultimately, support economically efficient, safe, reliable, and secure energy services at a reasonable cost for consumers.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 1.2. The status of this Strategic Challenge and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: NON-TRADITIONAL MARKET PARTICIPANTS

Overview. The Commission recognizes that jurisdictional energy markets are continuing to evolve, including the increasing participation of non-traditional market participants, which creates opportunities for the Commission to engage with both traditional and new stakeholders to bolster compliance. Compared to traditional market participants like public utilities and natural gas companies, non-traditional market participants encompass a wider range of entities, including financial traders that possess different strategies and incentives for participating in jurisdictional energy markets. As such, these non-traditional participants

may be less familiar with the Commission's requirements and, therefore, may face many different types of compliance challenges.

FY 2020 Results. In FY 2020, the Commission continued to conduct outreach through industry conferences and other venues to educate non-traditional market participants about compliance with FERC requirements and enforcement processes. FERC staff participated in conferences, workshops, and one-on-one discussions that included non-traditional market participants. FERC has also provided more transparency into its non-public surveillance and investigative activities by including additional detail in its annual report on enforcement matters that close with no public action.

Staff participated in 15 industry conferences and workshops that included non-traditional market participants, providing greater opportunity for outreach to these market participants. In addition, non-traditional market participants have expressed appreciation for the information and feedback they have received as part of the surveillance inquiry process.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022 the Commission will continue to conduct outreach through industry conferences and other venues to educate non-traditional market participants about compliance with FERC requirements and enforcement processes. In addition, FERC will look for opportunities to increase transparency into non-public matters that may help improve compliance.

Based on these actions, the Commission expects to see a number of compliance related impacts, particularly with regard to the non-traditional market participants. Specifically, the Commission expects that the time non-traditional participants take to establish their compliance programs will decrease and that the quality of those programs will increase. The Commission also expects to see compliance programs in smaller operations. Beyond the compliance programs, the Commission expects non-traditional, as well as traditional, market participants to provide better and more prepared responses to inquiries and investigations. Further, the Commission expects to see an increase in self-reporting of violations. Ultimately, of course, the Commission expects that there will be a decrease in violations that occur due to an entity's lack of familiarity with Commission requirements.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years, including the size of non-traditional market participants, their familiarity with Commission rules and regulations, and their unique compliance challenges.

In FY 2020, the Commission's actions were impacted by the fact that non-traditional participants, which are often smaller than traditional market participants and subject to fewer FERC requirements, can enter and exit the market more quickly than traditional market participants. This makes it difficult for FERC to maintain a clear picture of the full population of new participants and their activities. New participants are also more diverse and may have different compliance challenges. Therefore, the public information provided by FERC related to its enforcement program and compliance issues that are relevant for some non-traditional market participants may not be relevant for others. The diversity thus precludes the use of a single message or

outreach mechanism and makes it more difficult to reach all market participants. FERC expects that these factors will continue to be relevant over the next two years and will continue to take them into account.

CORE FUNCTIONS

In addition to being responsive to this strategic issue, FERC carries out its responsibilities in this objective through two core functions. Each core function is driven by discrete sets of inputs, operations, and outputs to deliver impact.

CORE FUNCTION 1.2.1: INCREASE COMPLIANCE BY IDENTIFYING ANOMALIES AND POTENTIAL RULE IMPROVEMENTS, AND THROUGH STAKEHOLDER EDUCATION AND OUTREACH.

In the complex and rapidly evolving energy marketplace, ongoing observation and analysis are necessary to ensure that market rules are effective and practicable for those who must follow them. Education and outreach related to market rules and compliance obligations are important as new participants join the markets and existing participants adapt to changing requirements.

FERC staff routinely monitors and analyzes the energy markets to identify and evaluate significant market events and trends, inefficient market rules, and unusual market behavior. The Commission staff also processes accounting filings and provides analysis and guidance on accounting matters in other filings submitted by regulated entities. Results of staff analyses may inform market rule changes or other Commission actions. This information may also be used to educate and inform the public on Commission oversight or market fundamentals.

FERC staff also works to increase compliance by conducting audits of jurisdictional entities. A risk-based approach to plan and prioritize audits helps FERC examine areas of regulatory importance and make the most efficient use of its resources. These audits assess compliance with rules and regulations and provide insight into the factors affecting compliance. In addition, audit staff provides informal feedback to the audited entities during the audit engagements, and formal findings are issued in public reports that facilitate compliance across jurisdictional entities.

Collectively, these activities help to understand the factors affecting compliance and facilitate compliance through information sharing, feedback, and practical recommendations. FERC further leverages this information and understanding to educate the market participants on rules, requirements, and processes.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Monitoring and analysis of natural gas and electric markets
- Compliance, operational, financial, and other audits
- Analysis of accounting/financial filings from regulated entities

MONITORING AND ANALYSIS OF NATURAL GAS AND ELECTRIC MARKETS

Overview. The Commission requires that companies participating in markets under its jurisdiction submit Electric Quarterly Reports (EQRs) regarding jurisdictional sales, financial statements, and operational data. On an ongoing basis, Commission staff synthesizes and analyzes a large variety and quantity of data from these filings and other data sources in order to perform *ex post* analysis of market-based rate authorizations. This analysis is conducted to ensure that jurisdictional rates remain just and reasonable and not unduly discriminatory and preferential. Commission staff also implements tools and algorithmic indicators to review market activities and analyze market results, for the purpose of identifying anomalous market outcomes and determining, among other things, whether there are indications of an exercise of market power (i.e., activities inconsistent with expectations of a competitive market) or possible fraud or manipulation.

FY 2020 Results. The Commission continues to focus on increasing its monitoring capability by improving its systems and processes for both collecting and analyzing market data to conduct market monitoring and detect undue market power.

In regard to collecting data, the Commission continued its efforts, which began in FY 2015, to replace the electronic filing format used for certain forms submitted by regulated entities to provide industry and market data to the Commission and public. This initiative to transition to eXtensible Business Reporting Language (XBRL) should improve the consistency and usability of submitted data, as well as improve ease of filing, reduce compliance issues, and decrease the costs of preparing the necessary data for submission. During FY 2020, the Commission organized and hosted a staff-led technical conference to discuss a draft XBRL taxonomy and other related documents, technical concerns, and issues related to the transition, including the implementation schedule. The Commission issued a final order adopting the XBRL taxonomy, protocols, implementation guide, and schedule for filing ten Commission forms.[4]

In addition, the Commission began an initiative to improve the processing of EQR filings. Each quarter, FERC staff conducts manual checks of the EQR filings to ensure that they have been completed properly and that data is complete and usable. To help reduce the time spent on manual checks, FERC staff developed a new screen in FY 2020 to automatically flag incomplete and improperly filed reports and identify entities that have failed to submit their EQR filings. The automated screens will also enable FERC staff to more quickly alert organizations to issues with their filings. By reducing the time spent on checking the accuracy of data submissions, staff will be able to spend more time on using the data and conducting *ex post* analyses of market power. Staff also began a multi-year reassessment of the EQR collection, assessing the data fields, filing methods and quality of the data collected to better understand future potential future changes to the data collection. During FY 2020, staff reviewed all EQR data fields, hosted two outreach sessions with industry to obtain feedback on the EQR data collection, and conducted an assessment with an external contractor to determine the best method for collecting EQR data in the future. In regard to analyzing market data, FERC staff is continuing to develop new screening methodologies for its *ex post* reviews. The new methodologies will

[4] Revisions to the Filing Process for Commission Forms, Order on Technical Conference, 172 FERC 61,059 (July 17, 2020).

increase staff's speed and efficiency in conducting its reviews and enable more refined analyses of EQR data in support of market-based rate filings. During FY 2020, staff developed 6 new screening tools and methodologies and made 7 enhancements to existing screens.

In addition to the enhancement efforts, the Commission completed quarterly and annual compliance checks on the industry's compliance with the Commission's financial forms and EQR filing requirements and conducted *ex post* analyses and inquiries. In FY 2020, the Commission received EQR submittals from approximately 2,800 entities each quarter and conducted *ex post* analyses at a level that was comparable to recent years. These in-depth, data-intensive analyses combine multiple types and sources of information to determine whether FERC's authorization of market-based rate authority resulted in any increases in the use of market power or other adverse effects. By looking at shifts in market power over time and across different geographic areas and proposed purchases, these inquiries also seek to anticipate future risks.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to enhance its compliance efforts related to the Commission's filing requirements with improved technology, such as the transition to the new XBRL filing format. The Commission anticipates a similar number of EQR quarterly filings and *ex post* inquiries in both FYs 2021 and 2022. In FY 2021 the Commission anticipates that the transition to the new XBRL filing format for FERC forms will be completed. The Commission expects the required forms to provide more meaningful, useful data and for the filing process to be faster as a result of these changes.

In addition, the Commission expects the new EQR screens to result in an increase in the proportion of staff time spent on analysis and a decrease in the time it takes FERC to alert organizations about issues with their filings by the end of FY 2021. Staff will also continue work on the EQR reassessment in FY 2021.

The Commission expects that the increases in analytical capacity related its *ex post* analysis will begin to show an impact in FY 2021. The impact will not necessarily be a higher number of instances of market power detected, because this number depends on external factors, but the impact should be evident through increased efficiency and more refined analysis of its *ex post* reviews.

COMPLIANCE, OPERATIONAL, FINANCIAL, AND OTHER AUDITS

Overview. The Commission conducts audits of jurisdictional entities—including public utilities, natural gas pipelines, and oil pipelines—to assess compliance with the Commission's authorizing statutes, orders, rules, and regulations. Each year, the Commission develops an audit plan that specifies the entities to be audited and particular areas of focus. The audit plan balances the Commission's intention to comprehensively cover potential areas of noncompliance with a risk-based approach that prioritizes key areas of regulatory importance. In addition to assessing compliance, the audits help the Commission identify and analyze factors affecting noncompliance. Every audit also generally includes a review of the internal compliance program of the entity under audit. To help regulated entities maintain compliance, FERC auditors provide informal feedback and recommendations during the audit engagements and issue a publicly available audit report that

provides formal recommendations. The Commission places an emphasis on timely implementation of recommended corrective actions within six months of an audit's completion.

FY 2020 Results. In FY 2020, the major topic areas for audits included competitive energy markets, transmission formula rates, market-based rates, reliability, affiliated transactions, open access transmission tariffs and interconnections, oil pipeline tariffs and FERC Form No. 6 reporting, and the impact of the Tax Cuts and Jobs Act of 2017.

Comprehensive audits may take up to a year or more, and, in FY 2020, the Commission completed 10 of the 19 audits that were open at the beginning of FY 2020. The completed audits of public utilities, natural gas pipelines, and oil pipelines resulted in 199 recommendations for corrective actions. The FY 2020 audit recommendations focused on the accuracy and transparency of financial reporting, improvements to internal processes and procedures, and efficiency of operations. As a result of these audits, $13.6 million has been refunded to transmission customers, with additional refunds expected in FY 2021. In addition, these audits will prevent $84.8 million in costs from being inappropriately included in future rate filings. In FY 2020, the Commission achieved a 98% success rate of audit recommendations implemented within six months. The audit reports are available to the public to provide all jurisdictional entities transparency into the audit process and areas of noncompliance.

The Commission also opened 12 new comprehensive audits during FY 2020 and implemented new audit management software in FY 2020, which should increase audit efficiency.

The COVID-19 pandemic impacted the Commission's FY 2020 audit activities and results. Understanding the impact the COVID-19 pandemic is having on jurisdictional entities, the Commission relaxed some of its audit processes to reduce the burden on companies. These changes include extending response times for data requests and draft reports. The Commission also deferred the commencement of several audits planned for FY 2020 and halted audit travel. Therefore, several audits planned for FY 2020 completion will not conclude until FY 2021 and audits scheduled for commencement in FY 2020 will be deferred to a future date. As a result, the statistics above reflect a slightly downward trend from prior years' results, but will resume their historical trend once audit-related travel and engagement with jurisdictional entities can safely and effectively resume.

FYs 2021 and 2022 Planned Results. The major topic areas of the Commission audits anticipated for FYs 2021 and 2022 include competitive energy markets, transmission formula rates, market-based rates, reliability, affiliated transactions, open access transmission tariffs and interconnections, oil pipeline tariffs and FERC Form No. 6 reporting, impact of the Tax Cuts and Jobs Act of 2017, and other accounting and financial reporting matters. Due to the comprehensive nature of Commission-led audits and the complexity of planned audits, the overall number of audits planned generally remains within a consistent range.

In FY 2021, the Commission expects to conclude a significant number of the audits that were open as of September 30, 2020. In addition, the Commission expects to commence in FY 2021 approximately 12 audits,

although this is largely dependent on the outcome of the COVID-19 pandemic. The Commission expects the number of audits in FY 2022 to return to its historical range of audit commencements.

Finally, the Commission will continue to work with entities to facilitate the prompt and effective understanding and implementation of audit recommendations. As such, the Commission expects to see a high success rate of implemented corrective actions continue into FYs 2021 and 2022.

ANALYSIS OF ACCOUNTING/FINANCIAL FILINGS FROM REGULATED ENTITIES

Overview. 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 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.

FY 2020 Results. In FY 2020, the Commission processed 441 accounting filings and responded to 105 accounting inquiries. The Commission issued accounting guidance on issues such as cyber security investments, cloud computing, current expected credit losses, and pipeline testing costs. In addition, the Commission issued accounting guidance on the computation of the allowance for funds used during construction to adapt to COVID-19-related impacts to financial markets. The number of filings reviewed for accounting matters is largely dependent on the number of accounting filings and rate applications submitted to the Commission by jurisdictional entities. In FY 2020, 97% of accounting filings were completed within 60 days.

Commission staff also met with industry groups and was actively engaged in providing analysis of emerging accounting issues including changes to U.S. Generally Accepted Accounting Principles related to accounting for cloud computing, leases, and employee pensions and the accounting impacts of the Tax Cuts and Jobs Act of 2017. The Commission's input on accounting issues helps to minimize the reporting burden for industry while supporting rigorous reporting that minimizes the potential for intentional or inadvertent inaccuracies.

This level of work represented a typical year for the Commission, with no external impediments to Commission work.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission expects to complete a similar number of accounting responses and inquiry responses (including those related to the Tax Cuts and Jobs Act of 2017), requests to recover stranded costs related to premature retirements of fossil fuel generators, and increasing applications for transmission rate incentives. The Commission also expects to issue accounting guidance on emerging topics, which may result in rulemaking proceedings to amend the Commission's accounting regulations and financial reporting requirements. However, the number of accounting projects in a

given year can vary depending on the number of industry requests for Commission action. The Commission expects FYs 2021 and 2022 to be similar to FY 2020, with no external impediments to Commission work.

CORE FUNCTION 1.2.2: DETECT AND DETER MARKET MANIPULATION BY IDENTIFYING AND CONDUCTING INVESTIGATIONS OF POTENTIAL VIOLATIONS.

Surveillance and enforcement promote a fair market for both service providers and end users. In its role as an enforcement body, FERC conducts surveillance and investigations with the aim of detecting and deterring violations, including market manipulation by regulated entities.

FERC staff monitors energy markets on a daily basis using sophisticated surveillance screens and tools developed by staff that algorithmically screen data from the physical and financial energy markets. When staff analyses identify potential violations by market participants, staff refers them for investigation. In addition to this monitoring and resulting internal referrals, FERC may be notified of potential violations of the statutes, regulations, rules, orders, and tariffs administered by the Commission through a variety of external sources, including self-reports, tips, calls to the Enforcement Hotline, and referrals from state agencies, organized markets, or their market monitoring units.

In response to receiving information related to an alleged violation, FERC staff evaluates whether to open and then, if opened, conduct non-public investigations of these possible violations. If staff opens an investigation, after conducting fact-finding, FERC staff determines whether the evidence indicates a violation. If no violation is identified or if the violation is not deemed to be sufficiently serious to warrant further action, the investigation is terminated. If a violation of sufficient seriousness is indicated, enforcement staff reports their factual findings and legal conclusions to the Commission and, upon authorization from the Commission, attempts to resolve the investigation through settlement. If a settlement is not reached, FERC staff may recommend that the Commission pursue further enforcement proceedings and participates in enforcement proceedings before an administrative law judge or district court. Investigations that reach this stage typically produce an administrative record that reflects the investigative findings and legal conclusions.

FERC's enforcement efforts are intended to lead to a fair resolution of each investigation, whether the result is the closure of that investigation, a settlement, or an enforcement proceeding that results in the payment of a civil penalty, disgorgement of unjust profits, compliance monitoring, and/or other remedies available to the Commission. Results of enforcement proceedings and settlements are publicly and transparently published to provide regulated communities with knowledge of the Commission's actions. FERC's actions to detect and deter market manipulation by market participants ensure that policies and regulations continue to promote a fair marketplace.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Surveillance of natural gas and electric markets
- Investigations
- Enforcement proceedings

SURVEILLANCE OF NATURAL GAS AND ELECTRIC MARKETS

Overview. FERC conducts comprehensive surveillance and analysis of the natural gas and electric markets to identify potential market manipulation and other violations. FERC's surveillance screening methods use market data collected from a variety of public and non-public sources to identify indications of potential misbehavior. Follow-up analyses are used to determine whether to recommend the matter be investigated.

FY 2020 Results. In FY 2020, the Commission's automated natural gas screens, which cover the majority of physical and financial natural gas trading hubs in the United States, produced approximately 10,594 basic screen trips. These trips were then further refined through integration of behavior, incentives, and persistence into 1,457 surveillance alerts that ranged in severity from low to high concern. Staff review of these alerts resulted in 26 inquiries. The inquiries involve more in-depth review of the specific trading behavior that could indicate potential manipulation or anticompetitive behavior. None of these inquiries were referred for investigation, which is within the normal range. For the electricity markets, staff ran and reviewed 84 electric surveillance screens monthly, hourly and intra-hour sub-screens, and reports for over 38,000 hub and pricing nodes within the six ISO/RTOs. These screens and reports produced 399,755 screen trips. Staff review of these trips in FY 2020 resulted in 39 inquiries, of which 5 were referred for investigation. This represents a typical level of referrals.

In addition to the Commission's ongoing surveillance activities, another focus of the Commission's surveillance program was developing new tools and increasing the usability of data. The Commission has several ongoing initiatives related to these improvements, which are expected to continue in FYs 2021 and 2022. In FY 2020, Commission staff continued its initiative to develop, refine, and implement improved surveillance tools and algorithmic screens to perform continuous surveillance and analysis of market participant behavior, economic incentives, operations, and price formation, both in the natural gas and electricity markets. The Commission also continued its use of software with improved visualization functionality to allow for more rapid interpretation of data.

In FY 2020, the Commission continued testing a cloud-based platform for its analytical activities, a change that is expected to provide increased storage space and allow more rapid access to technology updates. In FY 2020, the Commission also continued its 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 functions so that it can more quickly detect and prevent misconduct.

This level of work represented a typical year for the Commission, with no external impediments to Commission work.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission expects to continue its transition to cloud-based computing for data analytics and to complete the transition in FY 2022. While the Commission continues testing this platform, the transition to using a cloud-based platform for its day-to-day analytical activities has been delayed by a year due to budget constraints and prioritization of other IT initiatives. Once the transition is complete, the Commission expects the new system to improve its data management capabilities by allowing more storage space and faster iteration of tools and technology updates.

The number of surveillance alerts received is partially dependent on external market factors and may vary due to market or weather events. Higher numbers of alerts should not typically lead to higher numbers of inquiries because the Commission eliminates false alarms through analysis. However, events that create additional alarms can slightly decrease capacity due to the time needed to check statistics and review reports. In FYs 2021 and 2022, the Commission does not anticipate any changes to the volume of work based on known factors and will be prepared and able to respond effectively to alerts and inquiries.

The Commission often reaches out to market participants as part of its surveillance inquiries to discuss trading activities and to obtain additional non-public data. This frequent interaction between Commission staff and market participants has been positive and productive, often eliminating the need for an investigation. This reduces burden on the industry and the Commission. As these interactions continue and more market participants participate in surveillance inquires, the process should improve further in FY 2022, allowing inquiries to be resolved even more efficiently.

INVESTIGATIONS

Overview. While most market participants act in good faith and observe the relevant rules and regulations, some participants engage in manipulative behavior or violate Commission orders, rules, and/or tariff requirements. When potential violations are identified through surveillance activities, hotline tips, or market monitor or Commission referrals, the Commission conducts comprehensive investigations to determine whether a violation has occurred and whether, based on the facts presented, it is appropriate for the Commission to exercise its civil penalty authority.

FERC conducts investigations using various fact-finding methods (including comprehensive data collection and investigative interviews) and data analyses to make a determination of what happened and whether a violation has occurred. If a violation of sufficient seriousness is indicated, enforcement staff report their factual findings and legal conclusions to the Commission and, upon authorization from the Commission, attempt to resolve the investigation through settlement. The Commission provides guidance to the regulated community where possible, including in the Annual Report on Enforcement, the publication of settlements and adjudicative orders, and through regular interactions with regulated entities.

FY 2020 Results. In FY 2020, FERC had the following four investigation and enforcement priorities: (1) fraud and market manipulation; (2) serious violations of Reliability Standards; (3) anticompetitive conduct; and (4) conduct that threatens the transparency of regulated markets.

In FY 2020, FERC focused on strategies intended to help reduce the instances of enforcement activities, including encouraging regulated entities to implement effective compliance programs and providing guidance to them through regular interactions, outreach, and the publication of reports of investigations.

FERC also encouraged self-reports of violations and promoted the use of the Enforcement Hotline, both of which allow a greater chance of informal resolution and/or resolution without sanctions.

The Commission received 145 Enforcement Hotline inquiries in FY 2020, slightly less than the 153 inquiries received in FY 2019. Nearly all inquiries resulted in prompt, informal resolution. The Commission received 126 self-reports in FY 2020, slightly less than the 149 self-reports received in FY 2019. Commission staff has closed the vast majority of these self-reports without enforcement action. The Commission received thirteen referrals from market monitors in FY 2020, compared to the sixteen it received in FY 2019.

Commission staff opened 6 new investigations and brought 12 investigations to closure in FY 2020. As a comparison, Commission staff opened 12 new investigations and closed 16 in FY 2019. Of the closed investigations during FY 2020, 9 closed with no action because the evidence did not support finding a violation or because staff found a violation but did not believe sanctions were warranted. Another three investigations were closed following resolution through settlement. These three settlements included $437,500 in civil penalties and more than $115,000 in disgorgement, plus interest.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, FERC expects its investigational priorities to remain the same. Investigation and enforcement priorities may change if there is a regulatory change or a major violation of existing rules and regulations that reveals new topics of concern.

The Commission expects Enforcement Hotline inquiries and self-reports to remain steady. The Commission may receive more referrals in FYs 2021 and 2022 from market monitors than in previous years, as coordination continues to improve, resulting in a pattern of increased and higher-quality referrals that may lead to more investigations being opened.

ENFORCEMENT PROCEEDINGS

Overview. If a settlement is not reached, FERC staff may recommend that the Commission issue an Order to Show Cause (OSC) directing the subject to explain why it did not commit a violation and why penalties and disgorgement are not warranted. After considering the factual record and legal arguments submitted during the OSC process, if the Commission concludes that the subject committed a violation that warrants penalties and disgorgement, the Commission will issue either an Order Assessing Civil Penalties (in most matters arising under the FPA) or set the matter for hearing before an Administrative Law Judge (in some matters arising under the FPA and matters arising under the Natural Gas Act of 1938 [NGA]), if there are material issues of fact

to resolve before the Commission issues a final order. If the Commission issues an Order Assessing Civil Penalties pursuant to the FPA and the company or individual fails to pay the penalty in a timely fashion, the Commission seeks to enforce that assessment in federal court. These actions, and the Commission's imposition of civil penalties or other sanctions where circumstances warrant, act as a deterrent to fraud, market manipulation and other violations.

FY 2020 Results. During FY 2020, the Commission acted on one OSC that it had issued in FY 2019. Specifically, on October 25, 2019, the Commission issued an Order Assessing Civil Penalties against Vitol Inc. and one of its traders, Federico Corteggiano, finding that they engaged in a manipulative scheme to sell physical power at a loss in the California Independent System Operator's (CAISO) day-ahead market for the purpose of benefitting related financial positions.[5] The Commission assessed a penalty of $1,515,738 against Vitol and $1,000,000 against Corteggiano. The Commission also ordered Vitol to disgorge $1,227,143 in unjust profits. After Vitol and Corteggiano failed to pay the assessed penalties within 60 days, the Commission fulfilled its requirement under the FPA to enforce its order by filing a complaint on January 6, 2020, in the United States District Court for the Eastern District of California.

The Commission is limited in its ability to report on ongoing enforcement proceedings because much of the information cannot be made public unless and until an OSC is issued. The Commission is currently able to report that it currently has three open enforcement proceedings pending before federal courts:

- FERC v. Silkman, et al., (United States District Court for the District of Maine): a case against Richard Silkman and Competitive Energy Services, LLC, for fraud in participation in an RTO's demand response program, in which the parties have engaged in discovery, the court has resolved procedural and substantive motions, and on November 25, 2020, the Commission issued an order approving a settlement in this matter.
- FERC v. Powhatan Energy Fund LLC, et al., (United States District Court for the Eastern District of Virginia): a case 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 which the parties briefed and the court resolved procedural and substantive motions and the United States Court of Appeals for the Fourth Circuit affirmed the district court's decision that the Commission's action is not barred by the statute of limitations
- FERC v. Coaltrain Energy L.P, et al., (United States District Court for the Southern District of Ohio): a case against Coaltrain Energy L.P., Peter Jones, Shawn Sheehan, Robert Jones, Jack Wells, and Jeff Miller for engaging in fraud in the collection of marginal loss surplus payments in PJM energy markets, in which the parties engaged in discovery and have briefed cross motions for summary judgment. On November 18, 2020, the court granted the Commission's motion for partial summary judgement and denied the defendants' motion for summary judgment.

[5] *Vitol Inc. and Federico Corteggiano*, 169 FERC ¶ 61,070 (2019).

- FERC v. Vitol Inc. et al., (United States District Court for the Eastern District of California): a case against Vitol Inc. and Federico Corteggiano for engaging in fraud by selling physical power at a loss to benefit related financial positions, in which the parties are currently engaged in motions practice before the court.

This level of work represented a typical year for the Commission, with no external impediments to Commission work.

FYs 2021 and 2022 Planned Results. The three court proceedings, described above, are expected to continue and may continue into FYs 2021 and 2022. Two pending Natural Gas Act enforcement matters also are pending before the Commission and may be resolved in FYs 2021 or 2022:

- An Order to Show Cause issued by FERC in FY 2016, which proposed civil penalties totaling $216 million and disgorgement of $9.18 million against Total Gas & Power North America, Inc., S.A. Total Gas & Power, Ltd., Aaron Hall, and Therese Tran f/k/a Nguyen.
- July 11, 2016, affirmance of an Initial Decision from an Administrative Law Judge against BP of America, Inc. The decision alleges market manipulation involving natural gas trading and orders BP to pay $20.16 million in civil penalties and disgorgement in the amount of $207,169. The matter is pending rehearing.

The level of activity in FY 2021 and FY 2022 is expected to increase as the matters pending before the federal court move toward and possibly reach trial.

PERFORMANCE MEASURES

Commission staff will use the following measure to assess performance in Objective 1.2. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: PERCENT OF AUDIT RECOMMENDATIONS IMPLEMENTED WITHIN SIX MONTHS OF ISSUANCE

Overview. This measure tracks the timeliness of the industry's implementation of audit recommendations directed by the Commission. FERC's recommendations include corrective actions that improve compliance and enforce FERC's regulations of the interstate transmission of electricity, natural gas, and oil. Timely implementation of audit recommendations helps to maximize their impact. The sooner recommendations are implemented, the sooner the jurisdictional entity and impacted stakeholders will experience the benefits. Timely implementation of recommendations also helps to demonstrate industry's commitment to compliance and fair, competitive markets.

Targets and Actual Results Table

Percentage of audit recommendations implemented within six months of issuance							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
98%	98%	98%	97%	95%	98%	95%	95%
FY 2020 Target: Met							

For each area of non-compliance identified during the audit, FERC provides a recommendation to rectify the deficiency. FERC has established a six-month timeframe for the regulated entity to implement a recommendation. FERC considers a recommendation as implemented if the corrective actions have been completed or, in the case of complex recommendations where the changes require more than six months to achieve, the entity has taken action and is continuously working to implement the recommendation.

FY 2020 Results. FERC achieved its target in FY 2020 through continued emphasis of timely implementation. FERC audit staff regularly encourage jurisdictional entities to focus on timely implementation of recommendations. This is accomplished through regular communication with jurisdictional entities and stressing the importance of prompt compliance. FERC also stresses timely compliance through its outreach to the industry and its annual Report on Enforcement.

FYs 2021 and 2022 Planned Results. For FYs 2021 and 2022, the Commission will continue to emphasize timely implementation of recommendations. This will be accomplished through regular outreach and direct communication with jurisdictional entities. Through the Commission's outreach activities, staff will continue to stress the value and expectation of a strong compliance culture and the timely completion of audit recommendations.

Monitoring Risk Factors. Risk factors that could impact the timely implementation of audit recommendations by jurisdictional entities include industry changes, economic factors, and regulatory changes imposed by other regulatory agencies. FERC will continue to monitor these changes and remain vigilant to ensure the future achievement of the targets above.

GOAL 2: PROMOTE SAFE, RELIABLE, AND SECURE INFRASTRUCTURE

PROMOTE THE DEVELOPMENT OF SAFE, RELIABLE, AND SECURE INFRASTRUCTURE THAT SERVES THE PUBLIC INTEREST.

Infrastructure for which FERC approval is required includes non-federal hydropower facilities, interstate natural gas pipelines and gas storage projects, and LNG facilities. Hydropower facilities provide reliable, flexible, renewable, domestic energy that supports the electric grid. In addition to power generation, hydropower projects can provide other public benefits such as environmental protection and enhancement and recreational opportunities. The development of shale gas resources has led to unprecedented growth in domestic gas production. This, in turn, has led to an increase in natural gas infrastructure—pipelines, storage, and LNG facilities—to enable that growing natural gas supply to reach market areas.

In the FPA and the NGA, Congress charged the Commission with ensuring that these types of energy infrastructure are in the public interest and provide energy for consumers at a reasonable cost. Congress also charged the Commission with overseeing the development and review of, as well as compliance with, mandatory reliability standards for the bulk-power system to increase the reliability of that infrastructure. In addition to these efforts, the Commission helps to secure energy infrastructure from cyber and physical attacks through a collaborative approach that encourages voluntary architecture assessments of energy infrastructure and the promotion of best practices to mitigate existing and emerging vulnerabilities. Accordingly, the Commission's goal of promoting the development of safe, reliable, and secure infrastructure serves the public interest. In support of this goal, FERC recently established a new senior counsel position to lead its consideration of environmental justice in the context of these responsibilities, building on FERC's prior consideration of environmental justice in its energy infrastructure proceedings.

Strategic Goal and Objectives (Dollars in thousands)		FY 2020 Actual	FY 2021 Request	FY 2022 Request	Percent Change FY 2021 to FY 2022
Objective 2.1	**FTE**	**246**	**262**	**254**	**-2.9%**
	Funding	**$ 66,773**	**$ 76,274**	**$ 82,292**	**7.9%**
Program		48,647	53,595	54,174	1.1%
Support		18,126	22,680	28,118	24.0%
Objective 2.2	**FTE**	**237**	**239**	**244**	**2.1%**
	Funding	**$ 62,909**	**$ 66,482**	**$ 77,877**	**17.1%**
Program		45,408	45,811	50,931	11.2%
Support		17,500	20,671	26,947	30.4%
Goal 2 Total	**FTE**	**483**	**501**	**498**	**-0.6%**
	Funding	**$ 129,682**	**$ 142,756**	**$ 160,169**	**12.2%**

Note: Numbers may not add up due to rounding

Introduction		Goal 1		Goal 2		Goal 3	Appendices
Objective 2.1	>>	Strategic Challenges	>>	Core Functions	>>	Performance Measures	
Objective 2.2	>>	Strategic Challenges	>>	Core Functions	>>	Performance Measures	

OBJECTIVE 2.1: FACILITATE BENEFITS TO THE NATION THROUGH THE REVIEW OF NATURAL GAS AND HYDROPOWER INFRASTRUCTURE PROPOSALS.

To carry out its goal to ensure that necessary energy infrastructure is developed that is reliable, secure, and operationally safe, the Commission reviews proposals for natural gas and hydropower infrastructure. Under Part I of the Federal Power Act, the Commission's responsibilities include authorizing the construction of hydropower projects and overseeing their operation and safety. Under sections 3 and 7 of the Natural Gas Act, the Commission regulates the construction and modification of LNG terminals on shore and in state waters and of interstate natural gas pipelines and related facilities, including underground storage facilities.

FERC's review of proposed projects balances a range of factors including market need; statutory, regulatory, and policy requirements; and environmental impacts. FERC also coordinates with other agencies to consider issues related to environmental statutes such as the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, Coastal Zone Management Act, and Clean Water Act. The Commission's review processes are designed to result in well-reasoned, legally sound decisions based on a wide range of input from staff technical experts, other regulatory agencies, and the public.

FERC's orders authorizing energy infrastructure projects include terms and conditions designed to address impacts resulting from a project on the environmental resources in project areas. Among other things, these terms and conditions address water and air quality, land use and recreation, erosion control, cultural resources, and wildlife and endangered species. In addition, for orders involving LNG there are many engineering conditions related to plant design and operation and for hydropower projects, there are numerous conditions addressing safety and security concerns.

As specified by the authorization, licensees and certificate and authorization holders must implement specific environmental and operational measures, after filing detailed plans, proposals, and reports regarding this implementation. FERC ensures compliance with the terms and conditions of its orders through extensive environmental review and inspection of jurisdictional facilities during construction and, as appropriate, operation. These programs evaluate and assess implementation and compliance with the environmental and other requirements of authorizations. At regularly scheduled intervals, Commission staff familiar with the project and FERC rules and regulations conduct on-site inspections to confirm that licensees and certificate holders are abiding by terms and conditions specified in the authorizations. By helping to ensure that facilities are built and operated in compliance with the stipulated terms and conditions, FERC's review and inspection programs support the operation of safe, reliable, and secure energy infrastructure.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 2.1. The status of this Strategic Challenge and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: PERMITTING CHALLENGES

Overview. A variety of factors, many of which are outside the Commission's control, make it increasingly difficult for the Commission to complete its permitting process for needed energy infrastructure on a schedule that is timely and predictable. The Commission, however, strives to complete the permitting process in an efficient manner and continues to seek new ways to improve the process.

FY 2020 Results. The Commission continued to take actions in FY 2020 to seek and implement ways to make the Commission's permitting process more efficient. In addition, the Commission showed sensitivity to the concerns of property owners and environmental groups by issuing a rule barring the commencement of construction before the Commission has acted on rehearing. In connection with these steps, the Commission reorganized and upgraded the Rehearings Section of the Office of the General Counsel, to emphasize the importance of expediting the conclusion of both infrastructure and markets proceedings. Further, the Commission continued its efforts under Title 41 of the Fixing America's Surface Transportation Act (FAST-41) by working with project sponsors and other agencies to update and maintain the permitting dashboard and the Coordinated Project Plans, which describe the consultation process and responsibilities of each agency in the process. In addition, the Commission continued efforts in response to the One Federal Decision (OFD) Memorandum of Understanding (MOU), pursuant to Executive Order 13807 *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects*.[6] Under the MOU, agencies agreed to work towards an average project permit decision of two years or less. In FY 2020, FERC conducted interagency outreach under the MOU. The Commission held workshops in Washington, DC for agency headquarters' staff and in Atlanta, Georgia for Department of the Interior and Department of Commerce staff. Further, during the Commission's natural gas environmental training seminar in Seattle, Washington, staff explained the Commission's OFD Implementation Plan.

FYs 2021 and 2022 Planned Results. The Commission will continue to notify sponsors of potential projects which meet the FAST-41 criteria of their eligibility as a covered project once an application is filed in FYs 2021 and 2022; however, the Commission has no ability to forecast which project sponsors will seek to become a

[6] On January 20, 2021, President Biden issued Executive Order 13990 which revoked Executive Order 13807 of August 15, 2017 (Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects). The Director of the Office of Management and Budget and the Chair of the Council on Environmental Quality are required to jointly consider whether to recommend that a replacement order be issued. As a result, the associated Cross Agency Priority Goal (Modernizing the Infrastructure Permitting Process) is no longer relevant and results will not be reported.

FAST-41 covered project. Commission staff will conform its processes to implement the revised National Environmental Policy Act regulations issued by the Council on Environmental Quality in September 2020.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years. The ongoing effectiveness of FAST-41 efforts can only be as effective as the participant's willingness to engage in enhanced interactions and coordination. A change in the priorities of these partners could affect the timelines associated with the Commission's ability to act on infrastructure proposals. In addition, as the number of appeals of Commission decisions continues to increase, the Commission will continue to monitor and assess how best to respond to any direction and decisions that are the outcome of judicial review.

CORE FUNCTIONS

In addition to being responsive to this strategic issue, FERC carries out its responsibilities in this objective through two core functions. Each core function is driven by discrete sets of inputs, operations, and outputs to deliver impact.

CORE FUNCTION 2.1.1: CONDUCT THOROUGH AND TIMELY TECHNICAL REVIEW OF APPLICATIONS TO CONSTRUCT, OPERATE, OR MODIFY NATURAL GAS AND HYDROPOWER INFRASTRUCTURE.

FERC must respond to energy infrastructure applications with timely and well-reasoned decisions.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Natural gas pipeline, storage, and LNG projects
- Hydropower projects

NATURAL GAS PIPELINE, STORAGE, AND LNG PROJECTS

The Commission's work in this area involves a pre-filing process, an application process, and outreach efforts. These processes and their past and planned results are described in more detail in the following sections.

PRE-FILING PROCESS

Overview. The Commission established a pre-filing process that engages Commission staff and stakeholders prior to an applicant filing a formal application with the Commission. The goal of the pre-filing process is to identify and resolve issues early in the National Environmental Policy Act (NEPA) review process and reduce delays caused by incomplete filings. A six-month pre-filing period is mandatory for LNG projects; pre-filing is optional for gas pipeline and storage projects.

FY 2020 Results. In FY 2020, Commission staff initiated the pre-filing process for four natural gas pipeline projects and continued its work on six pre-filing reviews pending from prior years. No LNG projects entered the pre-filing process in FY 2020, but Commission staff continued work on five pre-filing reviews pending from prior years. In FY 2020, five projects completed the pre-filing process and filed formal applications with the

Commission. Historically, the Commission receives an average of four pre-filing requests for LNG projects and 12 pre-filing requests for gas pipeline projects each fiscal year. Thus, the number of pre-filing reviews initiated in FY 2020 is below average for LNG and gas pipeline projects.

FYs 2021 and 2022 Planned Results. The Commission estimates that between three to seven natural gas pipeline projects will be in the pre-filing stage each year in FYs 2021 and 2022. In addition, the Commission expects one to three LNG projects will initiate the pre-filing review process each year in FYs 2021 and 2022. Importantly, the Commission does not have control over the number of pre-filing reviews submitted by the industry or the overall timeline of the pre-filing review process. A company's decision regarding the construction and modification of a facility is influenced by multiple, complex external factors outside of the Commission's control.

APPLICATION REVIEW

Overview. Once an application is filed, the Commission conducts an environmental review, consistent with NEPA. Concurrently, the Commission also conducts an engineering analysis of proposed pipeline, storage, and LNG facilities. Further, staff's review of the application serves to assess whether the proponent has demonstrated a need for the project, as defined by the Commission's regulations and policies, and ensures that projects' proposed initial recourse rates, tariff and accounting treatment are consistent with Commission policies and regulations. Together, these activities provide for an efficient, timely, and well-supported determination by the Commission.

FY 2020 Results. In FY 2020 the Commission received 146 applications and project notifications for natural gas pipeline, storage, and LNG proposals and continued its work on 60 proceedings pending from prior years. Commission staff completed the environmental and engineering review of 147 natural gas pipeline, storage, and LNG proposals in FY 2020. This level of work represented a typical year for the Commission.

Also, in FY 2020, the Commission completed processing 129 applications and project notifications, including eight LNG projects, and resulting in the approval of approximately 10 billion cubic feet per day of LNG export capacity, over 1,700 miles of new pipelines, and over 1.8 million horsepower of mainline compression.

FYs 2021 and 2022 Planned Results. The Commission estimates 120 applications and project notifications for natural gas pipeline, storage, and LNG proposals in FYs 2021 and in 2022. This would be a similar number of filings received as in FY 2020.

OUTREACH EFFORTS

Overview. The Commission staff conducts outreach meetings with natural gas companies, stakeholder groups, and other permitting agencies to provide guidance and insight on the Commission's environmental review process and compliance-related matters. Commission staff also conducts natural gas environmental training seminars, which provide an opportunity for open dialogue between Commission staff and stakeholders. These seminars are typically attended by state, local, and federal agency officials, natural gas company representatives, construction contractors, and consulting firm staff. These seminars 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. These seminars are instrumental in developing the understanding of successful adherence to the Commission-issued certificates and authorizations and help applicants to prepare more robust applications that can be reviewed more expeditiously. Commission staff also extends its outreach efforts to Indian tribes to enhance their participation in the Commission's environmental review process for natural gas projects.

FY 2020 Results. In FY 2020 Commission staff conducted an environmental training seminar, attended by approximately 150 stakeholders, and participated in two outreach sessions to discuss the Commission's certificate and environmental review processes with natural gas companies and federal permitting agencies. Overall, the Commission's FY 2020 training and outreach sessions had full attendance rates with participants actively engaging in open discussions.

As previously mentioned in the Strategic Challenge to address permitting challenges, the Commission staff also developed additional guidance and online training resources during FY 2020 to further enhance the Landowner Topics web page on FERC.gov. This web page provides landowners around proposed projects with more direct and efficient access to information pertinent to their participation in the review process. In addition, staff issued final Guidance for Horizontal Directional Drill Monitoring, Inadvertent Return Responses and Contingency Plans to help industry professionals improve the quality and consistency of their plans and increase the efficiency and effectiveness of the Commission's environmental reviews.

In FY 2020, Commission staff prepared 135 tribal letters, seeking input for 10 proceedings, to various Indian tribes and Native American organizations/Alaska Corporations. Commission staff held one meeting with a Native American Village regarding natural gas proceedings. Additionally, staff participated in interagency tribal outreach training efforts.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission plans to conduct three natural gas environmental training seminars each year. Depending on the level of possible COVID-19 pandemic restrictions, these may be hosted in-person or virtually. The Commission also plans to conduct webinars for natural gas companies and other permitting agencies to learn about the environmental review process.

It is expected that the seminars and webinars will continue to provide value to potential applicants as they prepare project proposals. Staff also plans to conduct a similar amount of tribal outreach efforts in FYs 2021 and 2022, as compared to FY 2020.

HYDROPOWER PROJECTS

The Commission's work in this area involves a pre-filing process, an application process, and outreach efforts. These processes and their past and planned results are described in more detail in the following sections.

PRE-FILING PROCESS

Overview. The pre-filing process typically begins three years before an applicant submits a license or a small hydropower exemption application. Under the Integrated Licensing Process (ILP), the Commission's default process, Commission staff works with stakeholders throughout the pre-filing process to identify issues and study needs. Commission staff analyzes applicant study proposals and stakeholder study recommendations, and issues study plan determinations. A license applicant may request permission to use either the Traditional Licensing Process (TLP) or the Alternative Licensing Process (ALP), instead of the default ILP. Under both the TLP and ALP, the prospective license applicant leads the pre-filing process and works with stakeholders to identify issues and study needs. Unlike the ILP, Commission staff is generally not involved in the TLP and only minimally involved in the ALP primarily during the first six months. Over the last five to ten years, about one-third of pre-filing processes for license applications have been the ILP and two-thirds have been the TLP. The ALP is rarely used. To prepare a small hydropower exemption application, the only pre-filing process available to the prospective applicant is the TLP, and the applicant is not required to file a notice of intent.

FY 2020 Results. During FY 2020, Commission staff received 22 notices of intent/pre-application documents to initiate the pre-filing licensing process. Of the 22 notices of intent/pre-application documents that were filed, 7 were for the Commission's ILP and the remaining 15 were for the TLP. In addition to commencing 7 ILP pre-filing processes, Commission staff continued its work on 51 ILP pre-filing processes that commenced in prior years. In the course of these ILP proceedings, the Commission staff conducted 4 scoping meetings, issued 18 study plan determinations. Thirty-three pre-filings were concluded in FY 2020 as a result of the filing of a license application. Fourteen of the 33 license applications filed were prepared using the ILP, 19 using the TLP, and none using the ALP.

The level of pre-filing work is in line with staff expectations. Of the 22 notices of intent to prepare and file a license application, 18 were for projects with licenses expiring in FY 2025. The remaining 4 notices of intent were for original licenses, which falls within the range of one to eight per year received over the past several years.

FYs 2021 and 2022 Planned Results. Based on prior year results and other known factors, the Commission anticipates that there will be 61 active ILP pre-filing processes in FY 2021 and 62 active pre-filing processes in FY 2022. In the course of these processes, the Commission expects its staff to conduct approximately 20 scoping meetings, depending on the level of possible COVID-19 restrictions these may be hosted in-person or virtually. The Commission also expects to issue approximately 25 study plan determinations in FY 2021, and the same in FY 2022.

APPLICATION REVIEW

Overview. Commission staff conducts a NEPA analysis on most hydropower project applications, with the exception of most conduit projects. The Commission is responsible for ensuring that the environmental document analyzes the project's effects on potentially affected resources—including geology and soils, aquatic resources (including water quality), terrestrial resources, threatened and endangered species, recreation, land

use and aesthetic resources, and cultural resources—and examines alternatives and makes recommendations for protection, mitigation, and enhancement measures to be included in any license issued.

The Commission reviews and acts on plans and reports filed by licensees and exemptees pursuant to the license or exemption issued, as well as requests for additional time to make the required filings. In addition, the Commission analyzes and acts on requests to amend conditions or provisions included in licenses and exemptions.

The Commission also processes preliminary permit applications and monitors compliance with issued permits. A permit guarantees the holder "first-to-file" status for a particular site in cases where multiple applications are received by the Commission for a hydropower license. Permits also allow the holder to study a particular site for four years with the potential for an up-to-four-year extension for a total of up to eight years. A permit does not authorize construction, nor is a permittee required to apply for or receive a license.

FY 2020 Results. In FY 2020, the Commission received 30 license applications, of which two were for original projects and 28 were for projects with expiring licenses. This workload was is in addition to its continuing work on 86 applications pending from prior years. In FY 2020, the Commission acted on 31 license applications, representing a total capacity of 3,530 megawatts. During this same period, Commission staff issued 19 final environmental assessments on license applications, with an average processing time of nine months.

During FY 2020, the Commission received one small hydropower exemption application, continued work on two additional small hydropower exemptions filed in prior years, and acted on one small hydropower exemption application. During this period, Commission staff also issued one environmental document for a small hydropower exemption application.

In FY 2020, Commission staff also completed 2,866 amendment-related filings. Commission staff issued 7 environmental assessments on amendment applications, with an average processing time of 11 months. In FY 2020, the Commission acted on five license and exemption surrender applications, which terminated Commission jurisdiction for each of these five projects, representing a total capacity of 54,775 kilowatts. In FY 2020, the Commission acted on 21 transfer of license or exemption applications. The Commission also received 20 preliminary permit applications during FY 2020, which added to 33 pending permit applications that were filed in prior years. The Commission acted on 38 permit applications during FY 2020, and one permit application was withdrawn by the permit applicant.

FYs 2021 and 2022 Planned Results. By statute, a relicense application must be filed by no later than two years prior to current license expiration. In FYs 2021 and 2022, the Commission expects to receive 34 and 54 relicense applications, respectively, for projects with expiring licenses in FYs 2023 and 2024, respectively. Based on the number of original license and small hydropower exemption applications filed in FY 2012, the Commission expects two original license and one small hydropower exemption applications to be filed in both FYs 2021 and 2022. In FYs 2021 and 2022, the Commission expects to complete a similar number of amendment-related filings as in FY 2020 and to issue five environmental assessments on proposed

amendments each year and 30 final environmental assessments each year for license and small hydropower exemption applications. The increase in expected final environmental assessments in FYs 2021 and FY 2022 compared to FY 2020 is commensurate with the anticipated increase in relicense application filings.

OUTREACH EFFORTS

Overview. Commission staff expects to actively participate in workshops to assist licensees with specific issues, as well as conduct hydropower licensing training sessions to provide guidance on how to obtain a license or exemption or how to effectively participate in the licensing and exemption processes. The sessions are typically attended by prospective and current licensees, federal and state natural resource agency personnel, Indian tribes, and members of the public, and cover such specific 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.

FY 2020 Results. In FY 2020, due to travel restrictions and safety measures necessitated by the COVID-19 pandemic, staff postponed participating in a planned a recreation workshop in Folsom, California from FY 2020 to FY 2021. The workshop was anticipated to be attended by approximately 50 individuals, representing 20 hydropower licensees to discuss recreation issues at hydropower projects. During FY 2020, Commission staff conducted two licensing workshops, the purposes of which were to educate stakeholders new to licensing on the Commission's licensing processes. These workshops were well received, equipping participants with valuable information and a chance for open dialogue with Commission staff.

FYs 2021 and 2022 Planned Results. Commission staff anticipates participating in workshops to assist licensees in FYs 2021 and 2022. The Commission also expects to conduct additional meetings in FYs 2021 and 2022 with Indian tribes, federal and state agencies, and hydropower industry personnel to prepare for the increased relicensing workload, discuss requirements for abandoned mines for storage, and other hydropower-related topics. Depending on the level of possible COVID-19 pandemic restrictions, these may be hosted in-person or virtually

CORE FUNCTION 2.1.2: ENSURE NATURAL GAS AND HYDROPOWER INFRASTRUCTURE IS CONSTRUCTED AND OPERATED IN COMPLIANCE WITH ENVIRONMENTAL MITIGATION CONDITIONS IN FERC ORDERS.

The Commission conducts environmental inspections of licensed and exempted hydropower projects and authorized natural gas pipelines and LNG facilities to evaluate and assess compliance with environmental conditions of the Commission's Orders.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Natural gas pipeline, storage, and LNG project inspections/reviews
- Hydropower project inspections/reviews

NATURAL GAS PIPELINE, STORAGE, AND LNG PROJECT INSPECTIONS/ REVIEWS

Overview. The Commission's on-site inspection program assesses implementation and compliance with environmental protection and mitigation measures in its authorizations for natural gas facilities. While major pipeline facilities are under construction, Commission staff conducts inspections at least once every 28 days to ensure adherence to the prescribed environmental measures. Inspections are conducted throughout the construction and restoration phase, until project sites are deemed successfully restored. LNG projects are inspected at least once every 12 weeks during construction and continue through facility commissioning to ensure compliance with the Commission's authorization. Staff requires corrective actions for deficiencies in environmental compliance identified during construction and restoration inspections. Similarly, landowner concerns received directly by staff or via the Commission's Landowner Helpline can be more efficiently and effectively resolved by on-site review during construction and restoration inspections. Annual reports are filed by regulated companies for any pipeline construction activities conducted during the prior year, under automatic authorization provisions in the Commission's regulations.

FY 2020 Results. In FY 2020, 280 natural gas facility compliance inspections were completed at project sites. Some of these inspections were conducted virtually rather than onsite due to safety measures and travel restrictions required due to the COVID-19 pandemic. Staff also reviewed all annual reports filed by regulated companies to ensure compliance with the Commission's requirements for construction, mitigation, and successful restoration. In FY 2020, regulated companies filed 160 annual reports under 18 C.F.R. 157.207, 141 annual reports under 18 C.F.R. 2.55, and 72 annual reports under 18 C.F.R. 284.11, for a total of 373 annual reports which were reviewed by staff. The FY 2020 results are typical of average levels.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission expects the total number of pipeline, storage, and LNG facility construction inspections to be similar to FY 2020. In both FYs 2021 and 2022, the Commission expects LNG construction inspections to increase substantially above average, based on the number of LNG applications approved or in processing in FY 2020 and an increase in inspection frequencies due to commissioning activities. Commission staff expects to receive and review a similar number of annual reports filed under 18 C.F.R. 157.207, 18 C.F.R. 2.55, and 18 C.F.R. 284.11 in each of FYs 2021 and 2022.

HYDROPOWER PROJECT INSPECTIONS/REVIEWS

Overview. 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 license 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 five-to-eight-year cycles. The vast majority of projects under the Commission's jurisdiction are inspected less frequently. 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 40-50-year license term, is limited.

Commission staff also reviews licensees' and exemptees' compliance with requirements and terms and conditions specified in license or exemption orders and approved plans. Typical examples of instances of non-compliance include minimum flow deviations, reservoir elevation deviations, water-quality deviations, and deviations of required fish passage facility operations. The Environmental Inspection program provides a one-on-one opportunity at the project for staff to discuss with the licensee its compliance record and to provide specific guidance to ensure future compliance with license requirements.

FY 2020 Results. In FY 2020, Commission staff completed the review and analysis of 115 engineering amendments for construction and maintenance activities at Commission-licensed projects. Commission staff completed 492 investigations of deviations from project operations in FY 2020. In most cases, the licensees and exemptees were not found in violation of their requirements, and, in many cases, the cause for the deviation was attributed to extreme weather conditions and mechanical malfunctions. This represents a typical level of work.

Also in FY 2020, the Commission monitored commencement of construction of project works related to 22 hydroelectric projects. As staff expected, with the passage of the America's Water Infrastructure Act of 2018, the Commission saw a continued increase in requests for extensions of time to commence construction of a project as compared to FY 2018. Further, licensees also attributed some of these extension requests to the effects of the COVID-19 pandemic.

FYs 2021 and 2022 Planned Results. For FYs 2021 and 2022, it is projected that the Commission will conduct approximately 120 environmental inspections. Depending on the level of possible COVID-19 pandemic restrictions, these inspections may be impacted. The Commission also expects to complete 125 engineering reviews of construction and maintenance activities in each year. Similar to FY 2020, the Commission anticipates completing approximately 480 investigations regarding deviations in FYs 2021 and 2022. The Commission will continue to monitor project commencement activities and expects the number of extensions to continue to increase through FYs 2021 and 2022 due to residual construction delays as a result of the COVID-19 pandemic.

PERFORMANCE MEASURES

Commission staff will use the following measure to assess performance in Objective 2.1. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: PERCENT OF ORDERS ISSUED WITHIN ESTABLISHED TIMEFRAMES

Overview. To carry out its goal to ensure that necessary energy infrastructure is developed that is reliable, secure, and operationally safe, the Commission must review proposals for natural gas and hydropower infrastructure in a timely manner. The results for hydropower and natural gas orders are compiled separately due to the inherent differences in the two programs; however, the Commission's activities in both program areas provide for an efficient, timely, and well-supported determination by the Commission.

Targets and Actual Results Table

Percentage of hydropower orders issued within 24 months

FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Target	FY 2020 Actual	FY 2021 Target	FY 2022 Target
89%	96%	90%	100%	80%	88%	80%	80%

FY 2020 Target: Met

Percentage of natural gas orders issued within the appropriate timeline depending upon the category

FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Target	FY 2020 Actual	FY 2021 Target	FY 2022 Target
96%	76%	82%	98%	80%	90%	80%	80%

FY 2020 Target: Met

FY 2020 Results. For hydropower orders, 88% (21 of 24 cases) were issued within the established timeframe, which demonstrates a slight decrease in performance relative to FY 2019. Similarly, for natural gas orders, 90% (66 of 73 cases) were issued within established timeframes, which demonstrates a slight decrease in performance relative to FY 2019. In both programs, the Commission met its target, and given the previous years' fluctuations, these results do not show any noticeable long-term trend.

FYs 2021 and 2022 Planned Results. The Commission expects to continue coordinating with other agencies, assist applicants to effectively utilize the pre-filing process, and balance a range of factors—including market need; statutory, regulatory, and policy requirements; and environmental impacts—so that it can continue to issue orders in a timely manner in FYs 2021 and 2022.

Monitoring Risk Factors. In general, orders may be delayed as a result of projects involving facilities that are larger in scope and complexity, require extensive coordination with other federal permitting agencies, and/or

require the resolution of complex environmental or engineering issues. Results will also continue to be impacted by the quality and completeness of filed applications. Finally, an unexpected surge in applications could cause a "backup" at other federal and state agencies that play a role in the Commission's process. In the hydropower program, statutory filing requirements (e.g., state water quality certifications and federal fish and wildlife agencies' biological opinions) may also cause delays in the issuance of orders.

OBJECTIVE 2.2: MINIMIZE RISKS TO THE PUBLIC ASSOCIATED WITH FERC-JURISDICTIONAL ENERGY INFRASTRUCTURE.

In executing its duties under the Natural Gas Act and the Federal Power Act, FERC makes every effort to ensure that energy infrastructure, once authorized, continues to operate safely and reliably. Failure of LNG or hydropower infrastructure due to structural issues, unsafe operations, natural disasters, cyber and physical attacks, or other hazards can result in loss of life as well as environmental and economic consequences. In addition, the Energy Policy Act of 2005 amended the Federal Power Act to give FERC authority with respect to reliability standards for the bulk-power system and through oversight of an Electric Reliability Organization (ERO). In fulfilling these responsibilities, it is critical that FERC minimize risks to the public associated with FERC-jurisdictional energy infrastructure.

FERC achieves this objective through a range of activities. FERC conducts timely safety reviews and inspections with rigorous requirements, thereby advancing the safety of non-federal hydropower projects and LNG facilities throughout their entire life cycle. FERC also oversees the development and review of mandatory reliability and security standards for the bulk-power system, as well as compliance with these standards. In addition, FERC collaborates with regulated entities and other federal and state governmental agencies to identify and seek solutions to cyber and physical threats to FERC-jurisdictional infrastructure, facilitating proactive efforts that prevent or mitigate loss or damage.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 2.2. The status of these Strategic Challenges and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: PUBLIC AND ENVIRONMENTAL SAFETY IMPACTS

Overview. Recent incidents at jurisdictional facilities have highlighted the safety and environmental impacts that can be associated with hydropower and natural gas infrastructure. To address these, the Commission identified two areas for improvement: (1) the Commission's dam safety program; and (2) its natural gas pipeline compliance program.

FY 2020 Results. In May 2020 flooding occurred in Central Michigan, damaging two FERC regulated dams and causing two dam breaches, one at a non-jurisdictional dam and one at a jurisdictional dam. In response to this

incident, a Forensic Investigation Team was convened to study the incident and provide recommendations. Also, in FY 2020, in RM20-9-000, the Commission issued a Notice of Proposed Rulemaking proposing to amend its regulations governing the safety of hydropower projects licensed by the Commission under the Federal Power Act. Specifically, the Commission proposes to revise its regulations to: incorporate two tiers of project safety inspections by independent consultants, codify existing guidance requiring certain licensees to develop an owner's dam safety program and a public safety plan, update existing regulations related to public safety incident reporting, and make various minor revisions. The proposed two-tier inspection structure would include a comprehensive assessment and a periodic inspection. An independent consultant safety inspection would continue to be required every five years, but the required scope of the inspection would alternate between a comprehensive assessment and a periodic inspection. These inspections are in addition to Commission staff's regular dam safety inspections. The Commission also proposed to change the process by which it reviews and evaluates the qualifications of independent consultants that conduct part 12 inspections. The goal is to ensure that each project is inspected by an independent consultant or independent consultant team with sufficient experience and expertise for the site-specific conditions. Relatedly, the Commission plans to update and add new chapters to its engineering guidelines document. The Commission is soliciting public review and comment on these guidelines, which were issued in draft format in four separate advisory dockets: Docket Nos. AD20-20-000 (Supporting Technical Information Document), AD20-21-000 (Part 12D Program), AD20-22-000 (Potential Failure Modes Analysis), and AD20-23-000 (Level 2 Risk Analysis).

Additionally, in FY 2020, the Commission fully staffed the newly created Security Branch within the Commission's dam safety program with cyber security and physical security experts. These staff are carrying out the assessment of all security aspects at jurisdictional dams, which can include site inspections and/or remote document reviews. The development of this Branch allows the Commission's dam safety engineers and civil engineering staff to concentrate solely on dam structure integrity and performance and proper review of auxiliary/ancillary structures.

Efforts also continued in FY 2020 to improve the Commission's natural gas pipeline compliance program to ensure that the regulated community is held to the high standards set forth in project-specific certificate conditions. The Commission issued final guidance which incorporated public comments to provide best practices to minimize the number and impact of incidents associated with horizontal directional drilling.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022 the Commission will continue to address recommendations from the FERC Oroville After-Action Panel Assessment and plans to identify and assess licensees for physical and cybersecurity. In addition, the Commission expects to set up a Part 12 Panel Advisory Board, as recommended by the Panel, to address deficiencies in the Part 12 process. The Commission will also investigate ways, per the Panel's recommendations, to conduct additional team inspections of larger, more complex projects. Finally, the Commission will continue its efforts related to RM20-9-000 and the related advisory dockets as described above.

Monitoring Risk Factors. Due to safety measures and travel restrictions resulting from the COVID-19 pandemic, Commission staff was not able to perform a typical number of inspections in FY 2020, as discussed

more fully in the core function narrative below. Mitigation efforts and adjusted inspection practices to safeguard staff will be implemented during the COVID-19 pandemic. It is expected that once travel restrictions are eased and appropriate safety measures are in place, inspection activities will resume. Staff does not expect any additional risk factors to impact planned activities in FYs 2021 and 2022. The Commission will continue to monitor this item and develop responsive actions to ensure potential risks are timely identified and addressed.

STRATEGIC CHALLENGE: NEW AND EVOLVING THREATS

Overview. FERC-jurisdictional infrastructure and facilities are at increased risk from new and evolving threats, including physical and cybersecurity threats, by sophisticated actors that often have access to significant resources.

FY 2020 Results. In FY 2020, the Commission created a division, within its Office of Electric Reliability to focus exclusively on cybersecurity. In addition, Commission staff identified five focus areas on which the Commission plans to strategically focus efforts to address associated critical infrastructure risks and vulnerabilities to ensure the security of the grid: (1) Supply Chain/Insider Threat/Third-Party Authorized Access; (2) Industry access to timely information on threats and vulnerabilities; (3) Cloud/Managed Security Service Providers; (4) Adequacy of security controls; and (5) Internal network monitoring and detection.

Additionally, the Commission approved a cyber standard to enhance security and mitigate risks associated with communications between bulk electric system control centers. The new standard requires responsible entities to protect the confidentiality and integrity of real-time assessment and real-time monitoring data transmitted between control centers. The order also directed NERC to develop further modifications requiring protections regarding the availability of communication links and data communicated between those control centers.

The Commission also issued a series of Notices of Inquiry. The first Notice of Inquiry sought comments on the potential benefits and risks associated with the use of virtualization and cloud computing services in the operation of the nation's bulk electric system. The Notice of Inquiry asked whether the Commission-approved Critical Infrastructure Protection Reliability Standards allow for these technology advancements while balancing the innovations with security requirements. The second Notice of Inquiry sought information on whether the reliability standards sufficiently address certain cybersecurity risks associated with data security, detection of anomalies, mitigation of cybersecurity events, and the potential risk of coordinated cyberattacks. The third Notice of Inquiry sought comments on the potential risks to the bulk electric system posed by the use of equipment and services produced or provided by certain entities identified as risks to national security, and comments on steps to mitigate any potential risks posed by such telecommunications equipment and services.

In FY 2020, the Commission continued to conduct CIP Reliability Standards audits of jurisdictional entities. These audits help the Commission evaluate jurisdictional entities' compliance with the CIP Reliability Standards. While some potential compliance infractions were discovered during the audits, most of the cybersecurity processes and procedures adopted by the audited jurisdictional entities met the mandatory requirements of the CIP Reliability Standards. In addition, the information gained during the audits provided the basis for the Commission to make recommendations to the entities regarding cybersecurity best practices.

These recommendations were shared with the industry in the annual Lessons Learned staff reports that the Commission issued in FY 2020.

In addition, the Commission conducted voluntary and collaborative cyber and physical security assessments at electric, natural gas, LNG, and hydropower facilities to assist in identifying vulnerabilities and threats, as well as mitigation strategies to combat both. These assessments take a holistic view of the entities' IT and operational technology (OT) systems and provide valuable techniques and strategies that can be implemented quickly to protect IT/OT systems as needed.

In FY 2020, the Commission strengthened its internal expertise related to the cyber and physical security of jurisdictional facilities through the hiring of additional qualified technical staff who possess the specific skills and abilities needed to conduct the onsite assessments and audits.

FYs 2021 and 2022 Planned Results. The Commission recognizes that cyberattacks and physical attacks on critical infrastructure systems have the potential to create significant and widespread effects. To address these threats, in FYs 2021 and 2022 the Commission will:

- Continue to monitor and participate in the cybersecurity reliability standards development process. For example, Commission staff is currently monitoring NERC's efforts to improve cyber supply chain risk management and to ensure secure implementation of virtualization. These efforts will likely result in NERC filing modified cybersecurity reliability standards for Commission approval in FY 2021 through FY 2022;
- Continue to evaluate the implementation of cybersecurity reliability standards at jurisdictional bulk-power system facilities and to identify areas where Reliability Standards can be strengthened, or best practices applied;
- Continue to audit jurisdictional entities to help those entities improve their responses to threats and their overall security posture;
- Continue to assist owners and operators of jurisdictional facilities in recognizing vulnerabilities and threats to their facilities and provide guidance and best practices about how to improve security and reduce risk to themselves and the public;
- Continue to strengthen internal expertise related to cyber and physical security through hiring of qualified technical staff and apply this expertise to voluntary and collaborative cyber and physical security assessments; and
- Continue to work with other federal agencies to improve information sharing and awareness of interdependencies and the need to address critical infrastructure issues using a holistic approach as opposed to acting in isolation.

Based on these actions, the Commission expects to see a continued improvement of jurisdictional entities' overall security posture in responding to new and evolving threats.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years. In particular, the COVID-19 pandemic has extended the time necessary to complete audits and assessments due to travel restrictions, implementation dates of CIP Reliability Standards, and comment reply deadlines. Further, if travel restrictions continue into future fiscal years, this would subsequently hamper efforts to perform audits and onsite assessments of industry stakeholders. Additionally, information technology continues to advance at a fast pace, requiring jurisdictional entities to respond quickly to similarly quickly evolving threats that potentially open energy infrastructure to additional cyber risk. Other ongoing risk factors include the ability of entities to fully implement Commission regulations and voluntary best practices, the pace at which cyber threats evolve and proliferate, and challenges associated with hiring and retaining qualified individuals to secure utilities' information and operational technology systems.

STRATEGIC CHALLENGE: NEW CHALLENGES TO BULK-POWER SYSTEM PERFORMANCE

Overview. Multiple internal and external factors—including the development, application and increased penetration of new technologies, such as electric storage; the deployment of distributed energy resources; increased dependence on computing and telecommunications; and threats from extreme weather and natural disasters—are creating new challenges and opportunities to maintain and improve reliability, security, and resilience. All these trends are occurring in an environment of greater customer needs, expectations, and capabilities.

FY 2020 Results. In FY 2020, the Commission issued a Notice of Inquiry to seek comments on enhancements to the currently-effective CIP Reliability Standards in addressing cybersecurity risks pertaining to data security, the detection of anomalies and events, and mitigation of cybersecurity events. The Commission also sought comment on the potential risk of a coordinated cyberattack on geographically distributed targets and whether Commission action, including potential modifications to the CIP Reliability Standards, would be appropriate to address such risk. In FY 2020, the ERO, prompted by a Commission staff and ERO inquiry report into a January 2018 cold weather bulk power system event in the Midwest, initiated the development of a cold weather preparedness standard for generators.

FYs 2021 and 2022 Planned Results. In FYs 2021, the Commission will continue its own analysis and assessments and will continue to work with the ERO and industry. For example, with respect to threats from extreme weather and natural disasters, Commission staff will continue to monitor entities' preparedness and performance during events. Commission staff will continue to work with the ERO to monitor the development of the cold weather preparedness standard for generators. Additionally, it is expected that the cold-weather preparedness standard will be filed for Commission review by FY 2022.

Monitoring Risk Factors. A number of risk factors could impact the Commission's strategic response over the next two years, including the time required to develop and implement reliability standards compared to the pace of technology development and the emergence of other challenges as well as the voluntary nature of implementing best practices. FERC expects that these factors will continue to be relevant over the next two years and will continue to take them into account while implementing its responsive actions.

CORE FUNCTIONS

In addition to being responsive to these strategic issues, FERC carries out its responsibilities in this objective through three core functions. Each core function is driven by discrete sets of inputs, operations, and outputs to deliver impact.

CORE FUNCTION 2.2.1: CONDUCT COMPREHENSIVE AND TIMELY INSPECTIONS OF HYDROPOWER AND LNG FACILITIES TO ENSURE COMPLIANCE WITH THE NATURAL GAS ACT, THE FEDERAL POWER ACT, AND COMMISSION ORDERS.

To fulfill its responsibility for ensuring the safety of an LNG facility or a non-federal hydropower project, FERC relies on physical inspections. Before hydropower and LNG facilities are constructed, FERC staff reviews the design, plans, and specifications in both the Commission order and the documents and reports filed by authorization holders. During facility construction and operation, FERC engineers conduct regularly scheduled and comprehensive inspections. The inspections verify that dams and LNG facilities meet stipulated design criteria that ensure safe and reliable operation. The resulting inspection reports and deficiency reports also include necessary remedial modifications and/or required maintenance.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- LNG facility inspections
- Hydropower inspections

LNG FACILITY INSPECTIONS

Overview. To assess whether a facility may have a public safety impact, Commission staff conducts 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 12 weeks. Once in operation, jurisdictional peak-shaving plants are inspected once every other year and LNG import or export terminals are inspected once each year.

FY 2020 Results. In FY 2020, Commission staff conducted LNG inspections in-person and virtually: 35 construction inspections were conducted at five terminal expansions, two new LNG terminals, and three peak-shaving facilities under construction. This is similar to the previous year and higher than average, but the number of inspections was less than projected because some projects postponed construction activities due to the COVID-19 pandemic and general market conditions. In addition, 15 operational inspections/technical reviews were conducted in-person or virtually at seven peak-shaving facilities and eight LNG terminals. The

number of operations inspection/technical reviews were about the same as previous years due to one new LNG export terminal being placed in-service.

FYs 2021 and 2022 Planned Results. Between 40 and 60 construction and pre-operational inspections are anticipated for FY 2021 at between eight and 14 LNG terminals and at one peak-shaving facility. The ultimate number of inspections will be dependent upon the commencement of construction facilities. In FY 2022, the number of LNG facility construction and pre-operational inspections may significantly increase depending on the market conditions and financial investment decisions of the above noted approved LNG export terminal projects and the three pending LNG terminal projects and four pre-filing LNG terminal projects currently before the Commission. The number of operational inspections is expected to be 17 in FY 2021 and 18 in FY 2022.

HYDROPOWER INSPECTIONS

Overview. 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.

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 existing engineering guidelines are periodically reviewed and updated to reflect advancements in engineering standards and practices. In addition, new guidelines are developed to provide guidance on subject matter not currently covered by the existing guidelines.

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.

Risk-informed decision making provides the capability to assess non-traditional failure modes, provides levelized 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.

FY 2020 Results. In FY 2020, Commission staff conducted 117 inspections which is significantly lower than typical results because of the necessary safety measures and travel restrictions imposed in response to the COVID-19 pandemic. Commission inspections during much of FY 2020 were limited to incident response (Sanford Dam failure) and critical construction or foundation inspections.

To compensate for our inability to physically inspect all of our jurisdictional projects, jurisdictional dam owners were requested to provide information from their own inspections of their projects. Of the total number of inspections conducted this year, about 22% were construction inspections to ensure the new construction and remedial construction projects were being completed properly. Approximately 49% were special inspections meant to either assess a project after a flood event or to investigate an issue of concern noted by the licensee or exemptee. The remainder of the inspections were the dam safety inspections. Commission staff also reviewed 250 independent consultant reports to make certain the structural integrity of the jurisdictional dams is maintained or approved as appropriate.

During FY 2020, the Commission continued its intent of improving the guidance and expectations for the five-year independent audits of the Owner's Dam Safety Programs (ODSP). The quality of an ODSP is considered one of the best ways to ensure the safety of jurisdictional dams. The required audits help to ensure that the ODSPs for each of the licensees and exemptees who own high hazard projects are fully assessed and effective. The Commission was heavily involved in the Level 2 Pilot Risk Analysis at Oroville Dam and is using the lessons learned from this effort to further define the Commission's risk informed decision-making program. As discussed previously, in FY 2020, the Commission issued RM20-9-000, which proposed to amend its regulations governing safety inspections by independent consultants. This proposed rulemaking introduces the concept of a team of consultants to perform comprehensive and periodic inspections to ensure complex projects will be inspected by individuals with the necessary experience and expertise for the site-specific conditions.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, should the travel restrictions and safety measures required in response to the COVID-19 pandemic be eased, the Commission expects to conduct approximately 1,500 inspections, similar to FY 2019 levels. The Commission also expects the number of independent consultant inspection report reviews to remain steady through FY 2022. In FY 2021, the Commission expects to receive comments on four engineering guidelines: Docket Nos. AD20-20-000 (Supporting Technical Information Document), AD20-21-000 (Part 12D Program), AD20-22-000 (Potential Failure Modes Analysis), and AD20-23-000 (Level 2 Risk Analysis).The comments received will impact additional FYs 2021 and 2022 activities.

In FYs 2021 and 2022, 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. Additionally, Screening Level Risk Analysis is beginning to be internally used within the Commission's dam safety program to guide 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.

CORE FUNCTION 2.2.2: PROTECT AND IMPROVE THE RELIABLE AND SECURE OPERATION OF THE BULK-POWER SYSTEM BY IDENTIFYING RELIABILITY AND SECURITY RISKS; OVERSEEING THE DEVELOPMENT, IMPLEMENTATION AND ENFORCEMENT OF MANDATORY RELIABILITY STANDARDS; AND PROMOTING THE RESILIENCE, RELIABILITY AND SECURITY OF THE BULK-POWER SYSTEM.

FERC promotes the reliable operation of the bulk-power system through oversight of the ERO, which develops mandatory reliability standards in the United States and enforces compliance with those standards through audits, investigations, and penalties. FERC also gathers information through near-real-time monitoring of the grid and by engaging with stakeholders and experts to maintain awareness of trends that may affect bulk-power system reliability.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Review and approve proposed reliability standards
- Enforce independently and oversee the ERO's enforcement of reliability standards
- Assess the need for modified/new reliability standards
- Maintain Commission and stakeholder awareness of risks, trends, and emerging issues in reliability and security

REVIEW AND APPROVE PROPOSED RELIABILITY STANDARDS

Overview. FERC reviews reliability standards applicable to the United States proposed by NERC, the ERO responsible for developing mandatory electric reliability standards for the planning and operation of the bulk-power system in North America. For proposed reliability standards, the Commission may issue an order to approve, remand, or direct modifications. For proposed reliability standards that involve complexities and/or controversy, FERC will typically go through an in-depth notice and comment rulemaking process before issuing a final rule addressing the standard. For non-controversial proposed reliability standards, the Commission may approve the proposal more expeditiously following public notice and comment.

FY 2020 Results. In FY 2020, NERC filings concerned two major areas. The first concerned reliability standards related to operations and planning of the bulk-power system. In FY 2019, NERC submitted a petition seeking Commission approval to retire 77 reliability standard requirements which, according to NERC, are administrative in nature, duplicative of other standards, or provide no benefit to reliability. In FY 2020,

following NERC's withdrawal of its request to retire one requirement, the Commission approved the retirement of 18 requirements, remanded one Reliability Standard proposing to retire two requirements, and deferred action on 56 requirements to a later date, in order to coordinate action with related North American Energy Standards Board business practice standards. In addition, in FY 2020, NERC submitted, and the Commission approved petitions seeking approval of proposed Reliability Standards BAL-001-TRE-2 (Primary Frequency Response), BAL-003-2 (Frequency Response and Frequency Bias Setting), PRC-006-NPCC-2 (Automatic-Underfrequency Load Shedding), PRC-024-3 (Frequency and Voltage Protection Settings for Generating Resources, and TPL-007-4 (Geomagnetic Disturbances). Additionally, the Commission issued a final rule approving Reliability Standard TPL-001-5 (Transmission System Planning Performance Requirements).

The second area concerned CIP Reliability Standards related to cybersecurity. The Commission and NERC continually seek to protect and improve the reliable and secure operations of the bulk power system, and to identify and address gaps in the CIP Reliability Standards as they become apparent. In FY 2020, the Commission issued a final rule approving Reliability Standard CIP-012-1 (Cyber Security – Communications between Control Centers). The Commission also directed NERC to develop further modifications requiring protections regarding the availability of communication links and data communicated between those control centers. The Commission also issued an order directing NERC to submit informational filings regarding the status of two NERC critical infrastructure protection standard drafting projects pertaining to virtualization and cloud computing services. Project 2016-02 (Modifications to CIP Standards) and Project 2019-02 (BES Cyber System Information Access Management).

In FY 2020, NERC submitted a petition seeking approval of proposed Reliability Standard CIP-002-6 (Cyber Security – BES Cyber System Categorization), which clarifies the criterion for determining which BES Cyber Systems associated with Transmission Owner Control Centers performing the functional obligations of a Transmission Operator fall under the medium impact category. The Commission plans to address the petition in FY 2021.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, cybersecurity will remain a focus and the Commission anticipates receiving for review ERO-developed reliability standards or modifications to standards in the areas of virtualization, cloud computing, and supply chain risk management, for which NERC has active development efforts, among others.

NERC is also developing revisions to five reliability standards to better integrate inverter-based resources into the bulk-power system. In FYs 2021 and 2022 the Commission expects to determine appropriate agency actions in this area. NERC is also developing another list of reliability standards that may be retired in a second phase of their standard efficiency review project. The Commission will review and take appropriate action on this proposal when it is received. In FY 2021, the Commission plans to issue a final rule concerning Regional Reliability Standard BAL-002-WECC-3, considering any comment received in response to the previously issued notice of proposed rulemaking.

ENFORCE INDEPENDENTLY AND OVERSEE THE ERO'S ENFORCEMENT OF RELIABILITY STANDARDS

Overview. FERC enforces and oversees the ERO's enforcement activities, which take the form of audits, investigations, and proposed penalties and remediation to determine whether they lead to compliance with reliability standards. For the most part, the Commission depends on NERC and its Regional Entities to enforce the reliability standards. While NERC is authorized to impose, after notice and opportunity for a hearing, penalties for violations of the reliability standards, the Commission reviews the ERO's notices of penalty and sanctions for reliability violations, as well as the supporting documentation and rationale, before they take effect; if the Commission determines that further review is warranted, it may issue an order initiating review of a proposed penalty. The Commission may also enforce reliability standards independently of NERC by initiating an investigation or conducting its own audits but typically reserves use of this authority for more serious reliability matters.

FY 2020 Results. In FY 2020, the Commission conducted two audits of compliance with the physical security reliability standard, CIP-014-2, as well as two audits of compliance with the cyber security reliability standards. The Commission observed 14 ERO-led audits, which included eight cybersecurity audits, and six operations and planning audits. As of March 2020, these audits were conducted and/or observed virtually, or off-site, as a result of the COVID-19 pandemic. In addition, in FY 2020, the Commission reviewed 21 notices of penalty submitted by NERC citing Reliability Standard violations to ensure that the proposed penalties were appropriate.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission plans to audit two entities registered as reliability coordinators, the entities that have the highest level of authority and responsibility for the reliable operation of the Bulk-Power System, for compliance with operations and planning, cybersecurity, and physical security reliability standards. In FY 2021, the Commission will conduct an additional two audits of cybersecurity reliability standards. In FY 2022, the Commission will continue to conduct audits of cybersecurity reliability standards as well as audits of other critical reliability standards or functions, which could include, for example, requirements associated with operations and planning associated with inverter-based resources.

In FYs 2021 and 2022, the Commission will oversee 12 ERO-led audits and continue to review and act upon NERC-proposed penalties.

ASSESS THE NEED FOR MODIFIED/NEW RELIABILITY STANDARDS

Overview. FERC conducts inquiries, audits, and investigations of major blackouts and other grid-related events to identify lessons learned and determine whether adjustments to the standards are needed to help prevent future events. FERC staff also works with NERC and the Regional Entities to look closely at areas of concern including bulk-power system events such as the impacts of California wildfires on electric transmission, issues such as the changing resources mix and how utilities are integrating inverter-based resources into their operations. These efforts typically do not include enforcement issues, but analyses are

conducted to determine whether changes to reliability standards may be needed or other activities would be warranted based on how entities are complying with reliability standards.

FY 2020 Results. In FY 2020, the Commission commenced a joint study with the ERO to identify best practices in protection system commissioning programs. The Commission also continued working with the ERO, in a joint study commenced in FY 2019, to examine approaches used by entities to perform real-time assessments during a loss or degradation of data or primary tools used to maintain situational awareness, and to evaluate the effectiveness and clarity of the associated reliability standards (TOP-001-4 and IRO-008-2).

In FY 2020, the Commission conducted two audits of Reliability Standard CIP-014-2 (Physical Security). The standard establishes a performance objective without being prescriptive on how to accomplish that objective. Staff conducts compliance audits to determine whether and how entities are meeting those performance objectives and whether the standard requires additional specificity to ensure the objectives are met. Based on the results of these and previous audits, the Commission may direct the ERO to modify the reliability standard to minimize risks to the physical security of the bulk-power system.

In FY 2020, the Commission issued a Notice of Inquiry to seek information on whether the reliability standards allow for the implementation of virtualization and cloud computing technologies. In addition, the Commission issued a Notice of Inquiry to seek information on whether the reliability standards sufficiently address certain cybersecurity risks associated with data security, detection of anomalies, mitigation of cybersecurity events, and the potential risk of coordinated cyberattacks. Also in FY 2020, the Commission issued a Notice of Inquiry to seek comments on the potential risks to the bulk electric system posed by the use of equipment and services produced or provided by certain entities identified as risks to national security, and comments on strategies to mitigate any potential risks posed by such telecommunications equipment and services.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission anticipates completing the joint studies with NERC regarding protection system commissioning programs and how entities perform a real time assessment during a loss or degradation of data or primary tools used to maintain situational awareness. The Commission also plans to complete its analysis of the physical security reliability standard and determine if any resulting directives to improve the standard are required. In FY 2021, the Commission anticipates determining whether changes to the reliability standards are necessary in light of the information received in response to the Notices of Inquiry issued in FY 2020.

MAINTAIN COMMISSION AND STAKEHOLDER AWARENESS OF RISKS, TRENDS, AND EMERGING ISSUES IN RELIABILITY AND SECURITY

Overview. FERC gathers information through near-real-time monitoring of the grid, obtaining supplementary data on grid functionality through data services and coordination with facility owners and operators. FERC maintains up-to-date knowledge on grid technologies and changes in the bulk-power system to assess potential risks to reliability and opportunities to improve reliability. In addition, FERC engages with stakeholders and experts, sometimes by hosting technical conferences, to better monitor the cybersecurity

landscape and remain abreast of trends that may affect bulk-power system reliability. The Commission operates a 24/7 emergency message notification system to maintain bulk-power system situational awareness during active events such as storms and wildfires. The Commission conducts outreach to industry and the public. FERC provides guidance to the industry on both technical and process issues and educates the public on how the bulk-power system operates and the Commission's role with regard to reliability. These activities help to maintain a level of communication and coordination necessary to protect against and prepare for threats and issues in the bulk-power system.

FY 2020 Results. In FY 2020, Commission staff initiated an effort to holistically address cybersecurity challenges facing the nation's energy infrastructure. FERC staff identified areas where staff will strategically and collectively focus efforts to address cybersecurity challenges, such as supply chain risk management and emerging technologies. As noted above, in recognition of advancements in virtualization and cloud services technologies, the Commission issued a Notice of Inquiry to seek comments on benefits and risks associated with the use of virtualization and cloud computing services in the operation of the nation's bulk electric system. The Notice of Inquiry also asks whether the Commission-approved Critical Infrastructure Protection Reliability Standards allow for advances in these technologies and balance the innovations with security requirements.

In FY 2020, Commission staff and the ERO staff published a joint white paper on network scanning to address supply chain risks. Commission staff also published a white paper discussing a potential new framework for providing transmission incentives to utilities for cybersecurity. In addition, Commission staff and ERO staff worked on the fourth NERC-FERC-Regional Entity Joint Review of Restoration and Recovery Plans report, which is the Cyber Planning for Response and Recovery Study (CyPRES) Project, which the Commission published in FY 2020.

Pursuant to the Commission's regulations, the Commission conducts a comprehensive review of NERC's performance every five years. In FY 2020, the Commission issued an order on NERC's five-year performance assessment. The periodic performance assessment helps to ensure that NERC and the Regional Entities are positioned to oversee reliable operation of the bulk-power system for the next five years.

FYs 2021 and 2022 Planned Results. During FYs 2021 and 2022, Commission staff will analyze the record developed in the Notice of Inquiry and White Paper proceedings to identify possible further Commission action. Commission staff will also continue to pursue the Commission's cybersecurity priorities in supply chain risk management, cloud and emerging technologies, and improvements and efficiencies for the Critical Infrastructure Protection Standards. Additionally, Commission staff will participate in ERO and industry emerging technologies working groups and follow closely the research and development of the Department of Energy and the National Laboratories to remain informed of new technology and industry efforts as they relate to the reliability and security of the grid.

Also in FYs 2021 and 2022, Commission staff will process compliance filings from the ERO as a result of the order issued regarding the review of NERC's five-year performance assessment of the ERO.

CORE FUNCTION 2.2.3: PROTECT AGAINST CYBER AND PHYSICAL SECURITY THREATS TO FERC-JURISDICTIONAL ENERGY INFRASTRUCTURE AND IMPROVE THEIR RESILIENCE BY WORKING WITH REGULATED ENTITIES AND STAKEHOLDERS AND BY COORDINATING WITH OTHER GOVERNMENT AGENCIES TO IDENTIFY AND APPLY BEST PRACTICES SEPARATE FROM BASIC REGULATORY REQUIREMENTS.

Growing cyber and physical security threats, along with increasing automation and other developments, demand an agile and focused approach to energy infrastructure security. FERC staff employs deep familiarity with FERC-jurisdictional infrastructure, extensive experience in grid operations, and cybersecurity expertise to coordinate with and support other government agencies and regulated entities in addressing these threats.

FERC employs a four-part process to identify, inform, assess, and address cyber and physical security threats. FERC partners with federal and jurisdictional entities to identify and assess threats, activities, and capabilities of adversaries that may initiate a cyber or physical attack on FERC-jurisdictional infrastructure. To ensure that jurisdictional entities are informed about security threats and counter measures, FERC staff performs outreach by giving speeches and presentations to regulatory stakeholders. In addition, staff, along with the Commission's federal partners, facilitates analytic exchanges to regulatory stakeholders and industry partners to present information otherwise unavailable publicly. Staff also assists infrastructure representatives to obtain security clearances from other federal entities that enable those federal entities to give the infrastructure representatives access to classified threat information. FERC also reviews and provides input to ERO alerts, advisories, and bulletins to ensure they are useful and relevant to jurisdictional entities. Finally, FERC helps jurisdictional entities address cyber and physical threats by developing and compiling best practices, mitigation measures, as well as tools and techniques to enhance protection of facilities.

The Commission's work is designed to reduce the risk of cyber and physical security threats to vital energy infrastructure. The Commission's efforts in this area provide an important complement to FERC's related regulatory and enforcement requirements.

The past and planned results for this core function, described below, are organized as follows:

- Identifying and assessing jurisdictional infrastructure threats and vulnerabilities
- Collaborating with the security community to inform and address jurisdictional infrastructure security
- Working with jurisdictional infrastructure partners to inform and address jurisdictional infrastructure security

IDENTIFYING AND ASSESSING JURISDICTIONAL INFRASTRUCTURE THREATS AND VULNERABILITIES

Overview. FERC uses its analysis and assessment capabilities to identify and characterize infrastructure threats and vulnerabilities for Commission-jurisdictional infrastructure. Assessments are performed at electric, natural gas, and hydropower facilities, focusing on IT and OT networks and the cyber and physical security of those networks These assessments give Commission staff an opportunity to examine a range of topics such as

electromagnetic hardening, business environment, risk management, cybersecurity awareness and training, incident response and recovery, data security, protective technologies, network architecture, and supply chain security. Staff ask questions and make observations, identify options for improvement, and encourage facility operators to implement best practice mitigation strategies, countermeasures, and tools. These assessments help FERC analyze and understand broader infrastructure issues and provide a basis for identifying common vulnerabilities and developing best practices to mitigate them. These assessments are voluntary, and the facilities being assessed are determined by the entity. In addition, FERC staff reviews the entity's audit plan for facilities that will be subject to a regulatory audit by NERC or the Commission to better guide the assessment schedule.

FY 2020 Results. In FY 2020, Commission staff conducted two on-site assessments, which is fewer than originally planned. Due to travel restrictions as a result of the COVID-19 pandemic, performing on-site assessments was severely limited. Furthermore, while Commission staff attempted to conduct these planned assessments in a virtual environment, they found that personnel at the assessed entity were unavailable due to their need to focus on their own pandemic responses or due to the entity's preference to delay the on-site assessment to a later date.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, Commission staff plans to conduct eight assessments each year, which staff expects to include five electric entities, two natural gas pipelines, and one hydropower facility. In both FYs 2021 and 2022, assessments will focus on cybersecurity—including vulnerabilities that can impact operational control systems—particularly at interfaces between generation, transmission, and distribution; as well as physical security issues including Electromagnetic Pulse (EMP) and Intentional Electromagnetic Interference (IEMI). Data from the assessments may also be used to help develop better mitigation mechanisms and could be used in briefings for jurisdictional entities.

COLLABORATING WITH SECURITY COMMUNITY TO INFORM AND ADDRESS JURISDICTIONAL INFRASTRUCTURE SECURITY

Overview. FERC builds and maintains collaborative relationships with the larger infrastructure security community to enhance the community's understanding of Commission jurisdictional infrastructure, and to help the community develop effective countermeasures, tools, and best practices that can be used by regulated entities to address threats and vulnerabilities. The Commission staff actively coordinates with its federal partners—including the Department of Defense (DOD), the Department of Homeland Security (DHS), the Office of the Director of National Intelligence (ODNI), the Transportation Security Administration (TSA), and DOE—to identify, analyze, and disseminate information about threats, activities, and capabilities of entities that may initiate a cyber or physical attack on jurisdictional energy infrastructure as well as ways to prevent these attacks.

FY 2020 Results. In FY 2020, the Commission maintained its partnerships with DHS, DOE, DOD, TSA and ODNI. In particular, staff supported DHS and DOE in their initiatives under the Executive Order on EMP by providing input for FEMA's resilience/preparedness recovery plan, assisting with criteria for determining the

most critical electrical grid infrastructure, and by identifying regulatory and non-regulatory mechanisms that may foster private sector engagement to enhance the grid's resilience to EMP. Staff has also partnered with DOD and DOE to assist in their efforts to identify Defense Critical Electric Infrastructure as required by the 2015 Fixing America's Surface Transportation Act (FAST Act). In addition, Commission staff developed a new key partnership initiative with the National Science and Technology Council (NSTC) and the National Security Council (NSC). Staff served as members of the Space Weather Operations Research and Mitigation Working Group, the Hazards Subcommittee of the NSTC as well as the EMP-Resiliency Sub Policy Coordination Committee (PCC) under the NSC. Participation on these committees provides Commission staff the opportunity to identify research needed to enhance the resilience to GMD and EMP and identify types of systems and components that may be vulnerable to supply chain related issues. The Commission has acted on these opportunities, for example, conducting a joint research project through Sandia National Laboratory to better understand power transformer vulnerabilities to GMD and EMP.

In addition to these activities, staff served to closely monitor, participate in, and inform the Commission of federal and industry actions that were being taken as a result of the COVID-19 pandemic. With our federal and industry partners, staff was able to participate in and inform the Commission on a timely basis on several key activities such as the DHS/CISA Essential Workers Memorandum and relative to that memorandum, a joint letter with NARUC and another with DOE to the state governors informing them of this important work. Staff also participated in DOE's Primary Mission Essential Function (PMEF) #3 working group as well as the CEO-led Electricity Subsector Coordinating Council (ESCC) (with DOE and DHS) and the Oil and Natural Gas Sector Coordinating Council (ONG SCC) working groups. Further, staff had an active role in the development of pandemic plans in consultation with the NATF and NERC E-ISAC as well as contributing to several NERC bulletins and Alerts to the industry regarding the pandemic. In addition, staff worked closely with DOE to identify and receive reconstitution plans which were used as the basis for FERC's plans thereby improving the efficiency, efficacy, and consistency of these efforts.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will maintain its current contacts within the security community and will seek to develop new contacts as appropriate. The partnerships noted above will continue in FYs 2021 and 2022.

WORKING WITH JURISDICTIONAL INFRASTRUCTURE PARTNERS TO INFORM AND ADDRESS JURISDICTIONAL INFRASTRUCTURE SECURITY

Overview. The Commission staff conducts outreach to facility owners and operators, as well as state commissions that also have jurisdictional oversight of energy infrastructure, to provide timely and useful information about current and emerging threats and potential attack vectors as well as effective countermeasures. This outreach includes giving speeches and presentations and providing analytic information in collaboration with other federal agencies to maintain awareness and disseminate and promote the use of best practices, mitigation measures, and tools and techniques to enhance protection of all jurisdictional infrastructure including electric, natural gas, hydro, and LNG facilities. Commission staff also assists key

leadership individuals from jurisdictional infrastructure entities to obtain security clearances from other federal entities which allow those federal entities to provide the jurisdictional entities with access to classified threat information.

FY 2020 Results. In FY 2020, the Commission staff facilitated and/or conducted 15 speeches, presentations, and provided analytic information to federal, state, and private sector stakeholders. Due to the COVID-19 pandemic, all in-person outreach was halted. However, prior to the pandemic, staff was able to facilitate two exchanges of analytic information with the National Association of Regulatory Utility Commissioners (NARUC) and the North American Energy Standards Board (NAESB) focusing on cyber and physical security topics such as insider threat, supply chain, and Electromagnetic pulse (EMP). These analytic exchanges facilitated by FERC include briefings conducted by the Office of the Director of National Intelligence (ODNI) in which ODNI provided classified information and an opportunity for the attendees to participate in a follow-on working session to ask questions about mitigation techniques and best practices to put in place in a classified environment. Several attendees from both exchanges expressed interest in following up with on-site assessments and other services, such as checklists and training, to further delve into their Information Technology (IT) and Operational Technology (OT) architectures to assist them in bolstering their cyber security. In addition, both exchanges received praise for the informative and collaborative sessions facilitated to assist energy utilities with receiving from ODNI relevant and timely classified information. These analytic exchanges have also been used to inform subsequent filings with the Commission.

In addition to these analytic exchanges, Commission staff continued to provide, facilitate, and participate in cyber security awareness, training, and table top exercises. In consultation with the North American Transmission Forum, staff jointly published a cloud security whitepaper to help critical energy infrastructure owners determine readiness for implementing cloud services. Staff consolidated best practices from governments, academia, and industry into this single reference aid. The paper was presented to NATF members virtually, with almost 200 members in attendance. Further, staff facilitated cybersecurity training sessions at a regional National Association of Regulatory Utility Commissioners (NARUC) workshop and presented a series of topics, including the fundamentals of cyber security, IT and OT vulnerabilities, threats to these systems, and mitigation methods. These training sessions are intended to improve the security posture of the utilities by improving state commissions' regulatory oversight of cyber security. Finally, Commission staff actively participated in the Cyber Yankee planning conferences and National Exercise, which involves over 30 federal and industry participants. This is an annual exercise to create a realistic cyber exercise for the New England Army National Guard Defensive Cyberspace Operations Elements and other New England Army and Air National Guard Cyber Defenders to further train and apply their skills.

Commission staff monitored, actively participated and continues to participate, in a process sponsored by the American Petroleum Institute (API) to update its Standard 1164 2nd Edition for oil and natural gas pipelines. This API initiative involves creating a more expansive and robust standard, incorporating the NIST Cybersecurity Framework, industry best practices, and integrating applicable elements of the Transportation Security Administration (TSA) pipeline security guidelines.

Commission staff testified before the U.S. Senate Committee on Energy & Natural Resources to examine efforts to improve cybersecurity for the energy sector. The purpose of the hearing was to examine federal and industry efforts to improve cybersecurity for the energy sector, including how to improve collaboration on various cybersecurity and critical infrastructure protection initiatives. The Commission shared its dual-fold approach to cybersecurity: (1) employing mandatory reliability standards to establish foundational practices while also; (2) working collaboratively with industry, the states, and other federal agencies to identify and promote best practices.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to facilitate a similar number of analytic exchanges and perform outreach in the form of speeches and presentations on current cyber and physical security threats facing jurisdictional energy infrastructure companies.

PERFORMANCE MEASURES

Commission staff will use the following measure to assess performance in Objective 2.2. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: BULK-POWER SYSTEM RELIABILITY MEASURES

Overview. FERC will use three measures to track bulk-power system reliability. Together they will help to both assess and inform FERC's activities to ensure the reliability of the system.

1. The annual amount of lost load in a given year resulting from bulk-power system transmission-related events (unplanned disturbances), excluding weather related outages
2. The time in which each U.S. interconnection recovers from generator loss events
3. The change in frequency and elapsed time from the initial disturbance to the frequency minimum (Interconnection Frequency Response)

Reliability Measure 1 is an outcome measure of FERC's efforts to promote reliability. The measure looks at individual events (excluding weather-related outages) that involve an unplanned loss of firm load that meets certain criteria.[7]

Reliability Measure 2 is also an outcome measure that indicates the bulk-power system's ability to recover from disturbances as mandated by the reliability standards. Reliability Standard BAL-002-3 (Disturbance

[7] Loss of firm load for 15 minutes or more: a. 300 MW or more for entities with previous year's demand of 3,000 MW or more. b. 200 MW or more for all other entities. 2. BES Emergency requiring manual firm load shedding of 100 MW or more. 3. BES Emergency resulting in automatic firm load shedding of 100 MW or more (via automatic under voltage or under frequency load shedding schemes, or SPS/RAS). 4. Transmission loss event with an unexpected loss within an entities' area, contrary to design, of three or more BES Elements caused by a common disturbance (excluding successful automatic reclosing) resulting in a firm load loss of 50 MW or more.

Control Standard - DCS)[8] requires that the Balancing Authority (BA) or Reserve Sharing Group balances resources and demand and returns the BA's or Reserve Sharing Group's Area Control Error (ACE) to defined values (subject to applicable limits) following a Reportable Balancing Contingency Event. The intent of this metric is to measure the ACE recovery time at the Interconnection level by comparing the performance of BAs in the interconnection.

Reliability Measure 3 is another outcome measure that indicates an interconnection's ability to stabilize frequency immediately following the sudden loss of generation. The metric is defined as the changes in generation, divided by the change in frequency from the initial disturbance to the frequency minimum, expressed in megawatts per 0.1 Hertz (MW/0.1 Hz). Reliability Standard BAL-003-1.1 (Frequency Response and Frequency Bias Setting)[9] requires sufficient Frequency Response from the BA to maintain Interconnection Frequency within predefined bounds by arresting frequency deviations and supporting frequency until the frequency is restored to its scheduled value.

Together these three measures illustrate the state of bulk-power system reliability. The first measure is a high-level indication of the overall system health. The second measure looks at recovery time for a given disturbance that involved a loss of generation. The third measure looks at the interconnection frequency response to a disturbance caused by a loss of generation.

Targets and Actual Results Tables

Reliability Measure #1 – Annual amount of lost load due to unplanned disturbances							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
0.25%	0.11%	0.30%	0.31%[10]	Below 0.5%	0.147%	Below 0.5%	Below 0.5%
FY 2020 Target: Met							

The amount of load lost in each event occurring in a given fiscal year is totaled and reported as a percentage of the annual peak load. The lower the total amount of lost load, the more reliable and secure the operation of the bulk-power system.

[8] BAL-002-3 replaced BAL-002-2 on April 1, 2019.
[9] BAL-003-2 replaced BAL-003-1.1 effective on July 15, 2020
[10] The result for FY 2019 was adjusted to include all four quarters in 2019.

Reliability Measure #2 – The time in which each U.S. interconnection recovers from generator loss events (minutes)								
Interconnection	**FY 2016 Actual**	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
Eastern	8.90	8.24	8.50	8.10	Below 11	8.20	Below 11	Below 11
Western	8.70	8.50	9.50	9.40	Below 11	10.00	Below 11	Below 11
Texas	7.50	8.00	9.00	7.70	Below 11	6.30	Below 11	Below 11
FY 2020 Target: Met								

This measure analyzes individual DCS events in which an interconnection experienced a significant (typically >500 megawatts) loss of generation. The measure averages the recovery time of every DCS event that occurred in a given fiscal year. Reliability Standards BAL-002-3 mandates a Contingency Event Recovery Period of 15 minutes for a reportable balancing contingency. The lower the average recovery time, the more reliable and secure the operation of the bulk-power system.

Reliability Measure #3 – Interconnection Frequency Response (MW/0.1 Hz)[11]								
Interconnection	**FY 2016 Actual**	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
Eastern	2,191	-2,183	-2,205	-2,174	Below -964	-2,211	Below -964	Below -964
Western	-986	-907	-880	-826	Below -538	-833	Below -538	Below -538
Texas	-559	-665	-587	-437	Below -241	-445	Below -241	Below -241
FY 2020 Target: Met								

The interconnection frequency response for individual events is measured by dividing the changes in generation by the change in frequency from the initial disturbance to the frequency minimum (i.e. arresting period), which typically occurs within the first 5-7 seconds of an event. The annual interconnection frequency response will be calculated as the average of individual interconnection frequency responses for qualifying events that occurred during the year. In addition, the metric measures the individual BA's frequency response against the BA's frequency response obligation, which is calculated as part of the metric.

FY 2020 Results. During FY 2020, the Commission actively participated in overseeing the development and implementation of reliability standards designed to improve the frequency response of the bulk-power system. For example, staff participated in a NERC project to modify Reliability Standard BAL-003-1.1 to improve the

[11] To ensure consistency in calculating Reliability Measure #3, staff has coordinated with NERC regarding the date and method used to evaluate the measure. Prior year results have been changed due to changes in the data and the targets changed due to the differences in methods.

frequency response from generating units on the bulk-power system. Reliability Standard BAL-003-2 improves upon the retired BAL-003-1.1 by refining and clarifying the process and methods for calculating the amount of frequency response that must be provided in a given operating year to support the reliability operation of the bulk power system.

FYs 2021 and 2022 Planned Results. The Commission will work with NERC to identify and address any gaps in event reporting in Reliability Measure 1 and consider expanding it to include smaller events for a more complete picture of reliability. The Commission will also seek to improve Reliability Measure 2 by including the measure of frequency recovery time during frequency events in each interconnection to better assess reserve adequacy in each interconnection. Additionally, the Commission plans to explore available data sources to determine the actual energy produced by various types of resources over a reasonable time period (i.e., monthly or quarterly) to get a more accurate view of change in resources mix and their correlation with decay in Interconnection Frequency Response Measure (Reliability Measure 3) observed in the Western Interconnection. The Commission also plans to work with NERC to improve effectiveness of frequency response metrics in order to ensure that inadequate frequency response is not inadvertently masked.

Monitoring Risk Factors. The complexity of the bulk-power system is such that it is typical for major blackout events to be caused by a combination of several relatively small mistakes or problems occurring simultaneously. Thus, while the Commission-approved reliability standards are designed to prevent major blackouts, they are not a guarantee of success. Risks also come from ongoing changes to the resource mix; as resource characteristics change (e.g., increasing renewable resources and the retirement of coal and nuclear resources), grid adjustments may not change at the same pace and may lead to one or more of the Commission's reliability measures failing to the meet target during the transition period.

PERFORMANCE MEASURE: THE NUMBER OF REPORTED CYBER EVENTS WITH POTENTIAL RELIABILITY IMPACTS (INCLUDING OUTAGES) IN A GIVEN YEAR RESULTING FROM CYBER EVENTS ON BULK-POWER SYSTEM ASSETS SUBJECT TO RELIABILITY STANDARDS

Overview. In Order No. 848, the Commission directed NERC to develop and submit modifications to the Reliability Standards to require the reporting of Cybersecurity Incidents that compromise, or attempt to compromise, a responsible entity's electronic security perimeter or associated electronic access control or monitoring systems.

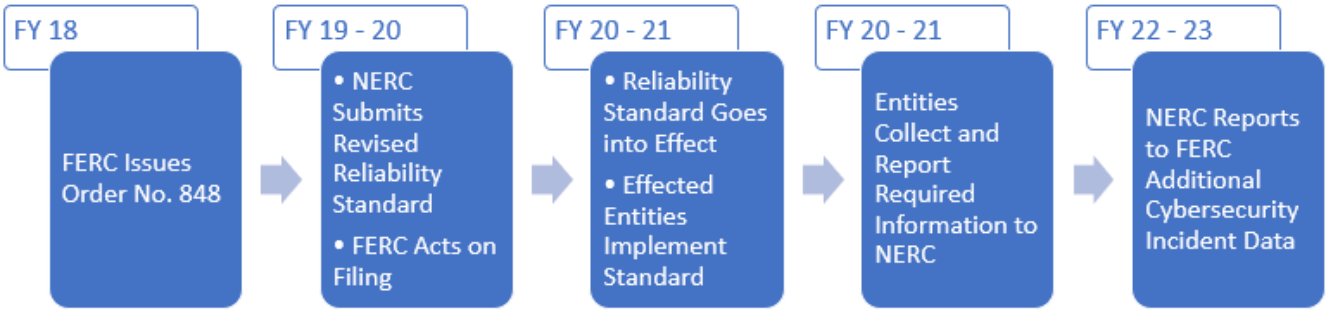
While this measure is not as robust as the information that will be received based on Order No. 848, it will show the types of cybersecurity incidents that are occurring. The Commission currently analyzes the cybersecurity reporting of DHS and other organizations to determine how the Critical Infrastructure Protection environment and the reliability of the bulk-power system may be impacted. Where there are gaps or shortcomings, the Commission can direct the improvement of the CIP Reliability Standards.

After the implementation of modifications to the Reliability Standards resulting from Order No. 848, this measure will be able to be modified to more accurately quantify and assess the degree to which cyber related events impact the reliability of the bulk-power system. The measure looks specifically at cybersecurity

incidents on assets that are important to reliability. A cybersecurity incident includes any attempt, whether successful or unsuccessful, to breach an asset's ESP that registers in the asset's cyber logs, electronic files, or firewalls. A cybersecurity incident also includes non-malicious cyber events that were caused by human error and that either did or could have caused an outage or disturbance. The result reported for this measure is a count of the number of incidents that occurred during the fiscal year.

As part of this reporting, NERC must file an annual, public, and anonymized summary of the reports with the Commission. NERC submitted the revised reliability standard, and the Commission approved it during the second quarter of FY 2019. The new reporting requirements will become enforceable on January 1, 2020. FERC expects to begin receiving data in FY 2022, after the requirements become mandatory. It is expected that information regarding cybersecurity incidents to support this measure will be available in FY 2022.

The following graphic[12] illustrates the chain of influence for Order No. 848 and general timeframe for each stage.



Although all events will be aggregated for the measure result, FERC will analyze and track different categories of events (e.g., human error, failed equipment/software, malicious activity) and use root cause analysis to gain a greater understanding of how and why these incidents occurred and how they did or could have impacted bulk-power system reliability.

The analyses of the information gathered will provide insight into any gaps and/or weaknesses that may exist in the CIP Reliability Standards allowing FERC, NERC, and industry to address these issues with a modification to a standard, a new proposed standard, or other approaches to minimize the occurrence and impact of cybersecurity events and protect the reliability of the grid.

[12] The graphic is illustrative to show the process and general timeline. Specific requirements and timeframes would be found in the related Commission orders.

Targets and Actual Results Table

The number of reported cyber events with potential reliability impacts (including outages) in a given year resulting from cyber events on bulk-power system asses subject to reliability standards.							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
4	1	4	4	8	6	6	50
FY 2020 Target: Met							

This is an outcome measure that provides an indication of the performance of FERC's oversight activities and its efforts to inform and support the cybersecurity programs of regulated entities. FERC oversees the development of CIP Reliability Standards and other compliance tools designed to improve the security of jurisdictional energy assets. By working to minimize the occurrence and impact of cybersecurity events, FERC helps to protect the reliability of the grid. The desired outcome is to have a smaller number of actual events than the target number. A smaller number of actual events indicates that the grid is less vulnerable and better protected, and therefore more reliable. Direct reporting is the best indicator of the reliability impacts of cyber events but is not currently available.

Because direct reporting is not currently available, the figures in the table derive from detailed reports from DHS and other government agencies. They do not account for each reported cybersecurity incident at each electric sector entity. The data may include compromises in non-CIP critical infrastructure environments or non-jurisdictional cyber assets, but all reported events have been evaluated to determine that they could have the potential to impact CIP environments. The Commission will continue to collect and analyze published alerts from DHS and other government agencies regarding cybersecurity alerts for the electric sector.

FY 2020 Results. During FY 2020, the Commission actively participated in overseeing the development and implementation of CIP Reliability Standards to improve their quality, auditing those standards to measure their effectiveness, and engaging in other activities designed to improve the cybersecurity of jurisdictional energy assets and systems. The Commission also participated in outreach activities, including Regional Entity security and compliance workshops, speaking at industry electric power conferences, and meeting with company representatives and trade associations to educate, inform, and support the cybersecurity programs of regulated entities. The Commission's actions contributed to minimizing the occurrence and impact of cybersecurity events.

FYs 2021 and 2022 Planned Results. In addition to its current activities, in FYs 2021 and 2022 the Commission will increase its focus on several areas of cybersecurity for the greatest reduction of risk. These areas include: (1) supply chain, insider threats, and third-party authorized access; (2) information sharing, audits, and assessments; (3) cloud/managed security service providers; (4) promoting enhanced voluntary security measures; and (5) internal network monitoring and detection. The Commission expects that the

increased focus on these areas and the enhanced quality of security measures will better equip security professionals to identify potential attacks before they are able to impact the operation of the grid.

In FY 2022, the reporting will change from the current broader alerts that affect many entities to singular entities reporting on incidents of compromise and attempts to compromise their systems based on Reliability Standard CIP-008-6. The scope is further increased by including Electronic Access Control and Monitoring Systems, such as firewalls. Thus, a much higher number of reported cyber events is expected in FY 2022.

Monitoring Risk Factors. Electric power is a critical infrastructure that is a highly valued target for nation states and criminals. And while the electric power infrastructure continues to implement new communications and technologies, cybersecurity perpetrators are becoming more sophisticated and have access to resources to support increasingly complex cyber attacks on the grid.

PERFORMANCE MEASURE: THE NUMBER OF ACTIVE PARTNERSHIPS FOR WHICH SECURITY RELATED ACTIVITY OCCURRED DURING THE FISCAL YEAR

This measure directly assesses the effectiveness of FERC's efforts to reach out to other federal agencies and establish active partnerships to the benefit of regulated entities. Partnerships provide a mechanism for information sharing and collaborative actions that enable infrastructure security to be addressed holistically, as opposed to action taken in isolation. Importantly, a holistic approach to infrastructure security provides the necessary framework for federal agencies to work together to address new and quickly evolving cyber and physical threats.

By maintaining active partnerships with federal agencies, FERC is able to coordinate with entities to identify and assess threats, activities, and capabilities of adversaries that may initiate a cyber or physical attack on FERC jurisdictional infrastructure. Active partnerships also enable FERC to work with other federal agencies and stakeholders to identify and assess key infrastructure facilities that present the greatest risk and develop a common understanding of infrastructure interdependencies. The Commission can use the extensive knowledge gained through partnerships and collaborative actions to make jurisdictional entities aware of these threats and appropriate counter measures.

Targets and Actual Results Table

The number of active partnerships for which security related activity (information sharing, outreach to industry, joint assessments, sharing of resources, etc.) occurred during the fiscal year.							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
Not Applicable	Not Applicable	4	8	5	8	5	5
FY 2020 Target: Met							

Maintaining the quality of FERC's partnerships is critical to effectiveness in this area; for this reason, maintaining a limited set of active partnerships reflects higher performance than a large number of inactive partnerships.

To help in the interpretation of the measure results, FERC will track the number and types of collaborative activities in which each partnership engages. FERC will also maintain an up-to-date list of potential partners, which will include the federal agencies that have expertise, information, resources, or authority relevant to the cyber and physical security of FERC regulated entities.

FY 2020 Results. In FY 2020, the number of partnerships significantly exceeded the target. This is because the Commission: (1) coordinated with intelligence agencies to facilitate two analytic exchanges for regulatory stakeholders and industry partners; (2) closely collaborated with DHS CISA on COVID-19 pandemic response activities; (3) assisted the NRC with security initiatives; and (4) coordinated with the White House Office of Science and Technology Policy (OSTP) on national resilience to Electromagnetic Pulses (EMP) in response to EO 13865.

FYs 2021 and 2022 Planned Results. The Commission will continue to maintain its current active partnerships with the Departments of Defense, Homeland Security, and Energy, as well as the Office of the Director of National Intelligence by partnering with them for analytic exchanges, facilitating table-top exercises, and assisting with technical analysis as requested. In addition to maintaining these partnerships, in FYs 2021 and 2022, the Commission will seek to create new partnerships that are beneficial to its efforts involving the security of energy infrastructure.

To supplement the active partnerships, the Commission engages and maintains awareness in other ways. For example, the Commission maintains contacts with several federal agencies by participating in various working groups such as the Electromagnetic Pulse task force, the Federal Senior Leadership Council, and the EMP Interagency Working Group with the Office of Science and Technology Policy. This allows the Commission to maintain awareness of security activities and any changes in key personnel. The Commission will also monitor Executive Orders to identify any that involve infrastructure security or cyber security and reach out to relevant agency counterparts.

Monitoring Risk Factors. There are two primary external risk factors that could impact the Commission's activities and achievement of the established targets. The first factor is a change in key staff or leadership at other federal agencies, which could delay the establishment of a partnership and collaborative engagement. The second factor is a change in course by the Administration, which could impact other agencies' priorities. The Commission will continue to monitor these factors and act as appropriate to support a holistic approach to infrastructure security.

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.

The public interest is best served when the Commission operates in an efficient, responsive, and transparent manner. The Commission pursues this goal by maintaining processes and providing services in accordance with governing statutes, authoritative guidance, and prevailing best practices. The Commission's 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 goal, 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 2020 Actual	FY 2021 Request	FY 2022 Request	Percent Change FY 2021 to FY 2022
Objective 3.1	FTE	236	230	221	-4.1%
	Funding	$ 59,719	$ 60,787	$ 68,113	12.1%
Program		42,317	40,882	43,731	7.0%
Support		17,402	19,906	24,382	22.5%
Objective 3.2	FTE	72	71	75	6.0%
	Funding	$ 18,003	$ 18,545	$ 22,265	20.1%
Program		12,694	12,418	13,969	12.5%
Support		5,309	6,127	8,295	35.4%
Goal 3 Total	FTE	308	301	296	-1.7%
	Funding	$ 77,722	$ 79,332	$ 90,377	13.9%

Note: Numbers may not add up due to rounding

OBJECTIVE 3.1: MANAGE RESOURCES EFFECTIVELY THROUGH AN ENGAGED WORKFORCE.

FERC achieves this objective by employing processes and services that help Commission leadership prioritize resource allocations, make prudent investments that yield returns that directly benefit the agency's mission, and use Commission resources in an efficient manner. The Commission follows foundational principles of management, set forth in various laws and regulations, including but not limited to the Code of Federal Regulations Titles 5 and 18, Federal Acquisition Regulation, the Federal Managers' Financial Integrity Act of 1983, the GPRA Modernization Act of 2010, and other federal guidance, such as OMB Circular A-123, Management's Responsibility for Enterprise Risk Management and Internal Controls.

These processes further allow the agency to meet federal statutes that require FERC to offset its appropriation by recovering its operating costs from the entities it regulates and to do so in a manner that avoids unnecessarily increasing the cost of energy to consumers.

FERC also achieves this objective by providing services, tools, and resources that equip employees to drive success and accomplish the agency'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 that employees have a performance management system that clarifies expectations, removes barriers to performance and engagement, and provides useful feedback that supports employee effectiveness.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 3.1. The status of these Strategic Challenges and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: NEW CHALLENGES AND OPPORTUNITIES FOR MISSION-RELATED INFORMATION

Overview. Availability of mission-related information is increasing, which presents new challenges and opportunities for FERC to leverage analytics. This strategic challenge is guided by the President's Management Agenda CAP Goal *Leveraging Data as a Strategic Asset*, H.R.4174 – 115th Congress (2017-2018) – *Foundations for Evidence Based Policy Making Act of 2018*, and OMB's Memorandum M-19-23 *Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018*. The Federal Data Strategy, released by the CAP Goal Leaders in the spring of 2019, set forth principles, practices, and an action plan for agencies to deliver a more consistent approach to federal data stewardship, access, and use.

FY 2020 Results. In FY 2020, the Commission continued to build out its data governance program. The data governance organization delivered a data platform roadmap, data product governance lifecycle, and

management support for data stewardship and data projects. The data product governance lifecycle will ensure a strong and consistent methodology for inventorying and integrating data assets into the environment and building a comprehensive data inventory. While developing those foundational program elements, the data governance organization executed various in-flight data maturity, management, and analytics requirements. The data governance organization began building out the data analytics platform in a cloud environment to orchestrate shared data services and dashboards across the Commission. By leveraging the capabilities of the data analytics platform, the data governance organization can facilitate and support the creation of trusted analytic data products to continue to promote data driven decision making.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission will continue the maturity and growth of its data governance program by expanding the data analytics platform, integrating new data sources, inventorying data assets and data sets into a comprehensive data inventory, and integrating new data technologies to deliver a more comprehensive analytic capacity to staff across FERC. The data governance organization will continue to implement this multi-step initiative, to include: (1) conducting a comprehensive data maturity assessment, identifying data currently available, and evaluating appropriate data usage; (2) implementing data standardization and validation protocols towards the adoption of a Master Data Management Program; and (3) promoting data skills and building data acumen across the Commission.

In FY 2022, FERC expects to implement its robust plan for Data Support, and Governance and Stewardship Services while delivering best in class capabilities and support services to meet the Commission's analytic and data science needs. Based on these actions, the Commission expects to improve staff expertise and to realize efficiency gains from streamlined data collection, analyses, and reporting.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years, including attracting and retaining a highly skilled and in-demand staff, the pace of technological change, and the pace of emerging data management technology and requirements, among other things. FERC anticipates these factors will continue to be relevant over the next two years and will continue to take them into account while implementing its responsive actions.

STRATEGIC CHALLENGE: MAINTAINING A SECURE AND RELIABLE IT INFRASTRUCTURE

Overview. FERC is challenged with maintaining a secure and reliable IT infrastructure to meet the needs of the Commission and provide innovative solutions to support employees.

FY 2020 Results. In FY 2020, FERC continued to execute multiple initiatives to support modernization efforts for the enterprise IT infrastructure, core mission applications, and endpoint hardware. The Commission completed upgrades of its unified telecommunications platform and endpoint operating systems to provide continued reliability and security of enterprise services while enhancing the employee experience. The Commission also implemented additional licenses for virtual private network (VPN) capabilities which provided increased support for employees to execute their daily responsibilities remotely in support of the Commission's telework and Continuity of Operations (COOP) programs. The Commission completed an upgrade of its public facing mission application, eLibrary, including a new user interface that provides better

search and download capabilities. In supporting the Commission's XBRL final rule, the Commission completed the modernization of the financial information collection forms, which replaced an outdated technology platform with a robust system that supports both current and future data collection needs and form reporting requirements. The Commission also completed Phase I implementation of the Hydropower License and Compliance Tracking System (HLCTS) which replaced another outdated technology platform and provided a more modern user interface. This effort consolidated the capture and storage of hydroelectric-related data and reporting function that previously was distributed across numerous databases and applications.

In FY 2020, the Commission re-competed its single largest IT Support Services Contract, which provides IT operations, enterprise architecture, cybersecurity and systems engineering services to the enterprise wide IT infrastructure and core mission and support applications. The Commission also procured, obtained and transitioned a service contract which supports capital planning and investment control (CPIC).

FYs 2021 and 2022 Planned Results. In FY 2021 the Commission will also procure, obtain, and transition a services contract which supports enterprise program management capabilities for the CIO organization.

In FY 2021, the Commission will continue its modernization efforts of its mission critical business applications and begin an Application Layer Modernization (ALM) initiative. The ALM initiative will be a multi-year effort of upgrading the Commission's various mission critical and support applications by developing an integrated application platform to increase self-service capabilities, leverage cloud-based technologies, and improve maintainability. ALM will also provide an enhanced user experience to access Commission information in a secure manner. The Commission will continue to deploy additional work sets into cloud-based services, enhance security monitoring of cloud environments and user access to systems, and continue to refresh employee endpoint devices and core infrastructure components. Based on these investments, the Commission expects to gain operational efficiencies from a stable and secure environment and realize an improved use of mission-related information and technology.

In FY 2022, the Commission will continue to increase resources within the IT Support Services Contract, which will support daily operations and fulfill planned initiatives such as routine refreshes for copiers, laptops, and Storage Attached Network (SAN) as well as maintaining legacy applications. The Commission plans to establish a data support services contract to support the expanding data governance program as well as add additional cloud services and capabilities. The Commission will plan to purchase and implement several tools to improve its security posture for the vulnerability management and cyber threat programs. Finally, by the conclusion of FY 2022, the majority of the Commission's telecommunication services for headquarters, regional and remote offices will be consolidated into the Enterprise Information Services (EIS) contract as mandated by the General Services Administration.

Monitoring Risk Factors. In FY21, the Commission transitioned its single largest IT support services contract and continues to monitor to ensure effective delivery of services while beginning IT infrastructure modernization efforts. The primary risk factor that could impact the strategic response over the next two years is the transition to a new application modernization contract to revamp FERC's core mission applications.

Although this risk factor will continue to be relevant over the next two years, FERC has taken appropriate actions in advance of the contract re-compete and will appropriately monitor its progress. In addition, the Commission must position itself to comply with new mandates issued by OMB or other governing bodies, which could impact the Commission's priorities and schedule of IT modernization efforts.

STRATEGIC CHALLENGE: ATTRACTING AND RETAINING THE REQUIRED WORKFORCE

Overview. The Commission's human capital strategic challenge has expanded beyond what was initially identified in the FY 2018–2022 Strategic Plan. In addition to the challenges of new and emerging knowledge/skill demands, the Commission also experiences challenges with remaining a competitive employer in the energy industry sector due to constraints with offering comparable compensation for mission critical positions. As a result, the Commission faces significant challenges attracting, recruiting and retaining the required workforce necessary to meet and support the mission. In addition to these challenges, the Commission must position itself to appropriately respond to increasing staffing vulnerabilities due to attrition and retirement, employee development pressures and a need for cross-functional collaboration. The Commission's continued issues acquiring staff will have a negative impact on program performance unless it finds viable recruiting and compensation strategies to acquire and retain skilled staff.

The Commission has made recruitment and hiring a strategic priority, working diligently to hire ahead of forecasted attrition and seeking to leverage available pay flexibilities to be more competitive in the energy sector job market. These strategies will be incorporated in a comprehensive Human Capital Operating Plan (HCOP) which the Commission is currently developing. This plan will provide a strategic framework that will better enable the Commission to reach the qualified candidate pools across the country, be competitive with other employers, and comply with federal requirements aimed at hiring people with targeted disabilities and other designations.

FY 2020 Results. FERC supports its myriad responsibilities with professionals specializing in an array of engineering, science and technology disciplines as well as legal and economic professionals with deep understanding of energy law and market fundamentals. In FY 2020, the Commission continued the efforts in analyzing the completed assessment of gaps and vulnerabilities that exists within its current staffing pool in all Commission occupations.

Staff continued the process of planning employee development opportunities and developing targeted hiring initiatives for mission critical occupations as determined to be the highest priority. In addressing this challenge, Commission staff have identified enterprise-wide solutions that can be deployed to address these gaps prospectively. In FY 2020, hiring and development efforts included maximizing the use of available Title 5 retention and recruitment incentives. The Commission has also sought OPM approval to compensate targeted positions beyond prescribed locality pay rates. The Commission has received approval of higher pay rates for engineering professionals in its San Francisco Regional Office. The Commission continues to use Federal Government-wide direct hire authorities to include Information Technology, Economists, Biological Scientists, Fishery Biologists, General Engineers, Engineers, Physical Scientists, and Acquisition occupations. While the

direct hire authority expedited the hiring process, the Commission is still constrained by the inability to offer competitive compensation for these needed skill sets.

The Commission continues to invest in its competency-based training program. The competency-based efforts have helped to inform and prioritize training for mission critical competencies and served as a resource to help guide staff's career development efforts. In addition, FERC has implemented these competencies in its hiring criteria and to focus on key positions where long-time employees are close to retirement.

Additionally, in FY 2020 the Commission procured a human capital support services consultant to provide a full spectrum of technical and functional capabilities to support its human capital goals and to inform organizational priorities which will identify and guide efforts to address its vulnerabilities in hiring and retaining a competitive workforce. These strategies will help to improve the delivery of workforce programs, maximize resource utilization and facilitate mission achievement.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission will continue the multi-year HCOP initiative to address gaps and vulnerabilities with a comprehensive workforce analysis study, and the development of the HCOP plan. Additionally, the Commission has aligned future training offerings to appropriately address staff's needs, and further the advancement of SharePoint as a knowledge management tool. In FYs 2021 and 2022, the Commission will transition from developing competency models to sustaining developmental needs assessment efforts and linking available employee development programs to addressing skill gaps. Future benefits include identifying and monitoring signs of increased cross-functional understanding as discussions of common knowledge/skill needs are assessed. The Commission will continue to aggressively use the hiring authorities available and monitor the impacts to workforce planning.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next three years. For example, despite aggressive hiring efforts, the limited talent pool in the identified mission critical occupational series could negatively impact the Commission's efforts to hire highly-skilled staff ahead of double-digit attrition rates. Further, compensation constraints prevent the Commission being competitive in the job market which significantly impacts its ability to attract and retain the necessary skill sets. These issues are compounded by higher costs of living in the Washington, DC Headquarters location and in the San Francisco Regional Office.

FERC anticipates these factors will continue to increase and be relevant over the next several years. The Commission will continue to take them into account while implementing its responsive actions. However, it is a realistic concern that if the Commission is not able to mitigate these risks with existing tools, it may not be able to hire and retain sufficient staff, leaving the engineering ranks, for example, perpetually lacking.

CORE FUNCTIONS

In addition to being responsive to these strategic issues, FERC carries out its responsibilities in this objective through two core functions. Each core function is driven by discrete sets of inputs, operations, and outputs to deliver impact.

CORE FUNCTION 3.1.1: MAINTAIN PROCESSES AND PROVIDE COMPLIANT SERVICES THAT ENABLE FERC OFFICES TO MANAGE RESOURCES EFFECTIVELY AND EFFICIENTLY.

To support the mission, FERC plans resource needs, executes compliant and effective processes and services, and assesses results against established objectives. As the needs of the agency evolve, proper planning is critical to mission success. In the planning stages, FERC employs a collaborative management approach and establishes systems to identify organizational needs—identifying staffing and competency needs through human capital processes, information technology and infrastructure needs through capital planning and investment control processes, and financial needs through the budget formulation process. FERC then develops comprehensive plans to address those needs for achieving program results.

The Commission executes its resource plans to achieve effective and efficient operations, reliable financial reporting, and compliance with applicable laws and regulations through mission-support services.

To ensure the effectiveness of resource planning and execution, FERC measures and evaluates how well-established processes and services are meeting statutory requirements and addressing identified needs. FERC develops control programs and reporting requirements and implements data collection and analyses to inform decisions and actions to address program performance deficiencies.

This cycle also ensures the Commission is always cognizant of program performance against strategic and operational plans and has the information to produce financial statements that accurately represent the Commission's financial condition, as well as other federally mandated reports that maintain the Commission's accountability and provide stakeholders with program performance information.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Maximizing human capital to deliver mission
- Maturing data management and informed decision-making capabilities
- Optimizing investments to support productivity gains and safeguard assets

MAXIMIZING HUMAN CAPITAL TO DELIVER MISSION

Commission staff assesses competencies and skills needs within the Commission to inform effective recruitment and hiring strategies and to deploy targeted training opportunities.

WORKFORCE PLANNING

Overview. Workforce planning is an essential internal service that helps Commission managers identify staffing, critical skills and competency needs. As part of this service, the Commission develops and validates competency models for all mission critical occupations. Workforce planning also includes the development of plans and strategies to meet the required resource levels needed to accomplish its mission. This relates closely to the third Strategic Challenge presented above for Objective 3.1.

FY 2020 RESULTS. In FY 2020, the Commission continued its efforts to develop a multi-year HCOP that will extend beyond FYs 2021 – 2022. This plan will assess the Commission's current human capital needs and establishes a responsive short and long-term staffing and recruitment strategy to meet those and future needs. As discussed above in the third Strategic Challenge in Objective 3.1, FERC's continued issues in acquiring mission critical staff will pose a risk on program performance unless it finds additional recruiting and compensation strategies to acquire and retain skilled staff.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to advance its staffing objectives as outlined in the HCOP, to recruit and retain a world class workforce to continue the execution of the Commission's mission. Workforce planning, and the associated hiring and recruitment efforts, will continue to be a strategic priority due to the significance and impact on future program performance.

RECRUITMENT

Overview. The Commission's human capital support services identifies recruitment strategies to assist managers in acquiring a highly skilled and diverse workforce to execute Commission duties. The recruitment strategies will also be integrated with the HCOP, and will allow the Commission to reach the best candidate pools across the country, while also complying with federal requirements aimed at hiring people with targeted disabilities and other designations.

FY 2020 Results. In FY 2020, the Commission initiated a hiring strategy to maximize its authorized FTE level, finishing the year with a 99% execution rate and averaged a 53-day time to hire. This strategy included the use of Government-wide direct hiring authorities for Science, Technology, Education, and Mathematics (STEM) positions and the use of an ideal candidate profile to pinpoint the exact skill sets needed in those positions. At this rate of execution, the Commission has used contractor-support to meet programmatic workload needs. However, this strategy is not feasible to sustain the long-term resource needs of mission-critical programs.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to use direct hire authorities to reach a targeted 99% FTE execution rate. The Commission will also implement the use of shared services systems to help streamline its hiring process and further improve its time to hire and onboarding process. Recruitment efforts will continue to be a strategic priority due to the significance and impact on future program performance.

COMPETENCIES AND SKILL MANAGEMENT

Overview. Through internal processes, the Commission identifies necessary skill sets, then develops and validates plans to address any staff competency gaps. This includes designing and deploying competency-based training to equip staff with the skills to perform their jobs.

FY 2020 Results. In FY 2020, the Commission finalized the development of its Competency-Based Training Program, finalizing occupational competency models—with the assistance of Commission subject matter experts—and deployed development needs assessments (DNA) to assess staff ability to acquire these competencies in all of its occupations.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will use the results of the completed DNA for all occupations to begin adapting its training and development opportunities to address competency skill gaps identified through the DNA process.

MATURING DATA MANAGEMENT AND INFORMED DECISION-MAKING CAPABILITIES

Commission staff are maturing decision making capabilities through a variety of channels, including incorporating an Enterprise Risk Management (ERM) process into its program performance management framework and building capacity to access and use sensitive data.

ENTERPRISE RISK MANAGEMENT AND PROGRAM PERFORMANCE MANAGEMENT FRAMEWORK

Overview. The Commission's program integrates strategic planning, program performance measurement, internal controls, and risk management into a comprehensive framework that informs decision making processes to support resource and operational planning.

FY 2020 Results. FERC continues to make progress on implementing an ERM capability coordinated with the strategic planning and strategic review process established by the Government Performance and Results Act Modernization Act, and the internal control processes required by the Federal Managers' Financial Integrity Act. In FY 2020, FERC procured a contract to support the establishment of an integrated ERM program.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, FERC will continue its efforts to integrate and coordinate risk management, combined with a strong and effective internal control program, into existing activities and support operational management. In FY 2021, FERC will develop a maturity model approach to the adoption of an ERM framework. FERC will also assess the effectiveness of the established governance structure to implement, direct and oversee the requirements of an effective risk management and internal control system. In FYs 2021 and 2022, FERC will continue to develop a risk profile coordinated with FERC's annual strategic reviews.

FEDERAL INTELLIGENCE COORDINATION OFFICE

Overview. A developed Federal Intelligence Coordination Office (FICO) capability strengthens the Commission's ability to access and use both sensitive information and data from the intelligence community to

monitor threats to energy infrastructure and to inform threat mitigation strategies. With this comes the need for additional measures to ensure access is granted only to appropriate staff.

FY 2020 Results. In FY 2020, the Commission continued to enhance its comprehensive business plan to implement a FICO, which included the Office of the Director of National Intelligence (ODNI) designating a Federal Senior Intelligence Coordinator. Additionally, progress was made on the design and initial review of construction and mechanical drawings for a Sensitive Compartmentalized Information Facility (SCIF) by the Department of Energy (Cognizant Security Agency). The Commission has continued to implement a continuous evaluation and continuous vetting program for employees with access to national security information (NSI) in compliance with Executive Order 13467.

FYs 2021 and 2022 Planned Results. The Commission will complete the construction and accreditation of the SCIF, installation of classified information systems, and development of key intelligence questions and priority intelligence requirements for consumption by the intelligence community to provide FERC-specific insight into finished intelligence products. Further, the continuous evaluation program will expand to incorporate a 100% annual revalidation of all NSI clearance holders and a 5% evaluation of background information for a randomly designated population of NSI clearance holders.

OPTIMIZING INVESTMENTS TO SUPPORT PRODUCTIVITY GAINS AND SAFEGUARD ASSETS

The Commission continuously seeks to safeguard its physical and financial assets and to ensure they are being used as efficiently and effectively as possible to advance Commission objectives.

FINANCIAL STEWARDSHIP

Overview. As public stewards, the Commission must employ sound financial stewardship. Further, as a full cost recovery agency that charges the industries it regulates, it is extremely important for the Commission to report financial information that is reliable, accurate, and free from material misstatements. Both industry and the American taxpayers must have confidence that the funding used to meet the Commission's mission is properly accounted for. To this end, the Commission manages budget planning and execution, including acquisition and capital planning and investment processes, as well as the accounts receivable and payables process.

FY 2020 Results. In FY 2020, the Commission received an unmodified financial statement audit opinion, which means the Commission's financial data is properly presented without any material misstatements. The Commission completed phase one of enhancing its financial management systems by implementing a software solution designed to increase workload and cost efficiencies, streamline demand and communication channels between financial resources, leverage customer demand for effective advanced planning, systematically advance execution and produce tailored reports that support financial decision-making.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will maintain strong financial stewardship practices, including a strong internal control environment to reduce the risk of fraud, waste, and

abuse. By continuing these proven practices and remaining vigilant to any changes to the financial operations, the agency can expect to receive unmodified financial statement audit opinions in both FYs 2021 and 2022.

In FYs 2021 and 2022, the Commission expects to finalize its implementation of a financial management software solution that will automate and integrate a significant number of manual processes, increase transparency and reporting, and improve financial awareness of Commission staff. This will ultimately improve financial system user satisfaction, yield cost savings and productivity gains.

Utilizing the software solution, the Commission will also implement advanced acquisition planning to build more effective strategies for acquiring goods and services in support of the Commission's mission. This will improve the budget planning and execution process and make the acquisition of goods and services more efficient to ensure these resources are available in a timely manner for efficient and effective Commission operations.

FACILITIES MANAGEMENT

Overview. The Commission manages the headquarters located in Washington DC; five regional offices located in Duluth, GA, Chicago, IL, Houston, TX, New York, NY, Portland, OR, San Francisco, CA; and four satellite offices located throughout the United States. These offices across the country facilitate staff's execution of the Commission's mission. In managing these facilities, the Commission's responsibilities include meeting federal mandates for space utilization as well as environmental considerations, such as Leadership in Energy and Environmental Design (LEED) certification.

FY 2020 Results. In FY 2020, after a series of delays caused by external factors, the Commission re-initiated the Building Modernization effort and revalidated housing and programming needs in preparation for construction which began in September 2020. Accomplishment of the building modernization will consolidate building space to provide for future rent savings. Additionally, it will modernize facilities which meet federal requirements and securely access and store sensitive information.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission will initiate Phase 1 construction to modernize floors 1, 3 and 10 in the headquarters building and prepare internal swing space for use on the remaining 5 phases. In FY 2022, the Commission will continue the modernization efforts which are planned through FY 2023.

CORE FUNCTION 3.1.2: PROVIDE TOOLS AND SERVICES THAT ENABLE FERC STAFF TO EFFECTIVELY PERFORM THEIR JOBS AND DRIVE COMMISSION SUCCESS.

The Commission achieves its mission when employees are equipped for success and empowered to take responsibility for achieving the Commission's mission, goals, and objectives. FERC enables staff to perform effectively and drive success by deploying tools, services, and resources that meet employee needs.

FERC's employee performance management system serves as a planning tool that communicates expectations and individual responsibilities and establishes accountability for expected results. Supervisors and staff also

use the system to establish a line of sight between individual performance and the Commission's mission, goals, and objectives. Organizational assessments, such as the Federal Employee Viewpoint Survey (FEVS), allow employees to provide feedback about their level of engagement and satisfaction.

FERC also provides technology, employee development and training programs, an employee engagement program, health and wellness programs, and other employee services and resources to meet employees' performance needs and remove obstacles to engagement. Safety continues to be a top priority for the agency. The Commission is deploying resources to ensure staff feels safe and secure in executing their duties.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Maximizing human capital to deliver mission
- Maturing data management and informed decision-making capabilities
- Optimizing investments to support productivity gains and safeguard assets

MAXIMIZING HUMAN CAPITAL TO DELIVER MISSION

The Commission works to meet employee professional needs and remove barriers to staff performance, helping to maintain a high-level of staff engagement and sustain staff capacity to perform their jobs. The Commission does this through the delivery of internal programs, services, and/or support, including employee engagement and development efforts, as well as diversity and inclusion support.

EMPLOYEE ENGAGEMENT

Overview. The Commission provides employee engagement support that helps Commission staff maximize their contribution to the Commission's mission. The U.S. Office of Personnel Management (OPM) administers the Federal Employee Viewpoint Survey (FEVS) across all federal agencies which measures employee engagement. The survey is usually administered in the spring or summer over a six-week period and agencies receive the results of the survey in the fall. The Commission analyzes and develops action plans on the results of the annual FEVS assessment to enhance employee engagement. The Commission also offers services, resources, and tools to management which will address employee performance needs and remove obstacles to engagement.

FY 2020 Results. OPM postponed the administration of the FY 2020 FEVS until September 2020 to allow support of critical agency missions and maximize employee participation in the survey. Additionally, OPM abridged the survey and removed a few of the core questions. The FY 2020 results were the highest results the Commission has ever received in employee engagement and overall satisfaction areas, which are key measures of the survey. Additionally, employee satisfaction results increased in almost every area the survey measured. The Commission's FEVS scores for all core questions were higher than the government-wide and medium-size agency rates. Leadership at all levels of the Commission greatly value the anonymous employee feedback

provided through the FEVS. The survey provides information which identify challenges and strengths for the Commission to improve and maintain which ensure employee engagement levels increased.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to work towards improving its employee engagement goals. The strategies the Commission identified to meet established targets will include, but are not limited to (1) providing enhanced analysis of the FEVS results to senior management and ensuring transparency of the results for all employees; (2) perform action planning in response to feedback provided on the FEVS; and (3) provide the necessary tools and training to supervisors to ensure they can effectively empower their employees.

EMPLOYEE DEVELOPMENT

Overview. The Commission provides employee training and development support primarily through iLearn, a learning management system that authorizes, distributes, and administers trainings electronically. The iLearn system brings training courses to employee desktops throughout the nation, reducing the need for training-related travel, improving Commission resource efficiency, improving course adaptability, and giving employees easy access to Commission courses.

FY 2020 Results. In FY 2020, the Commission provided all required IT security, ethics, and information governance training via the iLearn system. The system was also used for training administration to track all training, as required by OPM.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission will expand iLearn to provide supervisory training to employees and will explore options to add technical training to the iLearn system. Continuing to build out iLearn further strengthens employee capacity to advance FERC objectives while maintaining Commission resource efficiency. In FY 2021, the Commission will link the competency-based training program to the iLearn system.

DIVERSITY AND INCLUSION SERVICES

Overview. Employees are the Commission's greatest assets, making it critical to foster an environment where employees can thrive and accomplish the Commission's mission. The Commission provides services to support diversity and inclusion at FERC, including employee resource groups and hosting various diversity observances.

FY 2020 Results. In FY 2020 the Commission continued to support its existing employee resource groups and supported the creation of one new ERG. All groups have been formed by employees across diverse demographics—race, national origin, gender, sexual orientation, military status—as well as shared interests. In FY 2020, the Commission continued to involve the ERGs in Commission recruitment strategies and monthly observances. The Commission has benefited from various speaker engagements discussing topics ranging from the industry to leadership. Additionally, the Commission launched a "Call to Action" initiative that is a collaborative approach to develop a comprehensive plan to provide employees additional assurances that the Commission values diversity. This initiative will also develop and implement specific actions that will have a measurable and positive impact on the workplace.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to support and engage with the ERGs. In FYs 2021 and 2022, the Commission will assess the results of the survey of the workforce to identify strategies to achieve EEOC's mandated recruitment and hiring goals, as well as to ensure people with disabilities are provided with fair and equal opportunity. In addition, the Commission will implement necessary recruitment strategies and review internal policies or programs to ensure fair and equal opportunity for all Commission employees.

MATURING DATA MANAGEMENT AND INFORMED DECISION-MAKING CAPABILITIES

The Commission is maturing its data management and informed decision making by managers and staff regarding performance objectives, standards, approaches, and risks. It is doing so through the delivery of an integrated employee performance management program and a program to assess and improve employee experiences.

EMPLOYEE PERFORMANCE MANAGEMENT FRAMEWORK

Overview. The employee performance management framework helps employees and managers collaboratively establish employee performance objectives and ensures that employees receive the feedback they need to improve and focus their performance.

FY 2020 Results. In FY 2020, the Commission continued with steps to automate its employee performance management system and to align employee performance metrics with the Commission's strategic goals and objectives.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission anticipates the implementation of a shared services employee performance management solution through its personnel and payroll provider, the Interior Business Center, to automate and better track employee performance management efforts, with linkages to the Commission's Strategic Plan and employee position descriptions.

ASSESSMENT OF EMPLOYEE EXPERIENCES

Overview. In addition to the FEVS, the Commission administers other surveys—including an entry survey and exit survey—to assess employee experiences within the Commission and find opportunities for improvement. The data obtained from these surveys is critical in the development of Commission retention and recruitment strategies to secure a world-class workforce.

FY 2020 Results. In FY 2020, the Commission continued efforts to re-launch entry and exit surveys to assess employee experiences as they separate from the Commission. These surveys will capture employees' experiences as they navigated the recruitment process and entered on duty to the Commission and their overall employment experience with FERC.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to administer the surveys to collect and analyze employee survey data which will provide a baseline and determine how to best

address the needs of its workforce. This data will help determine the underlying workplace climate changes in employee attitudes. If necessary, staff will refine the surveys to ensure the data collected will provide the necessary information to develop long-term strategies to deploy programs to retain employees and develop innovative strategies to on-board them.

OPTIMIZING INVESTMENTS TO SUPPORT PRODUCTIVITY GAINS AND SAFEGUARD ASSETS

The Commission makes informed investments to equip employees, support their productivity, and ensure their safety and security.

EMPLOYEE SAFETY AND SECURITY

Overview. People are the Commission's greatest asset and the responsibility to protect staff is taken very seriously. The Commission continues to develop a mature and integrated protective operations program to ensure the security and safety of the Chairman, Commissioners, and Commission staff while they are conducting Commission activities throughout the United States. Additionally, the Commission has developed an Occupational Safety and Health Administration (OSHA)-Compliant Safety Program that identifies and addresses hazards facing FERC staff. The program also offers guidance to help employees ensure their own safety at work.

FY 2020 Results. In FY 2020, the Commission completed the full staffing and management of its protective operations program, by developing increased capability of its insider threat program, finalizing the executive protection team with the creation of a mission support specialist to provide oversight and information prior to deployments and the roll-out of a continuous evaluation program to monitor all clearance holders throughout the Commission. Additionally, the Commission finalized and formalized the job safety analysis program which has been adopted and implemented across the Commission to help mitigate risk and protect employees from workplace hazards across all Commission activities. The safety program was subsequently expanded to include mission travel risk assessments related to COVID-19.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will continue to grow its protective operations efforts by increasing liaison with the National Insider Threat Task Force and oversee the outreach efforts of FERC program offices providing regulated entities with best practices in establishing insider threat programs. Through the Occupational Safety and Health Program, the Commission will identify and finalize pandemic response planning to include deployment, sustainment, and reconstitution activities affecting all statutory responsibilities of the Commission. Additionally, the FERC's Occupational Safety and Health program will pursue International Organization for Standardization certification and inclusion in OSHA's Voluntary Protection Program.

KNOWLEDGE MANAGEMENT AND COLLABORATION TOOLS

Overview. The Commission deploys knowledge management and collaboration tools that help employees work together more effectively. This includes work with specific IT tools and applications and exploring new software functionalities to strengthen work processes. These tools also provide for a flexible and supportive work environment for Commission employees.

FY 2020 Results. In FY 2020, the Commission continued to integrate collaboration tools and add capabilities by refreshing its desktop sharing, communications video and telephony tools. Additionally, the continued enhancements to existing capabilities for knowledge management and collaboration were implemented to support additional SharePoint sites for internal collaboration and communications for mission-essential functions. The Commission deployed cloud-based web conferencing technologies to support real-time presentations, information sharing, and tele-conferencing services to support Commission meetings and technical conferences. These enhancements ensured Commission responsibilities continued to be executed seamlessly throughout the COVID-19 pandemic.

FYs 2021 and 2022 Planned Results. In FY 2021, the Commission expects to fully migrate its primary collaboration and communication platforms from an on-premise to a cloud solution that will replace an obsolete product and implement capabilities of the cloud environment. In FYs 2021 and 2022, the Commission will continue to modernize related mission applications, bolster Privacy and Rehabilitation Act Section 508 compliance programs, training, and technologies for staff, on top of the continued expansion of FERC's internal and external facing collaboration tools.

PERFORMANCE MEASURES

Commission staff will use the following measures to assess performance in Objective 3.1. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: OPERATIONAL EFFECTIVENESS MEASURES

Overview. FERC will use three measures to assess the operational effectiveness of the agency. The three measures represent key results for FERC's support functions. The measures are intended to enhance accountability, ownership, and engagement with and across the support functions.

1. The extent to which employees are engaged and equipped to perform their jobs to the best of their ability (People Measure)
2. The % of dollars appropriated that have been obligated (Dollars Measure)
3. The degree to which internal services meet employee and organizational needs (Quality Measure)

The People measure assesses the degree to which Commission employees are engaged. To gauge this, the Commission leverages the FEVS, administered annually by the Office of Personnel Management. OPM defines engagement as "an employee's sense of purpose that is evident in their display of dedication, persistence and

effort in their work or overall attachment to their organization and its mission." FERC's support functions work to equip employees and enable employee engagement, which is critical to ensuring that employees contribute and perform at their optimal levels. Thus, the People measure is a key result for the support functions.

The Dollars measure captures how well FERC utilizes its resources. The Commission's support functions provide oversight, guidance, and efficient processes and procedures that help FERC develop appropriate resource requirements and utilize agency resources accordingly. The measure looks at whether the dollars appropriated by Congress were obligated in a timely manner in a given fiscal year. Thus, the Dollars measure is a key result for the support functions.

The Quality measure assesses the satisfaction of FERC employees and agency leaders with the services provided internally by the support functions. These services range from capital planning processes and IT support to benefits counseling and special emphasis programs. Collectively, these services meet employee needs and equip them to perform effectively and achieve FERC's mission. To gauge this, the Commission leverages an internal survey. The Quality measure provides a high-level indication of how responsive the FERC support functions are to the needs of the offices and employees in developing and delivering internal services. Thus, the Quality measure is a key result for the support functions.

The People, Dollars, and Quality measures each capture a key result for the FERC support functions. Together they provide a comprehensive picture of performance and contribution of those functions in managing agency resources effectively through an engaged workforce.

Targets and Actual Results Tables

People Measure: The extent to which employees are engaged and equipped to perform their jobs to the best of their ability							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
78%	81%	82%	82%	80%	86%	80%	80%
FY 2020 Target: Met							

The measure is based on 19 questions from the FEVS, 15 questions of which OPM uses to define the Employee Engagement Index, plus four additional FERC-specific questions that are important to the Commission's specific employee engagement goals and overall success. Note that for the 2020 survey, OPM eliminated two of the questions included in the Commission's People Measure. The two questions are relative to employees having sufficient resources which enable them to perform their job and whether physical conditions allow employees to perform their jobs well. As these two questions were not included on the 2020 FEVS, this year's People Measure is an average of 17 questions instead of the aforementioned 19 questions. The reported result is an average of the percent of favorable (i.e., positive) ratings across all respondents for each item. Higher percentages are an indication of greater employee satisfaction with those factors.

FY 2020 Results. The actions taken related to the People Measure in FY 2020 include analysis of the FEVS data at the Commission-level and communicating the results Commission-wide. Since OPM started releasing the FEVS results in February 2021, the Commission is still processing its full analysis of the results at the office, division, and regional office levels. Upon completion of its analysis, the Commission will present the FEVS results via webinar to all employees. Additionally, the Commission will conduct training sessions for its supervisors to provide tools and information necessary to sustain and increase employee engagement. Commission leadership will also share their respective organization's results with their employees and hold discussions with them regarding strengths and challenges, as identified by the FEVS. Based on the employees' collective feedback from their office, leadership will implement those action items to improve employee engagement factors. Such efforts should contribute to the Commission maintaining or improving its key measures in future years.

FYs 2021 and 2022 Planned Results. The Commission will continue to analyze employee feedback and continue to develop or improve identified actions necessary to increase employee engagement and overall job satisfaction. The Commission will continue to provide supervisors with consultation on their action planning to continue to sustain or improve the Commission's level of employee engagement.

Monitoring Risk Factors. An internal and external risk factor that could significantly impact the achievement of the People target is the Commission's mandated building modernization efforts. The modernization of the headquarters building has the potential to impact staff's perception of their work environment due to the level of effort, and the external risk of uncertainty in the schedule for later phases of the project as the timing of annual appropriation decisions are beyond the control of the Commission. The Commission will continuously monitor the potential of these risks and will factor in contingency within the project's schedule.

Dollar Measure: Percentage of dollars appropriated that have been obligated							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
97%	97%	98%	99%	98%	98%	98%	98%
FY 2020 Target: Met							

The measure is based on the Commission's obligation rate of appropriated dollars available in a given fiscal year. Excluded from the calculation are funding received for building modernization, obligations associated with building modernization, and prior year unobligated funding used to offset a future fiscal year budget request. The greater the percentage of appropriated dollars obligated, the more effective and efficient FERC is at using its financial resources to execute its mission. The targets are considered a minimum threshold for performance. Results below the targets will serve as an alert system that provides FERC an indication that issues may have arisen regarding execution of its financial resources.

FY 2020 Results. In FY 2020, the Commission implemented a budget execution plan that focused on routine program office engagement to confirm current year requirements in a timely fashion. The plan was flexible enough to allow for the shifting of resources to meet new and unanticipated urgent requirements. The Commission further enhanced its acquisition processes and re-organized the organization structure of the acquisition team to place a renewed focus on requirement preparation, which led to improved acquisition process efficiencies. These actions helped ensure requirements were executed in a timely fashion and ensured acquisition purchases were comprehensive and met the full needs of the Commission. The Commission also implemented an aggressive hiring strategy, ensuring the Commission had the necessary resources and skill sets it needed to the meet its mission.

FYs 2021 and 2022 Planned Results. Moving forward, the Commission will continue to improve its acquisition and budget execution processes. The Commission will implement technologies designed to streamline financial management processes which will lead to improved budget execution. The Commission will also enhance its financial management reporting capabilities, providing Commission staff with timely and essential information necessary to make critical decisions regarding execution activities. The Commission will also continue to enhance its hiring strategies and processes ensuring program offices have the resources they need to successfully meet their goals and objectives.

Monitoring Risk Factors. An external factor that could impact the achievement of the established target is an unplanned and unfunded mandate requiring execution. An unplanned and/or unfunded mandate would require modifications to the current execution plan and delay execution of planned requirements, which could impact the overall obligational execution rate.

Quality Measure: The degree to which internal services meet employee and organizational needs

FY 2016 Actual	FY 2017 Actual	FY 2018 Actual	FY 2019 Actual	FY 2020 Target	FY 2020 Actual	FY 2021 Target	FY 2022 Target
68%	78%	82%	79%	80%	88%	82%	82%

FY 2020 Target: Met

The measure captures employee satisfaction ratings of 22 different internal support services. Each service receives a result of percent positive responses, which allows specific program managers to assess their program's responsiveness and take follow up actions, as needed. The consolidated measure is reported as an aggregated average. Higher percentages are an indication of greater satisfaction, overall, with the assessed support services.

FY 2020 Results. In FY 2019, the survey results indicated a majority of the support services had positive customer satisfaction scores. The results were impacted by additional risk factors for several IT support service areas. During FY 2019, the Commission began multiple IT systems modernization projects which were further

impacted by higher than average IT staff turnover due to the shortage of qualified staff and the increased pace of technology development.

During FY 2019, service owners were provided with an interactive dashboard to help facilitate the evaluation of the information provided from staff and senior leaders within the Commission. The dashboard provided historical trends for each service attribute and their correlation to the survey results. Service owners developed and began implementing actions to increase customer satisfaction across the support services.

FYs 2021 and 2022 Planned Results. The Commission will continue to implement the identified actions to ensure mission critical initiatives and operational tasks are successfully executed with a focus on constant and consistent quality customer service. Continuing to deliver consistent and reliable customer service will support the achievement of the targeted levels of performance across all service areas. Staff will continue to capitalize on opportunities to maximize training efforts and successfully execute a training plan to maintain professional certifications which will address customer service requirements in creative and innovative ways. In addition, program managers will continue to solicit feedback through Customer Engagement Forums providing an open exchange of opinions to strengthen internal support and continue to build internal coalitions to facilitate and meet performance goals.

Monitoring Risk Factors. FERC expects that several external risk factors have the potential to significantly affect the achievement of the targeted performance levels, particularly the shortage of qualified staff and the pace of technology development. In addition, internal risk factors, which include unforeseen changes in the agency's priorities, could also potentially make it more difficult for FERC's support service areas to meet the agency's needs. The Commission will continue to track, monitor and mitigate these and other risk factors and address them as needed.

OBJECTIVE 3.2: FACILITATE PUBLIC TRUST AND UNDERSTANDING OF COMMISSION ACTIVITIES BY PROMOTING TRANSPARENCY, OPEN COMMUNICATION, AND A HIGH STANDARD OF ETHICS.

Public trust is the backbone of federal service. Numerous laws guide the Commission's efforts to maintain this public trust, including the Government in the Sunshine Act, Ethics in Government Act, financial disclosure laws and the Freedom of Information Act (FOIA). Maintaining this public trust and facilitating understanding of how the Commission carries out its responsibilities are important components of the Commission's commitment to organizational excellence.

The Commission achieves this objective by maintaining processes and public information services that promote transparency and open communication with respect to the conduct of the Commission's business. FERC's proactive communication, along with an online document repository and timely responses to inquiries, fosters awareness and understanding of the Commission's activities.

The Commission also advances this objective by maintaining internal processes and services that ensure adherence to statutes, regulations, and self-imposed standards. In addition, FERC provides training and guidance to promote an ethically informed workforce. These activities further encourage public confidence in the Commission's activities and ability to fulfill its responsibilities.

STRATEGIC CHALLENGES

In its FY 2018–2022 Strategic Plan, the Commission committed to addressing challenges and opportunities that are likely to have a significant impact on the achievement of Objective 3.2. The status of this Strategic Challenge and the Commission's responsive actions are included below.

STRATEGIC CHALLENGE: GREATER PUBLIC INTEREST IN REGULATORY ISSUES

Overview. Greater public interest in and concern about issues that are or may come before the Commission are creating the need for more dynamic engagement processes with the public.

FY 2020 Results. The demands of having to work remotely due to the COVID-19 pandemic required many adjustments in how FERC communicated with the public. Yet, meeting those challenges provided the Commission with experience that will assist with outreach efforts in the years ahead.

In the third quarter of FY 2020, the Commission completed its extensive work to rebuild and redesign FERC.gov to make it more user friendly, and to improve transparency and accessibility of the large amount of complex information it contains. With the launch of the Commission's Landowner information page and completion of the FERC.gov redesign project, the Commission now has an updated, streamlined and easy-to-access presence on the web. This modernization project improves the Commission's compliance with the Americans with Disabilities Act and the Rehabilitation Act Section 508 guidelines and enhances accessibility for all site users and stakeholders while providing more information and clarity for engagement by landowners. The modernized design means that FERC is able to more quickly post important news and other items to the site, and that individual Commissioners now have the ability to control what goes on their individual pages. Further, that the site is housed "in the cloud" means that it will have improved stability. The ability to quickly and easily make design changes on the FERC.gov site enhances the Commission's ability to adjust its message to meet any demand and occasion and to quickly highlight new initiatives of interest to the public. Finally, the new website's compatibility with handheld devices, including smartphones and tablets, makes FERC much more accessible to the public than ever before. This rebuild and redesign of FERC.gov completes the Commission's work to address GAO concerns that the Commission's website was not accessible to the general public and difficult to navigate.

The Commission also expanded its reach and improved the quality of its various videos and podcasts to expand their relevance and interest to stakeholders. The Commission produced several podcasts using web-based communications and calls, casting a wider net of FERC staff interviews to explain how the Commission acted in response to the COVID-19 pandemic and to explain the high points of the 2020 Summer Market and Reliability Assessment. The Commission's use of the podcast and the Instagram Q&A option for the 2020 Summer

Market and Reliability Assessment laid the groundwork for future expansion of social media for all its work products. The Commission's expansion of the podcast to include more staff-level discussion also has expanded the options for communicating the Commission's actions to the public.

These efforts carried over to the Commission's social media postings, which improved in sophistication over the past year. The Commission's efforts to find new ways to engage the public through social media postings included engaging its Instagram audience with an "Ask Me Anything" session on the 2020 Summer Market and Reliability Assessment. FERC continues to evaluate and improve its social media outreach by adjusting its strategies on various platforms and improving its understanding of how best to publicize its activities. For instance, a successful experiment with using the Instagram TV application (IGTV) for podcasts is showing promise with regard to expanding visibility of these products. Commission staff also sought verification for its official accounts by Twitter and Instagram, further elevating FERC's status, tools and reach. The Commission has ramped up its efforts to use these platforms as educational and dialogue inspiring tools, interactive platforms for the public and means by which announcements are made.

And, after a full year of the Commission's publication of its new monthly newsletter, which provides a one-stop repository of all Commission actions over the previous month, FERC has improved its outreach and educational efforts to extend to more than 2,000 stakeholders.

FYs 2021 and 2022 Planned Results. These outreach efforts aim to better educate, inform and equip the public on how to more effectively engage with the Commission on various matters. The number of podcasts and videos will continue to fluctuate depending on the number of actions/news items generated by the Commission, which requires continual adaptability on the part of FERC staff. FERC plans to expand its use of IGTV to further spread its messages using its expanding capabilities with audio and video products.

In December 2020, Congress directed the Commission to provide a report, by June 25, 2021, detailing its progress towards establishing the Office of Public Participation (OPP). Section 319 of the FPA directs the Commission to establish the OPP to "coordinate assistance to the public with respect to authorities exercised by the Commission," including assistance to those seeking to intervene in Commission proceedings. (16 U.S.C. § 825q–1). In March 2021, the Commission held multiple listening sessions to give members of the public an opportunity to provide their thoughts and ideas on how the Commission should create the OPP to encourage and facilitate public participation. In addition, the Commission held a workshop in April 2021 to provide interested parties with the opportunity to provide input to the Commission on the creation of the OPP and to hear input on the office's function and scope as authorized by section 319 of the FPA; the office's organizational structure and approach, including the use of equity assessment tools; participation by tribes, environmental justice communities, and other affected individuals and communities, including those who have not historically participated before the Commission; and intervenor compensation. The Commission is analyzing all of the feedback received during the listening sessions and workshop as it develops the program requirements for submission of the report to Congress in June. Further, the Commission will begin to staff critical positions in FY 2021 and build out the necessary support throughout FY 2022.

Finally, the Commission will communicate often and proactively with members of Congress on Commission issuances that are of interest to their constituents. Based on these actions and the Commission's continuing efforts to be as transparent as possible, the Commission expects to see a continuation of increased engagement with and attention from the public along with an improved understanding of FERC's processes and actions. It also anticipates these efforts will strengthen relationships with interested stakeholders, including the public and members of Congress.

Monitoring Risk Factors. A number of risk factors could impact the strategic response over the next two years, including diverse stakeholder groups with varying access to technology and communication systems, tailoring messages to distinct stakeholder groups, and the fast pace of change in the energy sector, among other external factors. FERC expects that these factors will continue to be relevant over the next two years and will continue to take them into account while implementing its responsive actions.

CORE FUNCTIONS

In addition to being responsive to this strategic issue, FERC carries out its responsibilities in this objective through two core functions. Each core function is driven by discrete sets of inputs, operations, and outputs to deliver impact.

CORE FUNCTION 3.2.1: DEVELOP AND MAINTAIN INTERNAL PROCESSES AND SERVICES THAT PROMOTE HIGH STANDARDS OF ETHICS.

To ensure public trust in the exercise of FERC's regulatory authority, the Commission promotes and demonstrates a high standard of ethics.

The Commission develops and maintains processes to ensure that the activities of its employees conform to statutes and regulations relating to the standards of conduct for employees of the executive branch. FERC demonstrates a high commitment to the standards of conduct by providing innovative annual ethics training to all Commission employees, by providing timely and thorough guidance in response to all inquiries and issues, and by ensuring the timely completion, submission, and review of required financial disclosure forms. This commitment creates a high level of public trust and confidence that enables FERC to carry out its mission effectively and efficiently.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Implement the Commission's ethics training
- Address ethics-related questions and issues
- Manage financial disclosures

IMPLEMENT THE COMMISSION'S ETHICS TRAINING

Overview. The Commission's ethics program promotes the highest standards of ethical conduct. Commission ethics staff provides mandatory initial training to all new employees and annual ethics training to all Commission employees. Ethics staff receives regular training to stay abreast of the ethics requirements and any changes thereto. Ethics staff ensures training is compliant with regulatory requirements while also tailoring the content to respond to recent trends and developments. This helps ensure the training remains relevant and impactful.

FY 2020 Results. In FY 2020, the Commission's ethics staff provided annual ethics training to all Commission employees, which exceeds the Office of Government Ethics (OGE) requirements that annual training minimally be provided to all financial disclosure filers (typically, employees GS-14 and above are required to file financial disclosure forms).[13]

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will provide ethics training to all staff that meets or exceeds OGE's requirements. The Commission will continue to tailor training to address emerging trends and developments.

ADDRESS ETHICS-RELATED QUESTIONS AND ISSUES

Overview. The Commission ethics staff serves as a critical resource to Commission staff to ensure compliance with OGE regulations. The ethics staff responds to questions and identifies issues and performs a thorough review of relevant facts, applicable ethics laws or standards to promote a culture of trust and integrity.

FY 2020 Results. In FY 2020, ethics staff responded to approximately 1,817 ethics-related questions, typically addressing all in a timely manner. Questions generally cover outside activities, seeking employment, post-employment, financial disclosure review and prohibited financial holdings. Although the complexity of each question varies, they typically require substantive analysis of applicable ethics rules and regulations.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022 the Commission expects to receive a similar number of questions and will continue to respond to all in a timely manner.

MANAGE FINANCIAL DISCLOSURES

Overview. The Commission's ethics staff manages and reviews all confidential financial disclosure reports for employees who are typically GS-14 and above and all public financial disclosure reports for Senate confirmed Presidential appointees, Administrative Law Judges, the Senior Executive Service, and senior level employees. The disclosures are reviewed for completeness and to detect and resolve any conflicts of interest or other

[13] For more information on the General Schedule, see: https://www.opm.gov/policy-data-oversight/pay-leave/pay-systems/general-schedule/

concerns stemming from an employee's financial interests, covered outside activities, and their work at the Commission.

FY 2020 Results. In FY 2020, the Commission's ethics staff reviewed approximately 163 public and 724 confidential financial disclosures. This represented approximately 53% of Commission employees. The Commission currently uses OGE's Integrity system to manage the public financial disclosure reports and, as of January 2020, uses the FDOnline system to manage the confidential financial disclosure reports.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022 the Commission will continue to review all financial disclosures submitted by staff. The number of disclosures is expected to remain steady.

CORE FUNCTION 3.2.2: MAINTAIN PROCESSES AND PUBLIC INFORMATION SERVICES IN ACCORDANCE WITH THE PRINCIPLES OF TRANSPARENCY AND OPEN COMMUNICATION.

The Commission demonstrates its commitment to transparency and open communication in many ways, including its eLibrary document repository, electronic filing and subscription, its website, and direct communications with Congress, the states, and the news media, as well as the creative use of social media to share information from the Commission with larger and more diverse audiences.

Commission decisions and the Commission rulemaking processes are supported through open communication and are stored in eLibrary, FERC's online records repository. Moreover, the Commission announces its open meetings with notices that list matters that the Commission will discuss. FERC also issues a bi-weekly public notice to make the public aware of any off-the-record communications to Commission staff that could influence the Commission's decision-making process.

Commission transparency is also supported by timely responses to information requests and proactive communication with stakeholders. Commission staff frequently addresses questions from Congress and other government agencies, state agencies and regulators, the international community, and the media and the public at large. The Commission pursues proactive engagement with regulated entities and other interested stakeholders. This includes educating the public and stakeholders about the agency's mission, role, direction, and policy.

The past and planned results for this core function, described below, are organized by the areas of impact to most clearly articulate the work the Commission undertakes and the value it yields:

- Support transparency and efficiency regarding FERC rulemakings, notices, and issuance of orders
- Educate and inform public understanding about FERC
- Engage with Congress, state regulators, and international regulatory agencies
- Respond to FOIA and Critical Energy/Electric Infrastructure Information (CEII) requests

SUPPORT TRANSPARENCY AND EFFICIENCY REGARDING COMMISSION RULEMAKINGS, NOTICES, AND ISSUANCE OF ORDERS

Overview. The Commission's public eLibrary, accessible on FERC.gov, provides extensive access to submissions made to and issuances posted by the Commission. The Commission publicly notices all filings, orders, and Off-the-Record (*ex parte*) Communication in a timely and accurate manner to keep the public up to date on Commission decisions and activities. This serves two purposes: it ensures the public is aware of and can respond to Commission issuances and maintains transparency around *ex parte* communications to strengthen Commission accountability and build public trust.

In addition, the Commission works to maintain and improve its filing procedures so that staff can quickly review and respond to incoming documents, promoting efficient information exchange within the agency and to external stakeholders.

FY 2020 Results. The demands of having to work remotely due to the COVID-19 pandemic required many adjustments in how FERC processed incoming submissions and Commission issuances. As a result, the Commission developed and implemented processes that allow the Commission to be more agile in its processing of all filings and issuances, thereby fostering even greater transparency and public trust. During FY 2020, the Commission received 70,252 filings from external constituents, approximately the same number of submissions filed in FY 2019. All filings were processed and published in the eLibrary records repository. Approximately 90% of FY 2020 filings were received electronically—compared to an average of 75% over the last 10 years and 84.3% in FY 2019—reflecting the Commission's ongoing effort to reduce its reliance on paper filings.

The Commission issued 1,140 Commission voted orders and 7,185 delegated orders in FY 2020. Staff additionally published 7,620 public notices on eLibrary, 23 of which included *ex parte* public notices. These 23 public notices included approximately 1,511 prohibited/exempt communications. Commission staff assessed each of these instances to determine whether the communications were prohibited or exempt, then published the communications to eLibrary on a biweekly basis. Overall in FY 2020, Commission staff published 21,025 issuances to FERC's document repository, eLibrary.

Further supporting its transparency efforts, the Commission posted 100% of time-sensitive Commission actions to the FERC.gov website within one hour of the official actions being taken. Timely posting of announcements to the FERC website ensures that all related social media posts that follow can provide links for the public to FERC.gov for pertinent information, improving the transparency of FERC actions to the public.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission does not foresee any anomalous conditions and therefore expects a workload that is in keeping with the trend over the last few years. The Commission plans to improve FERC's online applications systems—including its electronic filing system and eLibrary data repository—to improve the reliability and efficiency of its services.

EDUCATE AND INFORM PUBLIC UNDERSTANDING ABOUT FERC

Overview. Commission staff leverages traditional and social media platforms to quickly communicate about Commission actions and educate stakeholders about Commission processes. To this end, Commission staff:

- Publishes press releases and publicizes Commission-issued Orders on FERC.gov, providing detailed background materials to help stakeholders understand their context and reasoning.
- Publishes educational materials about FERC, its policies, and its procedures to FERC.gov, YouTube, and social media accounts. This includes developing videos and short podcasts that illustrate FERC's work and operations in an engaging and accessible manner.
- Responds to inquiries and requests for information from the public.
- Manages Commission Facebook, Twitter, LinkedIn, and Instagram accounts to quickly and broadly inform the public about Commission work.

FY 2020 Results. In FY 2020, Commission staff responded to 5,604 inquiries from the general public, averaging almost 470 inquiries per month. Staff addressed all requests within three business days.

Regarding the Commission's social media presence, the number of followers across all accounts surpassed 40,000, with most of this growth on Twitter; which now has more than 26,000 followers. Across all platforms, FERC's increasingly sophisticated use of social media content has significantly expanded its page views and engagements by its audiences.

FYs 2021 and 2022 Planned Results. For FYs 2021 and 2022, the Commission expects to meet or exceed FY 2020's level of communication with members of the public. These goals, however, are dependent on many variables including overall issuances from the Commission and activity by the Commission in the public realm.

The Commission also will continue to publish educational materials and manage its social media platforms, continuing to adapt its outreach strategies to leverage new technologies, and respond to changing stakeholder needs. For example, the Commission will make regular postings on social media platforms and incorporate more photographs and video content. With these efforts, the Commission expects that its social media following and engagements with the public will increase in both FYs 2021 and 2022. The Commission also anticipates the size and breadth of followers will continue to grow and evolve with FERC's increased social media presence, use of new tools and technologies, and more frequent posting with diverse content.

ENGAGE WITH CONGRESS, STATE REGULATORS, AND INTERNATIONAL REGULATORY AGENCIES

Overview. The Commission emphasizes open and effective communication with Congress, state and international regulators and policymakers, and other officials. To this end, the Commission responds to congressional inquiries in a timely and transparent manner, notifies state regulators and other officials of pertinent Commission actions, and, when appropriate, briefs congressional staff or state officials on major Commission decisions. The Commission also testifies before Congress, as needed.

The Commission hosts visits from foreign countries; attends meetings with regulatory counterparts in Mexico, Canada, Europe and Asia; and, upon request, provides assistance to sister agencies such as the Departments of State and Commerce. These activities facilitate information exchange and best practice sharing among regulators and contributes to the overall strength of international regulatory efforts.

FY 2020 Results. In FY 2020, the Commission received and responded to 171 congressional inquiries, compiling and providing all requested information in a timely manner. Commission staff additionally:

- Hosted a FERC 101 training for new congressional staff, engaging 110 participants, which reflects an ongoing trend of increasing attendance
- Held 25 in-depth briefings on important Commission initiatives for state officials
- On average, sent out 11 notifications of Commission actions per month to over 800 state contacts
- Actively participated in over 15 visits from foreign delegations
- Held digital video conferences with India; and
- Finalized a Memorandum of Understanding with Canada.

Although the onset of the COVID-19 pandemic limited the Commission's ability to host in-person visits from foreign delegations and engage in international travel, the Commission continues to respond to requests for information and utilizes digital platforms to engage our international partners.

FYs 2021 and 2022 Planned Results. In FYs 2021 and 2022, the Commission will proactively offer briefings to Congressional staffers on areas of interest and major rulemakings and orders and continue to respond to all Congressional inquiries promptly and openly.

In FYs 2021 and 2022, staff expects to meet or exceed FY 2020 levels of communication with state officials and expand outreach to additional associations.

Commission staff also will continue to build relationships with international regulatory agencies, continue to attend meetings with regulatory counterparts in Mexico, Canada, Europe, and Asia and provide assistance to sister federal agencies upon request.

RESPOND TO FOIA AND CEII REQUESTS

Overview. The public typically requests information from the Commission through the FOIA process and the CEII process. Commission staff aims to respond to 85% of FOIA requests within the statutory time frame of 20 business days (10 business days for expedited requests). Upon receipt of a FOIA request, Commission staff searches non-public files for responsive documents, and determines whether all or part of a document may be withheld under one or more of the nine FOIA exemptions.

Staff will respond to requests for CEII according to the timing required for responses under the FOIA. Upon receipt of a request for CEII, Commission staff will (1) notify the original owner of the information of the fact that the information has been requested, if applicable; (2) determine whether the information is CEII; (3)

determine if it is a legitimate request and a valid need for the information; and (4) determine whether to release CEII subject to a non-disclosure agreement.

FY 2020 Results. In FY 2020, the Commission processed approximately 78 FOIA requests and 26 CEII requests, responding to all requests it received.

FYs 2021 and 2022 Planned Results. Commission staff will continue to process FOIA and CEII requests within the required timeframes. The Commission cannot predict the number of FOIA and CEII requests it will receive in future years. At this time, the Commission does not anticipate a significant change in the number of requests.

PERFORMANCE MEASURES

Commission staff will use the following measures to assess performance in Objective 3.2. The result of this measure will be used in combination with other data and supplemental information to establish a more complete picture of performance on this objective.

PERFORMANCE MEASURE: THE PERCENT OF COMMISSION FILINGS AND ISSUANCES THAT ARE DISSEMINATED TO THE PUBLIC WITHIN ESTABLISHED TIMEFRAMES

Overview. This measure serves as an indicator of FERC's effectiveness in providing timely access to documentation associated with a proceeding, an application, other FERC action, or filer request. As such, the measure reinforces FERC's commitment to transparency by making documents readily and quickly available to all interested parties. By providing timely access to documents, FERC builds public trust and reinforces its ethical stance.

The measure demonstrates FERC's commitment to open communications. Just as FERC mandates that applicants, intervenors, and other filing parties adhere to published timeframes, by this performance measure FERC shows that the Commission holds itself accountable to like standards.

The results will help FERC determine if software applications, business procedures, and staff/contractor capabilities adequately support the performance goal. Where a performance trend indicates less than optimal results, FERC will initiate a business analysis to identify points of weakness. Those points will be strengthened through training, application upgrades, or revision in operational procedures.

Targets and Actual Results Table

The percentage of Commission filings and issuances that are disseminated to the public within established timeframes							
FY 2016 Actual	**FY 2017 Actual**	**FY 2018 Actual**	**FY 2019 Actual**	**FY 2020 Target**	**FY 2020 Actual**	**FY 2021 Target**	**FY 2022 Target**
93%	94%	99%	98%	98%	99%	98%	98%
FY 2020 Target: Met							

The measure looks at individual filings, including both submissions (externally created) and issuances (internally created). All documents submitted as official filings intended for publication in the Commission's public data repository (eLibrary) are included with the exception of eTariff filings that are published within minutes and eForms that do not contribute to a proceeding. The measure looks at whether the time between the first receipt of a filing and its appearance in eLibrary is within the established timeframe for that type of filing. Since the result is an indication of timeliness, the greater the percentage of filings that meet their timeframe the better.

Although the targets for this measure are considered minimum thresholds for performance, it is likely that the results are near a practical maximum since there will always be anomalous situations which prevent a 100% achievement. Having reached a maximum, future results may show steady or a minor decrease in performance. The measure will thus serve as an alert system that provides FERC an indication that issues may have arisen in the publication of filings.

FY 2020 Results. A review of FERC submissions and issuances metrics for FY 2020 continue to show a stable trend towards the public's use of agency applications such as eLibrary, eFiling, eTariff, and eForms while FERC itself relies on the electronic publication of FERC issuances. Feedback related to conducting business with FERC using these applications is generally positive but FERC Online applications are widely regarded as needing user interface updates and greater reliability for an increasingly web- and IT-savvy public.

FYs 2021 and 2022 Planned Results. To address these needed updates, FERC continues to invest in electronic solutions that will streamline FERC business processes and make searching for a filing or issuance an enjoyable and intuitive experience. As the FERC Online applications are improved and show greater utility to the public during FYs 2020 and 2021, it is FERC's goal to further reduce paper submissions delivered to FERC while maximizing the number of filings that can be electronically submitted. Investing in enhancing the FERC Online applications means a better, faster, easier, and less labor-intensive service to a public that is increasingly comfortable conducting business with FERC via the internet.

Monitoring Risk Factors. There are few risk factors that impact this performance measure. Staff turnover could affect targets because of the myriad business processes involved and learning curve associated with these processes. System outages could also negatively impact the timeliness of posting items on eLibrary. Finally, in limited circumstances, some filings are submitted in hard copy directly to one of the Commission's regional offices. These filings must be mailed to the headquarters before they can be posted in eLibrary, which adds time to the process. The Commission actively monitors these risks and is confident in its abilities to mitigate the impacts if any are realized.

APPENDICES

APPENDIX A: REGULATORY AUTHORITY HISTORY AND OVERVIEW

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 undue 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, the Hydropower Regulatory Efficiency Act of 2013, and the America's Water Infrastructure Act of 2018. The Commission relies on these authorities to carry out its hydropower responsibilities, including: the issuance of preliminary permits; determinations regarding qualifying conduit facilities; the issuance of licenses for the construction and operation of new projects; the issuance of relicenses for existing projects; the investigation and assessment of headwater benefits; and the oversight of all ongoing project operations, including dam safety and security inspections, public safety, and environmental monitoring. While the Commission's responsibility under the FPA is to strike an appropriate balance among the many competing developmental and non-developmental (including environmental) interests, several other statutes affect hydropower regulation. These include, but are not limited to, NEPA, the Clean Water Act, the Coastal Zone Management Act, the Endangered Species Act, the Fish and Wildlife Coordination Act, and the 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 oversees the rates, terms and conditions of transportation and of certain sales for resale of natural gas in interstate commerce. The Commission is also responsible for determining fair and equitable rates for intrastate pipelines transporting or storing natural gas under section 311 of the Natural Gas Policy Act of 1978 (NGPA). The Commission's jurisdiction over sales for resale of natural gas is limited by the NGPA and the Natural Gas Wellhead Decontrol Act of 1989. Regulation of the production and gathering of natural gas, as well as retail sales and local distribution of natural gas, are matters left to the states.

OIL

The Interstate Commerce Act 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. EPAct2005 made three major changes to the Commission's civil penalty authority.

- 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.
- 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.
- Congress established the maximum civil penalty the Commission may assess under the NGA, NGPA, or Part II of the FPA as $1,000,000 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.

APPENDIX B: WORKLOAD TABLES

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Pipeline Certificates	P	R	C	P	R	C	P	R	C	P
Construction Activity	41	-	-	-	-	-	-	-	-	-
Prior Notice & Abandonments	10	-	-	-	-	-	-	-	-	-
Section 7c & Section 3 Applications	-	49	62	37	50	65	22	55	65	12
Section 7b Applications	-	9	6	6	12	13	5	13	13	5
Section 7f Applications	-	5	4	1	5	5	1	7	7	1
Prior Notice Applications	-	55	47	15	55	55	15	57	57	15
Annual Reports	0	373	373	0	400	400	0	400	400	0
Environmental Analysis	60	148	149	59	130	130	59	130	130	59
Pipeline & LNG Inspections	0	280	280	0	300	300	0	300	300	0
LNG Operational Inspections	0	15	15	0	17	17	0	18	18	0
Pre-filing	11	4	7	8	7	8	7	7	8	6
Rehearings	26	22	33	15	25	35	5	25	30	0
Complaints	1	0	0	1	0	1	0	0	0	0
Declaratory Orders	0	6	1	5	1	5	1	1	1	1
Remands	5	1	1	5	1	5	1	1	1	1
Dispute Resolution	22	93	105	10	100	105	5	100	100	5

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Hydropower Licensing	P	R	C	P	R	C	P	R	C	P
Original License Applications	13	3	2	14	5	5	14	5	5	14
Re-license Applications	72	27	17	82	34	25	91	54	30	115
10MW Exemptions	2	2	2	2	2	2	2	2	2	2
Preliminary Permit Applications	32	34	46	20	35	45	10	35	40	5
Environmental Analysis	-	21	22	21	30	25	26	40	35	31
Pre-filing	-	7	14	43	18	10	51	11	23	39
Rehearings	17	20	20	17	20	35	2	25	25	2
Declaratory Orders	11	1	8	4	1	4	1	1	1	1
Remands	1	0	0	1	1	1	1	1	1	1
Cases Set for Hearing	0	0	0	0	0	0	0	0	0	0
Dispute Resolution	2	1	1	2	1	2	1	1	1	1

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Project Compliance and Administration	P	R	C	P	R	C	P	R	C	P
Amendment Applications to Licenses/Exemptions	516	2,945	2,866	595	3,191	2,959	827	3,460	2,925	1,362
Non Project Use of Land & Water Applications	-	131	111	20	130	124	26	139	134	31
Section 23 Jurisdictional Determinations	3	5	4	4	7	5	6	11	7	10
Section 24 Federal Lands Determinations	5	19	23	1	26	25	2	28	27	3
Headwater Benefits Assessments & Bills	2	115	115	2	116	115	3	116	116	3
Compliance	171	-	-	-	-	-	-	-	-	-
Environmental Compliance Inquiries	-	53	47	6	50	46	10	54	58	6
Licensee Reported Deviations	-	742	517	225	539	570	194	535	548	181
Allegations of Non-Compliance	-	55	35	20	55	53	22	59	59	22
Surrenders, Transfers	40	-	-	-	-	-	-	-	-	-
Surrender Applications	-	16	5	11	17	14	14	29	15	28
Transfer Applications	-	30	16	14	29	29	14	39	37	16
Conduit Exemptions & Qualifying Conduit Exemption Applications	2	8	8	2	7	8	1	5	5	1
Environmental Inspections	-	7	7	0	70	70	0	80	80	0
Environmental Analysis	-	10	7	3	13	11	5	13	12	6
Rehearings	11	15	17	9	15	20	4	15	19	0
Complaints	1	4	5	0	1	1	0	1	1	0
Dispute Resolution	1	1	2	0	1	0	1	1	1	1

Key: P – Pending. R – Received. C – Completed.

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Dam Safety and Inspections	P	R	C	P	R	C	P	R	C	P
Operational Inspections	1,403	28	1,269	162	1,458	1,401	219	1,508	1,548	179
Prelicense Inspections	7	0	0	7	1	1	7	1	1	7
Construction Inspections	116	26	71	71	117	123	65	117	123	59
Exemption Inspections	123	5	106	22	174	140	56	126	176	6
Special Inspections	129	58	127	60	101	100	61	101	100	62
Evaluations	5,459	7,698	8,096	5,061	8,361	8,382	5,040	8,361	8,382	5,019
Part 12 Reviews	343	163	250	256	148	205	199	203	138	264
Dam Safety Reviews	10	58	47	21	31	42	10	31	41	0
Emergency Action Plan Tests	-	65	65	66	65	65	66	65	65	66
EAP Test – Functions	66	16	24	58	73	69	62	68	72	58
EAP Tests – Table Top	22	8	11	19	7	24	2	24	21	5

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Rates and Tariffs	P	R	C	P	R	C	P	R	C	P
Gas Certificates & Rate Evaluations	68	58	76	50	60	60	50	60	60	50
Market-Based Rates	1,194	2,806	2,553	1,447	2,800	3,110	1,137	2,600	2,800	937
Cogeneration/Small Power Producers (QF)	1,527	2,907	1,614	2,820	3,659	3,500	2,979	3,000	2,500	3,479
Dispute Resolution (Electric)	5	5	10	0	20	15	5	20	20	5
Rehearings (Electric)	351	168	180	339	160	180	319	160	180	299
Complaints (Electric)	49	26	22	53	35	45	43	35	45	33
Declaratory Orders (Electric)	18	23	16	25	20	25	20	20	25	15
Remands (Electric)	3	1	1	3	1	2	2	1	2	1
Negotiated Rates	35	675	715	-5	755	725	30	730	725	35
Cost-Based Rates	851	4,541	4,323	1,069	5,100	5,100	1,069	4,500	4,500	1,069
Dispute Resolution (Gas)	0	0	0	0	1	1	0	1	1	0
Rehearings (Gas)	30	18	16	32	18	20	30	18	20	28
Complaints (Gas)	3	4	3	4	3	4	3	3	4	2
Declaratory Orders (Gas)	1	12	6	7	10	8	9	8	8	9
Remands (Gas)	2	0	0	2	0	1	1	0	1	0
RTO and ISO Filings	27	127	147	7	250	250	7	250	250	7
Dispute Resolution (Oil)	0	2	2	0	1	1	0	1	1	0
Rehearings (Oil)	35	8	4	39	8	10	37	8	10	35
Complaints (Oil)	8	6	10	4	15	15	4	15	15	4
Declaratory Orders (Oil)	8	6	12	2	7	8	1	7	8	0
Remands (Oil)	1	0	1	0	1	1	0	1	1	0

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Corporate Applications	P	R	C	P	R	C	P	R	C	P
Interlocking Positions, Other Corporate Filings	97	593	620	70	635	660	45	635	660	20
Mergers, Acquisitions & Dispositions	43	112	104	51	140	160	31	155	170	16

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Electric Grid Reliability	P	R	C	P	R	C	P	R	C	P
Reliability Standards	132	37	55	44	44	48	40	42	59	23
Interpretations/Erratas of Reliability Standards	5	1	1	0	1	1	0	1	1	0
Reliability Filings by ERO/RE	49	6	6	3	6	9	0	3	3	0
Standards Compliance Audits	8	19	15	12	19	24	7	21	21	7
Notices of Penalty-Violations	207	1,474	1,480	201	1,250	1,300	151	1,250	1,300	101

	FY 2019 Actual	FY 2020 Actual			FY 2021 Estimate			FY 2022 Estimate		
Legal Matters	P	R	C	P	R	C	P	R	C	P
Cases Initiated and/or Set for Hearing	86	105	108	83	100	100	83	100	100	83
Settlement Judge Proceedings	58	89	87	60	80	80	60	80	80	60
Appellate Review	80	105	110	75	115	120	70	115	120	65
Audits	19	12	10	21	12	15	18	15	15	18
Accounting	59	435	441	53	425	430	48	425	425	48

Key: P – Pending. R – Received. C – Completed.

WORKLOAD TABLES UPDATES

The following changes were made to the FERC Workload Tables in FY 2019 to better capture and describe the Commission's workload. These changes affect the FY 2020 projections and beyond, submitted in the FY 2021 Congressional Justification:

PIPELINE CERTIFICATES

- Construction Activity was split into two distinct workload items: Section 7c & Section 3 Applications and Section 7f Applications
- Prior Notice & Abandonments were split into two distinct workload items: Prior Notice Applications & Section 7b Applications
- Compliance Filings & Reports were renamed Annual Reports, and calculated in the same manner
- Compliance & Safety Inspections were renamed Pipeline & LNG Inspections, and calculated in the same manner
- LNG Inspections were renamed LNG Operational Inspections, and calculated in the same manner
- Pre-filing was added as a new item to report

HYDROPOWER LICENSING

- Original Licenses were renamed Original License Applications, and calculated in the same manner
- Relicenses were renamed Relicense Applications, and calculated in the same manner
- 5MW Exemptions were renamed 10MW Exemptions, and calculated in the same manner
- Preliminary Permits were renamed Preliminary Permit Applications, and calculated in the same manner
- Environmental Analysis was added as a workload item
- Pre-filing was added as a workload item

PROJECT COMPLIANCE AND ADMINISTRATION

- Amendments were renamed Amendment Applications to License/Exemption, and calculated in the same manner
- Jurisdiction was renamed Section 23 Jurisdictional Determinations, and calculated in the same manner
- Federal Lands was renamed Section 24 Federal Lands Determinations, and calculated in the same manner
- Headwater Benefits was renamed Headwater Benefits Assessments & Bills, and calculated in the same manner
- Compliance was split into three distinct workload items: Environmental Compliance Inquiries, Licensee Reported Deviations, and Allegations of Non-Compliance

- Surrenders, Transfers were split into two distinct workload items: Surrender Applications and Transfer Applications
- Conduit Exemptions were renamed Conduit Exemptions & Qualifying Conduit Exemption Applications, and calculated in the same manner
- Environmental Inspections & Assistance split into two distinct workload items: Environmental Inspections and Environmental Analysis

DAM SAFETY AND INSPECTIONS

- Exemption Inspections were rolled into the calculation for Operational Inspections
- Engineering Evaluation & Studies was renamed Evaluations, and calculated in the same manner
- Dam Safety Reviews are no longer tracked
- EAP Test - Functions and EAP Tests - Table Top were rolled into Emergency Action Plan Tests

APPENDIX C: 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 2020 Annual Performance Report and FY 2021 Annual Performance Plan have been combined with its FY 2022 Congressional Performance Budget Request, referred to as the Congressional Justification, 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 2018 – 2022 Strategic Plan.

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.

APPENDIX D: ACRONYMS AND ABBREVIATIONS

Acronym	Description
ACE	Area Control Error
ALP	Alternative Licensing Process
CAISO	California Independent System Operator Corp.
CAP	Cross-Agency Priority
CEII	Critical Energy/Electric Infrastructure Information
CIP	Critical Infrastructure Protection
CISA	Cybersecurity and Infrastructure Security Agency
CyPRES	Cyber Planning for Response and Recovery Study
DCS	Disturbance Control Standard
DNA	Development Needs Assessment
EEI	Employee Engagement Index
EIA	U.S. Energy Information Administration
EIM	Energy Imbalance Market
EISA	Energy Independence and Security Act of 2007
EMP	Electromagnetic Pulse
EMS	Energy Management System
EPAct 2005	Energy Policy Act of 2005
EQR	Electric Quarterly Reports
ERM	Enterprise Risk Management
ERO	Electric Reliability Organization
FAST-41	Fixing America's Surface Transportation Act
FedRAMP	Federal Risk and Authorization Management Program
FERC; the Commission	Federal Energy Regulatory Commission
FEVS	Federal Employee Viewpoint Survey
FOIA	Freedom of Information Act
FPA	Federal Power Act
FPC	Federal Power Commission
FTE	Full-Time Equivalent
FY	Fiscal Year
GPRA	Government Performance and Results Act
GSA	General Services Administration
GSI	Global Satisfaction Index
HCOP	Human Capital Operating Plan
ICA	Interstate Commerce Act
IEMI	Intentional Electromagnetic Interference
IFRO	Interconnected Frequency Response Obligation
ILP	Integrated Licensing Process
IQ	Inclusion Quotient
ISO	Independent System Operator
ISO-NE	Independent System Operator New England, Inc.
IT	Information Technology
LEED	Leadership in Energy and Environmental Design

Acronym	Description
LNG	Liquefied Natural Gas
MISO	Midcontinent Independent Transmission System Operator, Inc.
MOU	Memorandum of Understanding
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
NOPR	Notice of Proposed Rulemaking
NSI	National Security Information
NYISO	New York Independent System Operator, Inc.
ODSP	Owner's Dam Safety Programs
OFD	One Federal Decision
OGE	Office of Government Ethics
OMB	Office of Management and Budget
OSC	Order to Show Cause
OSHA	Occupational Safety and Health Administration
OT	Operational Technology
PJM	PJM Interconnection, LLC
PPI-FG	Producer Price Index for Finished Goods
PURPA	Public Utility Regulatory Policies Act of 1978
ROE	Return on Equity
RTO	Regional Transmission Organization
SCIF	Sensitive Compartmentalized Information Facility
SPP	Southwest Power Pool
STEM	Science, Technology, Education, and Mathematics
TLP	Traditional Licensing Process
XBRL	eXtensible Business Reporting Language