

ANNUAL REPORT

2007





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FEDERAL ENERGY REGULATORY COMMISSION



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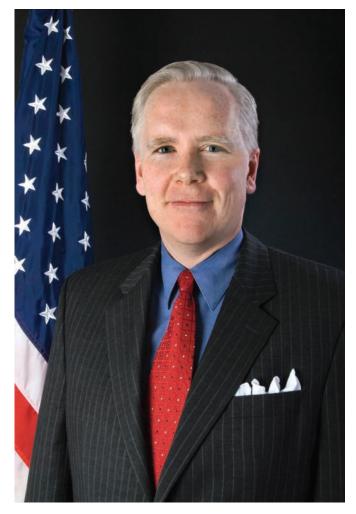
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am pleased to submit to the Congress the Federal Energy Regulatory Commission's annual report, covering the fiscal year from October 1, 2006, through September 30, 2007. This is the 87th Annual Report issued by the Commission and its predecessor, the Federal Power Commission.

This year saw the impacts of the dramatic shifts occurring in the nation's natural gas and electricity markets, both in the industries themselves and in the focus and activities of this Commission. These shifts, and the continuing evolution of the energy marketplace, create an important backdrop for the work FERC performed in Fiscal Year 2007. I am proud of our accomplishments, which are detailed throughout this report. Here, however, I would like to address the context in which this Commission conducts its business on behalf of American energy consumers.

The notion of a U.S. natural gas market is behind us; it has evolved into a North American market, with reliance upon Canadian imports to meet our needs, to become a truly international regime. North American gas production is inadequate to meet North American demand. U.S. gas producers have had impressive success in developing reserves in the lower 48 and domestic gas production has risen ten percent over the past two years. Yet production in some regions is declining. Overall, U.S. gas production is expected to remain relatively flat, while Canadian imports are projected to fall sharply at the same time that U.S. demand continues to increase.



The reality is that liquefied natural gas (LNG) is the fastest growing source of U.S. natural gas supply, and will remain so for the foreseeable future. Competition for LNG will be worldwide and vigorous, with European and the Asia-Pacific markets vying for LNG to fuel their energy-intensive economies. The U.S. can mitigate some of the volatility and price impacts by taking steps such as providing for adequate import capability, certificating sufficient natural gas pipeline facilities, and increasing natural gas storage.

Natural gas costs and supply arising from the changing market also will have a significant impact on U.S. electricity markets. To some extent, there is a growing convergence between natural gas and power markets. Natural gas has become the fuel of choice for newly-developed electric generation. Natural gas-fired generation benefits from operational flexibility, relatively short construction periods, lower emissions and, to date, relatively cost-effective fuel.

U.S. electricity markets continue to evolve, moving from localized centers to regional, and in some cases, North American trading. This changes how electricity is procured and how it is transmitted. Wholesale power markets—some organized, others characterized by bi-lateral contracting among parties—exist across the nation. Transmission, consequently, is moving from the equivalent of farm-to-market roads to superhighways.

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At the same time, the nation faces the challenge of determining how to secure electricity supply at a reasonable cost. Electricity demand continues to rise as our economy grows. There are a range of projections, but according to some estimates, the U.S. may have to add 230 gigawatts to its generating capacity over the next 15 years. Whether and how new generation is developed depends upon a number of factors, not least of which is whether and how the nation—or regions—will implement policies to curb greenhouse gas emissions. Demand response and energy efficiency also will play a role in meeting reliability and environmental needs, requiring close integration into the nation's market structures and transmission system.

Of course, the addition of generation must be accompanied by adequate transmission. Transmission systems in parts of the nation suffer from significant constraints. While the U.S. system is extensive, it has suffered from a sustained period of inadequate investment. The last sustained period of adequate investment in the U.S. power grid took place in the 1970s. However, we may have turned a corner. Transmission investment has nearly doubled in recent years, and a number of major backbone transmission projects have been proposed in several regions.

The above discussion provides the context in which FERC pursued our mission. FERC undertook these activities within the role and authorities determined by Congress. The U.S energy regulatory regime is federalist in nature and both federal and state regulators have important roles. Within the bounds set for it, FERC's actions play a significant role in implementing national energy policy and in ensuring reliable, reasonably-priced energy.

In FY 2007, the Commission focused on five core missions: Market Regulation, Energy Infrastructure, Safety, Reliability and Enforcement. Two of these missions—Enforcement and Reliability—are relatively new or expanded. In FY 2007, the Commission's implementation of these two missions matured, with significant actions taken in authorizing mandatory reliability standards, issuing penalties, and promulgating show cause orders for potential market manipulation. Each of these actions plays an important role in helping the nation meet the challenges ahead by ensuring the reliability of electricity supply, protecting consumers from those who would manipulate energy markets, and ensuring that players in relevant energy markets operate under the regulations and rules established by this Commission.

FERC continued to pursue other areas: siting and reviewing facilities such as gas pipelines, LNG facilities and hydropower projects; preventing the exercise of market power; assuring just and reasonable rates; refining market rules; and assuring safety. These achievements support the infrastructure and market development that will help the U.S. meet the challenges ahead. I am proud of the staff here at FERC, and commend them for their knowledge and dedication to serving energy consumers in this nation.

Finally, I would like to recognize my colleagues and the FERC staff, whose efforts helped FERC to achieve one of this agency's most notable years. To them, I convey my thanks and congratulations.

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. 61L Sincerely, Joseph T. Kelliher Chairman





**SUEDEEN G. KELLY** Commissioner



**PHILIP D. MOELLER** Commissioner



**MARC SPITZER** Commissioner



JON WELLINGHOFF Commissioner





## MANAGEMENT SUMMARY

## ORGANIZATION

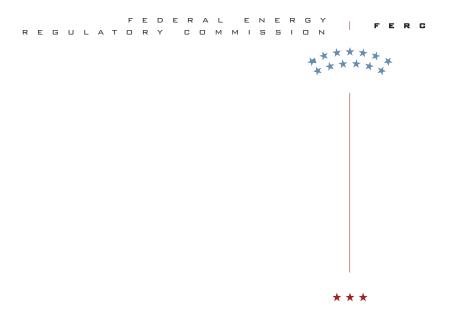
The Commission is an independent regulatory agency within the U.S. Department of Energy (DOE) whose function is to regulate the Nation's electric, natural gas, hydroelectric and oil pipeline industries. It is headed by a bi-partisan, fivemember Commission, comprised of the Chairman and four Commissioners who are appointed by the President and confirmed by the Senate. The Chairman serves as the chief executive officer. In FY 2007, FERC was organized into eight functional offices (see table on page 6). In September 2007, the Commission signaled the growing importance of the Commission's work on the reliability of the nation's bulk power system by announcing the creation of a new Office of Electric Reliability. The Commission's headquarters are in Washington, D.C., and the agency has five regional offices throughout the country dedicated to hydroelectric dam safety.

In FY 2007, Congress appropriated \$221,901,518 to support Commission activities. As of September 30, 2007, the Commission had 1,292 staff, including 1,271 permanent staff and 21 temporary staff.

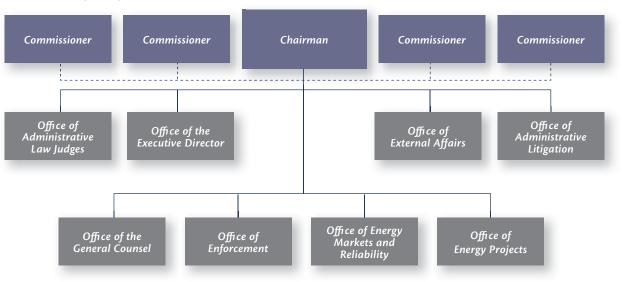
### SUMMARY

Fiscal year 2007 was a landmark in Commission history, as it took important steps to implement and exercise the new authorities granted by the Energy Policy Act of 2005 (EPAct 2005). Pursuant to the Act, the Commission approved mandatory reliability standards for the bulk power system. Beginning in the summer of 2007, compliance with reliability standards became mandatory, with the authority of the Commission behind them. Pursuant to EPAct 2005, the Commission also expanded its enforcement activities, and issued its first penalties. To fulfill its market regulation mission, the Commission must promulgate regulations, setting the rules under which wholesale competition occurs. Enforcement activities ensure compliance with these rules, and protect consumers from the consequences of market participant misconduct.

The Commission also made significant progress on other goals, responding to the current and growing demand for electricity and natural gas. It issued regulations to encourage fair and effective competition in wholesale markets, and to prevent the accumulation and exercise of market power. Integrated into these rules were new provisions to include demand response in planning and to facilitate demand response in organized markets. The Commission also established incentives for significant transmission development, and issued rules governing its limited authority to site transmission facilities. It also moved to respond quickly when companies proposed to



### Federal Energy Regulatory Commission



Note: The chart above depicts the Commission on September 30, 2007, the last day of FY 2007. On October 1, 2007, the Office of Electric Reliability was created. Reliability had previously been a division within the Office of Energy Market and Reliability, which was subsequently renamed the Office of Energy Market Regulation.

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expand or construct needed pipeline and LNG facilities, or to license hydroelectric facilities. Notably, new rules were proposed for processes and standards for issuing and enforcing preliminary permits for hydrokinetic generation facilities. The agency also proposed a new pilot license program to allow developers to test technologies and sites, and to confirm environmental impacts. Finally, the Commission focused closely on its responsibilities to oversee the safety of LNG and hydroelectric facilities.

The Commission's accomplishments in these areas are notable, and summary lists follow. The report that follows this summary provides more detail, and is divided to reflect its five priorities for the year: Energy Infrastructure, Market Regulation, Safety, Reliability and Enforcement.

#### ENERGY INFRASTRUCTURE

A robust energy infrastructure can support competitive markets and assure reliability of supply. A weak infrastructure can lead to higher prices, greater price volatility, lower supply reliability, and less effective competition. A strong energy infrastructure is a necessary foundation for competitive markets. In FY 2007, the Commission took the following significant actions:

- The Commission continued to certificate new storage facilities and new pipeline projects, including the Rockies Express West Pipeline, which consists of nearly 800 miles of new pipeline.
- The Commission certificated a major new Millennium pipeline project to bring gas from the Great Lakes area to the Northeast and several new west-to-east pipelines in Oklahoma, Arkansas, Texas and Louisiana to move shale gas into existing major hubs and systems serving Midwest and Northeast gas markets.
- The Commission certified the Algonquin and Maritimes & Northeast expansions to accommodate revaporized Liquefied Natural Gas (LNG) from Canada and offshore New England.

- The Commission implemented the LNG pre-filing mandates of EPAct 2005 and ensured ample stakeholder input into discussions of new energy infrastructure.
- The Commission approved three new LNG projects (Bayou Casotte, Gulf LNG and Calhoun) and a major expansion at the Elba Island LNG terminal.
- The Commission issued original licenses and relicenses for approximately 3,200 megawatts of non-federal hydropower.
- The Commission issued rules to implement section 1221 of EPAct 2005, which is a new section 216 of the Federal Power Act, authorizing the Commission to issue construction permits for the siting and construction of electric transmission facilities in certain circumstances.

#### MARKET REGULATION

A primary focus of the Commission is guarding the consumer from exploitation and ensuring that wholesale power markets produce just and reasonable rates. In FY 2007, the Commission took the following actions to discharge this duty:

- The Commission issued a final rule designed to strengthen the *pro forma* open-access transmission tariff to ensure that it achieves its original purpose of preventing undue discrimination or preference. The rule provides greater specificity to reduce opportunities for undue discrimination, facilitates the Commission's enforcement regarding regional transmission planning, and increases transparency in the rules and use of the transmission system.
- The Commission issued a final rule to reform its market-based rate program and prevent market power abuses.
- The Commission proposed a package of important regulatory reforms designed to enhance effective competition in organized wholesale power markets.

ENERGY Mission F

The proposed reforms promote more effective demand response in organized markets, strengthen the independence of market monitoring, encourage long-term contracting, and assure the responsiveness of regional transmission organizations and independent system operators to customers and other stakeholders. The Commission initiated these proposals after conducting three technical conferences with stakeholders on competition in these markets. These reforms are intended to strengthen competitive markets and better protect consumers.

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- The Commission advanced the case for greater use of demand response in electric markets through a collaborative effort with the National Association of Regulatory Utility Commissioners and the publication of its second report on demand response activities, which also addressed advanced metering infrastructure.
- The Commission encouraged the development of wind and other renewable energy facilities through approval of an innovative interconnection proposal by the California Independent System Operator.

Commission orders over this period recognized that demand response, environmental issues, competitive wholesale electricity markets, and reliability have become increasingly interrelated. The complexity and interdependence among these elements resulted in the September 2007 announcement of the creation of the Energy Innovations Sector within the Office of Energy Market Regulation, formerly the Office of Energy Markets and Reliability.

#### SAFETY

REGULA

The Commission is responsible for the safety of on-shore LNG and non-federal hydropower facilities throughout the entire life cycle of a project: design review, construction and operation. In FY 2007, the Commission took the following significant actions:

 The Commission reviewed and approved the final engineering design and safety aspects of the Freeport, Sabine Pass, Cameron and Golden Pass LNG projects.

- The Commission conducted biennial operational inspections at six LNG peak-shaving facilities and annual operational inspections at five LNG import terminals.
- Along with its continual and thorough review of existing dams, the Commission also took several steps to address safety at existing facilities: it rectified safety concerns at the Swinging Bridge Dam Project and addressed the 2005 dam breach at the Taum Sauk Pumped Storage Project to ensure the safety of the replacement of the upper dam.
- The Commission also cooperated with a large number of federal and state agencies to ensure and promote dam safety and, more recently, homeland security.

#### RELIABILITY

The Commission has made tremendous progress on reliability over the past two years. The Commission issued rules underpinning the reliability program and certified an Electric Reliability Organization. In FY 2007, the Commission took the following significant actions:

- The Commission conducted a critical assessment of proposed reliability standards, approved standards that it determined would protect reliability, and acted to assure that reliability standards are improved over time.
- In Order No. 693, the Commission approved 83 of 107 electric reliability standards proposed by the North American Electric Reliability Corporation (NERC). The Commission also directed improvements to 56 of the approved standards. Notable among the directed improvements were requirements to include an explicit provision recognizing that demand-side management may be used as a resource for contingency reserves.



- The Commission initiated rulemaking proceedings to consider public comment on two additional sets of reliability standards proposed by NERC in regard to system operating limits and cyber-security.
- The Commission approved delegation agreements to provide for regional enforcement of approved reliability standards, and continued to work closely with the regional entities to strengthen enforcement.
- The Commission set an ambitious target of having mandatory standards in place by the summer of 2007, earlier than the schedule envisioned by Congress. The Commission met that target, and the summer of 2007 was the first summer in which the interstate power grid was governed by mandatory and enforceable reliability standards.
- Going forward, on September 20, 2007, the Commission announced the creation of the Office of Electric Reliability, formerly a division within the Office of Energy Markets and Reliability. The Office was formally established on October 1, 2007 and it will continue to focus on the development and implementation of mandatory and enforceable reliability standards for the users, owners and operators of the nation's bulk power system.

#### ENFORCEMENT

Shortly after enactment of the EPAct 2005, the Commission issued a Policy Statement on Enforcement that explained how the Commission would exercise its new enforcement authority. The Enforcement Policy Statement was modeled on the best enforcement practices of other agencies, including the Securities and Exchange Commission, the U.S. Department of Justice, and the Commodity Futures Trading Commission. The Policy Statement made plain that the Commission's purpose is firm but fair enforcement. Beginning in January 2007, the Commission began to carefully exercise its newly-delegated penalty authority. The Commission's enforcement authority has protected consumers and encouraged regulated companies to develop a culture of compliance. In FY 2007, the Commission took the following actions:

- The Commission approved 10 settlements of enforcement actions providing for a total of \$32.5 million in civil penalties.
- The Commission issued two show cause orders in cases of alleged market manipulation in which it proposed civil penalties totaling \$458 million.



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Commission Open Meeting.





## Energy Infrastructure

he Commission is responsible for authorizing LNG facilities, certificating interstate natural gas pipelines and storage projects, permitting electric transmission facilities in interstate commerce (under certain circumstances), and licensing non-federal hydropower projects. Throughout all of these application processes, the Commission's goal is to apply its standard of review in a consistent manner, honor its responsibilities for environmental protection and public participation, while reducing the time it takes to act on projects.

The Commission also promotes, and sometimes requires, the use of the pre-filing process, which involves completing a substantial portion of the environmental review and identifying significant non-environmental issues prior to the filing of an application. The pre-filing process addresses issues early in the application process and involves stakeholders from the beginning. This process was embraced by Congress in EPAct 2005, and the Commission continues to pursue this method as a way to stimulate infrastructure development.

The Commission also stimulates infrastructure development by applying pricing policies that encourage investment and establishing and consistently applying policies that permit timely cost recovery. The Commission's rate policies, when consistently applied to infrastructure projects, must give investors confidence that they will have an opportunity to recover their investments as well as provide certainty to customers. Without such assurances, investors will face greater risks, companies will find it more difficult to obtain financing for jurisdictional facilities, and fewer energy projects will be constructed than the Nation needs. That, in turn, will undermine the provision of adequate and reliable energy service. The Commission encourages rate designs that support competitive wholesale markets for electric power and natural gas and provide incentives for companies to build and efficiently operate key new projects. Wholesale electric customers and gas and oil pipeline ratepayers need regulatory certainty about (1) the transportation costs they can expect to face, (2) the fairness of these costs, (3) continued access to nondiscriminatory transportation services, and (4) adequate transportation capacity. The Commission works to ensure that terms and conditions of service provide reliable access to service for all customers.



Natural gas pipeline.

## NATURAL GAS

#### GAS PIPELINES

The United States has a robust delivery system for natural gas, with approximately 220,000 miles of interstate pipelines. However, to meet the growing demand for natural gas, the Commission must continue to respond quickly when companies propose expansions or new construction for needed pipelines and related facilities. In FY 2007, the Commission took several steps to expedite the certification of natural gas pipelines. For example, Commission staff participated actively in more than 25 projects that used the pre-filing process to engage stakeholders in the identification and resolution of stakeholder concerns prior to filing a certificate application with the Commission. The staff's participation and initiative in these efforts will allow companies to file better certificate applications, enabling more efficient and expeditious consideration by the Commission.

Overall in FY 2007, the Commission approved 2,868 miles of new natural gas pipeline in the United States. This demonstrates the Commission's ability to approve pipeline projects quickly in response to changing patterns of domestic gas production. Specifically, the Commission authorized the following major natural gas pipeline projects:

- In December 2006, the Commission approved a natural gas pipeline project proposed by the Millennium Pipeline Co. LLC, Columbia Gas Transmission Corp., Empire State Pipeline and Empire Pipeline Inc., Algonquin Gas Transmission LLC, and Iroquois Gas Transmission System LP that will provide more than 525,400 Dekatherm per day (Dth/d) of Canadian and domestic gas to meet rising energy demand in New York. The companies proposed to construct and operate more than 260 miles of new pipeline to transport natural gas from the U.S.-Canada border to the New York City metropolitan region.
- In February 2007, the Commission authorized Maritimes & Northeast Pipeline, L.L.C. to construct, own and operate certain pipeline facilities to increase its mainline design capacity by approximately 418,000 Dth/d to accommodate the importation of regasified LNG from Canada.
- In February 2007, the Commission authorized Northern Natural Gas Company to construct, modify and operate pipeline, compression and town border station facilities in Minnesota and Iowa. The project will enable it to provide approximately 374,000 Dth/d of incremental winter peak day firm service to meet residential, commercial and industrial customer market growth commencing with the 2008 heating season.
- In March 2007, the Commission authorized Algonquin Gas Transmission, LLC to construct, install, own and operate a 16.4-mile subsea pipeline that will provide a direct connection between the offshore LNG port proposed by Northeast Gateway Energy Bridge, L.L.C. (Northeast Gateway) in federal waters in Massachusetts Bay and Algonquin's existing HubLine offshore system in Massachusetts Bay.

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Algonquin proposed the new facilities to provide up to 800,000 Dth/d of firm transportation service for Northeast Gateway's affiliate, Excelerate Energy Limited Partnership.

 In April 2007, the Commission approved the Rockies Express West interstate pipeline project intended to transport more than 1.5 million Dth/d of Rocky Mountain natural gas to supply growing energy demand in markets east of the Rockies. The entire project will consist of nearly 800 miles of new pipeline that will span portions of Colorado, Wyoming, Nebraska, Kansas, Missouri and New Mexico. In FY 2007, the Commission took the following industrywide actions to provide greater regulatory certainty and facilitate the expansion and construction of needed pipelines and related facilities:

In October 2006, the Commission approved a final rule expanding the scope of blanket certificate eligibility for natural gas infrastructure projects and raising the limits for project costs. The final rule extended blanket certificate eligibility to mainlines, storage field facilities, and facilities transporting revaporized liquefied natural gas or synthetic or natural gas. The rule also raised the cost limits that

The United States has a robust delivery system for natural gas, with approximately 220,000 miles of interstate pipelines.

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- In April 2007, the Commission authorized Questar Pipeline Company to construct and operate its Southern System Expansion Project II, a 53.9-mile, 24-inch diameter extension of ML 104 in Utah to transport Rocky Mountain gas to end-use markets. The project will result in an increase of 175,000 Dth/d of incremental capacity.
- In September 2007, the Commission authorized Southeast Supply Header, LLC and Southern Natural Gas Company to construct and operate 269 miles of new natural gas transmission facilities beginning near the Perryville Hub in Louisiana and terminating in Alabama. The project is capable of transporting up to approximately 1.14 million Dth/d of natural gas.
- In September 2007, the Commission authorized Gulf South Pipeline Company to construct and operate its proposed Southeast Expansion Project, which consists of approximately 111 miles of pipeline in Mississippi and Louisiana.

apply to eligible blanket certificate projects from \$8.2 to \$9.6 million for automatic authorizations and from \$22.7 to \$27.4 million for prior-notice projects. The rule also clarified that a natural gas company is not necessarily engaged in an unduly discriminatory practice if it charges different customers different rates for the same service based on the date customers commit to service.

In October 2006, the Commission finalized a rulemaking that implements provisions of EPAct 2005 requiring the Commission to coordinate the environmental review and the issuance of all federal authorizations for natural gas infrastructure proposals with other federal and state agencies, and to maintain a consolidated federal record for judicial appeal and review. Under the final rule, the Commission will act as lead agency for environmental review and will establish a schedule by which federal agencies, as well as state agencies acting under federally delegated authority, will reach final regulatory decisions necessary FEDERAL ENERGY | **FER** REGULATORY COMMISSION

for the approval of natural gas infrastructure projects under section 3 or 7 of the Natural Gas Act.

- In October 2006, the Commission concluded that the return on equity for rates charged for the interstate natural gas transportation services provided by Kern River Gas Transmission Co. should be 11.2 percent. The order reversed an administrative law judge's March 2, 2006, initial decision recommending the Commission adopt a 9.34 percent return on equity. The Commission concluded the initial decision should have excluded two companies from the proxy group the judge relied upon in calculating the lower rate of return.
- In April 2007, the Commission determined that it will not accept requests from interstate natural gas pipelines to compensate customers or other downstream entities for costs they may incur in using gas supplies that include revaporized LNG that meets approved standards for gas quality and interchangeability. The Commission announced the new policy in a case involving a complaint filed by AES Ocean Express LLC against Florida Gas Transmission Company.
- In June 2007, the Commission proposed to amend its regulations to modify the landowner notification requirements and require a noise survey following the completion of projects involving compressor facilities undertaken pursuant to blanket certificate authority. The proposed regulatory revisions should enhance public participation in the Commission's consideration of proposed projects.
- In July 2007, the Commission proposed to modify its standards to allow the use of master limited partnerships in the composition of proxy groups used to determine the returns on equity in rates charged by interstate natural gas and oil pipeline companies. The Commission's proposed Policy Statement seeks public comment on proposed modifications to its calculation of rates of return on equity that address myriad changes in the natural gas and oil pipeline industries, since these businesses increasingly are organized as master limited partnerships.

#### LNG FACILITIES

There is significant concern about the adequacy of natural gas supply, overall price levels, and price volatility in the United States. Importation of LNG is key to offsetting shortfalls in North American natural gas production and reducing energy price volatility during peak demand periods. The demand for natural gas in the United States has been exceeding domestic supply for most of the decade. In fact, natural gas usage is increasing while United States production is expected to remain roughly flat. As a result, LNG is now the fastest growing source of U.S. natural gas supply. LNG is economically viable at today's market price, based on supply contracts and on netback pricing. In FY 2007, following a thorough safety review, the Commission authorized, with conditions, the construction and operation of the following three new LNG import terminals:

- Bayou Casotte Energy LLC to site, construct and operate a new LNG import terminal in Pascagoula, Mississippi. The terminal project proposed by Chevron would enable its affiliates to import and deliver up to a peak volume of 1.6 billion cubic feet (Bcf) of regasified LNG per day and the vaporized LNG will reach the interstate grid through interconnections with five interstate pipelines.
- Gulf LNG Energy, LLC and Gulf LNG, Pipeline LLC to site, construct and operate a new LNG import terminal in Pascagoula, Mississippi. The terminal would include four LNG storage tanks that would have the capability to store up to 13 Bcf of natural gas and have a send-out capability of an average of 3.3 Bcf per day.
- Calhoun LNG, L.P. to site, construct, and operate a new LNG import terminal and associated facilities at the Port of Port Lavaca-Point Comfort in Calhoun County, Texas. The project will be designed for an installed gas send-out capacity of 1.0 Bcf per day.

In FY 2007, the Commission also authorized three expansions of existing LNG terminals:

 Cheniere Creole Trail LNG's project to construct and operate an additional 18.1 miles of 42-inch pipeline in Cameron Parish, Louisiana that will connect



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## Importation of LNG is key to offsetting shortfalls in North American natural gas production and reducing energy price volatility during peak demand periods.

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with another recently-approved project proposed by Cheniere Sabine Pass Pipeline LP. The amended proposal would extend Cheniere Trail's 116.8 mile certificated pipeline system to interconnect with the terminus of the Sabine Pass pipeline system in order to access and transport up to 2.0 Bcf per day of previously authorized regasified LNG originating from the Sabine Pass LNG terminal.

- Cameron LNG, LLC to amend its previous authorization to increase the send-out rate of the LNG terminal from the equivalent of 1.5 Bcf of natural gas to 1.8 Bcf per day on an interim basis and, ultimately, to 2.65 Bcf per day. The terminal is currently under construction near Hackberry, Louisiana.
- Southern LNG to expand the storage capacity of its Elba Island LNG import terminal by 8.44 Bcf and its vaporization capacity by 900 MMcf per day. The proposal will allow the LNG terminal in Elba Island, Georgia to interconnect with Transcontinental Gas Pipe Line Corporation.

#### STORAGE PROJECTS

There is great concern about natural gas price volatility and its impact on captive customers. One of the best ways to hedge against volatility is by increasing gas storage capacity. The Commission is acting to encourage expansion of gas storage capacity, and has adopted pricing reforms to that end. Underground natural gas storage can be used to balance a variable market with a nearly constant supply of natural gas provided by the pipeline system. Storage fields are, in effect, warehouses with a ready supply of natural gas that can serve a market with high peak demands in warm or cold weather. In FY 2007, the Commission continued to certificate projects to increase the storage capacity in the United States. Specifically, the Commission certificated the following major storage projects:

- In December 2006, the Commission authorized the construction of the MoBay Gas Storage Project in South Mobile Bay County, Alabama. The project will include nearly 83 Bcf of total storage capacity and 50 Bcf of working gas storage capacity from the three fully-developed reservoirs. The storage facility will be capable of receiving and delivering natural gas at a maximum rate of 1.0 Bcf/d.
- In February 2007, the Commission authorized the construction of a new salt dome natural gas storage facility and related pipeline facilities proposed by Mississippi Hub LLC. The Mississippi Hub Gas Storage



LNG Tank.

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Project will be located in Simpson and Jefferson Davis counties, Mississippi, and will be designed to provide storage for up to a total of 17.34 Bcf of gas. Each cavern will have a working capacity of 6 Bcf with deliverability of up to 1.2 Bcf/d and will be able to receive injection gas at a rate of an estimated 0.6 Bcf/d.

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 In September 2007, the Commission authorized Tres Palacios Gas Storage LLC to construct and operate a salt dome natural gas storage facility in Matagorda County, Texas. The facility will be capable of storing approximately 53.99 Bcf of natural gas, of which 36.04 Bcf will be working gas and 17.95 Bcf will be cushion gas.

In June 2006, the Commission issued a final rule intended to mitigate natural gas price volatility by encouraging the development of new natural gas storage capacity. The rule provided further incentives for the development of new natural gas storage capacity and ensures access to storage services at just and reasonable rates, while at the same time ensuring that adequate storage capacity will be available to meet anticipated market demand. The rule set up two ways for developers of natural gas storage facilities to seek authorization to charge market-based rates. The first approach includes a broadened definition of the relevant product market for storage. The second approach implements EPAct 2005 provisions that would allow applicants to request authority to charge market-based rates even if a lack of market power has not been demonstrated, under certain circumstances where market-based rates are in the public interest and necessary to encourage the construction of storage capacity in the area needing storage service, and customers are adequately protected.

In November 2006, the Commission approved for the first time an interstate natural gas storage operator's request to charge market-based rates under the second approach adopted in the June 2006 rule. The Commission concluded that Northern Natural Gas Company would qualify for market-based rates for storage from its to-be-proposed expansion of its Redfield Storage facility because it met the criteria, which included protection from market power for existing customers and those that signed precedent agreements.

#### **ENVIRONMENTAL MITIGATION**

In FY 2007, the Commission promoted the use of the thirdparty compliance monitoring program for environmental compliance in natural gas projects. The program established a full-time on-site presence during the construction and restoration of major projects, giving the Commission staff immediate access to information regarding field conditions and the ability to respond quickly to requests from landowners and construction contractors. The program also gives the industry more flexibility to react to changing or unanticipated construction conditions.

During FY 2007, the Commission staff completed the environmental review of 29 gas pipeline and LNG filings, including 17 environmental assessments (EAs) and 12 Environmental Impact Statements (EISs). Concurrently, the Commission staff continued work on 21 additional EAs and 20 additional EISs, primarily for new gas pipelines. Because of the effective use of the Commission's pre-filing process, the average time for the staff's completion of the EISs was about nine months.

Recommendations from the environmental review of pipeline and LNG applications are frequently included as conditions in the certificate orders. For example, the Commission included 56 environmental conditions in the order approving the Millennium Pipeline project and 42 environmental conditions in the order approving the Rockies Express West pipeline. These conditions were necessary to ensure that the pipelines would be constructed in an environmentally conscious manner to prevent or mitigate adverse impacts. For LNG applications, safety conditions. For example, the Commission imposed 79 conditions when issuing a certificate for the Calhoun LNG Project, including several conditions relating to the safety and security of the proposed facility.



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Over the last year, FERC staff has held public hearings in 43 cities, towns and villages, addressing 18 projects. Every week, 20 percent of FERC's siting staff were somewhere in the country meeting with state or local stakeholders.

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#### LANDOWNER ISSUES

FERC is committed to ensuring that landowners have ample opportunity to have their issues and concerns heard. FERC notifies property owners of a proposal, convenes public hearings and provides assistance for landowners seeking to become involved in the pre-filing or filing phases of proposal review.

Hearings are typically held in a number of venues along a project. Over the last year, FERC staff has held public hearings in 43 cities, towns and villages, addressing 18 projects. Every week, 20 percent of FERC's siting staff were somewhere in the country meeting with state or local stakeholders.

For long transmission projects, such hearings will occur at a number of sites along the proposed routes. Hearings are held during the day, in the evening, and on weekends. These hearings play an important role in Commission decisions. Frequently, public concerns raised in these hearings result in changes reflected in FERC's final orders. These hearings give the public a convenient



FERC scoping meeting.

FERC Staff Meeting with public.

opportunity to provide information or comments that will be included in the formal record for the proceeding. Landowners are encouraged to participate in the prefiling process convened by FERC staff, which is designed to work with cooperating stakeholders to evaluate routes and issues presented by a proposal. FERC has a record of changing routes for projects to avoid problems with individual landowners' homes or businesses. Landowners are also encouraged to submit their comments directly into the record developed on the proposed project.

FERC staff will investigate landowner complaints about developers' tactics and operations before and during construction of electric transmission facilities. During project development, this may be done by staff from FERC's Office of Energy Projects. Others may be addressed by FERC's Enforcement Hotline.

During FY 2007, FERC's Enforcement Hotline received 112 calls regarding landowner matters related to natural gas interstate pipeline construction. These calls varied in purpose and scope and included matters such as allegations of, among other things, improper landowner notification prior to commencement of construction, disturbances and/or damage caused to property by pipeline construction, inadequate post-construction restoration of property, or trespassing on landowners' property (such as when pipeline construction crews strayed beyond the pipeline's right-of-way).

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For example, the proposed route of the Southeast Supply Header Project pipeline would have crossed the property of an elderly couple. The landowners participated in the Commission proceeding, protesting the proposed route, which would have crossed through their yard. The husband had hand-built their "dream home" with timber he cut himself on the property. The husband had a serious illness, and he attended the Commission community meeting with IV ports in his arms from a recent hospitalization. Intercession by Commission staff and an environmental condition in the order encouraged the pipeline to settle on a route off the property, avoiding treasured wet meadows and stands of mature trees.

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For example, a Hotline caller complained that pipeline construction activities had resulted in, among other things, changes to the gradation of his land such that his fields had become subject to flooding and his crops had been destroyed. Hotline staff, with the assistance of Commission technical/environmental staff, determined through an on-site analysis that the pipeline construction had indeed changed the gradation of the land as the landowner had described, and ensured that the pipeline company properly restored the property.

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Hotline staff helps landowners understand the pipeline construction process and their rights under the Commission's rules and regulations. Hotline staff also explains the constructing pipeline company's obligations to the landowner(s) as well as any pertinent requirements established in the certificate that the Commission issued to the pipeline company authorizing the construction. When warranted, Hotline staff contacts the pipeline company to resolve these issues and coordinates with Commission technical staff overseeing the pipeline construction project to determine the appropriate resolution of the matter. Under certain circumstances, Commission technical staff will conduct an inspection of the pipeline construction to determine the extent of any problems arising from the pipeline construction.

To make this information as accessible as possible to the public, FERC maintains pertinent information on its website, **www.FERC.gov.** This includes projects in various areas of the country, information on how to get involved, and guides to gas facilities, LNG, electric transmission siting, hydropower licensing, and the pre-filing process.





FERC scoping meetings.



Electric Wholesale Transmission.

## ELECTRIC

The transmission grid is the interstate highway system for wholesale power markets. A robust grid is necessary to assure reliability and support competitive markets. The grid no longer consists of a multitude of local systems. Rather, the U.S. transmission system is regional in nature, with some systems extending into Canada and part of Mexico. Transmission investment has roughly doubled since 2002, after suffering from a sustained period of underinvestment. In response to the broad recognition of the national importance of a robust transmission grid, EPAct 2005 gave the Commission significant new regulatory authority to strengthen the grid, such as the reliability, transmission incentives, and federal siting provisions.

#### TRANSMISSION INVESTMENT

EPAct 2005 added a new section 219 to the FPA, which directed the Commission to develop incentive-based rate treatments for transmission of electric energy in interstate commerce. In response, the Commission issued a pricing reform rule that seeks to bolster investment in the Nation's transmission infrastructure, and to promote electric power reliability and lower costs for consumers by reducing transmission congestion. In FY 2007, the Commission approved several incentive proposals to encourage transmission investment:

- In October 2006, the Commission authorized a return on equity for the owners of the ISO New England transmission grid that included an incentive rate to encourage transmission expansion needed to ensure grid reliability in the New England region. The Commission approved returns on equity of 11.7 percent covering the period from February 1, 2005, until the date of the order, and 12.4 percent subsequently.
- In February 2007, the Commission conditionally granted Duquesne Light Company's petition for transmission rate incentives in connection with a proposed \$184 million transmission expansion project in Western Pennsylvania.
- In May 2007, the Commission conditionally granted United Illuminating Company's petition for transmission rate incentives in connection with a proposed transmission construction project from Middletown to Norwalk, Connecticut.
- In May 2007, the Commission conditionally accepted Trans-Allegheny Interstate Line Company's (TrAILCo) filing to implement a transmission cost of service formula rate for TrAILCo and an incentive rate authorization for a previously-qualified facility, the Trans-Allegheny Interstate Line Project (TrAIL Project). The TrAIL Project is a proposed 500 kilovolt, 244-mile transmission line that is to be constructed from southwestern Pennsylvania to West Virginia to Northern Virginia, within the PJM Interconnection (PJM) region, at an expected cost of \$1.8 billion.
- In July 2007, the Commission accepted Baltimore Gas & Electric's proposed return on equity adder for continuing membership in PJM and for two

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proposed transmission expansion projects. The Commission also initiated a technical conference to investigate whether to grant a return on equity adder for certain other upgrades.

The Commission has taken additional and novel steps to encourage transmission projects. Recognizing the unique characteristics of location-constrained resources, the Commission in April 2007 approved a proposal by the California Independent System Operator for financing facilities to interconnect location-constrained renewable resources. The Commission determined that this proposal represented a reasonable balance addressing the barriers impeding the development of location-constrained resources, such as

- In November 2006, the Commission accepted the Midwest Independent Transmission System Operator's (Midwest ISO) proposed methodology for allocating 20 percent of the costs of high-voltage baseline reliability network upgrades on a systemwide basis and allocating the remaining 80 percent to affected transmission owners based on the outcome of load flow analysis. The order reaffirmed a February 2006 order that had conditionally accepted the proposed cost sharing methodology pending the outcome of a technical conference.
- In December 2006, the Commission held a technical conference to discuss proposals to allocate between

## The transmission grid is the interstate highway system for wholesale power markets.

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wind facilities, while including appropriate ratepayer protections to ensure that rates are just and reasonable and not unduly discriminatory. To strengthen regional grid planning in the Pacific Northwest, in April 2007 the Commission accepted Columbia Grid's proposal to coordinate transmission planning and expansion in the region. This proposal should help ensure reliability and support competitive power markets in the Pacific Northwest.

## TRANSMISSION EXPANSION

In FY 2007, the Commission reviewed proposed transmission cost allocation plans in organized markets to ensure that they result in just and reasonable rates that are not unduly discriminatory or preferential. In looking at these cost allocation plans, the Commission approved several orders establishing new methodologies for allocating costs in the future. For example: the Midwest ISO and PJM the cost responsibility for constructing facilities that benefit both regional transmission organizations (RTOs).

- In March 2007, the Commission issued two orders on cost allocation in the Midwest ISO region. In the first order, the Commission reaffirmed the previously mentioned November 2006 decision to accept the proposed cost sharing for baseline reliability projects. In the second decision, the Commission conditionally accepted Midwest ISO's proposal to allocate 20 percent of the costs of regionally beneficial projects (e.g., new economic projects) on a system-wide basis and allocate the remaining eighty percent of costs among the three geographic sub-regions based on a "beneficiary pays" approach.
- In April 2007, the Commission accepted a plan for allocating transmission costs among PJM's transmission service customers. The Commission reaffirmed

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PJM's current "license plate" rate design for allocating the cost of existing facilities and new owner-initiated facilities. Under a license plate rate design, each utility pays for transmission service based on the costs of transmission facilities located in the same, sub-regional zone in which the utility is located. The Commission also determined that the costs of all new, centrally-planned, high-voltage facilities in PJM should be shared on a region-wide basis.

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The Commission also continues to work to facilitate merchant transmission projects. For example, in April 2007 the Commission approved Linden VFT, LLC's request to sell transmission rights at negotiated rates from its proposed spect to federal transmission siting than it took with federal siting of interstate natural gas pipelines. When Congress provided for federal siting of interstate natural gas pipelines, it provided for exclusive and preemptive federal siting. By contrast, federal transmission siting is not exclusive. Federal transmission siting supplements state siting, instead of supplanting state siting.

In November 2006, the Commission approved a final rule, effective January 30, 2007, governing the filing requirements and procedures for entities asking the Commission to exercise its supplemental authority to site interstate transmission facilities under EPAct 2005. The final rule reflects the Commission's extensive experi-

## The Commission has taken additional and novel steps to encourage transmission projects.

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merchant transmission project. Linden's merchant transmission project differed from the merchant transmission projects previously addressed by the Commission in that, as a part of its project, Linden proposed to increase the capacity on an existing transmission line and to charge negotiated rates for the incremental capacity.

#### TRANSMISSION LINE SITING

Section 1221 of EPAct 2005 added a new section 216 to the Federal Power Act that authorizes the Commission to issue construction permits for the siting and construction of electric transmission facilities in certain circumstances. The siting authority entrusted to the Commission is limited in scope. Congress took a very different approach with reence in licensing transmission for hydroelectric generation facilities and issuing certificates for interstate natural gas pipelines, and it applies this knowledge and experience to the electric transmission construction permit program.

In February and March 2007, Commission staff held a series of workshops on the transmission siting final rule. The workshops were designed to assist stakeholders in understanding the implementation of the rule. Commission staff also created a brochure entitled "A Guide to the FERC Electric Transmission Facilities Permit Process" to educate the public and stakeholders on this process. The Commission received no applications for Federal siting under the new law during FY 2007.



### HYDROPOWER

#### HYDROPOWER PROJECTS

Hydropower remains an important component of the Nation's energy portfolio and supports efficient, competitive electric markets by providing low-cost energy reserves and ancillary services. In FY 2007, the Commission authorized 56 megawatts (MW) of additional capacity at existing licensed hydropower projects. The Commission also granted an increasingly large number of preliminary permits authorizing feasibility studies for more than 7,870 MW of capacity for new projects.

During FY 2007, the Commission acted on a total of 16 hydropower applications, which included a total of 14 relicense applications and two 5-MW exemption applications. These applications represented an installed capacity of over 3,424 MW. The Commission also initiated the processing of 10 relicense applications, five of which have an installed capacity in excess of 100 MW.

Several new hydropower projects were licensed or issued 5-MW exemptions, contributing to an increase in overcall capacity. The following actions took place in FY 2007:

- In February 2007, the Commission approved a comprehensive settlement and issued a new license allowing the continued operation of the School Street Hydro Project in upstate New York. The license for the 38.8-MW project, located on the Mohawk River in Albany and Saratoga counties in upstate New York, includes provisions for 11 MW of increased power generation, a fish passage and aesthetic flows to protect the scenic quality of Cohoes Falls.
- In March 2007, the Commission issued a new license for the 2,755-MW Niagara Hydroelectric Project on the Niagara River in New York, ensuring that a valuable source of low-cost power for the region will continue operating with improved environmental protections and recreational benefits.



Saluda Dam reconstruction.

- In March 2007, the Commission issued a new license for Ameren's Osage Hydroelectric Project, a 176-MW project on the Osage River in Missouri. The new license assures the continued operation of a reliable power source in the region while minimizing downstream erosion and protecting water quality, fisheries, wetlands, recreation and historical resources at the project.
- In May 2007, the Commission issued a new license for the continued operation and maintenance of the 29.9-MW Merrimack River Project located on the Merrimack River in Merrimack and Hillsborough Counties, New Hampshire.
- In July 2007, the Commission issued a new license for the 312.33-MW Pit 3, 4, 5 Hydroelectric Project located on the Pit River in Shasta County, California.

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 In July 2007, the Commission issued a new license to continue operation and maintenance of the 7.54-MW Blue Lake Project located on Sawmill Creek in the Borough of Sitka, Alaska.

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- In August 2007, the Commission approved a settlement and issued a new license to continue operation and maintenance of the 19.38-MW Cooper Lake Hydroelectric Project located on Cooper Lake, Cooper Creek and Kenai Lake, near the community of Cooper Landing in south-central Alaska.
- In August 2007, the Commission issued a new license to operate and maintain the 4-MW Boulder Creek Hydroelectric Project, located in south-central Utah, in Garfield County.

The additional electric generation that results at a downstream project from regulation of the flow of the river by an upstream headwater project is referred to as headwater benefits. These benefits are usually attributable to increasing or decreasing the release of water from a storage reservoir. Pursuant to section 10(f) of the Federal Power Act, in FY 2007 the Commission assessed \$6,266,000 in headwater benefits in 24 river basins covering 83 hydroelectric projects for energy benefits provided by federal headwater storage facilities. Headwater benefit assessments are returned to the U.S. Treasury to offset headwater project construction costs.

#### HYDROKINETIC ENERGY

Hydrokinetic energy is hydroelectric generation from ocean waves, tides, and currents and from free-flowing rivers. In the past, efficient and reliable conversion of kinetic energy from water has proven elusive, but with recent advances in technology, rising fuel cost, and a growing demand for renewable energy, the potential for hydropower using new technologies is on the rise. The development of this new source of hydropower has the potential to add a substantial amount of power to the nation's generation capacity, particularly in the area of renewable energy. Some experts predict that ocean-based hydropower using new technologies could double hydropower production. At present, however, the development and commercialization of the new technologies are just beginning. The Commission took a number of important steps in FY 2007 to promote development of hydrokinetic technologies.

In FY 2007, the Commission issued 44 preliminary permits for hydrokinetic energy projects. The purpose of a preliminary permit is to maintain priority of application for a license for three years while the permit holder conducts investigations and secures data necessary to determine the feasibility of a new project and prepares an application to develop it.

The Commission also took several steps towards issuing the first hydrokinetic energy license:

- In November 2006, the Commission received the first license application for a wave energy hydropower project, the Makah Bay Offshore Wave Energy Project. In May 2007, the Commission issued an environmental assessment for the project, to be located in Makah Bay in Clallam County, Washington that would generate up to 1 MW.
- Commission staff has been working with Verdant Power to develop a license application for the Roosevelt Tidal Energy Hydropower Project, which would be located in the East River in Queens County, New York.
- Commission staff has been working with Reedsport OPT Wave Park and other stakeholders as they prepare a license application for a proposed wave energy project in Douglas County, Oregon, which could generate up to 50 MW.

In December 2006, the Commission held a technical conference to examine new hydroelectric technologies. The purpose of the technical conference was to learn more about \*\*\*\*\*

these new technologies and to develop prudent "next steps" in the regulation of this nascent industry. In response to the technical conference, in February 2007, the Commission issued a Notice of Inquiry announcing an interim policy and seeking public comment on how to process preliminary permit applications for wave, current and instream hydropower technologies and how it should enforce permits once they are issued. In the interim policy, the Commission proposed to grant the preliminary permit applications that meet the Commission's rules, but subject to strict scrutiny. Under the interim policy, if the Commission determines that a permit To eliminate redundancy for the benefit of the applicants, other stakeholders, and the two agencies, the Commission has developed a Memorandum of Understanding with the Minerals Management Service (MMS) of the U.S. Department of the Interior to weave the MMS and Commission processes together.

### INTEGRATED LICENSING PROCESS

In an effort to increase the efficiency of the licensing process, which involves a multitude of stakeholders including citizen groups, environmental organizations, tribal interests,

## Hydrokinetic energy is hydroelectric generation from ocean waves, tides, and currents and from free-flowing rivers.

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holder is not actively pursuing project exploration, and is not preparing for a license application, the Commission may cancel the preliminary permit.

In July 2007, the Commission announced the creation of the staff proposal for a Pilot License program. The goal was to allow developers to: test new technologies, determine appropriate sites, and confirm environmental effects while connected to the grid; complete the full project licensing process in as few as six months; and provide for Commission oversight and input from affected states and other federal agencies. The process would be available for projects that are 5 MW or smaller, removable or able to shut down on relatively short notice, and located in waters that have no sensitive designations. The Commission will convene a technical conference on this pilot program in the beginning of FY 2008. and local, state and federal resource agencies, the Commission developed the Integrated Licensing Process (ILP). The ILP's ultimate goal is to establish an efficient, predictable and timely licensing process that develops a record sufficient for the Commission to take final action.

In FY 2007, the number of hydropower projects using the ILP increased from 17 to 28. The first three relicense applications prepared using the ILP, PPL Montana's Mystic Project No. 2301, Georgia Power Co.'s Morgan Falls Project No. 2237, and Public Service Company of New Hampshire's Canaan Project No. 7528, are currently pending at the Commission. These projects are being processed expeditiously and are expected to be ready for final Commission action within the target time frame for the ILP (16 to 18 months from filing). Throughout FY 2007, the Commission also undertook numerous outreach efforts to educate the industry, resource agencies, tribes, nongovernmental organizations, citizen groups and other stakeholder groups on the ILP. Staff made presentations and led discussions on the ILP at several national hydropower meetings. In addition, regional conferences and intensive projectspecific meetings with multiple stakeholder groups were held to educate participants on the ILP.

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#### **ENVIRONMENTAL MITIGATION**

Hydropower licenses include requirements that are designed to protect, mitigate and enhance the environmental resources of project areas. The Commission safeguards the environment by requiring that all hydropower applicants communicate with affected federal and state natural resources agencies, tribes and state water quality agencies prior to submitting an application to the Commission.

The Commission continues to receive an increasing number of land and water use development applications that involve contested, complex issues related to water quality, navigation hazards, aesthetics and erosion around licensed lakes and reservoirs. The Commission expects this trend to continue, as public leisure demands continue to grow on lakes and reservoirs. The Commission has issued a guidance manual for shoreline management, and will hold land resources management and development workshops in the affected regions of the country.

In FY 2007, Commission staff completed the environmental review of 21 hydroelectric license and exemption applications, including 13 EAs and seven EISs. Concurrently, Commission staff continued work on three draft EAs and three draft EISs. Environmental recommendations are also incorporated into the hydroelectric licenses the Commission issues. For example, in FY 2007, the Osage Project contained 30 special conditions and 28 standard conditions for a total of 58 conditions. There were also additional requirements in the State of Missouri's Water Quality Certificate that were included as part of the license.

In FY 2007, the Commission continued to monitor compliance through its environmental inspection program to ensure that resource protection measures, designed to maintain environmental quality at hydropower projects, are constructed and implemented according to license requirements. The Commission's compliance assistance program, comprised of environmental inspections, building partnerships, collaborative problem solving, and guidance, will ensure effective license compliance and resource protection.

### OIL PIPELINES

The United States has approximately 175,000 miles of oil and oil products pipelines, with ten companies accounting for over 40% of the total miles. There are about 200 interstate pipelines, comprised of a few large players and many small pipelines.

In FY 2007, the Commission encouraged and supported the building of expanded petroleum product lines through its orders on pipeline petitions for declaratory orders. In these orders, the Commission approved certain flexible rate methodologies and granted other rate assurances prior to construction in order to reduce the uncertainty and risk inherent with these large infrastructure projects. Specifically, the Commission took the following major actions:

 In May 2007, the Commission denied rehearing of an order that granted in part Colonial Pipeline Co.'s (Colonial) petition for declaratory order and approved certain rate methodologies applicable to Colonial's proposed \$1 billion pipeline expansion between Baton





Oil Pipeline.

Rouge, Louisiana, and Atlanta, Georgia. On rehearing, the Commission rejected arguments that the Commission erred by approving Colonial's proposal for a uniform rate component surcharge rather than requiring the surcharge to be based on the length of haul, or requiring that expansion costs be recovered through a revision of Colonial's existing grandfathered rates.

 In July 2007, the Commission approved a rate plan that would allow Calnev Pipe Line LLC (Calnev) to begin a four-year, \$400 million expansion of its 248mile petroleum products pipeline system to meet growing demand for fuel in Las Vegas. Calnev's refined petroleum products pipeline system serves consumer and military installations in Southern California and Southern Nevada. It consists of two parallel 248-mile pipelines, one 14 inches in diameter and one that is eight inches in diameter. The Commission approved Calnev's proposal to establish a uniform rate charge to recover its expansion costs while continuing to recover the cost of its existing facilities under grandfathered rates.





# MARKET REGULATION

n FY 2007, the Commission continued to develop rules that encourage fair and effective competitive markets and prevent the accumulation and exercise of market power. The Commission's regulatory approach is flexible and can react effectively to changes in energy markets caused by new technology and market forces. This flexibility allows the Commission to find the best possible mix of regulation and competition to encourage fair and effective competitive markets and prevent the accumulation and exercise of market power.

The Commission is charged by statute with ensuring that prices in jurisdictional energy markets remain just and reasonable and are not unduly discriminatory or preferential. The Commission does this by preserving and expanding the transparency of information and operations in energy markets, and by having effective rules that encourage fair and efficient competitive markets. The Commission accomplishes this primarily through:

- Its rate, merger and corporate review jurisdiction under sections 205, 206 and 203 of the Federal Power Act.
- Its rate jurisdiction under sections 4 and 5 of the Natural Gas Act and section 311 of the Natural Gas Policy Act of 1978.
- EPAct 2005 amendments to the Federal Power Act and Natural Gas Act related to market operations, including anti-manipulation provisions.

In FY 2007, the Commission actively took steps to encourage fair and effective competitive markets. The Commission issued a final rule reforming the decade-old Open Access Transmission Tariff and made significant changes to the market-based rate program, while codifying for the first time the rules for obtaining market-based rate authority. The Commission also convened a series of public conferences to evaluate the state of competition in wholesale power markets. The Commission has a duty to ensure that jurisdictional services provided in wholesale markets are just and reasonable and not unduly discriminatory, and these public conferences helped discharge this important responsibility. As a result of these conferences, the Commission issued an advanced notice of proposed rulemaking, which addressed a number of issues in wholesale electric markets.

The agency's efforts to promote competitive markets take place at a time when the cost of natural gas and primary fuels used to generate electricity are rising, resulting both in higher gas and power prices. In particular, the wholesale spot price of natural gas has more than doubled in the five years since 2002. That increase is being borne by natural gas consumers. It is also borne by electricity consumers, since increasing fuel costs put upward pressure on power prices. To some extent, increasing electricity prices may be the unavoidable result of rising fuel costs.

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However, movements in retail prices are not a correct measure of the success of competition in wholesale power markets. The truest measure of that success is what electricity prices would have been in the absence of competition, based on total reliance on regulation, recognizing the imperfections of cost-of-service regulation. This measurement, however, is impossible to quantify with any satisfactory precision.

The better course is to compare the elements of competitive wholesale power and gas markets with the elements of perfect or textbook competition. Success can be measured by the extent to which wholesale markets manifest these characteristics. The elements of perfect competition include the following:

- Adequacy of electricity and natural gas supply
- Entry by generators and gas producers
- Market access

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- Robust infrastructure—both electric transmission and gas pipelines
- Fair access to grid and pipelines
- Continued infrastructure investment
- Contract certainty
- Regulatory stability
- Good market rules
- Market transparency
- Elasticity of demand—effective demand response
- Effective enforcement
- Absence of market manipulation and market power exercise.

It should be recognized that perfect competition may not exist outside a textbook. For that reason, the goal should perhaps be workable competition to assure that wholesale power and gas markets have as many elements of perfect competition as possible. The Commission is making continued progress towards that goal.

## FAIR AND EFFICIENT Competitive Market Rules

The Commission ensures that open access transmission service is available at reasonable prices on a nondiscriminatory basis. This provides the foundation for fair and efficient wholesale energy markets for electricity and natural gas. In exercising its jurisdiction over wholesale markets and transportation in interstate commerce, the Commission strives to reduce barriers in both gas and electric markets. Furthermore, the Commission seeks to adopt approaches that are complementary to those of the states in their regulation of retail markets.

The Commission continues to make progress towards strengthening competitive wholesale power and gas markets. In particular, it has proposed a number of reforms and adopted orders that make continued progress towards more perfect competition. In FY 2007, the Commission took steps to improve access to the transmission grid, improve market rules, assure continued entry by generators through adoption of forward capacity markets, and improve market transparency.

#### MARKET RULE CHANGES

In FY 2007, the Commission addressed issues in wholesale competitive markets by taking the following actions:

- In October 2006, the Commission finalized a rulemaking modifying the mandatory power purchase obligation for electric utilities under the Public Utility Regulatory Policies Act of 1978. The final rule does not terminate the purchase obligation of any utility, but instead allows electric utilities to file applications for relief. Qualifying facilities in the markets the Commission identified may, under the rule, be able to rebut the presumption of access to markets because of operational characteristics or transmission constraints. In June 2007, the Commission issued a rehearing order affirming the final rule.
- In November 2006, the Commission took final action to establish a Forward Capacity Market to address deficiencies in New England's generation

capacity markets. The Commission reiterated that it relied upon a relevant and substantial record in reviewing the settlement. The agreement was the product of a series of more than 30 formal settlement conferences over a four-month period.

- In December 2006, the Commission approved, with conditions, a settlement agreement concerning PJM's Reliability Pricing Model intended to secure sufficient resources to meet PJM's reliability requirements at just and reasonable rates. The settlement will allow utilities to provide capacity through a combination of generation, transmission and demand response.
- In January 2007, the Commission authorized the Southwest Power Pool to initiate its proposed energy imbalance market. SPP's energy imbalance market employs least-cost bid-based security-constrained economic dispatch and locational marginal pricing of energy to settle all energy imbalances in its footprint.
- In February 2007, the Commission adopted a final rule reforming its decade-old open-access electric transmission tariff. As described more fully below, the reform will better ensure that transmission service is provided on a basis that is just and reasonable and not unduly discriminatory. It also provides for more effective regulation and transparency in the operation of the transmission grid.
- In April 2007, the Commission largely reaffirmed a prior order approving planned power market reforms in California, reiterating the Commission's view that the reforms are necessary to help prevent a recurrence of the Western energy crisis. The Commission granted in part and denied in part petitions for clarification and rehearing of its September 2006 order approving a filing by the CAISO to implement its proposed Market Redesign and Technology Upgrade (MRTU) tariff.
- In June 2007, the Commission issued an Advanced Notice of Proposed Rulemaking seeking public comment on potential reforms to improve operations in

organized wholesale power markets. The proposal will help the Commission identify challenges facing competitive wholesale power markets in RTOs and ISOs and propose workable solutions in those areas in which the Commission has jurisdiction. Specifically, the Commission sought comments on (1) the role of demand response in organized markets, (2) facilitation of opportunities for long-term power contracts, (3) strengthened market monitoring, and (4) the responsiveness of RTOs and ISOs to customers and other stakeholders.

The Commission also has encouraged the development of business rules and practices that maximize market efficiency, ease market entry, and reduce transaction costs, relying in the first instance on such organizations as the North American Energy Standards Board (NAESB), RTOs and ISOs, where appropriate. For example, in June 2007, the Commission amended its open access regulations governing standards for business practices and electronic communications with interstate natural gas pipelines and public utilities. The Commission incorporated by reference certain standards promulgated by the Wholesale Gas Quadrant and the Wholesale Electric Quadrant of NAESB. Through this rulemaking, the Commission sought to improve coordination between the gas and electric industries in order to improve communications about scheduling of gas-fired generators.

#### DEMAND RESPONSE

A well-functioning competitive wholesale electric market should reflect current supply and demand conditions. The Commission's policy is to facilitate the participation of demand response in organized markets because demand response helps to hold down wholesale power prices, reduces price volatility, increases awareness of energy usage, provides for more efficient operation of markets, mitigates market power and enhances reliability. In FY 2007, the Commission took several steps to help facilitate demand response programs:

 In November 2006, the Commission initiated a Collaborative Dialogue on Demand Response with the National Association of Regulatory Utility Commissioners to explore state/federal coordination of efforts to ERGY SLON

promote and integrate demand response into retail and wholesale markets and planning. The purpose of the Collaborative Dialogue is to address the coordination of federal and state demand response policies concerning issues such as the regulatory barriers to increased customer participation in demand response programs identified in the 2006 Report to Congress: Demand Response & Advanced Metering.

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- In April 2007, the Commission conducted a technical conference on integrating demand response in wholesale power markets. The Commission also explored the technical feasibility and capability of demand resources to be cost-effectively integrated into the transmission planning process.
- In June 2007, the Commission issued an Advanced Notice of Proposed Rulemaking on competition in wholesale markets, which included proposals to encourage greater demand response in RTOs and independent system operators (ISOs) by (1) allowing demand resources to provide certain ancillary services in their markets unless not permitted by state law, (2) modifying tariffs to let demand resources provide spinning and supplemental reserves without being required to sell into the energy market, (3)modifying RTO and ISO tariffs to eliminate certain charges for purchasing less energy in real time than in the day-ahead market during a system emergency, (4) amending market rules to permit an entity that aggregates the demand responses of individual retail consumers to bid the aggregate demand reduction directly into an RTO or ISO energy market, unless not permitted by state law, and (5) modifying market power mitigation rules to allow pricing during an emergency to elicit more demand response.
- In September 2007, Commission staff issued its annual report pursuant to EPAct 2005 that charts progress in the number of demand response programs, the number of states introducing opportunities for demand response, and the key role that

demand response is playing in organized wholesale power markets. Demand response and advanced metering programs have grown significantly over the past year, according to the report.

#### OPEN ACCESS TRANSMISSION TARIFF REFORM

The primary task of the Commission in the area of electric regulation is to guard the consumer from rates that are not just and reasonable. The primary goal of the Open Access Transmission Tariff reform final rule is to prevent undue discrimination and preference in transmission service, thus allowing wholesale customers to access lower-cost power supplies.

In the final rule issued in February 2007, the Commission concluded that the existing Open Access Transmission Tariff provides an opportunity to engage in undue discrimination and preference in transmission service. The final rule limits undue discrimination and preference by increasing the transparency of Open Access Transmission Tariff administration. The final rule also limits undue discrimination by requiring an open, transparent and coordinated transmission planning process that will consider the needs of native load customers and transmission customers, as well as transmission providers. Specifically, the final rule was issued to:

- Increase non-discriminatory access to the grid by eliminating the wide discretion that transmission providers had in calculating available transfer capability.
- Improve the ability of customers to access new generating resources by requiring an open, transparent and coordinated transmission planning process.
- Promote efficient utilization of transmission by eliminating artificial barriers to access to the grid.
- Facilitate the use of and access to intermittent energy resources.
- Further acknowledge the role of demand resources in transmission planning and in ancillary services.
- Strengthen compliance and enforcement efforts.



The final rule applies to all public utility transmission providers, including RTOs and ISOs. Each public utility is required to file revisions to its Open Access Transmission Tariff to conform to this rule. Since February 2007, the Commission has taken several steps to implement the provisions of the Open Access Transmission Tariff final rule and to offer guidance to the industry:

 In June 2007, Commission staff convened technical conferences in four locations around the country to review and discuss the "strawman" proposals regarding processes for transmission planning required by the final rule.

#### LONG-TERM TRANSMISSION RIGHTS

In July 2006, the Commission issued a rule that required RTOs and ISOs to make long-term firm transmission rights available to all transmission customers. The availability of such rights will provide financial certainty to load-serving entities that wish to enter into long-term power supply arrangements. In FY 2007, the Commission took the following actions on filings made by RTOs and ISOs:

 In November 2006, the Commission accepted PJM's proposal to establish a Long-Term Transmission Rights product intended to allow load serving entities to hedge their energy market positions on a

Differences in market rules and designs, operating and scheduling protocols, and other control-area practices can inhibit or preclude the ability to execute transactions that cross regional boundaries and thus create inefficiencies.

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- In July 2007, Commission staff convened a technical conference to consider (1) the minimum lead-time for undesignating network resources in order to make firm third-party sales and (2) the eligibility of on-system sellers' choice and system sales to be designated as network resources.
- In August 2007, due to requests by transmission providers and stakeholders for guidance during the transmission planning conferences, the Commission staff released a white paper regarding the compliance filings for transmission planning and scheduled follow-up technical conferences for October 2007 to discuss transmission providers' draft proposals regarding transmission planning.

long-term basis by providing price certainty over the relevant period.

- In May 2007, the Commission generally affirmed its earlier holding that PJM's Long-Term Transmission Rights proposal was consistent with the rule.
- In May 2007, the Commission accepted the Midwest ISO long-term firm transmission rights proposal, subject to modification.
- In July 2007, the Commission conditionally accepted, subject to modification, proposed revisions to the California MRTU Tariff to implement long-term firm transmission rights.
- In August 2007, the Commission held a technical conference to address issues raised by the New York Independent System Operator's Long-Term Transmission Rights proposal.

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#### **REDUCTION OF BARRIERS TO TRADE**

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Differences in market rules and designs, operating and scheduling protocols, and other control-area practices can inhibit or preclude the ability to execute transactions that cross regional boundaries and thus create inefficiencies. Significant differences in power products, pricing and rules among markets can reduce competition among suppliers across the regions. Resolving these differences (referred to as "seams") could lower transaction costs, permit greater utilization of resources and, ultimately, lower costs to customers.

The Commission has facilitated discussions between industry and the states to address and resolve seams issues. In FY 2007, the Commission took the following actions:

- In November 2006, the Commission accepted for filing a proposed Seams Operating Agreement between the Midwest ISO and Manitoba Hydro.
- In December 2006, the Commission held a technical conference to examine concerns about seams issues stemming from the CAISO's implementation of MRTU. While MRTU does not introduce seams into Western electricity markets, certain seams issues already existed between organized and bilateral markets in the West, and the Commission determined that a technical conference would be appropriate to address these concerns. The Commission also required the CAISO to file quarterly reports, jointly with neighboring control areas, on progress toward reducing seams in the West.
- In March 2007, the Commission held a technical conference on seams issues in the Eastern Interconnection. The goal of the conference was to identify the market seams in the Eastern Interconnection that create the greatest barriers to trade and cost shifts.

#### PREVENTING ACCUMULATION AND EXERCISE OF MARKET POWER

Commission rules encourage fair and efficient competitive markets by preventing the accumulation and exercise of market power and promoting transparency of competitive electric and gas markets.

Most industries that make the transition to increased competition experience considerable restructuring, including consolidations of companies within individual segments of the industry. Mergers and other dispositions or acquisitions can bring efficiencies from economies of scale and can represent the success of competition when more effective business models grow. However, they also can eliminate competitors and lead to markets that are too concentrated and not fully competitive.

The Commission safeguards the customer from consolidations of energy assets that reduce competition, and ensures that rates customers pay for electricity and transmission services in wholesale markets are just and reasonable.

The Federal Power Act and the Natural Gas Act enable the Commission to identify and disallow from jurisdictional rates any imprudently-incurred, unjust or unreasonable or unduly discriminatory or preferential costs from affiliate transactions among companies in the same holding company system.

#### REVIEW OF MERGERS AND ACQUISITIONS AND OTHER CORPORATE TRANSACTIONS

The Commission is responsible for determining whether certain mergers and acquisitions in the electric industry are consistent with the public interest. In making its determination, the Commission examines a transaction's effect on competition, rates and regulation, and the potential for cross-subsidization. The Commission's approach to mergers analyzes horizontal and vertical competitive concerns, and establishes filing requirements and conditions for mergers that raise market power concerns. In FY 2007, the Commission held several technical conferences to evaluate the merger and acquisition review process. In response to these technical conferences, in July 2007 the Commission issued the following package of orders designed to provide greater clarity and guidance on its merger and acquisition review policies while protecting customers from inappropriate crosssubsidization between regulated utilities and their unregulated affiliates:

In a Supplemental Policy Statement, the Commission provided guidance regarding future implementation of section 203 of the Federal Power Act. This guidance was based on the Commission's experience amending its Federal Power Act section 203 regulations to implement EPAct 2005 as well as enacting new regulations under the Public Utility Holding Company Act of 2005.

In its review of mergers and other corporate transactions, the Commission uses its authority under section 203 of the Federal Power Act to prevent the accumulation of market power. A merger could potentially increase market power by eliminating a competitor or overly concentrating those markets where the merging parties have overlapping generation resources. In such a case, the Commission would either reject the merger, or impose conditions or accept applicant commitments to ensure that competition is not harmed.

For example, in October, 2006, the Commission authorized the merger of National Grid and KeySpan Corporation, subject to restrictions on certain sales by the merged company. The analysis of the effect of the merger on competition in the relevant markets showed that combining National Grid's electric generating resources in upstate New York with KeySpan's generating resources in New York City and Long Island would increase market concentration in New York City and Long

Commission rules encourage fair and efficient competitive markets by preventing the accumulation and exercise of market power and promoting transparency of competitive electric and gas markets.

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- In a proposed rule, the Commission sought to codify cross-subsidy pricing restrictions on power and nonpower goods and services transactions between franchised public utilities with captive customers and their market-regulated power sales affiliates or non-utility affiliates.
- In a separate proposed rule, the Commission asked for comment on a proposal to grant an additional limited blanket authorization for certain dispositions of voting securities by public utilities to public utility holding companies.

Island, and therefore potentially result in an increase in market power in those markets. The Commission's concern about any increase in market power was addressed by the applicants' commitment to seek prior Commission authorization before making sales from upstate generating resources into New York City or Long Island submarkets, and therefore the Commission relied on that commitment in authorizing the merger. The Commission also required applicants to revise their market-based rates tariffs to show the limitation on those sales. EDERAL ENERGY FER

Overall, the Commission approved the following significant mergers and acquisitions in FY 2007:

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- In October 2006, the Commission approved the merger of KeySpan Corp. and National Grid. The Commission determined that the \$7.3 billion merger would not adversely affect wholesale power rates, noting that the companies had stated their commitment to hold ratepayers harmless from transactionrelated costs in excess of transaction-related savings for five years.
- In October 2006, the Commission approved the acquisition of NorthWestern Corp. by Babcock & Brown Infrastructure Ltd for \$2.2 billion. The Commission noted that the acquisition would not result in any new combination of generating assets that would compete in the same geographic markets.
- In December 2006, the Commission approved the acquisition of Duquesne Light Holdings Inc. by an investment consortium led by Macquarie Infrastructure Partners. Under the terms of the agreement, the consortium would acquire all of the outstanding shares of Duquesne Light Holdings Inc. in a transaction valued at approximately \$1.59 billion.
- In December 2006, the Commission approved the \$9.2 billion merger between Peoples Energy and WPS Resources. In approving the merger, the Commission noted that the applicants had offered "hold harmless" provisions for jurisdictional ratepayers and had provided sufficient assurances that their merger would not result, at the time of consummation or in the future, in cross-subsidization.
- In September 2007, the Commission authorized the transfer of jurisdictional assets owned by Oncor Electric Delivery and TXU Wholesale through the acquisition of their parent company, TXU Corp., by Texas Holdings. The transaction was valued at approximately \$32 billion.

#### MARKET POWER IN WHOLESALE POWER SALES

The Commission has been granting market-based rate authority to qualified applicants since 1988. The Commission's policy has evolved based on its experience on a case-bycase basis. This program first requires a seller seeking marketbased rate authorization to demonstrate that neither it nor its affiliates have market power in generation or transmission (or that any such market power is sufficiently mitigated). If such demonstration is made, the grant of market-based rate authorization is conditioned on adherence to a code of conduct, the quarterly filing of transaction information through the Electric Quarterly Reports, and the filing of any change in status affecting market power.

In June 2007, the Commission issued Order No. 697, its final rule on the proposed amendments to its market-based rate policy. The rule reflects the Commission's fundamental responsibilities to oversee wholesale power markets and protect consumers from exploitation in those markets. The rule was designed to reform and codify the existing standards to protect customers and provide greater certainty to sellers seeking market-based rate authority. The rule became effective in September 2007 and has the following major elements:

- The rule includes a two-part test covering horizontal (generation) and vertical (transmission and other barriers to market entry) market power.
- Restrictions on affiliate abuse must be satisfied as a condition of obtaining and retaining market-based rate authority.
- The rule eliminates the section 35.27 exemption from market power screens of all generation built after July 9, 1996. Now all sellers seeking market-based rate authority, or filing updated market power analyses, on or after the effective date of the rule must provide a horizontal market power analysis for the generation they own or control, including generation, built after July 1996.



- It allows a seller to use the entire RTO/ISO geographic footprint as the default relevant geographic market if the RTO/ISO has sufficient market structure and a single energy market with Commissionapproved market monitoring and mitigation. But if the Commission determines there is a submarket within an RTO/ISO, the submarket becomes the default relevant geographic market.
- The rule provides that the Commission will determine appropriate mitigation on a case-specific basis, including whether a "must offer" requirement is necessary to mitigate market power for those sellers that do not demonstrate a lack of market power.
- Finally, the rule allows mitigated sellers to make market-based rate sales at the boundary of the mitigated market if that seller provides assurance that the power will leave the control area and that it will not sell the power back into the control area through an affiliate. The rule imposes a record retention requirement on mitigated sellers making such sales and requires the seller to include tariff language in its market-based rate tariff to allow for such sales.

#### STANDARDS OF CONDUCT

On November 17, 2006, the United States Court of Appeals for the District of Columbia vacated Order No. 2004, which adopted Standards of Conduct for transmission providers, as it applies to the relationship between natural gas pipelines and their non-marketing affiliates in National Fuel Gas Supply Corp. v. FERC, 486 F.3d 831 (D.C.Cir. 2006). The Commission acted promptly to respond to the court decision and to clarify the Standards of Conduct. In January 2007, the Commission issued an interim rule that addressed deficiencies identified by the court by revising the Standards of Conduct so they did not apply to non-marketing affiliates of natural gas pipelines. Concurrently, the Commission issued a proposed rule to make permanent the revisions contained in the interim rule. In the proposed rule, the Commission sought comment on the applicability of the Standards of Conduct to non-marketing affiliates of electric utilities. The Commission also proposed changes to the Standards of Conduct to improve the consideration of transmission in electric utilities' integrated resource planning and procurement subject to certain restrictions designed to protect against affiliate abuse. The Commission received comments and intends to act promptly in these proceedings.

#### WESTERN ENERGY SETTLEMENTS

The Commission continues to pursue resolution of the remaining disputes arising from the 2000–2001 Western energy crisis. While litigation continues in various appeals and Commission proceedings, the Commission approved several additional settlements in refund proceedings for companies involved in the Western energy markets crisis in FY 2007. This represents continued progress towards resolution of the Western energy crisis.

DATE	SETTLING PARTIES	PAYMENT
March 1, 2007	APX, Inc. and approximately 30 other entities	\$53 million
March 17, 2007	Portland General Electric Company	\$65.4 million
June 21, 2007	PacifiCorp	\$27.9 million
June 21, 2007	El Paso Marketing LP	\$56 million
July 6, 2007	BP Energy Company	\$18 million

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# SAFETY

he Commission is responsible for the safety of onshore LNG and non-federal hydropower facilities throughout the entire life cycle of a project: design review, construction and operation.

The Commission reviews and approves the final engineering design of authorized LNG projects, inspects these facilities during construction to ensure compliance with the safety and reliability requirements of Commission orders, and conducts the annual and biennial safety and reliability inspections of the existing jurisdictional LNG peak shaving and marine import terminals for the life of these facilities. The Commission has taken steps to ensure that the review of new facilities does not conflict with the ongoing obligation of the Commission to ensure the safe and reliable operation of existing facilities.

Natural gas projects and hydropower projects have environmental impacts that can be mitigated with appropriate measures. The Commission is committed to satisfying environmental concerns through cost-effective mitigation of environmental impacts, while also seeking to avoid construction delays. Commission licenses include terms and conditions that are designed to mitigate possible environmental impacts of project construction and operation, and to provide opportunities to enhance the public's use of available resources. The Commission monitors these terms and conditions for compliance throughout the term of the license.

#### NATURAL GAS

#### SAFETY AT LNG FACILITIES

Consideration of public safety is the Commission's highest priority when fulfilling its Congressional mandate under the Natural Gas Act to regulate facilities for importation of natural gas. The Commission has been proactive in addressing safety concerns and rigorously applies high safety standards to these projects. When projects meet the Commission's safety standards and are found to be in the public interest, they are approved. Projects that fall short of these standards are rejected. NERGY | FER

The siting and oversight of LNG facilities are governed by a comprehensive scheme of federal regulation that guarantees that the Commission and other federal agencies work together to ensure public safety. The Commission works with the U.S. Department of Transportation (DOT), which is responsible for safety of gas pipelines once operational, and the U.S. Coast Guard to ensure the safe siting, operations and reliability of facilities. This process ensures that approved LNG terminals and associated LNG vessel traffic meet safety and environmental requirements during construction and operation. For each project, the Commission, in coordination with DOT and the U.S. Coast Guard, conducts an engineering and siting review geared toward assuring that a facility will operate safely and securely in an environmentally sound manner. In FY 2007, the Commission reviewed 16 LNG applications to ensure that safety concerns are appropriately addressed.

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#### HYDROPOWER

#### DAM SAFETY

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The Commission administers the largest dam safety program in the United States. The Commission cooperates with a large number of federal and state agencies to ensure and promote dam safety and, more recently, homeland security. More than 2,500 FERC-licensed dams are in the program. Two-thirds of these dams are more than 50 years old. As dams age, concern over their safety and integrity grows, and oversight and a regular inspection program are extremely important.

In addition to implementing an effective dam safety program, FERC continues to make significant contributions to ensure and improve the safety of dams in the United States as a member of the National Dam Safety Review Board. The Board, as authorized by Congress, directs and facilitates federal funding and technology transfer to the 50 state dam safety offices to ensure and improve the safety of more than 70,000 non-federal dams in the United States

The Commission dam safety program, recognized both nationally and internationally as a leading expert

in Emergency Action Planning, conducts biennial open training workshops for federal, state and local dam safety and emergency response agencies for emergency action planning and exercising. The Commission also developed and implemented an innovation in dam safety evaluations entitled the Potential Failure Mode Analysis. The Commission provides training to federal and state dam safety agencies in this analysis, which identifies the possible failure modes for specific dams and determines necessary actions before a problem occurs, thereby ensuring the safety of dams and preventing failure emergencies. The entire United States dam safety community has embraced the value Potential Failure Mode Analysis brings to ensuring dam safety.

Commission staff also has assumed a leadership role in many of the important technical advancements in the areas of dam safety research, training, dam safety program design, and the importance of coordinating Emergency Action Plans with the local first responder agencies.

During FY 2007, Commission staff: (1) conducted three workshops on dam site security and emergency action planning; and (2) convened a technical workshop for all Commission pump storage operators, the U.S. Army Corps of Engineers, and the Bureau of Reclamation to develop guidelines for the operation, instrumentation and monitoring, and inspection of pumped storage projects.

Commission staff also has assumed a leadership role in many of the important technical advancements in the areas of dam safety research, training, dam safety program design and the importance of coordinating emergency action plans with the local first responder agencies. Among the activities in FY 2007 were:

- Three workshops on dam site security and emergency action planning.
- Significant contributions to the Department of Homeland Security (DHS) on dam security and criticality of dams.
- Continuing work with DHS and the Federal Bureau of Investigation to coordinate a national security response at dams.





FERC Staff inspect Taum Sauk Project.



Inspection of Taum Sauk Project.

- Leading interagency coordination on federal infrastructure security at dams.
- Continuing coordination efforts between Commission-regulated dam owners and law enforcement and emergency management agencies.
- Coordination with various federal and state dam safety agencies, Federal Emergency Management Agency and DHS, and providing industry guidance on the format and content of disaster recovery plans for hydropower projects.

The Commission also took additional steps to address safety concerns at specific dam locations. In October 2006, the Commission approved a settlement addressing the December 14, 2005, breach of the upper reservoir of the Taum Sauk hydroelectric project in Reynolds County, Missouri. AmerenUE agreed to pay a \$10 million civil penalty, to fund \$5 million in improvements in the vicinity of the Taum Sauk project, and to adopt a comprehensive safety program for AmerenUE's hydroelectric facilities. The \$10 million civil penalty is the largest the Commission has ever imposed in a hydroelectric matter. The penalty, plus the \$5 million in improvements, are over and above the costs AmerenUE will incur in remediating the environmental and property damage caused by the breach. The approved enhancements include computer system improvements for an enhanced 911 emergency system, construction of a new emergency operations center, installation of an emergency power generator for the municipal drinking water supply, purchase of a CT scanner for the local medical center, and structural improvements to Lesterville High School. The enhancements are scheduled for completion by July 2008.

Commission staff also focused on safety issues involving a sinkhole discovered in the crest of the Swinging Bridge Dam on the Mongaup River in Sullivan County, New York. The Commission conducted an investigative program to assess the condition of the dam, to determine the cause of the sinkhole, and to determine what actions may be necessary to correct the problem. In July 2007, the Commission approved the reopening of the recreation facilities at the Swinging Bridge Reservoir. The recreation areas at the Mongaup Falls and Rio Projects will remain closed until further notice. Prior to reopening the reservoir, the Commission required the licensee to notify the public of any water and boating safety cautions that they must exercise while the reservoir is refilling. In addition, the Commission required the licensee to install signage at all access points notifying the public of the safety cautions and of the rules and regulations for use of the reservoir.





# RELIABILITY

he security, safety, and economic well-being of our citizens depend upon the reliability of our Nation's bulk power system. It is therefore critical for the industry to be regulated by clear, unambiguous, mandatory and enforceable reliability standards and secure communications and control technology.

Historically, while the Commission regulated access to the transmission grid, it had no role in the approval or enforcement of reliability standards. Prior to 1965, reliability of the interconnected electric grid was managed by individual electric utilities, or groups of interconnected utilities, which were, to varying degrees, accountable to state and local regulators. Following the Northeast Blackout of 1965, regional reliability organizations and, later, the predecessor to NERC, were formed to develop voluntary reliability rules and to encourage reliable operating practices. Over time, the voluntary regime proved insufficient. The primary causes of the August 2003 blackout were violations of voluntary reliability standards. Indeed, a common cause of all previous major bulk power system failures was violation of voluntary reliability standards.

#### **RELIABILITY STANDARDS**

In EPAct 2005 Congress granted the Commission authority to establish mandatory reliability standards, and ultimately enforce those standards by adding to the Federal Power Act a new section 215 on reliability. It directed the Commission to promulgate new rules addressing establishment of an Electric Reliability Organization (ERO) and development of mandatory electric reliability standards and enforcement procedures. On June 18, 2007, reliability standards became mandatory for the wholesale electricity grid.

During FY 2007, the Commission took a number of important steps to implement section 215 of the FPA and to ensure that the reliability standards could become effective for the summer season:

In March 2007, the Commission acted to assure the reliability of the nation's bulk power system by approving reliability standards proposed by the North American Electric Reliability Corporation (NERC), the Commission-certified ERO. The final rule approved 83 of 107 proposed reliability standards, which apply to users, owners and operators of the bulk power system designated by NERC through its compliance registry procedures, and simultaneously directed the ERO to modify 56 of the approved reliability standards to address issues identified by the Commission.

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In April 2007, the Commission approved NERC's pro forma Delegation Agreement, which serves as the blueprint for the contractual relationship between NERC and eight regional reliability entities. The agreement includes a compliance monitoring and enforcement program to be used by NERC and regional entities to monitor, assess and enforce compliance with Commission-approved mandatory reliability standards.

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- In May 2007, the Commission issued a final rule to ensure that qualifying facilities are subject to mandatory reliability rules. The final rule clarified that qualifying facilities are not, as a class, exempt from compliance with mandatory reliability standards.
- In May 2007, the Commission approved the assignment of more than 700 Violation Risk Factors for NERC's Reliability Standards. A Violation Risk Factor links the violation of a Requirement of a Reliability Standard with its potential reliability impact on the Bulk-Power System. Violation Risk Factors are an important part of the ERO's compliance and enforcement program that will be used in the determination of monetary penalties for violations of reliability standards.
- In June 2007, the Commission approved eight regional reliability standards for the Western Interconnection. The proposed regional reliability standards would allow the continuation of certain reliability practices that are currently in effect in the Western Interconnection.

- In July 2007, the Commission issued the Small Entity Compliance Guide to assist small entities—small businesses, small organizations and small governmental entities—to comply with the Commission's mandatory reliability standards.
- In August 2007, the Commission proposed to approve three reliability standards that set requirements for the development of system operating limits of the wholesale electricity grid for use in the planning and operation horizons.
- In September 2007, the Commission held a technical conference to explore issues associated with cost recovery of penalties for reliability standard violations assessed against ISOs and RTOs.

#### **CYBER SECURITY**

The Commission has also begun to analyze and facilitate the industry's work in cyber and physical security and information exchange within the industry. In July 2007, the Commission issued a proposed rule to approve a set of reliability standards and, immediately after their approval, to direct modifications to them in order to help safeguard the nation's bulk electric power supply system against potential disruptions from cyber attacks. The proposed standards require certain users, owners and operators of the grid to establish plans, protocols and controls to safeguard physical and electronic access to systems, to train personnel on security matters, to report security incidents, and to be prepared to recover information. The proposed rule follows a *Commission Staff Assessment of Critical Infrastructure Protection Standards*, which was issued in December 2006.

#### **ELECTRIC RELIABILITY STANDARDS APPROVED IN FY 2007**

RELIABILITY	
STANDARD	TITLE
BAL-001-0	Real Power Balancing Control Performance
BAL-002-0	Disturbance Control Performance
BAL-003-0	Frequency Response and Bias
BAL-004-0	Time Error Correction

RELIABILITY	
STANDARD	TITLE
BAL-005-0	Automatic Generation Control
BAL-006-1	Inadvertent Interchange
CIP-001-1	Sabotage Reporting
COM-001-1	Telecommunications



RELIABILITY	
STANDARD	TITLE
COM-002-2	Communications and Coordination
EOP-001-0	Emergency Operations Planning
EOP-002-2	Capacity and Energy Emergencies
EOP-003-1	Load Shedding Plans
EOP-004-1	Disturbance Reporting
EOP-005-1	System Restoration Plans
EOP-006-1	Reliability Coordination – System Restoration
EOP-008-0	Plans for Loss of Control Center Functionality
EOP-009-0	Documentation of Blackstart Generating Unit Test Results
FAC-001-0	Facility Connection Requirements
FAC-002-0	Coordination of Plans for New Facilities
FAC-003-1	Transmission Vegetation Management Program
FAC-008-1	Facility Ratings Methodology
FAC-009-1	Establish and Communicate Facility Ratings
FAC-013-1	Establish and Communicate Transfer Capabilities
INT-001-2	Interchange Transaction Tagging
INT-003-2	Interchange Transaction Implementation
INT-004-1	Interchange Transaction Modifications
INT-005-1	Interchange Authority Distributes Arranged Interchange
INT-006-1	Response to Interchange Authority
INT-007-1	Interchange Confirmation
INT-008-1	Interchange Authority Distributes Status
INT-009-1	Implementation of Interchange
INT-010-1	Interchange Coordination Exceptions
IRO-001-1	Reliability Coordination – Responsibilities
IKO-001-1	and Authorities
IRO-002-1	Reliability Coordination – Facilities
IRO-003-2	Reliability Coordination – Wide Area View
IRO-004-1	Reliability Coordination – Operations Planning
IRO-005-1	Reliability Coordination – Current Day Operations
IRO-006-3	Reliability Coordination – Transmission Loading Relief
IRO-014-1	Procedures, Processes, or Plans to Support
IKO-014-1	Coordination Between Reliability Coordinators
IRO-015-1	Notifications and Information Exchange
IKO-013-1	Between Reliability Coordinators
IRO-016-1	Coordination of Real-time Activities
	Between Reliability Coordinators
MOD-006-0	Procedures for Use of CBM Values
MOD-007-0	Documentation of the Use of CBM
MOD-010-0	Steady-State Data for Transmission System Modeling and Simulation
MOD-012-0	Dynamics Data for Transmission System Modeling and Simulation
MOD-016-1	Actual and Forecast Demands, Net Energy for Load, Controllable DSM
MOD-017-0	Aggregated Actual and Forecast Demands and Net Energy for Load
MOD-018-0	Reports of Actual and Forecast Demand Data
MOD-019-0	Forecasts of Interruptible Demands
MOD-020-0	and DCLM Data Providing Interruptible Demands and DCLM Data
MOD-021-0	Accounting Methodology for Effects of Controllable DSM in Forecasts
PER-001-0	Operating Personnel Responsibility and Authority
PER-002-0	Operating Personnel Training

RELIABILITY	
STANDARD	TITLE
PER-003-0	Operating Personnel Credentials
PER-004-1	Reliability Coordination – Staffing
PRC-001-1	System Protection Coordination
PRC-004-1	Analysis and Mitigation of Transmission and
	Generation Protection System Misoperations
PRC-005-1	Transmission and Generation Protection System Maintenance and Testing
PRC-007-0	Assuring Consistency with Regional UFLS Program
PRC-007-0	Underfrequency Load Shedding Equipment
PRC-008-0	Maintenance Programs
	UFLS Performance Following
PRC-009-0	an Underfrequency Event
DD C 010 0	Assessment of the Design and Effectiveness
PRC-010-0	of UVLS Program
PRC-011-0	UVLS System Maintenance and Testing
PRC-015-0	Special Protection System Data
	and Documentation
PRC-016-0	Special Protection System Misoperations
PRC-017-0	Special Protection System Maintenance
	and Testing
PRC-018-1	Disturbance Monitoring Equipment Installation
PRC-021-1	and Data Reporting
PRC-021-1 PRC-022-1	Under-Voltage Load Shedding Program Data Under-Voltage Load Shedding Program Performance
TOP-001-1	Reliability Responsibilities and Authorities
TOP-002-2	Normal Operations Planning
TOP-003-0	Planned Outage Coordination
TOP-004-1	Transmission Operations
TOP-005-1	Operational Reliability Information
TOP-006-1	Monitoring System Conditions
TOP-007-0	Reporting SOL and IROL Violations
TOP-008-1	Response to Transmission Limit Violations
TPL-001-0	System Performance Under Normal Conditions
TPL-002-0	System Performance Following Loss of a Single BES Element
	System Performance Following Loss of Two or
TPL-003-0	More BES Elements
TPL-004-0	System Performance Following Extreme BES Events
VAR-001-1	Voltage and Reactive Control
1/1 D 000 4	Generator Operations for Maintaining Network
VAR-002-1	Voltage Schedules
Glossary	Glossary of Terms Used in Reliability Standards
WECC-BAL-	Operating Reserves
STD-002-0	operating reserves
WECC-IRO-	Qualified Path Unscheduled Flow Relief
STD-006-0	
WECC-PRC-	Certification of Protective Relay Applications
STD-001-1	and Settings
WECC-PRC-	Protective Relay and Remedial
STD-003-1 WECC-PRC-	Action Scheme Misoperation
STD-005-1	Transmission Maintenance
WECC-TOP-	
STD-007-0	Operating Transfer Capability
WECC-VAR-	
WECC-VAR- STD-002a-1	Automatic Voltage Regulators
	Automatic Voltage Regulators Power System Stabilizers





# ENFORCEMENT

ompetitive energy markets can succeed only when competition is tempered by effective regulation. The Commission has adjusted its regulatory policies to meet the dramatic changes that have occurred in both the natural gas and electricity industries. While the core legal duties of the Commission have not changed—that is, to guard the consumer from market power abuse—the means of discharging this duty have evolved over time.

The Commission permits market-based rates and increasingly sets rules of general applicability that govern market participants and, where applicable, an entire market. As a result of this regulatory approach, it is even more important for the Commission to promote compliance with, and enforce, the statutes it is responsible for implementing and the regulations it issues under those statutes.

The Commission seeks to detect violations quickly; penalize those who violate orders, rules, and regulations; seek disgorgement of unjust profits or other remedies; publicize misconduct where appropriate; and take prompt action to prevent future misconduct. It is important that the Commission understand market dynamics, detect problems or issues in energy markets early, prevent violations of its rules, and enforce compliance with the laws under its jurisdiction. Perhaps most importantly, the Commission needs to ensure that utilities subject to its jurisdiction have effective internal monitoring and compliance programs in place to assure that they are following established Commission rules and regulations. Commission oversight must then provide an independent and external check to ensure that the compliance programs of each jurisdictional utility are adequate, and periodically to audit utility compliance with Commission's rules, regulations and statutory requirements.

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The Commission's enforcement tools were greatly reinforced when EPAct 2005 conferred expanded authority, which provided for the first time civil penalty authority for violations of the Natural Gas Act and Part II of the Federal Power Act. This expanded penalty authority also applied to any entity (not just companies traditionally subject to the Commission's jurisdiction) that manipulates wholesale gas or electric markets by engaging in fraud or deceit in connection with jurisdictional transactions. Armed with this expanded authority, the Commission has created an even stronger and more effective compliance and enforcement program to protect the public interest.

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Within the Office of Enforcement, the Division of Energy Market Oversight monitors markets on a daily basis and maintains regular contact with the market monitors in the Commission-approved RTOs and ISOs. The Division of Investigations conducts non-public investigations of violations of Commission orders, rules or regulations, and the Division of Audits conducts operating and financial audits of regulated entities' practices.

#### VIGILANT OVERSIGHT

Energy markets are complex and change rapidly. A key part of the Commission's market-oriented approach to its oversight of the natural gas and electric power industries is the ability to identify potential problems quickly and to address them before they become severe. Transparency of market operations is key to market oversight.

#### IDENTIFICATION AND REMEDY OF POTENTIAL MARKET PROBLEMS

In FY 2007, the Commission continued to enhance its comprehensive energy market oversight program. This program reviews all key markets daily to detect both anomalous behavior by individual market participants and problems with market rules or operations that affect outcomes significantly. The program uses a real-time information capability to address rapidly developing situations and emergencies.

The Commission's Market Monitoring Center (MMC) provides analysts with data from numerous sources of market information. The information includes data on prices from sources such as RTOs and the trade press, on physical flows on the pipeline and electric transmission systems (largely from data aggregators), on the operating status of some generating units (for example, operational information on nuclear plants from the Nuclear Regulatory Commission) and on some aspects of individual transactions from some trading platforms. It acts as a nerve center where analysts can quickly examine market conditions, exchange insights and develop shared understanding of the information observed. Through daily fact-finding meetings attended by Commission staff, followed by briefings if warranted, the market oversight program helps keep key decision makers updated on market activities.

The MMC, where Commission staff can access most of the real-time and other data obtained from information providers, is a hub of data-collection and analysis for Commission research staff and a "must-visit" for foreign and domestic visitors engaged in or contemplating monitoring their energy markets. In FY 2007, more than 48 groups were briefed on MMC functions and operations by Commission staff; these groups included more than 380 individuals from 32 foreign country delegations. Staff from the U.S. Congress, state commissions, federal agencies, and other energy-related agencies/organizations also toured the MMC in conjunction with appropriate briefings.

The market oversight program focuses on wholesale physical markets for natural gas and electric power and associated transmission markets. The Commission's market oversight program examines detailed interactions between the two industries to detect any possible problems as soon as possible after their occurrence.

Because many other markets affect the operation of the physical electric power and natural gas markets, the market oversight program also reviews related markets every day, including: financial markets for electric power and natural gas, markets for generation fuels and emissions credits, and international markets. The Commission also supports state efforts to monitor power and gas markets. To that end, in FY 2007 the Commission established the Research in Market Oversight (RIMO) program. Under this program, representatives from state agencies come to the Commission for a week to research an energy market issue of importance to the state in partnership with the Commission's Market Oversight staff. The first RIMO project in April 2007 saw five representatives from Wyoming (including three aides to the Governor) study the effect of natural gas pipelines on prices paid to producers in Wyoming. In June 2007, two separate RIMO projects occurred. First, a staff member of the California Public Utilities Commission studied episodes of high prices in various RTOs. to discuss. This outreach program began modestly and has now grown to more than 38 participating state and federal energy agencies, four regional state entities and British Columbia.

Complementing the market oversight program is the long-established Enforcement Hotline program. The Hotline provides a way for market participants and the public to contact the Commission's enforcement staff on a confidential basis by telephone or email on matters affecting prices and wholesale utility service, including bidding anomalies, price spikes, inappropriate use of financial instruments, changes in available capacity on electric transmission systems or natural gas pipelines, undue discrimination in access to interstate transmission

#### The market oversight program focuses on wholesale physical markets for natural gas and electric power and associated transmission markets.

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Second, three staff members of the Public Utilities Commission of Ohio improved modeling techniques they use to analyze electric markets in Ohio. The Commission anticipates performing at least four projects a year with states in the future.

The RIMO program complements an ongoing program in which the Commission makes available to state and federal energy agencies the opportunity to discuss information on energy markets, including: natural gas supplies and prices of electric power, LNG facilities planned and under construction, coal market fundamentals, weather implications and an analysis of observed changes over the month. The program provides for monthly regional phone discussions with representatives of various agencies that have requested participation, using information as posted on the Market Oversight web site and other energy issues the agencies may wish or transportation services, or violations of the Commission's Standards of Conduct or other improper affiliate transactions. The Hotline also is available to landowners to raise concerns regarding pipeline construction and remediation that affects their property. Matters brought to the attention of the Hotline may result in investigations by the Commission's enforcement staff.

#### TRANSPARENCY

Sections 316 and 1281 of EPAct 2005 added section 23 to the Natural Gas Act and section 220 to the Federal Power Act. These sections provide that the Commission may act to facilitate price transparency in wholesale natural gas and electricity markets and authorize the Commission to adopt such rules as may be necessary to assure the timely dissemination of information about the availability and prices of natural gas, electric energy and transmission service in such FEDERAL ENERGY | **FER** REGULATORY COMMISSION

markets. In FY 2007, the Commission took several actions to improve market transparency:

- In October 2006, the Commission held a transparency technical conference designed to (1) review the current structure of energy markets with a particular emphasis on the transparency of price development, (2) assess the quality of existing transparency mechanisms, (3) examine developing price transparency mechanisms, and (4) identify any opportunities for Commission action under EPAct 2005 authority to improve transparency in these markets.
- In October 2006, the Commission adopted new accounting rules for service companies and holding companies to allow for greater accounting transparency and to protect ratepayers from paying for improper service company costs.
- In April 2007, to address concerns regarding transparency in natural gas markets, the Commission proposed new rules to facilitate price transparency in markets for the sale and transportation of natural gas in interstate commerce. The proposed rule would establish (a) a daily requirement for intrastate pipelines to post the capacities and volumes of natural gas flowing through their major receipt and delivery points and mainline segments, and (b) an annual requirement for certain buyers and sellers of natural gas to report the numbers and volumes of relevant transactions for the previous calendar year.
- In July 2007, the Commission held a transparency workshop to discuss various implementation and other technical issues associated with the proposals set forth in the transparency proposed rule.

#### MARKET OVERSIGHT

During FY 2007, Commission staff continuously examined the seasonal events affecting natural gas and electricity prices. The goal was to provide information for Commission staff and to help Congress, state officials and citizens to understand the factors affecting energy supply and demand, and natural gas and electricity prices. At several Commission meetings, staff presented the Commission and the public detailed information relating to current market prices and analyses explaining those prices and their effect on supply and demand in the various regions of the Nation. In February 2007, the Commission issued the **2006 State of the Markets Report**.

In January 2007, the Commission announced an addition to its website to allow greater access to information on jurisdictional and related electric and natural gas markets. The site serves as a repository for Commission analytic work as well as regular updates of market data. This initiative allows stakeholders, regulators and the public to get better access to Commission staff's market observations through the website. Specifically, the webpage:

- Collects and organizes staff's analytical work, such as the State of the Markets Report; and the Winter and Summer Assessments.
- Presents regional information on electric and gas markets, including supply, demand, capacity and price information.
- Updates monthly more than 50 graphs on market indices such as electric and gas prices, generated and delivered electric power and gas pipeline and storage volumes.

#### FINANCIAL FORMS

Uniform accounting and financial forms provide information that is essential to the Commission's oversight authority, namely, financial data covering a company's past performance. The financial statements are prepared in accordance with the Commission's Uniform Systems of Accounts and related regulations. The statements provide data that enable the Commission to develop and monitor cost-based rates, analyze costs of different services and classes of assets, and compare costs across lines of business. In addition, the financial forms are relied upon by electric utilities, interstate natural gas pipeline and oil pipelines, state commissions, and trade associations to develop and monitor rates. In FY 2007, the Commission took the following actions to improve accounting and reporting of financial information:

- In October 2006, the Commission amended its regulations to provide for electronic filing of the FERC Form 60 (annual reporting by centralized service companies in holding companies). In connection with this initiative, the Commission developed and made available to filers electronic submission software, thereby reducing the cost of data entry and the overall burden on filers.
- Also in October 2006, Commission staff met informally with both filers and users of Forms 1 and 2 (annual reporting by Public Utilities and Natural Gas companies) to reexamine the type of data collected by the forms and to determine the need for clarifications, corrections, deletions or additional information.
- In February 2007, the Commission initiated a rulemaking proceeding to assess whether its financial forms collect relevant financial information critical to the Commission's jurisdictional activities.
- Simultaneously, the Commission ordered 14 companies to explain why they failed to file required financial forms, and eliminated the capability to mark data as "privileged" in electronic submissions of financial forms.
- In March and May of 2007, the Commission provided guidance to industry on how companies should implement new accounting standards in the areas of employee post-retirement benefits and income taxes for Commission accounting and reporting

purposes. The new standards and guidance will improve financial reporting and ensure that all companies account for and report these transactions to the Commission in a uniform manner.

- In July 2007, the Commission held a staff workshop to address the need for changes or revisions to the Commission's reporting requirements in the FERC Form No. 6 (annual reporting by Oil Pipelines). By addressing these issues, Commission staff provided an informal forum for market participants and stakeholders in the oil industry to explore ways to improve the quality and usefulness of information contained in this form.
- In September 2007, the Commission proposed to amend the financial forms, statements, and reports for natural gas companies, making up FERC Form Nos. 2, 2-A and 3-Q. The proposed revisions reflect the fact that in the present regulatory environment, in which interstate natural gas pipelines are no longer required to file a triennial restatement of rates, and the number of filed rate cases has declined sharply, FERC Form Nos. 2, 2-A, and 3-Q may need to be expanded and otherwise revised in order for the Commission and the public to have sufficient information to assess the justness and reasonableness of pipeline rates.

#### MARKET MONITORING UNITS

Market monitors have played an integral role in the organized electric markets, providing valuable reporting and analysis services not only to the Commission, but also to the RTOs and ISOs, to market participants, and to state commissions. In light of their importance, the Commission has required that all RTOs and ISOs incorporate a market monitoring function. Market monitoring units (MMUs) take different forms and perform a diverse set of market functions, depending on the individual tariffs of their respective RTOs or ISOs. The span of years over which market NERGY | FER

monitors have been in existence has given the Commission and others in the industry a track record upon which to evaluate the appropriate roles MMUs should play and the procedures that might be adopted to assist them in performing those roles.

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In April 2007, the Commission held a technical conference to review its market monitoring policies. At the conference, the Commissioners heard from interested parties on the development of the concept and functions of market monitoring, the MMUs' role with respect to the Commission, the MMUs' role with respect to ISOs and RTOs, and the MMUs' role with respect to the various stakeholders such as states, generators, transmission providers and customers.

In June 2007, the Commission issued a proposal, which sought comment on the following proposals regarding MMUs:

- Remove the market monitoring unit from RTO/ISO operations.
- Require that the MMU advise the Commission and other stakeholders of any design flaws and report to the Commission any tariff violations it believes may have been committed by the RTO or ISO.
- Hold regular conference calls among the market monitor, interested state commissions and FERC staff.
- Release offer and bid data, with a lag period, but mask market participants' identities.
- Subject to certain limitations, allow state commissions within an RTO or ISO to request and receive information from the RTO's or ISO's MMU.
- Develop a *pro forma* tariff provision to address all sections relating to market monitoring.

In May 2007, in response to complaints filed against PJM alleging interference with the independence of PJM's MMU, the Commission issued data requests to both PJM and the MMU to determine whether, in fact, there had been any tariff violations or interference with the MMU by PJM, and whether any such interference was ongoing. In September

2007, the Commission issued an order on the complaints. While the Commission concluded that PJM had not committed any tariff violations, the Commission initiated settlement procedures for the parties to address the details of the relationship between PJM and the MMU.

#### FIRM BUT FAIR ENFORCEMENT

In EPAct 2005, Congress substantially enhanced the Commission's enforcement authority. First, the new law expanded the Commission's authority to assess civil penalties to include all of the Natural Gas Act and Part II of the Federal Power Act, and set the maximum civil penalty authority for the Natural Gas Act, Part II of the Federal Power Act, and the Natural Gas Policy Act of 1978 at \$1 million per violation per day. Second, EPAct 2005 amended the Natural Gas Act and Federal Power Act to prohibit the use of manipulative or deceptive devices or contrivances by any entity in connection with the purchase or sale of electric energy, natural gas, or transmission or transportation services subject to the jurisdiction of the Commission.

In light of the new authorities granted the Commission by EPAct 2005, the Commission has taken a number of steps to craft a cohesive approach to enforcement, built around the central theme that Commission enforcement actions will be firm but fair. The Commission uses the full range of remedies available—civil penalties, disgorgement of unjust profits, or conditioning, revocation, or suspension of authorizations—but exercises discretion to apply such penalties and remedies in a fair, reasonable and appropriate manner.

#### **CLEAR AND FAIR PROCESSES**

In FY 2007, the Commission took additional steps to establish clear and fair processes to protect energy customers. Specifically, the Commission took the following actions:

 In October 2006, the Commission modified its "no-action" letter process, which allows entities to request and obtain informal staff advice on certain



matters. The Commission clarified that the no-action letter process could be used to obtain advice as to whether Staff will recommend that the Commission take no enforcement action with respect to specific proposed transactions, practices or situations that may raise issues under the Commission's regulations relating to the Standards of Conduct for Transmission Providers, Market Behavior Rules, the Prohibition of Energy Market Manipulation Rules, and the codes of conduct.

 In December 2006, the Commission outlined its policy for processing and assessing civil penalties administratively. The Statement of Administrative Policy explains how the Commission will assess civil

#### INVESTIGATIONS AND ENFORCEMENT

In competitive markets, participants constantly seek new profit opportunities, but some participants may violate rules or manipulate markets to reap unjust profits. In FY 2007, the Commission actively monitored electric and natural gas markets to determine whether price movements are the result of market manipulation or market fundamentals. The Commission's market oversight and investigations staff continually reviewed market activity for any possible manipulation of prices. In close coordination with investigations staff, market oversight staff performs a detailed review of wholesale electric and natural gas prices and market activity on a daily basis with the intent of identifying areas of possible manipulation. If Commission staff identify price

In light of the new authorities granted the Commission by EPAct 2005, the Commission has taken a number of steps to craft a cohesive approach to enforcement, built around the central theme that Commission enforcement actions will be firm but fair.

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penalties and the procedural safeguards provided when it takes enforcement actions under Parts I and II of the Federal Power Act, the Natural Gas Act and the Natural Gas Policy Act of 1978.

In May 2007, the Commission approved the assignment of over 700 violation risk factors for NERC reliability standards. The Commission reviewed the proposed violation risk factor assignments to determine whether they appropriately indicate the potential or expected impact to the reliability of the bulk-power system.

anomalies that are not explained by market fundamentals it will investigate the matter.

The Commission's enforcement investigations in FY 2007 focused on possible market manipulation, undue discrimination or affiliate abuses, violations of Standards of Conduct requirements, compliance with hydropower requirements, violations of the terms and conditions of tariffs, referrals from market monitors in organized markets, and violations related to Commission rules and regulations. Enforcement investigations arise from a variety of sources, including referrals from the Commission, Enforcement Hotline calls, direct contact with enforcement staff, observations of markets, market monitors in RTOs and ISOs, and anonymous tips.

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In FY 2007, the Commission continued to use the Enforcement Hotline, a mechanism whereby industry participants provide information to the Commission, to identify other potential investigations. In addition to identifying possible investigations, the Enforcement Hotline was used by the Commission to encourage selfpolicing and reporting of violations.

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Where the Commission identified violations, it applied remedies to mitigate the effects of market power, required disgorgement of unjust profits where appropriate, imposed civil penalties or other sanctions when available under existing laws, and required compliance plans to prevent future violations.

In many cases enforcement proceedings result in settlements. Settlements allow the Commission to stretch out enforcement resources and conduct investigations In January 2007, SCANA Corporation agreed to pay a \$9 million civil penalty and to disgorge \$1.4 million in profits to resolve an investigation into violations of the utility's Open Access Transmission Tariff (OATT). The company further agreed to credit \$400,000 in foregone point-to-point transmission revenues to retail customers, and to undertake a compliance program including quarterly filings to allow the Commission to ascertain the company's continuing compliance with the network service provisions of its OATT. Specifically, staff identified 1,109 transactions during a four-year period in which South Carolina Electric & Gas, a SCANA subsidiary, improperly used network transmission to facilitate off-system wholesale power sales in violation of its Open Access Transmission Tariff.

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Settlements allow the Commission to stretch out enforcement resources and conduct investigations across a wider field. They also benefit consumers by delivering benefits such as disgorgement of profits sooner than would be possible under litigation.

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across a wider field. They also benefit consumers by delivering benefits such as disgorgement of profits sooner than would be possible under litigation. In FY 2007, the Commission approved the following settlements of enforcement matters:

- In October 2006, the Commission completed action on an investigation concerning the breach of the upper reservoir of the Taum Sauk hydroelectric project in Missouri. The Commission approved a record hydropower settlement of \$15 million, including a \$10 million civil penalty and a \$5 million fund to provide enhancements to the project area over and above remediation of the damages from the breach.
- In January 2007, PacifiCorp agreed to pay a \$10 million civil penalty to settle violations of the utility's Open Access Transmission Tariff (OATT) and Standards of Conduct. Staff's investigation found that PacifiCorp engaged in hundreds of OATT violations granting undue preference to its merchant power function, and engaged in numerous and significant Standards of Conduct violations. The investigation began when PacifiCorp self-reported, following its acquisition by MidAmerican Energy Co., having used network transmission service for transactions that should have employed point-to-point transmission service. Staff identified 1,096 violations since April 2003, representing 174,639 MW of total transmission service.

# In January 2007, Entergy agreed to pay a \$2 million civil penalty and to contribute \$1 million to a hurricane relief fund to settle three separate self-reported matters: (1) employees of Entergy lost, in violation of the Federal Power Act, all hourly Available Flowgate Capability (AFC) data files from the start of the AFC system in April 2004 through January 2005; (2) Entergy's AFC system responded in error to nearly 2,000 requests for transmission service between April 2004 and January 2006; and (3) Entergy on multiple occasions failed to post information on its open-access same-time information system (OASIS) in violation of the Commission's OASIS posting requirements.

- In January 2007, Northwestern Energy agreed to pay a \$1 million civil penalty to settle 83 instances in which the utility violated its Open Access Transmission Tariff, including failure to act on requests for firm monthly and yearly point-to-point transmission service within 30 days, as required by the Commission's Business Practice Standards. Thirty-nine of the violations occurred after August 8, 2005, the date of EPAct 2005's enactment.
- In January 2007, NRG Energy agreed to pay a \$500,000 civil penalty to settle violations of Commission Market Behavior Rules that resulted from the misrepresentation of a reliability-must-run generation facility in ISO-New England. Staff found that NRG intentionally misrepresented that the generating plant was available, when it was not. The misrepresentation resulted from the actions of a single employee and did not involve NRG Energy senior management, the staff investigation concluded. NRG Energy took immediate corrective action, including reporting the incident to the Commission and ISO-New England.
- In March 2007, Bangor Gas Co. agreed to pay a civil penalty of \$1 million and take other actions to resolve self-reported violations of the Commission's "shipper-must-have-title" requirements. Bangor Gas

Co. did not hold title to the gas it transported for nine customers on a natural gas pipeline located in Maine.

- In May 2007, a Calpine Corporation affiliate, Calpine Energy Services, L.P. (CES), agreed to allow a \$4.5 million civil penalty claim in its bankruptcy proceeding to resolve self-reported violations of the Commission's "shipper-must-have-title" requirements. The Commission found that CES violated Commission requirements when the company failed to hold title to 156.5 Bcf of gas that CES transported on eight natural gas pipelines. CES's violations of the "shipper-must-have-title" requirement numbered in the thousands and varied in type, including the misuse of capacity held by Calpine affiliates to serve other affiliates, and improper movement of gas to storage and delivery of gas to other pipelines and markets.
- In May 2007, Columbia Gulf Transmission Company (Columbia Gulf) agreed to pay a civil penalty of \$2 million to resolve an investigation into whether Columbia Gulf violated Commission orders by failing to allow Tennessee Gas Pipeline Company to construct a receipt point interconnection on a natural gas complex in Egan, Louisiana. Under the Stipulation and Consent Agreement, Columbia Gulf may not recover the civil penalty amount from its ratepayers.
- In June 2007, Cleco Power, LLC, (Cleco), agreed to pay a civil penalty of \$2 million to resolve an investigation into whether it violated its code of conduct and a 2003 Commission-approved settlement agreement. Following a self-report by Cleco, a staff investigation found that Cleco's regulated electric utility and its exempt wholesale generators violated the 2003 Settlement Agreement and their code of conduct by sharing six operating personnel and market information from the summer of 2003 to as late as the winter of 2005. The investigation also found that Cleco failed to disclose those violations to the Commission's Office of Enforcement, as required under the 2003 Settlement Agreement.

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In August 2007, the Commission approved a settlement with Gexa Energy, L.L.C. (Gexa) stemming from its failure to file for merger authorization in advance of indirect transfer of Gexa's jurisdictional assets to FPL Energy (FPLE) in a transaction in which FPLE purchased all the equity of Gexa's parent company. Pursuant to the Settlement, Gexa will pay a \$500,000 civil penalty and disgorge nearly \$12,500 in profits with interest.

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Not all enforcement actions result in settlements. Congress gave the Commission the authority to prevent manipulation to protect both consumers and the integrity of these markets on which our economy depends. When manipulation is detected and proven, violators will be punished severely.

In July 2007, for the first time, the Commission used its new enforcement authority to prosecute market manipulation when it issued show cause orders that made preliminary findings of market manipulation and proposed civil penalties and disgorgement totaling \$458 million in two investigations involving traders' actions in natural gas markets. Specifically, the Commission took the following actions with respect to preliminary findings of market manipulation:

The Commission directed Amaranth and two traders to show cause why they should not be assessed civil penalties and disgorge profits totaling \$291 million for manipulating the price of Commission-jurisdictional transactions by trading in the NYMEX Natural Gas Futures Contract in February, March and April 2006.

 The Commission directed Energy Transfer Partners, L.P. to show cause that it did not violate the Commission's then-applicable market behavior rule by manipulating the wholesale natural gas market at Houston Ship Channel on certain dates in 2003, 2004 and 2005. The Commission proposed more than \$167 million in total penalties and disgorgement of unjust profits.

#### INTERNAL COMPLIANCE

Self-reports began immediately after the issuance of the Policy Statement on Enforcement. In FY 2007, the Commission received 40 self-reports of violations of various Commission orders, rules or regulations. In many cases companies took self-corrective action before making the self-report. During FY 2007, 16 self-reports involving less serious matters were closed without further action by the Commission, upon a showing by the company that it was now in compliance. Elsewhere, the Commission has imposed civil penalties for more serious violations that were self-reported, but in doing so gave significant credit in determining the penalty amount to the company for having self-reported. The Commission encourages companies to instill a strong culture of compliance in their organizations, and to self-report violations promptly and fully.

It is incumbent upon the Commission to ensure that its market, reliability and other regulatory rules are clear, enforceable and fully understood by the jurisdictional entities that we regulate. Yet the obligation to comply with those regulations, rules and standards lies with the regulated entity. Therefore, it is important that regulated entities have a rigorous internal compliance program that provides the tools, processes and high-level management support to identify problems or areas of non-compliance and to report such problems to the Commission. The Commission intends to work with its regulated entities to help them develop and maintain good compliance procedures such that any necessary enforcement actions by the Commission (including penalties or sanctions) are a regulatory tool of last resort—invoked only when the compliance process has failed.

#### INDUSTRY COMPLIANCE THROUGH AUDITS

Audits are a crucial part of the Commission's strategy to prevent the accumulation and exercise of market power. The Commission staff conducts audits on a regular but unscheduled basis to ensure that jurisdictional companies comply with the Commission regulations, orders and poliIn FY 2007, the Commission completed 68 audits of jurisdictional companies, including natural gas pipelines and electric utilities. The 68 audits consisted of 29 operational audits and 39 financial audits. The jurisdictional companies implemented corrective actions to comply with all of the 98 recommendations issued by the Commission. The Commission conducted these audits proactively on a regular but unscheduled basis to ensure compliance with various Commission requirements.

The audits resulted in stringent compliance plans requiring the creation of robust compliance programs. Among them were requirements for the company to conduct periodic internal audits related to the areas of noncompliance, to make refunds, to make correct-

#### Transparency of market operations is key to market oversight.

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cies in four major program areas: Open Access Transmission Tariff; market-based rate program; market-based-rate storage program; and price transparency. Audits in these major program areas are performed to ensure that jurisdictional companies are following appropriate Commission precedent when providing and obtaining transmission service, making power sales in wholesale power markets, pricing storage and storage services at market prices, and reporting trade data to price index publishers. In FY 2007, the Commission has completed major audits in these program areas to improve jurisdictional companies' compliance with Commission precedent. Corrective actions resulting from these audits included structural, process and procedural changes, as well as remedies to improve market transparency.

ing accounting entries, and to file tariff revisions. These compliance plans required the creation of organizational, procedural and process remedies. For example, the Commission auditors monitored a public utility's successful completion of a new construction project costing \$25 million to alleviate congestion on the transmission system. This increased transmission capacity benefited many entities in the Midwest, including a number of municipal electricity providers. Moreover, two Commission audits resulted in a public utility (1) paying \$1 million in refunds for fuel costs improperly recovered from whole-sale energy customers in fuel adjustment clause billings and (2) paying \$125,000 in refunds for engaging in affiliated transactions without Commission authorization.





# APPENDIX A BACKGROUND INFORMATION

#### **COMMISSION OVERVIEW**

The Federal Energy Regulatory Commission (FERC or the Commission) is an independent agency that regulates aspects of the electric, natural gas and oil pipeline industries. FERC also reviews proposals to build liquefied natural gas (LNG) terminals, certificates interstate natural gas pipelines and licenses hydroelectric power projects. The Energy Policy Act of 2005 (EPAct 2005) gave FERC additional responsibilities for overseeing the reliability of the nation's electric grid, and additional enforcement:

- Regulating the transmission and sale of natural gas for resale in interstate commerce.
- Regulating the transportation services of interstate oil pipelines.
- Regulating the transmission and wholesale sales of electricity in interstate commerce.
- Reviewing mergers, acquisitions, asset sales, and certain security transactions in the electric industry.
- Licensing and inspecting private, municipal, and state hydroelectric projects.

- Approving the siting and abandonment of interstate natural gas facilities, including pipelines, storage facilities, and liquefied natural gas facilities.
- Approving the siting of electric transmission facilities in national interest electric transmission corridors if certain conditions are met.
- Overseeing the establishment and enforcement of reliability standards for the bulk power system.
- Monitoring wholesale energy markets and investigating violations of Commission orders, rules, and regulations.
- Enforcing compliance with FERC rules, through audits, the use of civil penalties, and other means.
- Overseeing environmental matters related to natural gas pipelines and hydroelectric projects.
- Administering accounting and financial reporting regulations applicable to regulated companies.
- Assuring the safety of licensed hydroelectric projects and liquefied natural gas facilities.

The combination of the Commission's vision, mission, organizational structure, resources and goals, as described in this section will help it achieve its regulatory responsibilities, including those added by EPAct 2005. AL ENERGY | FERC

#### **REGULATORY AUTHORITY**

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The Commission is an independent regulatory agency within the U.S. Department of Energy (DOE).

The Commission was created through the Department of Energy Organization Act on October 1, 1977. At that time, the Federal Power Commission (FPC), the Commission's predecessor that was established in 1920, was abolished and the Commission inherited most of the FPC's regulatory mission.

The Commission has five members who are appointed by the President of the United States with the advice and consent of the Senate to five-year staggered terms. Each Commissioner has an equal vote on regulatory matters and no more than three Commissioners may belong to the same political party. One member is designated by reasonable and not unduly discriminatory or preferential. Under Federal Power Act section 203, as amended by EPAct 2005, the Commission reviews mergers and certain corporate transactions involving public utilities and public utility holding companies. Under Federal Power Act sections 203, 205 and 206, the Commission primarily regulates investor-owned utilities. Government-owned utilities (e.g., Tennessee Valley Authority, federal power marketing agencies, and municipal utilities) and most cooperatively owned utilities are not, in large part, subject to Commission regulation (with certain exceptions).

Regulation of retail sales and local distribution of electricity are matters left to the states. The Commission does not have a role in authorizing the construction of

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#### MISSION

#### Regulate and oversee energy industries in the economic, environmental, and safety interests of the American public.

#### VISION

#### Abundant, reliable energy in a fair competitive market.

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the President to serve as Chairman and is the Commission's chief executive officer.

Hydropower regulation, the oldest area of the Commission's jurisdiction, began with the FPC's regulation of non-federal hydroelectric generation in 1920 and includes authorizing the construction of projects in interstate commerce and overseeing their operation and safety.

Since 1935, the Commission has regulated certain electric industry activities under the Federal Power Act. Under Federal Power Act sections 205 and 206, the Commission ensures that the rates, terms and conditions of sales for resale of electric energy and transmission service in interstate commerce by public utilities are just, new generation facilities (other than non-federal hydroelectric facilities) as regulation of such construction is the responsibility of state and local governments. EPAct 2005 gave the Commission authority to permit the construction or modification of transmission facilities in national interest electric transmission corridors designated by the Secretary of Energy, if certain conditions are met.

A major new area of Commission regulation as a result of EPAct 2005 is oversight of the Electric Reliability Organization (ERO). The ERO will develop and enforce mandatory reliability standards for the nation's bulk power system, subject to Commission approval pursuant to new section 215 authority under the FPA. On July 20, 2006, the Com-



mission conditionally certified the North American Electric Reliability Corporation (NERC) as the ERO. On March 15, 2007, the Commission acted to protect the reliability of the nation's bulk power system by approving 83 reliability standards proposed by the Commission-certified ERO. On June 18, 2007, all owners, users and operators of the bulk power system became subject to mandatory reliability standards approved by the Commission.

The Commission's role in regulating the natural gas industry is largely defined by the Natural Gas Act. Under sections 3 and 7 of the Natural Gas Act, the Commission regulates the construction of new on-shore LNG import terminals and natural gas pipelines and related facilities. Under sections 4 and 5 of the Natural Gas Act, it oversees the rates, terms and conditions of sales for resale and transportation of natural gas in interstate commerce. The Commission's jurisdiction over wholesale sales of natural gas, however, is limited by the Natural Gas Policy Act of 1978 and the Wellhead Decontrol Act of 1989. Pipeline siting and construction is authorized by the Commission if found to be required by public convenience and necessity. As with hydropower licensing, the Commission's actions on LNG and pipeline projects typically require consideration of factors under the National Environmental Policy Act of 1969, the Endangered Species Act, the Coastal Zone Management Act and other such statutes. 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.

Finally, the Interstate Commerce Act gives the Commission jurisdiction over the rates, terms and conditions of transportation services provided by interstate oil pipelines. 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.

#### STRATEGIC PLAN

FEDERAL ENERGY REGULATORY

STRATEGIC PLAN FRAMEWORK

#### Mission

Regulate and oversee energy industries in the economic, environmental, and safety interests of the American public.

#### Vision

Abundant, reliable energy in a fair competitive market.

#### Guiding Principles that Strengthen the Commission's Overall Performance

To fulfill its Mission, the Federal Energy Regulatory Commission commits to:

#### Organizational Excellence

Use resources efficiently and effectively to achieve its strategic priorities.

#### Due Process and Transparency

Complete regulatory proceedings in an open and fair manner, consistent with established regulations.

#### **Regulatory Certainty**

Provide regulatory certainty through consistent Commission approaches and actions.

#### Stakeholder Involvement

Ensure that interested parties are informed and provided an appropriate opportunity to participate in Commission proceedings.

#### Timeliness

Act on regulatory matters in an expeditious manner.

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#### **Goal 1: Energy Infrastructure**

#### Promote the Development of a Strong Energy Infrastructure

### Objective A: Stimulate Appropriate Infrastructure Development

- Resolve regulatory and other challenges to needed development
- Encourage investment and effect timely cost recovery

#### Objective B: Maintain a Reliable and Safe Infrastructure

- Assure reliability of the interstate transmission grid
- Protect safety at LNG and hydropower facilities
- Incorporate environmental considerations into Commission decisions

#### **Goal 2: Competitive Markets**

#### Support Competitive Markets

## Objective A: Develop Rules that Encourage Fair and Efficient Competitive Markets

- Employ best practices in market rules
- Reduce barriers to trade between markets and among regions

# Objective B: Prevent Accumulation and Exercise of Market Power

- Assure proposed mergers and acquisitions are in the public interest
- Address market power in jurisdictional wholesale markets

#### **Goal 3: Enforcement**

#### Prevent Market Manipulation

#### **Objective A: Provide Vigilant Oversight**

Identify and remedy problems with structure and operations in energy markets

#### Objective B: Provide Firm but Fair Enforcement

- Establish clear and fair processes
- Conduct investigations promptly and impose penalties where appropriate
- Encourage self-policing and reporting of violations

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#### OFFICE DESCRIPTIONS

OFFICES	DESCRIPTIONS
Office of Administrative Law Judges	Resolves contested cases as directed by the Commission effectively, efficiently and expeditiously, either through impartial hearing and decision or through negotiated settlement, ensuring that the rights of all parties are preserved.
Office of Administrative Litigation	Represents the public interest and seeks to litigate or settle cases set for hear- ing in a timely, efficient and equitable manner while ensuring the outcomes are consistent with Commission policy.
Office of External Affairs	Handles all external communications with the public, press, Congress, and the states for the Commission.
Office of the Executive Director	Provides administrative support services to the Commission including human resources, procurement, information technology, organizational management, financial, logistics and others.
Office of Energy Projects	Strengthens our energy infrastructure through the approval and oversight of hydroelectric and natural gas energy projects that are in the public interest and assures the safety of hydroelectric and LNG facilities.
Office of the General Counsel	Provides legal services to the Commission. OGC represents the Commission before the courts and Congress, and is responsible for the legal phases of the Commission's activities.
Office of Enforcement	Ensures effective regulation and protection of consumers by monitoring the operation of energy markets, identifying and remedying market problems in a timely manner, and enforcing Commission orders, rules and regulation.
Office of Energy Markets and Reliability	Establishes and maintains rules for fair and competitive markets and prevents the exercise of market power and undue discrimination and preference by establishing market rules, terms and conditions of service. Reviews proposed electric reliability standards; oversees enforcement of Commission approved standards, reviews/conducts special reliability studies and assessments and considers cost recovery filings pursuant to reliability expenditures.

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#### **GUIDING PRINCIPLES**

EGULA

Five principles guide the Commission as it exercises its jurisdiction under its governing statutes. Whether the Commission is adjudicating a rate filing, ruling on a permit application, or developing a new policy, it strives to meet these criteria as a means of ensuring that each of its actions is consistent with the public interest.

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**Organizational Excellence.** Above all, the Commission strives to use its resources efficiently and effectively to achieve its strategic priorities. This includes its human resources. The Commission performs targeted recruiting and hiring and has developed a markets-oriented training curriculum for entry-level and experienced staff and a retention and mentoring program for new employees. The Commission also makes efficient use of its information technology to receive filings, produce reports and orders, and maintain data repositories. The Commission tracks the activities of its staff to ensure that they are directed at meeting the Commission's strategic goals and objectives.

Due Process and Transparency. Paramount in all of its proceedings is the Commission's determination to be open and fair to all participants. All significant initial filings submitted to the Commission are announced by way of public notice published in the Federal Register. Material issues of fact are litigated in public hearings governed by due process rules. Many of the Commission's major decisions are discussed and announced at open meetings that are webcast at no charge on its website. Significant items are posted on the Commission's website and beginning in July 2007 summaries of items from Commission meetings were immediately posted following the meeting.

**Regulatory Certainty.** In each of the thousands of orders, opinions and reports issued by the Commission each year, the Commission strives to provide regulatory certainty through consistent approaches and actions. Without an assurance that the Commission's policies will be internally consistent and applied consistently, investors may be unwilling to bear the risks associated with investing in critical energy infrastructure. Where appropriate, the Commission provides generic direction to industry participants in the form of guidance orders, policy statements or rulemakings, to avoid the uncertainty present in case-by-case adjudications. The Commission also has codified market power rules designed to help prevent the exercise of market power and market abuse to provide a more stable marketplace and create an environment that will attract needed investment capital.

**Stakeholder Involvement.** The Commission conducts regular outreach to ensure that interested parties have an appropriate opportunity to contribute to the performance of the Commission's responsibilities. The Commission also organizes technical conferences and workshops designed to explain and explore issues related to the development and implementation of its policies. Throughout FY 2007, the Commission met with state and federal regulators, industry officials and the public to discuss significant energy issues. Specifically, the Commission held the significant technical conferences and workshops; shown on the table on page 65.

The Commission also held regional conferences to identify infrastructure conditions, needs and investment, as well as environmental and landowner concerns. Finally, in processing hydropower and gas-related permit applications, the Commission conducts an extensive collaborative pre-filing process, during which it receives input from a multitude of stakeholders including citizen groups, environmental organizations, tribal interests, and local, state and federal resource agencies.

**Timeliness.** The Commission's goal is to reach an appropriate resolution of each proceeding in an expeditious manner. Toward that end, the Commission has steadily reduced the time it takes to act on projects, such as LNG import terminals, gas storage facilities, and interstate natural gas pipelines. It has done so without compromising its environmental protection and public participation responsibilities. The Commission also sets and tracks compliance with goals for timely resolution of filings for cost recovery, new services or changes to existing services, as well as on opinions resolving initial decisions, complaints, and FPA section 203 applications.



DATE	SUBJECT	LOCATION
October 12	Technical Conference regarding Preventing Undue Discrimination and Preference in Transmission Service	DC
October 13	Technical conference on Price Transparency	DC
December 5	Technical Conference to discuss proposals to allocate between Midwest ISO and PJM cost responsibility for constructing facilities that benefit both RTOs	DC
December 6	Technical conference on Hydroelectric Infrastructure	DC
December 7	Technical Conference on Public Utilities Holding Company Act of 2005 and Federal Power Act Section 203 Issues	DC
December 14 December 15	Technical Conference to address issues related to the CAISO electric tariff, which reflects the Market Redesign and Technology Upgrade	Phoenix
February 13 March 6 March 7 March 20 March 21	Workshop on Electric Transmission Siting	Chicago Boston Atlanta Portland Phoenix
February 27 May 8	Conference on Competition In Wholesale Power Markets	DC
March 8	Technical Conference on the Commission's Merger and Acquisition Review Standards under FPA Section 203	DC
March 29	Technical conference on Seams Issues for RTOs and ISOs in the Eastern Interconnection	DC
April 5	Technical conference to review the Commission's general policies regarding market monitoring	DC
April 23	Technical Conference on Demand Response in Wholesale Markets	DC
May 8	Quarterly Trilateral Electric Reliability Conference with Canadian and Mexican energy and reliability regulators	DC
June 4–7 June 13 June 26 June 28–29	Technical conference on "strawman" proposals regarding transmission planning under Order No. 890	Little Rock Park City Phoenix Pittsburgh
July 18	Workshop on Adequacy of FERC Financial Forms	DC
July 24	Informal staff workshop on the transparency provisions of the Natural Gas Act and the Energy Policy Act of 2005	DC
July 30	Technical conference on Preventing Undue Discrimination and Preference in Transmission Service	DC
August 22	Technical conference on E-filing	DC
September 13	Quarterly Trilateral Electric Reliability Conference with Canadian and Mexican energy and reliability regulators	Montreal
September 18	Technical conference on Reliability Standard Compliance and Enforcement in Regions with ISOs and RTOs	DC

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# APPENDIX B Settlements and the Alternative Dispute Resolution Process

he Commission encourages parties to resolve disputes in the form of settlements. Settlements offer a means of asserting control over the outcome that is more certain and predictable than the risk of litigation. To this end, the Commission encourages the use of alternative dispute resolution (ADR) whenever appropriate to resolve conflicts. The Commission has been actively involved in efforts to improve the use of alternative dispute resolution and conflict resolution on a government-wide basis. The Commission submitted extensive information on its programs in the following reports:

- In December 2006, the Commission issued its first annual report to Office of Management and Budget and the Council of Environmental Quality per a joint policy memo directing agencies to increase the effective use of and build institutional capacity for Environmental Conflict Resolution (ECR). ECR is third-party assisted conflict resolution and collaborative problem-solving. ECR is used for hydropower licensing and re-licensing applications; natural gas facility certificate applications; LNG facility applications; and electric transmission permit applications.
- In April 2007, the U.S. Attorney General submitted to the President the *Report for the President on the Use and Results of Alternative Dispute Resolution in the Executive Branch of the Federal Government*. The Commission's efforts to encourage and apply ADR are highlighted throughout the report and demonstrate the Commission's leadership among federal agencies to encourage settlements and alternative approaches to conflict resolution.

Since litigation can be costly and time-consuming, the Commission requires litigants to conform to specified time limits, depending upon the complexity of the issues. Thus, the Commission's litigation staff and its administrative law judges guide the efficient handling of the unique, complex issues that arise in today's energy markets, and speed their resolution. The Commission's administrative law judges frequently serve as settlement judges or mediators, thereby offering the parties greater access to the means of settlement which, in turn, allows them to exercise greater control over the outcomes. Overall, settlements certified in FY 2007 cases set for hearing produced over \$129 million in immediate refunds and over \$724 million in future annual savings to ratepayers.

Below are examples of benefits obtained though uncontested settlements certified in FY 2007:

 Moratoria (e.g., three-year) in several cases preclude new rate increases and/or complaints, thereby increasing rate certainty. Several settlements contained "come-back" provisions requiring the regulated entity to make a rate filing within a set period, thus ensuring that rates will continue to reflect current costs.



- Settlements improved transparency of gas pipeline billings, especially relating to pass through of fuel costs.
- Several settlements implemented audit, discovery, dispute resolution, complaint and subject-to-refund provisions to ensure that companies will bear the burden of justifying all of the costs they seek to pass through their formula rates, and to protect customers by affording them procedures through which they can determine the accuracy of the costs being flowed-through.
- Settlements protected wholesale ratepayers, and ultimately retail ratepayers, from the adverse effects of affiliate abuse and code of conduct violations.

- Settlements resolved significant rate and other issues to allow development of Cove Point LNG facility to move forward.
- Several settlements resolved issues related to who pays for network upgrades, and how much.
- Settlements preserved incentives for merchant transmission investment by maintaining the incremental financial transmission rights that are produced when transmission facilities are installed.
- Settlements have mitigated adverse effects of code of conduct violations thereby protecting the development of competitive markets.
- Contracts among affiliate entities have been modified through settlements to mitigate the potential

The Commission's litigation staff and its administrative law judges guide the efficient handling of the unique, complex issues that arise in today's energy markets, and speed their resolution.

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- $\star \star \star$
- Settlements of many reactive power and reliability must-run cases have helped to ensure the stability of the transmission grid and reduce administrative burdens on RTOs.
- Several settlements resulted in updated, clarified, and improved interconnection service agreements.
- Several settlements obtained rollover rights balanced with system reliability needs.

for affiliate abuse thereby assuring compliance with the Commission's standards for affiliate transactions.

 Issues relating to cost-based rates instituted in lieu of market-based rates have been settled thereby ensuring that the potential for the exercise of market power by some entities has been eliminated.



# APPENDIX C Hydroelectric Power Table

#### HYDROELECTRIC POWER TABLE

Project For Which Licenses Will Expire Between January 1, 2007 and December 31, 2012

#	Project No.	PROJECT NAME	LICENSEE	WATERWAY	STATE	AUTHORIZED CAPACITY (KW)	EXPIRATION DATE
			CALIFORNIA DEPT-WTR		BIAIL	((()))	BAIL
1	02100	FEATHER RIVER	RESOURCES (CA)	FEATHER RIVER	CA	762850	1/31/2007
		KILARC-COW	PACIFIC GAS AND ELECTRIC CO				
2	00606	CREEK	(CA)	SOUTH COW CREEK	CA	4440	3/27/2007
3	09185	CLAM RIVER	FLAMBEAU HYDRO LLC. (WI)	CLAM RIVER	WI	1200	3/31/2007
,				00.001 BU (50		170000	7/24/2227
4	00082	MITCHELL	ALABAMA POWER CO (AL)	COOSA RIVER	AL	170000	7/31/2007
5	00618	JORDAN DAM	ALABAMA POWER CO (AL)	COOSA RIVER	AL	100000	7/31/2007
ر	00018	UPPER	SACRAMENTO MUNICIPAL	SOUTH FORK	AL	100000	//31/200/
6	02101	AMERICAN RIVER	UTIL DIST (CA)	AMERICAN RIVER	CA	640950	7/31/2007
0	02101	/ WIENC/ WYNY ER		/ WIERCONNY REVER	CA	010990	//51/200/
7	02146	COOSA RIVER	ALABAMA POWER CO (AL)	COOSA RIVER	GA	690900	7/31/2007
			PACIFIC GAS AND ELECTRIC CO	SOUTH FORK			
8	02155	CHILI BAR	(CA)	AMERICAN RIVER	CA	7000	7/31/2007
9	02545	SPOKANE RIVER	AVISTA CORPORATION (WA)	SPOKANE RIVER	WA	136600	7/31/2007
10	02165	WARRIOR RIVER	ALABAMA POWER CO (AL)	SIPSEY FORK	AL	203250	8/31/2007
	00005	MAMMOTH	SOUTHERN CALIFORNIA		~ .	450000	44/22/2227
11	02085	POOL	EDISON CO (CA)	SAN JOAQUIN RIVER	CA	150938	11/30/2007
12	02785	SANFORD	BOYCE HYDRO POWER, LLC (MI).	TITTABAWASSEE	MI	3300	11/30/2007
12	02/83	SANFORD	BOTCE HTDRO POWER, EEC (MI).	TITTADAWASSEE	7711	5500	11/30/2007
13	00925	OTTUMWA	OTTUMWA CITY OF (IA)	DES MOINES RIVER	IA	3250	4/30/2008
				BLACKSMITH		0.000	.,,
14	00946	HYRUM	HYRUM CITY CORP (UT)	FORK RIVER	UT	400	4/30/2008
			ALCOA POWER				
15	02197	YADKIN	GENERATING INC. (NC)	YADKIN RIVER	NC	216380	4/30/2008
			PROGRESS ENERGY				
16	02206	YADKIN-PEE DEE	CAROLINAS, INC. (NC)	PEE DEE RIVER	NC	108600	4/30/2008
			VIRGINIA ELECTRIC				
17	00906	CUSHAW	& POWER CO (VA)	JAMES RIVER	VA	7500	6/15/2008
18	00659	lake Blackshear	CRISP COUNTY POWER COMM (GA)		GA	15200	8/9/2008
10	00039	CATAWBA-	CRISP COUNT I POWER COMM (GA)	FLINT RIVER	UA	13200	8/9/2008
19	02232	WATEREE	DUKE ENERGY CAROLINAS, LLC (SC)	WATEREE RIVER	SC	804940	8/31/2008
	02292	SULLIVAN LAKE	PUD NO 1 OF PEND	the fille for the fille	50	001710	0/01/2000
20	02225	(STORAGE)	OREILLE CNTY (WA)	SULLIVAN CREEK	WA	0	9/30/2008
21	02242	CARMEN-SMITH	CITY OF EUGENE (OR)	MCKENZIE RIVER	OR	120500	11/30/2008
		BIG CREEK NOS 2A,	SOUTHERN CALIFORNIA	SOUTH FORK			
22	00067	8 & EASTWOOD	EDISON CO (CA)	SAN JOAQUIN RIVER	CA	373320	2/28/2009
	0.0405		SOUTHERN CALIFORNIA			1 (5075	0 100 100
23	00120	BIG CREEK NO 3	EDISON CO (CA)	SAN JOAQUIN RIVER	CA	165375	2/28/2009
24	02175	BIG CREEK			CA	150150	2/20/2000
24	021/5	NO.1 & NO.2	EDISON CO (CA)	SAN JOAQUIN RIVER	CA	150150	2/28/2009
25	02237	MORGAN FALLS	GEORGIA POWER CO (GA)	RIVER	GA	16800	2/28/2009
25	52251	OIG/INT/IELS		IN Y LIN	0/1		212012007

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	PROJECT	PROJECT				AUTHORIZED CAPACITY	EXPIRATION
#	No.	NAME	LICENSEE	WATERWAY	STATE	(KW)	DATE
26	02655	EAGLE & PHOENIX MILLS	EAGLE & PHENIX HYDRO CO INC (SC)	CHATTAHOOCHEE RIVER	GA	27660	2/28/2009
27	02088	SOUTH FEATHER POWER	SOUTH FEATHER WATER AND POWER AGENCY (CA)	SOUTH FORK FEATHER RIVER	CA	104100	3/31/2009
28	02281	WOODLEAF KANAKA T. L.	PACIFIC GAS AND ELECTRIC CO (CA)	BUTTE CO	CA	0	3/31/2009
29	04851	SLY CREEK T. L.	PACIFIC GAS AND ELECTRIC CO (CA)		CA	0	3/31/2009
30	09988	JOHN P. KING MILL	AUGUSTA CANAL AUTHORITY (GA)	SAVANAH RIVER	GA	2050	5/31/2009
31	02261	LOLO-IMNAHA T. L.	AVISTA CORPORATION (OR)		OR	0	7/22/2009
32	07528	CANAAN	PUBLIC SERVICE CO OF NH (NH)	DEUBERT	VT	1100	7/31/2009
33	01005	BOULDER CANYON	BOULDER CITY OF (CO)	MIDDLE BOULDER CREEK	СО	20000	8/31/2009
34	00803	DESABLA- CENTERVILLE	PACIFIC GAS AND ELECTRIC CO (CA)	WEST BRANCH FEATHER RIVER	CA	26650	10/11/2009
35	02801	GLENDALE	LITTLEVILLE POWER CO INC (MA)	SUM	MA	1140	10/31/2009
36	02301	MYSTIC LAKE	PP&L MONTANA, LLC (MT)	WEST ROSEBUD CREEK	MT	10000	12/31/2009
37	06885	CINNAMON RANCH	MOSS RICHARD (CA)	MIDDLE CREEK	CA	175	12/31/2009
38	02543	MILLTOWN	CLARK FORK AND BLACKFOOT, LLC (MT).	CLARK FORK	MT	3200	12/31/2009
39	02244	PACKWOOD LAKE	ENERGY NORTHWEST (WA)	LAKE CREEK	WA	26125	2/28/2010
40	02210	smith Mountain	APPALACHIAN POWER CO (VA)	ROANOKE (STAUNTON) RIVER	VA	636000	3/31/2010
41	00785	CALKINS BRIDGE	CONSUMERS ENERGY CO (MI)	KALAMAZOO RIVER	MI	2550	4/10/2010
42	00733	OURAY	JACOBSON ERIC R (CO)	UNCOMPAHGRE RIVER	CO	700	4/12/2010
43	01992	FIRE MOUNTAIN	WILLIS KEN (CA)	FERN SPRINGS CREEK	CA	15	4/30/2010
44	00400	TACOMA-AMES	PUBLIC SERVICE CO OF COLORADO (CO)	SAN MIGUEL RIVER	CO	11500	6/30/2010
45	00503	SWAN FALLS	IDAHO POWER CO (ID)	SNAKE RIVER	ID	25000	6/30/2010
46	02277	TAUM SAUK	UNION ELECTRIC CO (MO)	EAST FORK BLACK RIVER	МО	408000	6/30/2010
47	02677	BADGER-RAPIDE	KAUKAUNA CITY OF (WI)	FOX RIVER	WI	8000	8/11/2010
48	00516	SALUDA	SOUTH CAROLINA ELECTRIC & GAS CO (SC)	SALUDA RIVER	SC	207300	8/31/2010
49	03041	HETTINGER	MACKAY BAR CORP (ID)	SMITH CREEK	ID	12	10/31/2010
50	00013	green island	GREEN ISLAND POWER AUTHORITY (NY)	HUDSON RIVER	NY	6000	3/2/2011

continued on following page...

F E D E R A L E N E R G Y R E G U L A T O R Y C O M M I S S I O N



#### ...continued

#	PROJECT No.	Project Name	LICENSEE	WATERWAY	STATE	AUTHORIZED Capacity (KW)	EXPIRATION DATE
51	02211	MARKLAND	DUKE ENERGY INDIANA, LLC. (IN)	OHIO RIVER	IN	64800	4/30/2011
52	02985	WILLOW MILL	MEAD PAPER CORP (MA)	ZAVESKY	MA	100	4/30/2011
53	02157	HENRY M JACK- SON (SULTAN)	EVERETT, CITY OF (WA)	SULTAN RIVER	WA	111800	5/31/2011
54	00739	CLAYTOR	APPALACHIAN POWER CO (VA)	NEW RIVER	VA	75000	6/30/2011
55	02106	MCCLOUD-PIT	PACIFIC GAS AND ELECTRIC CO (CA)	PIT RIVER	CA	340500	7/31/2011
56	02144	BOUNDARY	SEATTLE CITY OF (WA)	PEND OREILLE RIVER	WA	1024000	9/30/2011
57	02594	LAKE CREEK	NORTHERN LIGHTS INC (ID)	LAKE CREEK	MT	4500	11/30/2011
58	02621	PACOLET	LOCKHART POWER CO (SC)	PACOLET RIVER	SC	800	1/31/2012
59	02558	OTTER CREEK	OMYA, INC. (VT)	OTTER CREEK	VT	18130	3/31/2012
60	02615	BRASSUA	BRASSUA HYDROELECTRIC LTD PART (ME)	MOOSE RIVER	ME	4180	3/31/2012
61	02851	NATURAL DAM	CELLU TISSUE CORPORATION (NY)	ST. LAWRENCE RIVER	NY	1020	3/31/2012
62	02149	WELLS	PUD NO 1 OF DOUGLAS COUNTY (WA)	COLUMBIA RIVER	WA	774250	5/31/2012
63	02850	EMERYVILLE	HAMPSHIRE PAPER CO INC (NY)	ST. LAWRENCE RIVER	NY	3481	5/31/2012
64	02662	SCOTLAND	FIRSTLIGHT HYDRO GENERATING CO. (CT)	SHETUCKET RIVER	СТ	2000	8/31/2012
65	04362	RIVERDALE	RIVERDALE DEVELOPMENT VENTURE, LLC. (SC)	ENOREE RIVER	SC	1240	8/31/2012
66	02713	OSWEGATCHIE RIVER	ERIE BOULEVARD HYDROPOWER, L.P. (NY)	PUGLESE	NY	28471	12/31/2012



# LIST OF ACRONYMS

#### ACRONYMS AND ABBREVIATIONS

ADR	alternative dispute resolution Midwest ISO		Midwe
ATC	available transmission capability		Syste
Bcf	billion cubic feet	ММС	Market
CAISO	California Independent System Operator Inc.	MOU MW	memor megaw
Commission	Federal Energy Regulatory Commission	NAESB	North /
DOE	U.S. Department of Energy	NERC	North
Dth	dekatherm	NEPA	Nation
EA	Environmental Assessment		Act c
EIS	Environmental Impact Statement	NGA	Natura
Entergy	Entergy Services Inc.	NGPA	Natura
EPAct 2005	Energy Policy Act of 2005	NRC	Nuclea
ERO	Electric Reliability Organization	OASIS	Open A Informa
FERC	Federal Energy Regulatory Commission	DIAA	
FPA	Federal Power Act	PJM	PJM Int
FPC	Federal Power Commission	PURPA	Public I Act c
ILP	Integrated Licensing Process	RTO	regiona
ISO	independent system operator	SPP	Southw
kV	kilovolt	WECC	Wester
LNG	Liquefied Natural Gas		

lwest ISO	Midwest Independent Transmission System Operator Inc.
ммс	Market Monitoring Center
MOU	memorandum of understanding
MW	megawatts
NAESB	North American Energy Standards Board
NERC	North American Electric Reliability Corp.
NEPA	National Environmental Policy Act of 1969
NGA	Natural Gas Act
NGPA	Natural Gas Policy Act of 1978
NRC	Nuclear Regulatory Commission
OASIS	Open Access Same Time Information System
PJM	PJM Interconnection
PURPA	Public Utility Regulatory Policies Act of 1978
RTO	regional transmission organization
SPP	Southwest Power Pool Inc.
WECC	Western Electric Coordinating Council





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