

# Federal Energy Regulatory Commission



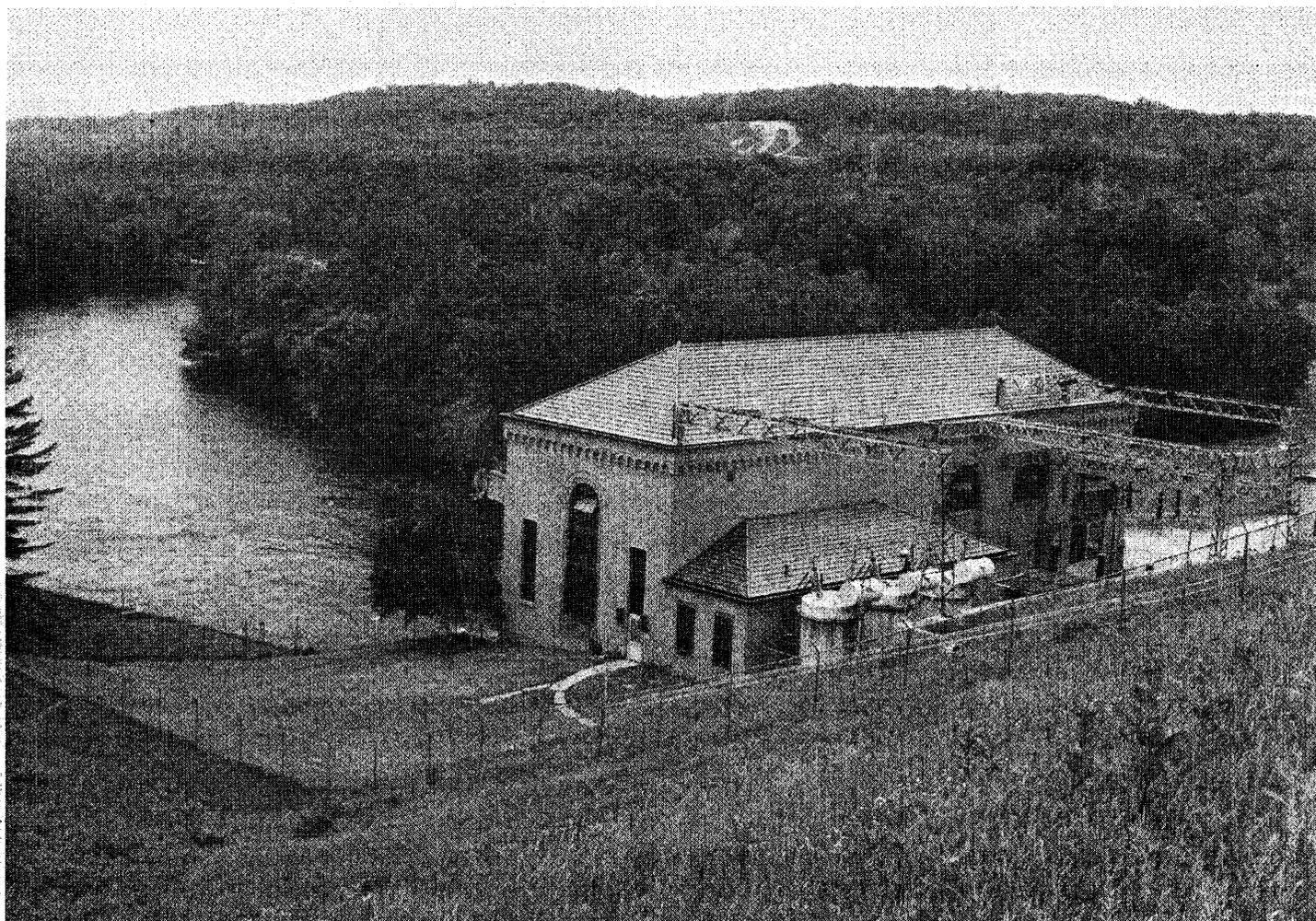
## 1994 Annual Report

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**Federal  
Energy  
Regulatory  
Commission**

**1994  
Annual  
Report**



*Power plant for hydroelectric project on the Muskegon River in Michigan. The project was relicensed by FERC in FY 1994.*

# Members of the Federal Energy Regulatory Commission



Vicky A. Bailey  
Commissioner



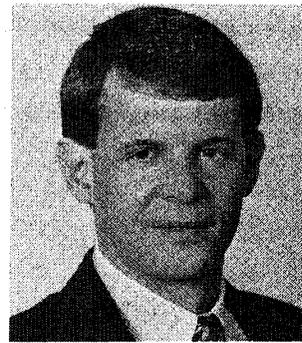
James J. Hoecker  
Commissioner



Elizabeth A. Moler  
Chair



William L. Massey  
Commissioner



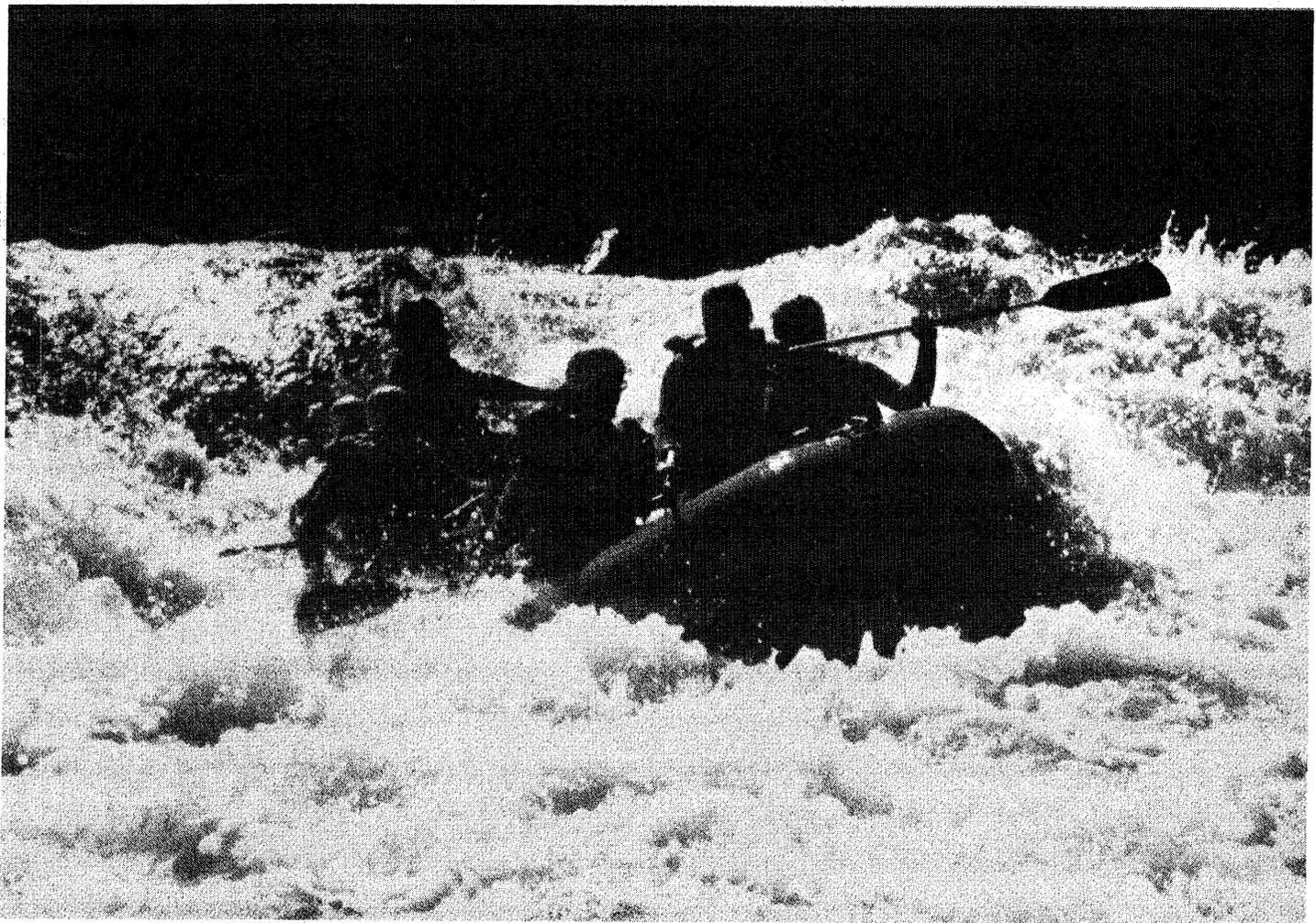
Donald F. Santa, Jr.  
Commissioner

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*The "big chill" of 1994 shut down the Federal government. Electric power systems generally held up well during the extreme weather.*



*Recreational facilities are taken into consideration in licensing hydroelectric projects. Here, vacationers enjoy the Penobscot River in Maine, downstream from a hydroelectric facility.*

# The Commission In Brief

The Federal Energy Regulatory Commission (FERC) is an independent regulatory commission within the Department of Energy (DOE). Its function is to oversee America's natural gas industry, electric utilities, hydroelectric projects and oil pipeline transportation system.

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 which was established in 1920, was abolished and the Commission inherited most of the FPC's regulatory mission.

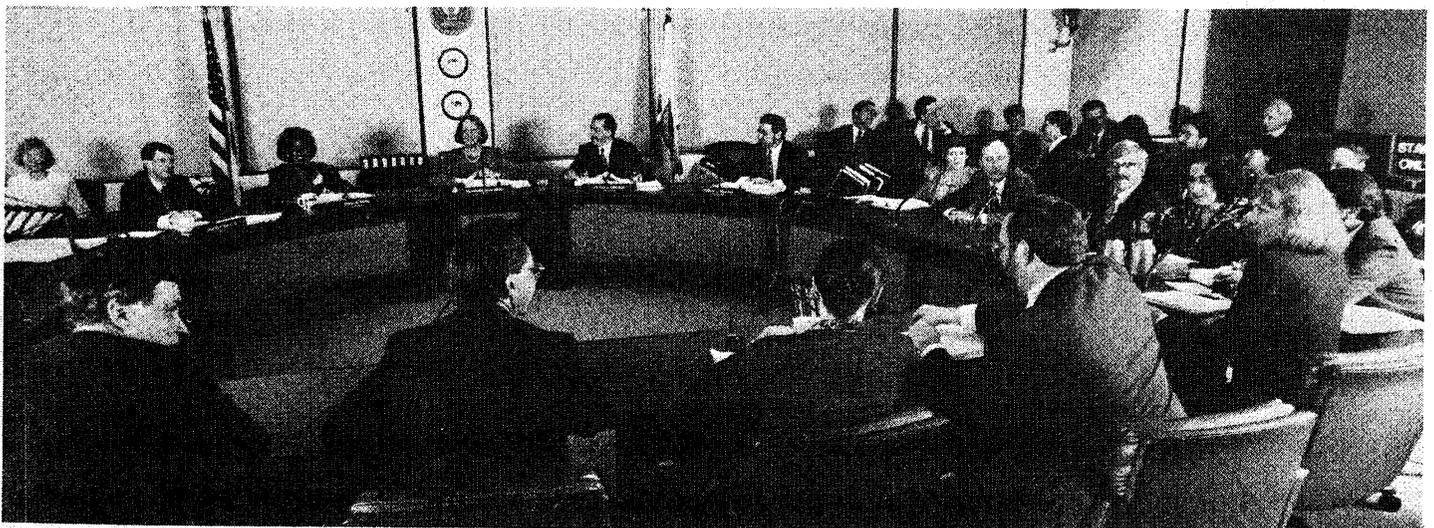
The FERC administers numerous laws and regulations involving key energy issues. These include:

- ❖ Transportation of natural gas in interstate commerce;
- ❖ Transportation of oil by pipeline in interstate commerce;
- ❖ Transmission and wholesale sales of electric energy in interstate commerce;
- ❖ Licensing and inspection of private, municipal, and state hydroelectric projects;
- ❖ Oversight of related environmental matters.

The Commission's primary legal authority comes from the Federal Power Act of 1935 (FPA), the Natural Gas Act of 1938 (NGA), the Natural Gas Policy Act of 1978 (NGPA), the Public Utility Regulatory Policies Act of 1978 (PURPA), and the Energy Policy Act of 1992 (EPAAct).

The Commission has five members who are appointed by the President 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 the President to serve as Chair and is the Commission's administrative head.

The Commission generally meets twice a month. It considers license and certificate applications, rate filings, and other matters submitted by regulated companies, and sets industry-wide rules. Commission meetings are open to the public under the Government in the Sunshine Act and are televised.◆



*Typical Commission meeting in 1994. The Commission generally meets twice a month. Meetings are open to the public.*

# Letter From the Chair

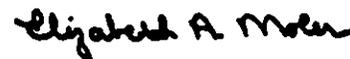
To the Senate and House of Representatives:

I am pleased to submit to the Congress the Federal Energy Regulatory Commission's annual report, covering the fiscal year from October 1, 1993, through September 30, 1994.

This is the 74th report issued by the Commission and its predecessor, the Federal Power Commission. As an independent agency, the Commission oversees key operating functions of the natural gas, electric utility, hydroelectric power, and oil pipeline transportation industries.

For fiscal year 1994, Congress appropriated \$165,375,000 to support Commission activities. Under the authority of the Omnibus Budget Reconciliation Act of 1986 and other laws, the Commission recovers all of its costs from regulated industries through fees and annual charges. Revenues generated from these sources are used to offset congressional appropriations and result in a net cost to the treasury of zero dollars. Therefore, the users and beneficiaries of the Commission's services—not the general taxpayers—pay its operating costs.

Respectfully,



Elizabeth A. Moler  
Chair

# Commission Responsibilities

## Natural Gas

The NGA, the NGPA, the Outer Continental Shelf Lands Act (OCSLA), the Natural Gas Wellhead Decontrol Act of 1989 (NGWDA), and the EPAct are the primary laws the Commission administers to oversee America's natural gas pipeline industry.

Under the NGA, the Commission regulates both the construction of pipeline facilities and the transportation of natural gas in interstate commerce. Companies providing services, and constructing and operating interstate pipeline facilities, must first obtain Commission certificates of public convenience and necessity. In addition, Commission approval is required to end (abandon) facility use and services, as well as to set rates for these services.

The Commission also regulates the transportation of natural gas as authorized by the NGPA and the OCSLA.

The NGPA's wellhead pricing program required the Commission to administer ceiling prices for certain categories of natural gas production in interstate commerce. On January 1, 1993, the NGWDA removed all remaining NGPA wellhead price controls for natural gas and all NGA filing requirements for natural gas producers.

Finally, the Department of Energy Organization Act vests approval authority in the Commission to oversee construction and operation of facilities needed by pipelines at the point of entry or exit to import or export natural gas.

## Electric Power

The Commission oversees wholesale electric rates and service standards, as well as the transmission of electricity in interstate commerce, under the legal authority of the FPA, the PURPA, and the EPAct. Sales of electricity for resale (sales between public utilities or by a public utility to a municipality or a cooperative), and transmission and interchanges comprise a little over a quarter of total U.S. investor-owned electric utility sales. Retail electric sales (sales to end-use customers such as homeowners and businesses) are generally regulated by state public utility commissions.

The Commission ensures that wholesale and transmission rates charged by utilities are just and reasonable and not unduly discriminatory or preferential. It also reviews utility pooling and coordination agreements.

In addition, the Commission oversees the issuance of certain stock and debt securities, assumption of obligations and liabilities, and mergers. The Commission reviews the holding of officer and director positions between top officials in utilities and major firms supplying electrical equipment to the power companies or underwriting securities.

Finally, the Commission reviews rates set by the federal power marketing administrations, such as the Bonneville Power Administration, makes determinations as to exempt wholesale generator status under the EPAct, and certifies qualifying small power production and cogeneration facilities.

## Hydroelectric Power

Hydroelectric power regulation was the first work undertaken by the FPC, the Commission's predecessor agency, after Congress passed the Federal Water Power Act in 1920. Subsequent statutes under which the Commission regulates non-federal hydroelectric power projects that affect navigable waters, occupy U.S. public lands, use water

or water power at a government dam, or affect the interests of interstate commerce include the FPA, the PURPA, the Electric Consumers Protection Act of 1986, and the EPAct. This work includes issuing project licenses and exemptions, dam safety, performing project compliance activities, investigating and assessing headwater benefits, and coordinating with other agencies.

Commission licensing costs are offset by annual charges collected from license holders. The Commission also determines charges for a licensee's use of Federal lands, Federal dams, and Indian reservations.

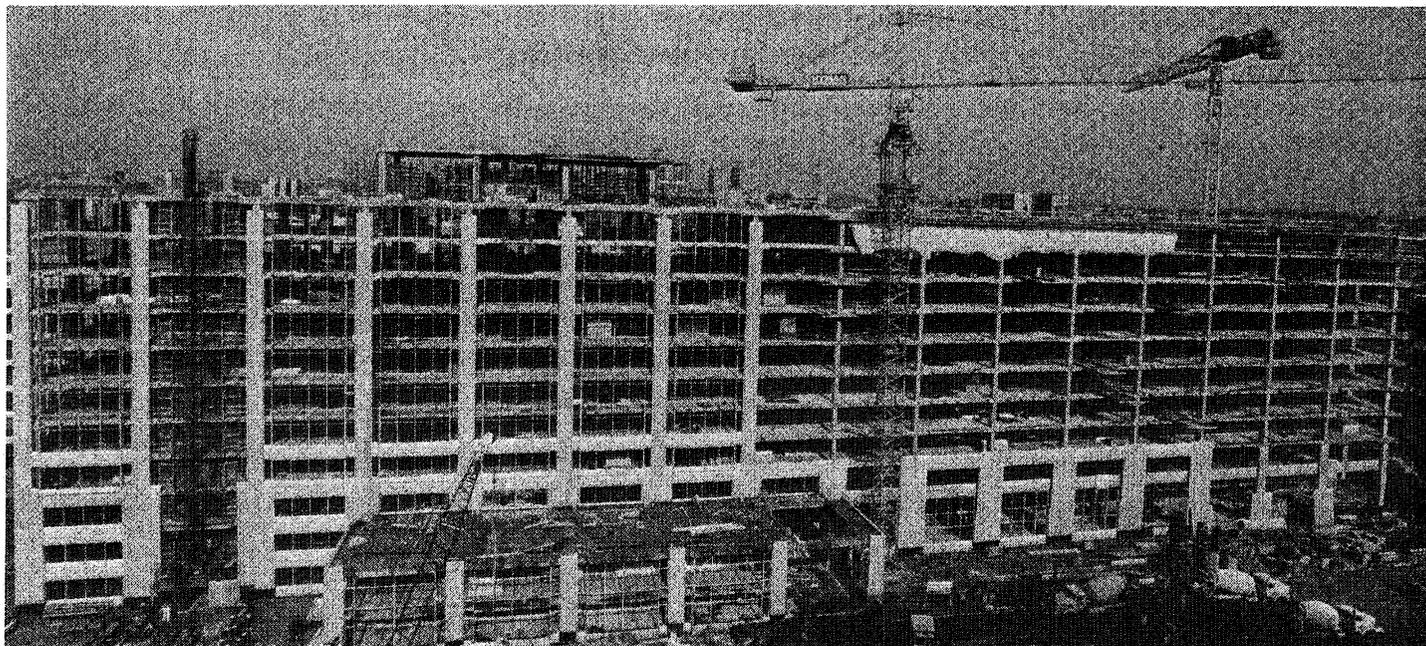
Licensed projects receive comprehensive safety inspections from Commission engineers stationed in Washington and at five regional offices. The dam safety program is a key Commission priority.

## Oil Pipelines

Under the Interstate Commerce Act (ICA) and the EPAct, the Commission regulates the rates and practices of oil pipeline companies engaged in interstate transportation. The objective is to establish just and reasonable rates to encourage maximum use of oil pipelines—a relatively inexpensive means of bringing oil to market—while protecting shippers and consumers against unjustified costs.

The Commission does not oversee the construction of oil pipelines or regulate the supply or price of oil or oil products. Rather, it helps to assure shippers equal access to pipeline transportation, equal service conditions on a pipeline, and reasonable rates for moving petroleum and petroleum products by pipeline. ♦

# Administration



Work progresses on FERC's new headquarters building at 888 First St., NE. Employees are due to start moving in late 1995.

## Operating Expenses

The Commission's budgetary resources for Fiscal Year (FY) 1994 totalled \$192.8 million. The Commission had obligations of \$162.3 million in four major categories:

- ❖ Salaries and benefits—\$100.2 million, or about 62 percent;
- ❖ Fixed costs (i.e., building rent and utilities) and other support costs (i.e., postage, telecommunications, data processing and printing)—\$42.3 million, or 26 percent;
- ❖ Contracts (e.g., environmental reviews)—\$17.7 million, or about 11 percent;
- ❖ Travel to conduct dam safety inspections, audits, compliance investigations, and work related to certificate and rate filings—\$2.1 million, or about 1 percent.

## Obligations for the three program areas were:

- ❖ Natural Gas and Oil—  
\$68.9 million            42.5 percent

- ❖ Hydropower—  
\$61.0 million            37.5 percent
- ❖ Electric Power—  
\$32.4 million            20.0 percent

## Revenue

In FY 1994, the Commission collected revenues of \$174.5 million. Of that, \$165.4 million was applied directly to offset the Commission's FY 1994 appropriation, which reduced it to \$0. The remaining revenue of \$9.1 million exceeded the appropriation and was deposited in the U.S. Treasury General Fund. Following is a breakdown of the type of revenue collected:

- ❖ Annual charges—  
\$167.9 million            96.2 percent
- ❖ Filing fees—  
\$2.6 million            1.5 percent
- ❖ Miscellaneous—  
\$4.0 million            2.3 percent

## Information Technology

Through the introduction of new and improved information technology the Commission continues its efforts to provide the public and

Commission staff with the most effective means for gathering and using information.

The Commission has over 1,600 multipurpose work stations as well as numerous portable and notebook computers for use by staff while on travel. The Commission completed changing over from its older local area network (LAN) technology to the newer, more technologically advanced, client/server LAN technology during FY 1994. The Commission-wide network connects over 1,200 work stations utilizing its LAN facilities, with the remainder of headquarters' personnel due to be on the LAN by February 1995. During FY 1994, the LAN was extended to the Office of Hydropower Licensing's (OHL) Chicago Regional Office with the remainder of the regional offices scheduled for completion by April 1995.

The Commission's Remote Public Access (RPA) system continues to be extremely successful in providing the public with access to Commission records, with well over 500 different entities using this service.

Significant progress was made toward implementing the new

Record and Information Management System (RIMS) during the year. The RIMS "Proof of Concept" (POC) was implemented in July 1994. The POC allows the retrieval of document images for a small subset of FERC documents using the old RIMS indexing structure. Five work stations located throughout the Commission and in the Public Reference Room were used for the POC. An extended POC will be implemented in early FY 1995 and allow access to a larger set of document images and from a larger number of work stations—over 75.

The Commission also introduced the use of video-teleconferencing into the OHL headquarters and its regional offices during FY 1994. This new technology reduced the need for travel between the regional offices and headquarters. With the introduction by the General Services Administration (GSA) of the FTS 2000 video-teleconferencing gateway service, the OHL now has the ability to video-conference with both members of industry and the public. The Commission will extend the use of this technology to other offices within the Commission during FY 1995.

## Printing and Distribution

The Commission purchased the Docutech electronic duplicating system. This allows the user to transmit data through the LAN to capture and merge data originated with a wide variety of word processing, graphics, and desktop publishing software packages. The Docutech is in the beginning phases of implementation and will expedite the transmission of documents required for printing. During the year, the Commission produced and distributed 50.5 million pages of printed material. This included orders, notices, decisions, court briefs, environmental impact statements (EIS), and administrative printing through the Government Printing Office and the Commission's copy center.

## Public Reference Room

The Public Reference Room is the Commission's main point of contact for meeting the public's information needs. The Records Maintenance Center is the official repository of the Commission records and documents. Under the Commission's information rules, 18 C.F.R., Part 388, most documents are readily available for inspection and photocopying. The Public Reference Room serves as both a library and reference center for the public and Commission staff, providing requested records and documents in hard copy as well as documents in electronic and microfilm/microfiche formats.

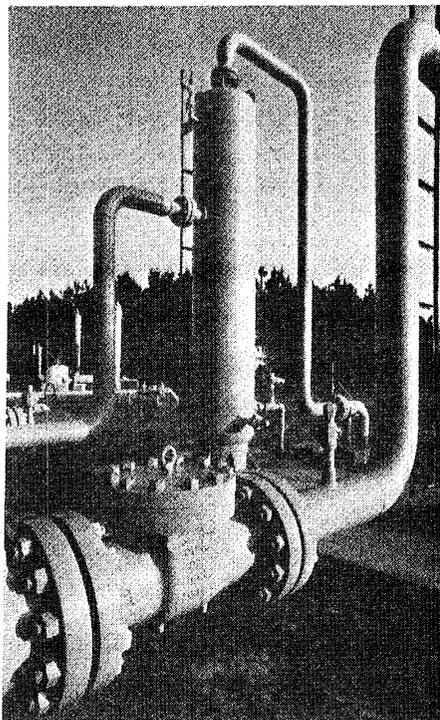
During FY 1994, the Public Reference Room incorporated several new operations and procedural systems designed to offer a more responsive level of service while improving turnaround time to the public and staff. These included:

- ❖ Conducting a review of all proposed file rooms of 200 square feet or more to determine if high density filing systems would be beneficial in the Commission's new headquarters which is now under construction.
- ❖ Arranging for acquisition of two demonstration mechanical-assist aisle saver systems for two program offices. The systems showed the advantages of centralizing files and the benefits that can be obtained. These included space savings, reduction in the number of filing cabinets which will be required and improved organization and efficiency of program office operations.
- ❖ Conducting a comprehensive records review of all program offices' records holdings.
- ❖ Updating and revising a brochure entitled *The Federal Energy Regulatory Commission Welcomes you to the Public Reference Room*. This brochure established customer service levels, or turn-around times, that can be expected for the various services offered within the Public Reference Room.
- ❖ Updating and revising the publication entitled *A Guide to Public Information at the Federal Energy Regulatory Commission*. The Guide provides detailed explanations and directions on where and how to access information available from FERC.
- ❖ Initiating our Annual Customer Satisfaction Survey to identify the strengths and weaknesses of services provided by the Public Reference Room and identify those areas which can be improved.
- ❖ Completing a major records retirement program resulting in transferring 2,657 boxes of official records to the Washington National Federal Records Center in Suitland, Maryland.
- ❖ Initiating a task order for design of an automated system to help manage the volume of written correspondence from the public. This system incorporates our publications inventory both on and off site, and tracks the quantity and amount of publications sold.
- ❖ Improving the integrity of the documents maintained in the Public Reference Room by implementing a security guard service to ensure that documents are being removed from the room only after appropriate payment has been made.

## FERC Headquarters Consolidation

The Commission headquarters consolidation effort continues on schedule. The new headquarters building is under construction at 888 First Street Northeast, Washington, D.C. Commission staff are expected to begin occupying it in late 1995, with occupancy expected to be completed in early 1996. ♦

# Natural Gas



*During FY 1994, FERC issued seven orders clarifying its gathering policy.*

## Overview

Natural gas is transported from production areas to markets via pipelines, consisting of a network more than one million miles long. The pipeline industry moves nearly a quarter of the nation's annual energy consumption to the burner tip. A major component of this network is the more than 200,000 miles of large-diameter pipe that moves gas in interstate commerce over long distances to markets in 48 states. These transmission facilities represent an investment exceeding \$50 billion.

Since the mid-1980s, the FERC has pursued a comprehensive program to create a flexible regulatory framework for America's natural gas industry. The Commission's key objectives are:

- ❖ To provide for more extensive service options;
- ❖ To enable parties to respond quickly to fast-changing market conditions; and

- ❖ To maintain service reliability and rate certainty.

That process culminated in the issuance of Order No. 636 in April 1992. Order No. 636 marked the beginning of a new era in the natural gas industry and will ultimately enable the industry to provide better service to more markets at a lower cost. After completing the first phase of restructuring in FY 1993, the Commission addressed new issues raised by compliance with Order No. 636 in FY 1994.

In addition to the restructuring program, the Commission strengthened its environmental compliance effort.

Finally, the Commission addressed the ratemaking method and tariff filing procedures for oil pipelines as required by the EPAct.

## Natural Gas Pipeline Restructuring

The Commission completed the first phase of natural gas pipeline restructuring under Order No. 636 in the first quarter of Fiscal Year 1994. The Commission established this as its highest priority among the Commission's natural gas policy initiatives. Order No. 636 substantially completed the structural changes in the Commission's regulation of the natural gas industry. These changes were brought about by:

- ❖ The NGPA;
- ❖ The Commission's open access transportation program; and
- ❖ The NGWDA.

The purpose of Order No. 636 is to improve the competitive structure of the natural gas industry while maintaining adequate and reliable service at reasonable rates. The new rules allow all natural gas suppliers, including the pipeline as merchant, to compete for gas purchasers on an equal footing. This ensures that the benefits of decontrol accrue to consumers to the maximum extent envi-

sioned by the NGPA and the NGWDA.

Despite the fundamental structural changes mandated by Order No. 636, and the subsequent opening of gas markets to market forces, the transition into the post-Order No. 636 environment went extremely well. The unusually cold and icy 1993-94 winter in many gas market areas provided an important test of the reliability of the restructured industry, and the results proved highly successful. With some limited exceptions, the industry was able to maintain service to all customers with firm service contracts, and generally maintained gas deliveries to interruptible service customers.

Now that the first phase of restructuring pipeline services is complete, the Commission faces considerable oversight work and fine tuning of the pipeline compliance plans as both the industry and the Commission gain experience in the post-Order No. 636 environment. In particular, the Commission and parties to the restructuring are now receiving and evaluating operational reports most pipelines were required to submit after their first year of operations under Order No. 636. Additionally, pipelines have made and continue to make tariff filings to revise their terms and conditions of service to address operational problems and changing market needs.

Further, the Commission addressed other Order No. 636 related issues. Specifically, the Commission:

- ❖ Established specific guidelines and procedures on the eligibility and prudence of gas supply realignment costs resulting from the implementation of Order No. 636;
- ❖ Held a public conference on pricing differential cost mechanisms for the recovery of gas supply realignment transition costs;
- ❖ Held a public conference on rate policies for costs related to new construction and for capacity release;

- ◆ Issued Electronic Data Interchange standards for downloading capacity release information from gas pipelines' EBBs as a result of a cooperative effort with industry;
- ◆ Initiated a review of rate filing requirements and reporting requirements with the intention of updating them to reflect the restructured service environment, expediting case processing, monitoring rates on an on-going basis and reducing industry burden; and
- ◆ Re-examined its policy for determining whether facilities perform a gathering or transmission function.

### Transition Costs

The Commission recognized that pipelines would incur costs as a result of complying with Order No. 636. These costs fall into three categories:

- ◆ **Gas supply realignment costs** resulting from pipelines reforming or buying out existing gas supply contracts or continuing to perform under certain contracts;
- ◆ **Unrecovered gas costs** remaining in the purchased gas adjustment Account No. 191 when a pipeline adopts market-based pricing for its gas sales and terminates its purchased gas adjustment mechanism; and
- ◆ **Stranded costs** representing assets now used to provide bundled sales service (such as the pipeline's own facilities, gas in storage and capacity on upstream pipelines) that cannot be directly assigned to customers of the pipeline's unbundled services.

As of September 30, 1994, 32 pipelines had filed for \$2.1 billion in transition costs, including :

- ◆ \$1.1 billion of gas supply realignment costs;
- ◆ \$572.1 million of Account No. 191 costs; and

- ◆ \$420.3 million of stranded costs.

Under Order No. 636 the Commission decided that pipelines should be allowed to recover 100 percent of any prudently incurred gas supply realignment (GSR) costs which are attributable to the rule. Ninety percent of prudently incurred GSR costs can be recovered through use of a reservation fee surcharge or a negotiated exit fee for firm transportation and storage services. Pipelines must allocate the remaining ten percent to interruptible transportation.

Unrecovered gas costs are to be direct-billed to the pipelines' former sales customers and stranded costs related to unneeded upstream pipeline capacity are recovered through NGA Section 4 rate filings. Remaining stranded costs and new facilities' costs are to be included in pipelines' general Section 4 rate case filings.

The Commission has developed policies and procedures to scrutinize all claims of transition costs to ensure that pipelines only recover legitimate costs under Order No. 636 and to minimize total transition costs. To this end, the Commission:

- ◆ Established specific guidelines and procedures on the eligibility and prudence of gas supply realignment costs resulting from the implementation of Order No. 636;
- ◆ Held a public conference on pricing differential cost mechanisms for the recovery of gas supply realignment transition costs; and
- ◆ Approved full or partial settlements of transition cost issues for 11 pipelines. Three of these settlements were approved as part of the initial restructuring compliance proceedings.

### Policy Initiatives

In FY 1994, the Commission focused on the development of natural gas policy initiatives. With the implementation of Order No. 636

completed in the winter of 1993-94, the Commission moved to address policy issues that were begun with Order No. 636, as well as other issues that remained:

- ◆ The Commission established and applied clear policies to define what types of gas facilities are nonjurisdictional gathering facilities. This included the establishment of a mechanism to ensure existing producers are protected during the transition from Commission regulation of gathering facilities to nonjurisdictional status.
- ◆ The Commission scheduled a series of informal staff meetings with organizations representing all segments of the natural gas industry to address the capacity release program issued under Order No. 636. These meetings were held to determine whether modifications of the program should occur to further encourage and enhance the development of the secondary market.
- ◆ The Commission issued a Notice of Date and Procedures for Public Conference to consider the methodologies to be used in setting rates for transportation services in regard to new facilities constructed by interstate natural gas pipelines.
- ◆ The Commission expressed its intention to establish forums to address the additional issues of market-based, incentive, and production area rates and to examine the use of natural gas usage for electric cogeneration.

### Electronic Bulletin Boards

In Order No. 636, the Commission established a capacity releasing mechanism. Shippers who do not need their firm transportation and storage capacity on a pipeline can release it on a short- or long-term basis to other shippers wanting capacity. The Commission required pipelines to establish EBBs to provide shippers with equal and timely

## Natural Gas

access to relevant information about the availability of service on their systems. This includes information on capacity available through release transactions and firm and interruptible capacity available directly from the pipeline.

On December 23, 1993, the Commission issued a Final Rule adopting standards for capacity release data sets and establishing electronic data interchange (EDI) as the communication protocol. The standards enable interested parties to obtain information on capacity across pipelines in a standardized format. Most pipelines implemented the standards by June 1, 1994.

The pipelines are currently working on a common codes database to identify transaction points. The database will allow shippers to identify points that have multiple pipeline-specific proprietary codes. The database should be completed in early 1995.

### Filing and Data Collection Requirements

In response to the new environment created by Order No. 636, with unbundled sales for resale at market-based prices and open-access transportation of natural gas, the Commission began a comprehensive review of both its filing and data collection requirements. The primary objectives of the review are to update the filing and reporting requirements to reflect restructured services and operations, to streamline rate case processing by receiving important information earlier in the process, and to remove outdated requirements. By simplifying its reporting requirements, eliminating those that are no longer needed, and eliminating duplication, the Commission will significantly reduce the reporting burden on respondents.

Since the issuance of Order No. 636, the industry burden associated with compliance with our natural gas program has been reduced by over 360,000 hours or 23 percent. A significant portion of this reduction was achieved during FY 1994.

The Commission will also review its electronic filing requirements to ensure that information is filed in the least burdensome manner and is in a format that is useful to staff and readily available to the public. The Commission intends to employ user-friendly form-fill, word processing, or spreadsheet application software as much as possible.

### Pipeline Rates

Under the NGA, the Commission regulates approximately 150 pipelines which sell and transport gas in interstate commerce. The NGA requires the Commission to ensure that tariff rates and charges are just and reasonable and not unduly discriminatory. These requirements protect consumers from excessive prices and abuses of market power and allow pipelines to be compensated for prudent and necessary service costs—including a fair return on investment.

The Commission generally uses an historical costing approach in major rate cases. Recorded costs follow the Commission's Uniform System of Accounts. Pipeline companies can file for rate changes under Section 4 of the NGA based on recent historical costs as adjusted for the known and measurable changes that they expect to occur over the next nine-month period.

The Commission then has 30 days to accept, reject, or suspend the filing's effectiveness for up to five months. If the Commission accepts and suspends the filing, rates may go into effect after the suspension period subject to refund—with interest—for any amounts that the Commission ultimately finds are not recoverable under the NGA's just and reasonable rates standards.

Interstate pipelines made 1,314 rate-related filings during FY 1994. Of these, 550 were formal rate change and tariff filings. Twenty-one of the filings were general rate changes involving revenue increases totalling \$805.7 million; 193 filings involved limited Section 4 filings;

and 336 involved changes in tariff and operating terms and conditions.

The Commission approved 24 full or partial settlements on pending Section 4 general rate cases which resulted in the completion of 80 docketed proceedings.

Rate change filings continue to be based on increases in operating costs, the cost of new facilities, and changes in the natural gas industry. Order No. 636 proceedings caused the pipelines to postpone many general rate change proposals that they would have filed in Fiscal Years 1992 and 1993. We began to receive the postponed rate change filings in 1994 and we expect a continued increase in these filings in 1995. These filings may involve issues the Commission deferred in the restructuring compliance orders for consideration in pending or future rate cases, including:

- ◆ Cost allocation;
- ◆ Rates of return and depreciation;
- ◆ Transportation zones and mileage-based rates;
- ◆ Market centers;
- ◆ Treatment of storage costs;
- ◆ Rates for transportation in the production area;
- ◆ Pipeline tariff terms and conditions;
- ◆ Impact of capacity release on interruptive throughput projections;
- ◆ Eligibility of costs for recovery under Order No. 636;
- ◆ Market-based rate and other non-traditional rate proposals; and
- ◆ Discrimination in providing transportation services.

The effort discussed earlier to revise the Commission's rate and reporting requirements is the first of a two-step process which will also look into the potential for alternatives to cost-based rate regulation and the criteria to be used for evalu-

ating noncost-based rate proposals, such as market-based rates and incentive regulation.

## Accounting and Financial Reporting

The Commission needs continuous, reliable financial information based upon sound accounting principles uniformly applied to all jurisdictional companies. This information is required in monitoring economic activity within the industry and evaluating whether rates charged are just and reasonable.

These needs are met by development of the Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural Gas Act. Periodic financial reporting is undertaken by jurisdictional companies, and the Forms Nos. 2 and 2-A are being updated. In addition, audits are conducted on a cyclical basis by the Office of the Chief Accountant.

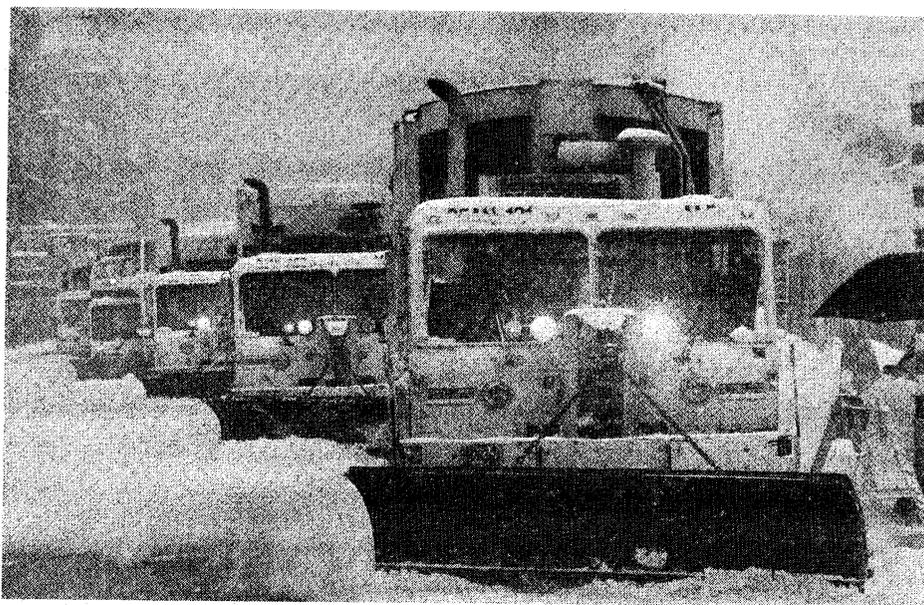
These audits enable the Commission to ensure that required financial information is reported according to Commission regulations. During the audits, special emphasis is placed on costs that are automatically passed on to consumers. Companies that have improperly charged customers are ordered to refund excess collections with interest.

## Pipeline Certificates

Generally, pipelines must apply to the Commission for either case-by-case certificate or blanket certificate authorization to construct and operate certain interstate gas facilities and to transport or sell gas for resale in interstate commerce.

The Commission's pipeline certificate program evaluates four types of applications:

- ❖ Construction and operation of facilities;
- ❖ Authority for gas transportation, sale, storage, or exchange services;
- ❖ Extension or abandonment of services; and



*Snowplows go to work in New York's Times Square in early 1994 during unusually cold weather. Order 636 worked to meet the crisis, with the natural gas industry achieving FERC goals.*

- ❖ Siting and constructing facilities for the import or export of natural gas and liquefied natural gas (LNG).

The following factors are considered in evaluating applications:

- ❖ Identification and assessment of the public interest aspects of terms and provisions of the proposed service;
- ❖ Facilities' design and operational aspects;
- ❖ Project financing;
- ❖ Environmental impacts of proposed projects;
- ❖ Initial rates for service;
- ❖ Cost shifting to existing ratepayers; and
- ❖ Operational reliability of LNG facilities;

Reviewing the many filings for expanded capacity was a major Commission priority in FY 1994. The Commission acts on these proposals as quickly as possible to allow applicants to begin construction if the

project is in the public interest. In early 1994, the Commission completed efforts to allow applicants to pay third-party contractors to prepare environmental documents for Commission review. This effort could add another resource to environmental review and may potentially expedite Commission processing of construction projects.

## Reexamination of Gathering Policy

Order No. 636 required interstate natural gas pipelines to unbundle sales and transportation services. Since pipelines generally had included gathering costs in their sales rates, they had to state a separate gathering rate to prevent shipper subsidization of the merchant function.

Due to the number of contested cases involving the transfer or refunctionalization of facilities, the Commission initiated a proceeding to reexamine its policy for deciding whether facilities perform a gathering or transmission function.

On May 27, 1994, the Commission issued seven orders clarifying the

## Natural Gas

Commission's gathering policy. In these orders, the Commission:

- ◆ Said it does not have jurisdiction over gathering transferred to an affiliate or other third-party gatherer, unless the pipeline and its affiliate gatherer act in a manner that frustrates the Commission's regulation of the pipeline.
- ◆ Determined that the pipeline's historical obligation to its customers and the Commission's requirement for open access transportation had created an expectation that the relationship between the pipeline and producers connected to the gathering system would continue to be governed by regulation, not private contract.
- ◆ Required the pipeline or its successor to demonstrate that (1) the existing customers have negotiated terms, conditions and rates for continued gathering service with the successor or (2) service has been offered to existing customers under a default contract. The default contract must be at rates the pipeline is currently charging for a term of up to two years and under conditions comparable to the existing service.
- ◆ Applied the same rationale in refunctionalization cases by requiring pipelines to apply for abandonment authority before any transfer and demonstrate that existing customers have been able to arrange for service from the successor in interest.
- ◆ Concluded that an absence of protests in cases involving the transfer of gathering facilities creates a presumption that existing customers are satisfied with their ability to continue receiving service.

### Pipeline Construction

In FY 1994, the Commission completed work on 847 certificate cases including:

- ◆ 42 major construction projects (over \$1 million each);
- ◆ 493 miles of pipeline;
- ◆ 2.3 billion cubic feet per day of capacity; and
- ◆ \$570 million in construction costs.

The Commission authorized 288 additional transactions on a prior notice basis under its blanket certificate program.

At the end of FY 1994, pending certificate applications for major construction projects, excluding Alaska, involved:

- ◆ 38 major construction projects (over \$1 million each);
- ◆ 2,045 miles of pipeline;
- ◆ 5.6 billion cubic feet per day of capacity; and
- ◆ \$2.2 billion in construction costs.

#### Construction Certificate

**Phasing:** To expedite action on proposed major construction applications, the Commission issues preliminary determinations (PDs). The purpose of a PD is to allow the Commission to rule on the merits of a construction proposal with regard to non-environmental issues. Once the environmental analysis is completed, the Commission issues final certificate authorization of the project. This approach gives applicants an early indication of the form that ultimate Commission authorization might take. PDs are among the following certificate actions taken by the Commission in 1994:

**Altamont Project:** On January 17, 1991, the Commission issued a PD addressing the non-environmental issues raised in Altamont Gas Transmission Company's (Altamont) application. On August 1, 1991, the Commission issued an optional certificate of public convenience and necessity which authorized Altamont to construct and operate a 620-mile pipeline system (including six compressor stations). It would be designed to transport 770 MMcf per

day of natural gas from the Canadian border near Wild Horse, Montana, to Opal, Wyoming, where the gas would interconnect with Kern River Gas Transmission Corporation which would transport the gas from Wyoming to Kern County, California.

Several parties sought rehearing, particularly the National Trust for Historic Preservation (National Trust) and the Wyoming Outdoor Council (WOC) on environmental grounds and the route of the pipeline through the South Pass area of Wyoming. On July 29, 1994, the Bureau of Land Management issued a Record of Decision adopting Altamont's proposed route, including the part of the route through South Pass. On August 30 and 31, 1994, senior Office of Pipeline Regulation (OPR) staff conducted an onsite visit of the South Pass area and the various alternative variations to the South Pass area.

**Yukon Pacific LNG Project:** On May 14, 1993, FERC issued a Draft Environmental Impact Statement (DEIS) for the Yukon Pacific Corporation's (Yukon Pacific) proposed LNG export site near Valdez, Alaska. The project consists of a 2.1 billion cubic feet per day natural gas liquefaction plant, four 800,000 barrel LNG storage tanks, a marine loading facility, and a cargo/personnel ferry dock facility. In addition to the shore facility, a fleet of 15 LNG tankers, each having 125,000 cubic meters of cargo capacity, would transport LNG beyond U.S. territorial waters to destinations in Japan, Korea, and Taiwan. From June 7 to 12, 1993, staff conducted local public meetings in Alaska on the DEIS. On December 1, 1993, it became apparent that significant additional analysis was required by Yukon Pacific to resolve air quality data and methodologies. During 1994, staff and the Environmental Protection Agency worked with Yukon Pacific to resolve the air quality issues, in addition to resolving many other outstanding environmental issues. A Final Envi-

ronmental Impact Statement (FEIS) is expected in early 1995.

**Mojave Pipeline Company:** The Commission issued an order on February 15, 1994, asserting jurisdiction over Mojave's proposed "Northward Expansion." This project, with a capacity of 475,000 MMcfd, more than doubles Mojave's capacity and comprises approximately 635 miles of various diameter pipeline, 103,228 horsepower of compression, and 59 new delivery points. The majority of these facilities will be utilized to serve the northern California market in direct competition with Pacific Gas and Electric Company.

**Florida Project:** On May 25, 1994, the Commission issued a PD, pending a subsequent order addressing environmental issues, to SunShine Interstate Transmission Company (SunShine), a general partnership whose general partners are affiliates of Coastal Corporation and Trans-Canada Pipelines, Ltd. The proposal covers the construction, ownership, and operation of 142.6 miles of 30-inch pipeline, compression totalling 12,000 horsepower and related lateral and metering facilities. The facilities will extend from near Pascagoula, Mississippi, to a point of interconnection in Okaloosa County, Florida, with the proposed facilities of SunShine Pipeline Partners, a Florida intrastate pipeline, and an affiliate of SunShine.

Construction costs are estimated at \$188 million. Initial capacity of the pipeline will increase from 329.5 MDth per day in 1995 to a total capacity of 637.8 MDth per day in 1999. The order tentatively approved SunShine's creative proposal to defer the recovery of certain costs from the early to the late years of the project in recognition that full utilization will start in year five. If authorized, SunShine will serve as an alternative to Florida Gas Transmission Company as a transporter to markets in the State of Florida.

**TransColorado Gas Transmission Company:** On June 3, 1994, the Commission authorized TransColorado to construct and operate pipeline facilities to transport up to approximately 300,000 Dekatherms per day (Dtd) of natural gas from the western slope of Colorado and the Rocky Mountain region for ultimate redelivery to Southwest, Midwest, and California markets. The authorized facilities include 251 miles of 22-inch pipeline, 41 miles of 24-inch pipeline, and 10,150 horsepower of compression, all at an estimated cost of \$183,585,625.

**Cove Point LNG:** In July, the Commission issued a PD to Cove Point LNG Limited Partnership (Cove Point LNG) to recommission the onshore "mothballed" Cove Point LNG facilities in Calvert County, Maryland, to store natural gas during the summer for use at peak demand times during the winter. Cove Point LNG proposed, among other things, to provide the peaking service at negotiated, market-based rates. The Commission found Cove Point LNG's proposal to be generally acceptable, but denied the use of market-based rates because Cove Point LNG did not demonstrate that it lacked market power over storage services in its market area. In the final order issued on September 28, 1994, the Commission approved the project, but required initial cost-based rates for both the storage peaking and the related transportation services.

**Young Gas Storage:** On June 22, 1994, the Commission authorized Young Gas Storage Company, Ltd. (Young) to develop, construct and operate a 5.3 Bcf working gas underground storage facility in Morgan County, Colorado, and to provide storage services at cost-based rates for others, with pre-granted abandonment. The Commission had preliminarily approved Young's proposal on March 3, 1994. The authorized facilities include approximately 10.8

miles of 20-inch pipeline, approximately four miles of 4- to 12-inch gathering lines, 37 injection/withdrawal, observation and saltwater disposal wells, and an approximate 6,000-horsepower compressor station. The facilities' estimated cost is \$44,355,100.

In FY 1994, the Commission approved several pipeline proposals to offer gas storage services at market-based rates for Avoca Natural Gas Storage, and others as noted below. However, in two instances, the Commission declined to give authorization for market-based rates for transportation services. Nevertheless, the pipeline applicants in those cases were invited to perfect their applications.

**Avoca Natural Gas Storage:** In July 1994, the Commission issued a PD authorizing Avoca Natural Gas Storage (Avoca), subject to final certification, to construct and operate an underground storage field in the market area near Avoca, New York, capable of storing five Bcf of natural gas. As part of the final certificate authority granted to Avoca on September 20, 1994, the Commission allowed market-based rates in lieu of cost-based rates. This represents the first time that the Commission has authorized the use of market-based rates for market area storage operations. In 1994, the Commission also approved market-based rates for production area storage for Koch Gateway Pipeline Company and Bay Gas Storage Company. Previously, the Commission had approved market-based storage rates in the production area for Richfield Gas Storage System, Petal Gas Storage Company, and others.

**Ouachita River Storage Company:** On September 30, 1994, the Commission issued a PD addressing all non-environmental issues related to Ouachita River's application to develop, construct and operate a storage field and related hub facilities in Louisiana. The proposed facilities include 11

## Natural Gas

injection/withdrawal wells, two observation wells, two compressor stations totalling 18,780 horsepower, and 24 miles of 24-inch pipeline. The facilities would be connected to nine interstate and intrastate pipelines and would have design peak day withdrawal and injection capacities of 550 Mmcf and 250 Mmcf respectively.

The Commission issued a PD, rather than dismissing the application, even though Ouachita River's application did not include any contracts for the proposed services. The Commission believes that this action will allow Ouachita River and its potential customers to negotiate contracts knowing with much more certainty the terms and conditions of service. Further action is, however, dependent upon the submission of evidence demonstrating that Ouachita River has long-term executed contracts or binding precedent agreements for a substantial amount of the firm capacity of the proposed facilities.

**Buffalo Wallow:** Also on September 30, the Commission rejected tariff sheets filed by KN Interstate Gas Transmission Company (KNI) which proposed market-based rates and negotiable terms and conditions for transportation service on KNI's Buffalo Wallow system. The system consists of approximately 100 miles of pipeline located in Hemphill County, Texas, and Roger Mills County, Oklahoma, that are geographically separated from KNI's mainline facilities. However, the Commission gave KNI the opportunity to file for a declaratory order to include more effective protective measures for captive customers and against affiliate preferences. (KNI subsequently filed for a declaratory order, which is pending.)

### Environmental Compliance

In FY 1994, the Commission continued to expand its environmental post-construction compliance review of blanket certificate and NGPA Section 311 new construction and Section 2.55 facilities replacements.

The Commission staff completed 230 on-site environmental inspections to ensure compliance with certificate environmental conditions during 1994.

The Commission conducted two regional training courses on environmental compliance. The courses covered the Commission's cultural resources compliance under the National Historic Preservation Act. This highly successful outreach program, started in 1992, continues to draw significant interest from all parts of the industry, including Federal and state agencies, industry employees, environmentalists, consultants, and the public. Eight training courses have been held in the past and more are planned next year. The courses provide a better understanding of:

- ◆ Compliance with environmental certificate conditions;
- ◆ The National Environmental Policy Act (NEPA);
- ◆ The National Historic Preservation Act compliance; and
- ◆ Other environmental laws and regulations.

The Commission has, among other things, taken several initiatives to monitor whether environmental compliance has occurred and to order it if necessary. The Commission now requires the companies to:

- ◆ Certify that the personnel and contractors have been trained in accordance with the approved implementation plan prior to construction.
- ◆ Have environmental inspectors on all major construction projects. At least one inspector is required per construction spread. The environmental inspector has the authority to order compliance with mitigation measures.
- ◆ File weekly or bi-weekly reports, depending on the size of the project, describing the status of construction.
- ◆ Notify the Commission's staff in advance of construction activities in environmentally sensitive areas. Commission staff can then be on-site during construction.

Further, the Commission has delegated to the Director of OPR the authority to take appropriate steps to ensure the protection of all environmental resources during construction of projects.

### Affiliates and Fair Market Practices

The marketing affiliate program guards against pipelines favoring their marketing affiliates in providing transportation services. In 1994, the Commission completed efforts to reduce the reporting burden associated with the program by eliminating certain reports and requiring posting of other information on the EBB.

## Gas Supply Competition

Natural gas imports and exports are regulated by the DOE. The Commission has sole responsibility for approving the point of entry where new facilities are required and jurisdiction over the transportation and resale of imported natural gas in interstate commerce.

Many proposals which the Commission authorized over the past few years to serve consuming markets in the Northeast, Midwest and California were based on Canadian and domestic gas sources. Twenty-seven projects involving Canadian, Mexican, and LNG gas sources were approved in FY 1994.

Deregulation and imports are significant forces in gas supply competition. According to the Energy Information Administration, imports accounted for 2.5 trillion cubic feet, or 11 percent, of America's total gas consumption of 21.1 trillion cubic feet in FY 1993. Canada supplied 97 percent of the imports and LNG from Algeria accounted for the rest. Virtually all imported gas volumes moved through interstate gas pipeline facilities. Exports to Canada and Mexico and LNG exports to Japan during FY 1994 totalled nearly 140 billion cubic feet.

## Producer Regulation

Producer regulation began in 1954 when the U.S. Supreme Court held that the Commission's NGA jurisdiction included sales of gas by producers in interstate commerce. The Commission initially set well-head prices on a company-by-company basis, then switched to area-by-area rates, and finally to nationwide rates. In response to continued declines in dedicated interstate reserves and severe gas shortages in the interstate market, Congress enacted the NGPA.

The NGPA established a series of maximum lawful prices for both the interstate and intrastate markets. The Act also provided a phased schedule to deregulate most new gas. The NGWDA completed the decontrol process by deregulating well-head gas prices and removing the NGA's certificate and rate filing requirements for producers on January 1, 1993.

The Commission completed processing a backlog of filings from state and Federal jurisdictional agencies. These filings are necessary for producers to qualify for certain nonconventional fuels tax credits available under the Crude Oil Windfall Profits Tax Act.

## Oil Pipelines

The Commission has statutory authority over the regulation of approximately 150 interstate common carrier oil pipelines under the Interstate Commerce Act and the Department of Energy Organization Act. These pipelines have total yearly revenues of over \$5.5 billion.

The primary goals of the Commission in its regulation of oil pipelines are to ensure that:

- ◆ Shippers and consumers do not pay unjust and unreasonable rates;
- ◆ Transportation services are not unduly discriminatory; and
- ◆ Oil pipelines have appropriate levels of incentives to make prudent investments in their systems.

The EPCRA requires that the Commission:

- ◆ Issue a final rule establishing a simplified and generally applicable ratemaking method; and
- ◆ Streamline its procedures for oil pipelines.

The Commission continued the implementation of its streamlined regulations in 1994. Numerous pipelines took advantage of the new, relaxed regulations, particularly dealing with waiver requests for short-notice filings. For example, under the prior regulations, oil pipelines only made 23 filings requesting waiver of the notice requirements in a one-year period. Under the streamlined regulations, oil pipelines made 108 filings for a comparable period.

After complying with the mandate of the EPCRA by issuing Order No. 561 on October 22, 1993, the Commission continued its review of oil pipeline regulation. This continued review resulted in the issuance of two additional, related orders.

Order No. 571 established the requirements for cost-of-service rate filings, delineated the information needed to be filed by an oil pipeline seeking to establish new or changed depreciation rates, and updated and simplified the annual reporting form of oil pipelines—FERC Form No. 6.

Order No. 572 established filing requirements and procedures with respect to an application by an oil pipeline for a determination that it lacks significant market power in markets in which it proposes to charge market-based rates.

The three orders were to become effective concurrently on January 1, 1995, in accordance with the EPCRA. Starting on that date, an oil pipeline has a variety of methods upon which to demonstrate its rates are just and reasonable. The primary method is the simplest; that is, rates which are indexed using a published figure. Among the alternatives are cost-of-service-based rates and market-based rates.◆

# Electric Power

## Public Utility Rates

The Commission has regulated rates for the transmission and sale for resale of electric energy in interstate commerce since 1935.

During FY 1994, public utilities filed 1,668 electric rate applications, addressing such issues as market-based rates, transmission arrangements, unit sale rate increases, changes in delivery points, rate reductions, cancellations, and other interchange and power pool services. Of these, eight sought major wholesale rate increases totaling \$29.5 million.

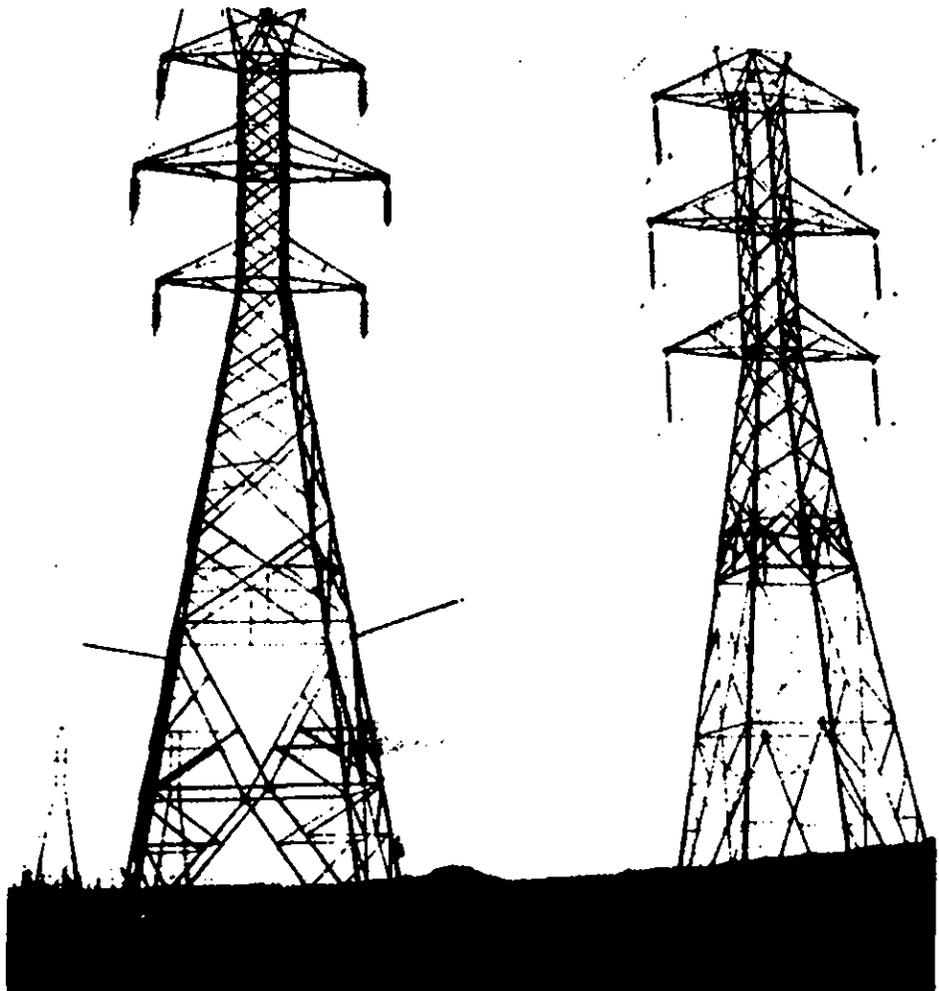
### FERC Electric Utility Rate Workload, 1994

Filings	Non-Formal	Formal
In process at start	198	67
Filed during year	1645	39
Total workload	1843	106
Processed during year	1362	32
In process at end of year	481	74

When a public utility files for rate changes or modifications to its terms or conditions of electric service, the Commission issues a public notice soliciting comments, protests and interventions. The staff acts on many routine, uncontested filings, freeing the Commission to decide complex and controversial cases. Approximately 85 percent of the Commission's rate filings are processed by the staff through delegated authority.

The Commission directly handles major rate increases and contested applications. The staff reviews these filings, along with any protests or interventions. The staff then presents these filings to the Commission, with recommendations. The Commission may then take one of three actions:

- ◆ Approve the application without further review;
- ◆ Reject all or part of the application; or



*Assured transmission access is necessary for traditional and nontraditional sources of electricity to compete effectively.*

- ◆ Suspend the effectiveness of the rate application and order a hearing and investigation.

When the Commission's preliminary evaluation of an application indicates that the rate schedule or tariff may produce excessive revenues or that the filing may be unjust, unreasonable, unduly discriminatory or preferential, the Commission may suspend the effectiveness of a rate filing for up to five months. At the end of the suspension period, the new rate goes into effect, subject to refund. If the Commission orders an investigation, the case is typically assigned to an administrative law judge (ALJ) for a formal hearing, and a settlement conference

is scheduled. This gives the parties an opportunity to resolve the issues and arrive at terms. If this is unsuccessful, or only partially successful, a hearing is scheduled.

During FY 1994, the Commission accepted 28 settlements which resolved some or all of the issues presented. In addition, the Commission issued 40 hearing orders involving 49 dockets.

### Transmission Issues

Assured transmission access is necessary for traditional and nontraditional sources of generation to compete effectively. Such transmission access must be on reasonable and nondiscriminatory terms. Dur-

ing FY 1994, the Commission took several actions to increase applications for transmission access.

In May of 1994, the Commission announced a new "comparability" policy. The Commission asserted that open access transmission tariffs would not be in the public interest unless these tariffs offered the same or comparable transmission services under price and non-pricing terms that the utility accorded itself. For instance, in the cases of Florida Power and Light Company (Docket No. ER93-465) and American Electric Power Service Corporation (Docket No. ER93-540), the Commission requested all parties to address in their evidentiary presentations the following: (1) uses the utility makes of its system, including operational differences that would affect flexibility under comparable use; (2) potential impediments to providing comparable service; and, (3) costs incurred in providing comparable service. These cases were scheduled to go to hearing early in 1995.

There have been 16 applications requesting the Commission to order transmission service filed under Section 211 since the passage of the EPAct. Seven have been granted, one was withdrawn, one was denied and seven are pending. These applications involved service from several kinds of transmitting entities. In Docket No. TX94-3-000, the transmitting utility was a municipal bulk power agency (Southern Minnesota Municipal Power Agency), in Docket No. TX-94-7-000, the transmitting utility was a federal agency (Tennessee Valley Authority), in Docket Nos. TX93-1-000 and TX94-4-000, the transmitting utility was an ERCOT utility, and in Docket Nos. TX94-6-000 and TX94-8-000, the transmitting utilities were all of the members of an existing power pool. These transmission applications also raise a myriad of novel issues concerning pricing (pricing for network service, joint pricing over multi-utility systems, comparability, distance sensitive rates, and curtailment

terms for nonfirm services). We expect that Section 211 applications will continue to raise novel issues.

### Exempt Wholesale Generators

The EPAct added a new Section 32 to the Public Utility Holding Company Act of 1935 (PUHCA). Section 32 established a class of electric power producers known as Exempt Wholesale Generators (EWGs). The Commission is charged with determining EWG status. On February 10, 1993, the Commission issued regulations (Order No. 550) covering filing requirements for EWG status. Order No. 550-A was issued on April 14, 1993.

During FY 1994, the Commission received 108 applications for EWG status. Of those, 87 were granted, five were denied, and 16 applications were withdrawn by the applicant.

### Electric Opinions

The Commission issued six electric opinions reviewing ALJs' decisions and seven rehearings of opinions. The opinions and rehearings issued and the primary issues were:

- ◆ Entergy/Gulf States Utilities, Opinion No. 385 and 385-A—approving highly contested merger with numerous issues;
- ◆ Systems Energy Resources Inc., Opinion No. 386 and 386-A—approving the Entergy System Agreement which has been modified to reflect the merger;
- ◆ American Electric Power Company v. Blue Ridge, Opinion No. 387 and 387-A—deciding Section 211 FPA contract issues relating to a request for transmission service;
- ◆ Cajun Electric Cooperative v. Gulf States Utilities, Opinion No. 388 and 388-A—resolving a contract dispute about new delivery points in the competition for new customers;

- ◆ Pacific Gas & Electric Company (PG&E), Opinion No. 389—resolving issues related to the interconnection and coordination of the California Oregon Transmission Project and PG&E's service to the Transmission Association of Northern California members; and,

- ◆ Yankee Atomic, Opinion No. 390 and 390-A—allowing the recovery of the cost of nuclear plant prematurely retired.

Two additional rehearing cases were:

- ◆ New England Power Opinion No. 379-A—resolving rate issues involving post-retirement Benefits Other than Pensions and related policy statement;
- ◆ Indiana Michigan Opinion No. 382-A—dealing with the prudence of affiliate fuel purchases.

### Fuel Prices

The Commission has broad authority under Section 206 of the FPA to adjust utility rates that are unjust and unreasonable. The Commission monitors electric utility fuel procurement practices under Section 208 of PURPA to ensure the reasonableness of prices passed through to ratepayers under wholesale fuel adjustment clauses.

In addition to tracking the level of utility fuel costs, the Commission uses the PURPA review to monitor the type of charges passed through the wholesale fuel clause. For example, when fuel prices are falling, utilities generally have opportunities to reduce costs by buying out or buying down high-priced contracts and replacing them with less expensive purchases available in the market. To encourage utilities to take advantage of such cost-cutting measures, the Commission permits fuel clause treatment for buy-out and buy-down expenses. And, to ensure that ratepayers benefit from the transaction, utilities are required to provide details of the buy-out/buy-down

**Fossil Fuel Prices Paid by Electric Plants in the United States  
 (Cents Per Million Btu)<sup>1</sup>**

	12 Months Ending September 30, 1993	12 Months Ending September 30, 1994	Percent Change
Coal <sup>2</sup>	139.1	137.0	-1.5
Oil <sup>3</sup>	258.9	240.3	-7.2
Gas <sup>4</sup>	263.1	234.4	-10.9

<sup>1</sup> Source: Federal Energy Regulatory Commission, FERC Form 423, *Monthly Report of Cost and Quality of Fuels for Electric Plants (Steam-electric and Combined Cycle Plants 60 MW or greater)*.  
<sup>2</sup> Coal: Bituminous, Subbituminous, Lignite and Anthracite.  
<sup>3</sup> Heavy and Light Oils.  
<sup>4</sup> Gas: Natural Gas and Small Quantities of Coke Oven, Refinery, and Blast Furnace Gas.

arrangement, while also obtaining a waiver of the regulations before passing such costs through the fuel clause. Information gathered during the PURPA review is used to verify that the cost recovery complies with the Commission's regulations.

The average price of coal delivered to electric utilities during FY 1994 fell slightly from the previous year. During the same period, the delivered prices for both oil and gas decreased.

**Qualifying Facilities**

PURPA encourages cogeneration and small power production by requiring electric utilities to buy electric energy from, and sell electric energy to, facilities that meet certain qualifications. Qualifying facilities (QFs) are exempted in whole or in part from Federal and state regulation.

Commission regulations permit small power producers and cogenerators that are seeking QF status either to file a notice that their facilities meet applicable standards for certification or to apply to the Commission for certification.

During FY 1994, the Commission received 304 filings and completed 316 filings for QF status. Of the latter, 138 were for small power production and 178 were for cogeneration. Among the completed cases there were:

- Granted—57 applications;

- ◆ Denied, rejected, withdrawn, or dismissed—four applications; and,
- ◆ Self-implementing (notified the Commission of status)—255 applications.

During FY 1994, applications were received for approximately 6,000 MW of cogeneration capacity and 646 MW of small power capacity.

In the 1980-1994 period, QF filings were made for approximately 120,000 MW of existing or proposed capacity. However, this is not necessarily the operable capacity of qualifying facilities, nor is it necessarily a reliable projection of future capacity. Some projects reflected in these amounts may not be built.

**Contingency Plans For Electricity Shortages**

Section 202(g) of the FPA, as amended by PURPA, directs the Commission to establish rules requiring public utilities to notify it and state regulators of possible electric power shortages and to submit contingency plans. The purpose is to assure that all customers served directly or indirectly are treated equally if shortages occur. On October 5, 1984, the Commission issued Order No. 401 requiring public utilities to file reports of anticipated shortages, along with amendments to previously filed contingency plans. Respondents are the Commission-regulated public utilities

supplying full or partial firm power requirements to wholesale customers.

The Commission has pending a proposed rule that includes, among other things, a proposal for amending Part 294 of its regulations to exempt a public utility from having to file a contingency plan or a modified plan if it includes certain provisions in the appropriate rate schedules. Such provisions would ensure that the utility treats firm power wholesale customers without undue discrimination or preference. The provisions would also require reporting of modification to the appropriate state regulatory agency and to the affected wholesale customers.

**"Big Chill" Report**

On January 26, 1994, the Commission began an inquiry after the extreme weather during the prior week culminated in rotating blackouts in the eastern part of the country and a declared emergency in the District of Columbia that shut down the federal government for a day. The order directed various utilities (Virginia Power, the Pennsylvania-New Jersey-Maryland Interconnection and its members, plus all directly interconnected neighboring public utilities) to report on power transactions and other information during the week of January 16.

In May, the Commission published a report on the matter. It found that generally the electric power system performed well during the emergency. Additionally, the staff report made several recommendations to help meet future energy needs. Among other things, the report recommended that the Commission encourage utilities to improve communications over the eastern interconnected system, to file tariffs to facilitate purchases from non-traditional trading partners during emergencies and to improve procedures for reassessing baseline interregional transfer capabilities.

## Rulemaking and Policy Statement Initiatives

During 1994, the Commission dealt with several rulemaking initiatives, including various matters relating to our new transmission responsibilities.

Five Notices of Proposed Rulemaking were issued in addition to five Final Rules on electric matters. Among the more important proceedings were the transmission pricing inquiry and the stranded cost proposed rule.

With respect to implementing our new transmission responsibilities under the EAct and related matters, the Commission issued the following:

- ◆ RM93-10—Section 213(b) transmission information Final Rule promulgating Form 715 and subsequent clarifying rule;
- ◆ RM93-19—Held technical conference on transmission;
- ◆ RM93-22—Final Rule on notice requirements under Section 211; and,
- ◆ RM94-7—Notice of Proposed Rulemaking to establish a Commission policy on recovery of stranded costs.

Among the additional proposed rules were:

- ◆ RM93-24—Revision of fuel clause regulations relating to company owned sources;
- ◆ RM94-5—Treatment of confidential responses to Form 580 fuel reports; and,
- ◆ RM94-14—Decommission trust fund guidelines for nuclear plants.

Among the additional Final Rules were:

- ◆ RM93-18—Ratemaking for the recovery of DOE nuclear assessments;
- ◆ RM-93-20—Providing for the electronic filing of Form No.1; and,
- ◆ RM94-17—Clarification of the applicability of provisions of the FPA to QFs.

Notably, the Final Rule implementing the 213(b) information requirement was on a fast track and was issued within the one-year statutory deadline. Similarly, the transmission pricing inquiry was completed after extensive comments from all segments of the industry.

## Mergers and Corporate Matters

The Commission is responsible for acting on applications related to corporate transactions including mergers, property dispositions, acquisitions of securities by public utilities, and authorization to hold various interlock positions. Increased corporate activities continued during FY 1994.

Three significant merger cases were processed. These were the Entergy/Gulf States Utilities Merger (EC92-20) which was approved after hearing, the Public Service Company of Indiana-Cincinnati Gas & Electric Merger (EC93-6) which was ultimately approved after settlements were reached, and the El Paso/Central & Southwest Merger which is in hearing. The latter case also involves a contentious Section 211 application with Southwestern Public Service Company. During the year, the Commission announced, in the Illinois Power Company case, its policy with respect to the formation of holding companies and *de facto* mergers requiring approvals under Section 203 of the FPA for indirect mergers.

## Market-Based Rates

Ordinarily, the Commission fixes cost-based rates utilities may charge. In some cases, however, the Commission will allow a utility to charge market-based rates, i.e. rates negotiated by seller and buyer. The Commission has approved market-based rates when the seller can demonstrate that: (1) it and its affiliates are not dominant in the generation market; (2) it and its affiliates either lack market power in transmission or have mitigated any transmission market power (e.g. by providing open-access transmission service); (3) it and its affiliates have not erected any other barrier to entry; and (4) it has not engaged in self-dealing or affiliate abuse. The Commission relies on these criteria to ensure that the market rate is not excessive.

In Kansas City Power & Light Company, Docket No. ER94-1045-000, the Commission determined that any transmission tariff filed in support of market-based rates must provide for service comparable to the uses the transmission owner makes of the transmission system. The Commission also announced that it would no longer examine generation dominance when considering market-based rate proposals involving sales from generating units to be constructed in the future. After examining generation dominance in numerous proceedings over the years, the Commission had yet to find an instance of generation dominance in long-run bulk power markets.

Under Part V of the FPA, power marketers are public utilities which buy and sell power but do not own generation or transmission facilities and do not have a franchised terri-

## Electric Power

tory. There has been a large increase in the number of power marketer filings with about 75 power marketers requesting market-based rates for 1994. Some of these power marketers are affiliated with public utilities; therefore, in Heartland Energy Services, Inc., Docket No. ER94-106-000, the Commission explained the standards it would apply to affiliated power marketers, e.g., a requirement that the affiliated public utility have a comparable transmission tariff on file. Also, while the Commission rejected requests for changes in the reporting requirements applicable to power marketers, the Commission announced that it would reexamine on a generic basis the reporting requirements applicable to all sellers at market-based rates, including power marketers. At the end of FY 1994, the Commission had approved 35 applications by power marketers to sell at market-based rates.

### Regional Transmission Groups

The Commission issued a Policy Statement on July 30, 1993, encouraging the development of RTGs. The policy statement contains guidance on the basic components that should be included in RTG agreements filed with the Commission by jurisdictional investor-owned utilities.

The policy statement includes the following criteria for properly structured RTGs:

- ❖ Broad contiguous membership;
- ❖ Service and expansion commitments;
- ❖ Coordinated planning mechanisms;
- ❖ Open participation that includes state commissions;
- ❖ Fair governance; and
- ❖ Alternative dispute resolution procedures.



*FERC Commissioner William L. Massey, left, along with FERC staff members Cynthia A. Marlette and Robert J. Cupina, chat with Texas Public Utilities Commission Chairman Robert W. Gee, right, at the FERC Open House for the National Association of Regulatory Utility Commissioners.*

The criteria are flexible but contain a fair amount of guidance. An important part of the Commission's Policy Statement concerns the willingness to give appropriate deference to decisions rendered by RTGs.

Properly structured RTGs may enable the wholesale market to operate in a more competitive, efficient manner. RTGs, with the information coming out of the information rule-making and the new procedures for good faith requests and responses, may also help resolve transmission disputes voluntarily and reduce the number of applications made to the Commission for mandatory transmission access. The alternative dispute resolution process may be particularly useful in resolving technical and reliability issues.

Activity in this area is progressing in several regions. In response to the Commission's Policy Statement, three RTGs located in the Western System Coordination Council region

have filed proposals. The Commission has accepted proposals filed by the Western Regional Transmission Association and the Southwest Regional Transmission Association on the condition that they modify their arrangements. They must ensure that the planning process would result in a single regional coordinated transmission plan to be supported by all members and require that all members commit to offer comparable transmission service whether under individual tariffs or under a regional tariff. An RTG proposal filed by the Northwest Regional Transmission Association is pending.

### Access to Transmission Information

On September 30, 1993, the Commission issued a Final Rule that established a new reporting form (Form 715) entitled Annual Transmission Planning and Evaluation Report. The reporting, required by

the EPAct, is to inform potential transmission customers, state regulatory authorities, and the public of potential transmission capacity and known constraints. On April 1, 1994, the Commission began receiving the information.

Besides setting up the information requirements, the rule is also intended to support or complement the Commission's expanded authority to order wheeling and to provide information to analyze transmission rate filings.

The rule requires information from certain "transmitting utilities" that operate integrated (non-radial) transmission facilities 100kV and above. A transmitting utility is any electric utility that owns or operates electric power transmission facilities used for the sale of electric energy at wholesale. Respondents include investor owned utilities, Federal and state agencies (including municipalities) and cooperatives.

The Commission received reports representing approximately 191 transmitting utilities. Nearly all of the respondents have designated one of 11 regional organizations as their reporting agent for all or part of the form. The regional agents are reliability councils or subregions of the North American Electric Reliability Council.

Transmitting utilities or their agents are required to make this

information available to the public on request. Additionally, the Commission has established an EBB for public access to that Form 715 information submitted on magnetic diskettes.

### **Federal Power Marketing Rates**

Congress assigned the responsibility for marketing power from various Federal hydroelectric developments to the DOE under the DOE Organization Act. These projects were constructed primarily by the U.S. Army Corps of Engineers and the Bureau of Reclamation. The Secretary of Energy has delegated final authority to the Commission to approve or disapprove the rates charged by the following power marketing agencies:

- ◆ Alaska Power Administration;
- ◆ Southeastern Power Administration;
- ◆ Southwestern Power Administration;
- ◆ Western Area Power Administration.

In addition, Congress, in the Pacific Northwest Electric Power Planning and Conservation Act, assigned to the Commission direct responsibility for confirming and approving or disapproving the

rates of the Bonneville Power Administration.

As of January 1, 1994, about 130 federally owned hydroelectric projects requiring Commission-approved rate schedules were in operation and one was under construction. The projects had an installed capacity of over 34,000 megawatts. The Commission is also responsible for approving rates for transmitting non-Federal power over Federal transmission lines.

During FY 1994, the Commission received 18 Federal rate filings (representing rate increase amounts totalling \$423 million) and completed 16 filings (representing rate increase amounts of \$437 million).

### **Security Issuances**

Under Section 204 of the FPA, the Commission regulates the issuance of securities or assumption of obligations and liabilities by public utilities, if such activities are not otherwise regulated by a state commission. During FY 1994, the Commission processed 82 Section 204 applications authorizing about \$6.5 billion of security issues and assumption of obligations and liabilities.◆

# Hydroelectric Power

## Hydroelectric Power

Hydroelectric power offers an abundant, clean source of electric energy. In FY 1994, hydroelectric plants supplied approximately 10 percent of America's electrical energy. The Commission regulates about half of this amount.

Conventional hydroelectric projects generated an estimated 309.1 billion kilowatt-hours of electricity during the year, saving some 529 million barrels of oil or 121 million tons of coal. In addition to providing significant generating capacity, hydroelectric projects authorized by the Commission often improve fish and wildlife habitats, recreational opportunities, flood control, and water supply.

## Hydropower Resources Assessment

As of September 30, 1994, the Commission estimated the nation's developed and undeveloped hydroelectric power potential at 150.2 million kilowatts of conventional hydroelectric generating capacity. Of this total, 74 million kilowatts are already developed.

The September 30, 1994, estimate of hydroelectric resources is based on an annually updated inventory of potential hydroelectric power sites. In addition to 2,335 existing plants, 64 plants under construction are capable of producing 3.7 billion kilowatt-hours of electricity annually. There are 4,994 sites with undeveloped generating potential of 226 billion kilowatt-hours.

The leading states in hydroelectric production are Washington, California, and Oregon, with 100.7, 44.5, and 28.9 billion kilowatt-hours respectively. The greatest undeveloped average annual generation exists in Washington, California, and Idaho, with 28.6, 24.9, and 22.6 billion kilowatt-hours respectively.

## Licensing

The FPA and the PURPA provide alternatives in developing a



*Lake Blackshear Dam on the Flint River in Crisp County, Georgia. Spillway gates are fully open to allow flood water to pass.*

hydropower project. A developer may, as a first step, seek a preliminary permit. A permit gives the developer time to perform feasibility studies while maintaining priority to apply later for a license or an exemption for licensing. Since a preliminary permit is not a prerequisite for a license, a developer may also file directly for a license or an exemption. The Commission's regulations detail the filing procedures.

Exemptions may be obtained for projects if:

- ❖ Generating capacity is being installed or increased;
- ❖ The applicant has all of the real property interests necessary to develop and operate the project;
- ❖ Either the project will be located at a pre-1977 dam and have 5 MW or less installed capacity; or the project will use the hydropower potential of a man-made conduit used primarily for purposes other than hydropower, and the installed capacity is 15 MW or less (40 MW or less for states and municipalities); and

- ❖ The project's capacity is less than 5 MW (15 and 40 MW limit for conduit exemptions).

In FY 1994, the Commission issued 12 original licenses, 43 relicenses, and five exemptions from licensing for hydropower projects.

## Comprehensive Development

The FPA, amended by the Electric Consumers Protection Act of 1986, requires the Commission to give equal consideration to developmental and non-developmental uses of the waterway on which a project is located. The Commission weighs the economic and environmental tradeoffs of the various uses of the waterway when determining whether, and under what conditions, to issue a hydropower license.

The Commission independently evaluates the environmental impacts that would result from licensing proposed, and relicensing existing, hydroelectric projects.

Staff considers the recommendations of:

- ❖ Federal and state natural resource agencies;
- ❖ Indian tribes affected by project construction or operation; and
- ❖ Other concerned individuals and entities.

The staff also evaluates each project's consistency with relevant state and Federal comprehensive plans.

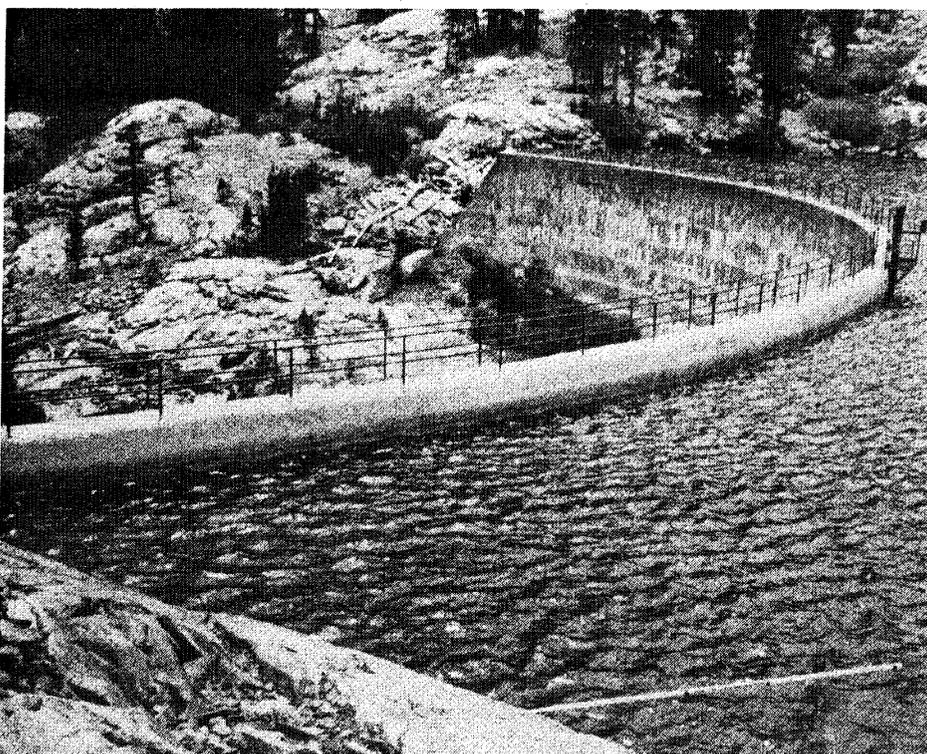
The Commission's assessment of a project's environmental and engineering aspects often leads to special license articles. These articles frequently require the licensee to implement specific mitigative or enhancement measures. Unresolved major hydropower-environmental resource conflicts may cause the staff to recommend an alternative project design, or denial of a license.

### Environmental Impact Statements

In November 1993, the Commission issued two FEISs. One FEIS was for seven projects (total existing and proposed capacity of 55.58 megawatts [MW]), all on the Androscoggin River in New Hampshire. The second FEIS evaluated proposed modifications to the 39.3-MW Lower Mokelumne River Project No. 2916 in California to protect anadromous salmon and steelhead in the Lower Mokelumne River. In February 1994, the Commission issued an FEIS for the proposed 10.3-MW Shelley Project No. 5090, to be located on the Snake River in Idaho.

In April 1994, the Commission issued a revised DEIS for the existing Kingsley Dam Project No. 1417 and North Platte/Keystone Diversion Dam Project No. 1835. These two projects share a 150-mile reach of the Platte River in south-central Nebraska just upstream from a reach of the Platte River designated under the Endangered Species Act as critical habitat for the whooping crane.

In June 1994, the Commission issued a DEIS for the Saint Louis River Basin in Minnesota. This



*Concrete arch dam on Rush Creek in Mono County, California. This project, Rush Meadows, P-1389, is awaiting relicensing.*

DEIS addressed the existing 91-MW St. Louis Project No. 2360—which includes five head-water reservoirs and four hydroelectric developments—and the 6.5-MW Cloquet Project No. 2363, which is used to generate power to produce paper.

In July 1994, the Commission issued an FEIS for the proposed 600-MW River Mountain Pumped Storage Project No. 10455 and a DEIS for the proposed 150-MW Clavey River Project No. 10081. The River Mountain Project would be located in eastern Logan County, Arkansas, just west of the City of Russellville. The upper reservoir of this pumped storage project would be at the summit of River Mountain, and the Corps of Engineers' Lake Dardanelle, on the mainstem of the Arkansas River, would serve as the lower reservoir. The Clavey River Project would be constructed on the Clavey River in Tuolumne County,

California, and would include the construction of a 413-foot-high dam. The Clavey River DEIS was simultaneously issued as a draft environmental impact report to meet California requirements and was prepared with the following cooperating agencies: U.S. Forest Service; Bureau of Land Management; the Corps of Engineers; and California State Water Resources Control Board.

In September 1994, the Commission issued two DEISs. One DEIS was for the proposed 13.2-MW Felts Mills Project No. 4715 located on the Black River in New York. The proposed project would involve reconstructing two dams located about 2.5 river miles apart and demolishing an existing breached dam located between the two dams to be reconstructed. The second DEIS was for the existing 8.4-MW Ayers Island Project No. 2456 on the Pemigewasset River in the Merrimack River Basin in New Hampshire.

## Hydroelectric Power

### Third-Party Contracting

When the Commission is required to prepare an EIS under the NEPA for a license application, the EPAct authorizes the Commission to permit hydro applicants—at their option—to pay outside contractors to prepare the EIS. The program was initially limited to applications filed after the EPAct was enacted. The program has now been expanded to include all applications. Hydro applicants can choose a contractor from the Commission-approved list. The Commission reviews the applicant's choice, makes the final selection, and oversees all contractor-prepared documents. This process will shorten the time required for Commission review, because much of the environmental analysis will be completed before an application is filed.

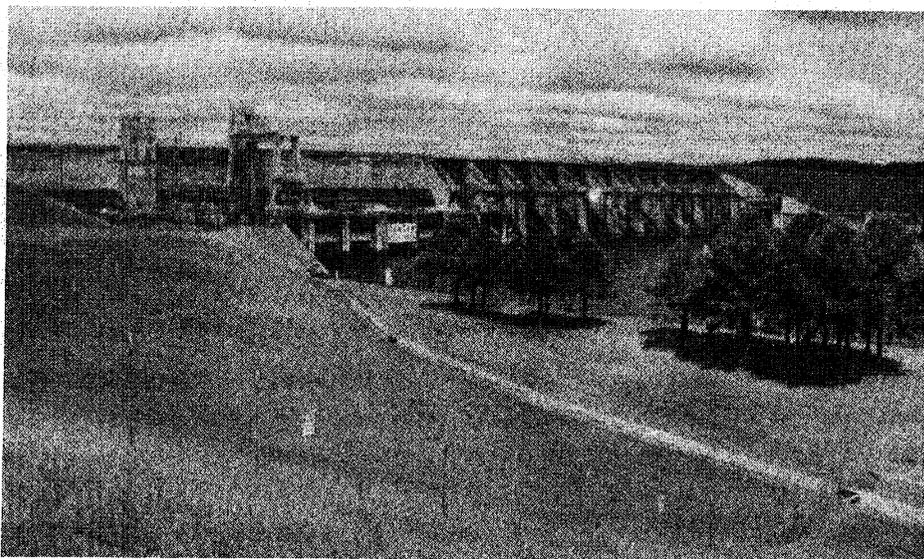
The Commission initially selected 27 firms as qualified contractors to prepare EISs for hydroelectric projects.

The Commission started three third-party contract EISs in FY 1994.

### Applicant-Prepared Environmental Assessment

The EPAct permits an applicant, or a contractor, consultant, or other person selected by the applicant to prepare an environmental assessment (EA) when one is required under NEPA. The Commission is required to institute procedures, including pre-application consultations, to advise potential applicants of studies or other information that FERC will require.

In FY 1994, the Commission advised five applicants who intended to file a draft EA in lieu of the Exhibit E with their application. Three were filing relicense applications, the other two original license applications. By overseeing an applicant who prepares a draft EA during the pre-filing consultation process, OHL will help ensure that the EA analyzes the interests of all involved stakeholders. Benefits of the process



*Hydroelectric project on Lake Gaston, Virginia. The licensee wishes to use the lake as a source of municipal water supply.*

should include a more collaborative decision-making process and expedited licensing decisions.

The staff is preparing a guidance manual for applicants, agencies, organizations, the public, and the staff to use when an applicant decides to prepare an EA before filing a license application.

### Cumulative Impacts and Decommissioning

During FY 1994, the Commission reviewed about 250 sets of comments filed in response to its Notice of Proposed Policy Statement on the Use of Reserved Authority in Hydropower Licenses to Ameliorate Cumulative Impacts—the comments differed widely as to whether and how reopener articles in licenses should be used. The Commission also reviewed about 160 sets of comments filed in response to its Notice of Inquiry on Project Decommissioning at Relicensing. The comments reflected a wide range of opinions on whether a decommissioning policy was needed, whether the Commission had the Authority to order decommissioning of projects, and how decommissioning would be paid for if ordered.

### Project Relicensing

The 157 relicense applications filed for projects with licenses that expired in 1993 comprise a large part of the Commission's current and future workload. Of the 157 applications, the Commission, by the end of FY 1994, had issued 60 new licenses. One relicense application was withdrawn. In FY 1994, the Commission continued its outreach program and participated in hydropower conferences to inform license applicants, Federal and state agencies, public interest groups, and Indian tribes about a variety of topics. Topics included how to improve the licensing process, third-party contracting, assessing cumulative environmental impacts, and how the public may become more involved in the NEPA process.

In FY 1994, the Commission completed three EAs that addressed multiple projects and two EISs that addressed multiple projects. These documents reflect a river basin approach to evaluating cumulative impacts from relicensing these projects. The three EAs were for projects in Michigan, including: the AuSable River Basin with six projects totaling 41 MW; the Muskegon

River Basin with three projects totaling 45.6 MW; and the Manistee River Basin with two projects totaling 37.1 MW. These three multiple EAs were prepared in cooperation with the U.S. Forest Service. All 11 projects were included in a *settlement agreement between Consumers Power Company and the resource agencies.*

One multiple EIS was for seven projects with a total existing and proposed capacity of 55.58 MW—all on the Androscoggin River in New Hampshire. That EIS analyzed the effect of issuing new licenses for the continued operation of the projects, the effect of installing additional generating capacity at two projects, and the effect of raising the reservoir surface elevation for increased energy generation at one project.

The second multiple EIS was for two projects on the St. Louis River in Minnesota. The St. Louis River Project No. 2360 consists of five headwater storage reservoirs without hydroelectric generating facilities and four hydroelectric developments on the main stem river with a total generating capacity of 88.6 MW. The 6.5-MW Cloquet Project No. 2363 is located between two of the St. Louis River Project developments.

## Joint Preparation of Environmental Documents

The Commission prepared, and will continue to prepare, NEPA documents with the Forest Service and other cooperating agencies, such as the Bureau of Land Management and the Corps of Engineers.

## Dam Safety

Dam safety receives top priority in the Commission's hydropower program. All of the Commission's licensed projects are inspected regularly to ensure their safety. The Commission's dam safety program is the largest in the Federal Government. The Commission cooperates with other agencies, as appropriate, in carrying out the program.

The Commission's dam safety program ensures that licensed and exempted projects are properly constructed, operated, and maintained to protect life, health, and property. The program complies with the Federal Guidelines on Dam Safety issued in 1979 under Presidential Executive Order.

During FY 1994, the Commission staff conducted about 2,400 dam safety inspections and completed final review of 224 reports of inspections by independent consultants.

A licensee must retain an independent board of consultants to review the design and construction of major or complex projects. Commission regulations require an independent consulting engineer, approved by the Commission, to inspect and evaluate certain projects at five-year intervals after they become operational. They inspect and evaluate these projects to identify any actual or potential deficiencies that might endanger public safety.

If deficiencies are discovered, dam owners are required to take remedial actions, ranging from minor maintenance to major repairs.

Since 1981, over 317 dam safety modifications have been completed at a total cost of about \$523 million. At the end of FY 1994, there were 94 ongoing modifications at a total estimated cost of \$195 million.

When warranted, the Commission staff has retained the services of consultants to assist staff in specialized fields, such as seismology and geotechnical engineering. In addition, the staff contacts experts in specialized fields to keep abreast of the latest advances in engineering.

The Commission staff has required licensees to use new equipment for investigative and quality control purposes, and has revised proposed investigative programs. Typically these efforts result in cost savings associated with remediation and sometimes eliminate the need for dam safety modifications. In addition, the staff has required

licensees to modify their analytical methodologies.

At several projects, the staff helped *select core hole locations and sampling and laboratory testing procedures, and helped interpret results.* Before the Commission can accept the strength parameters used in dam stability and stress analyses, it has to observe the field coring operations and inspect the foundation core samples.

There is a concern about possible effects on dams from seismic events. Varying degrees of seismic activity have been recorded east of the Rocky Mountains, and there is concern of a repeat of the New Madrid, Missouri, and the Charleston, South Carolina, earthquakes. The Commission has retained the services of expert consultants to assist staff in addressing these issues on specific dams. In addition, there has been an increasing concern about the possibility of a large earthquake that could affect areas of Oregon and Washington west of the Cascade Mountains. The Commission staff is monitoring and evaluating the seismic research in this area. Projects potentially affected will require more site specific seismicity evaluation and subsequent structural analyses. An excellent example of the need to assess the stability of dams during earthquakes was last year's Northridge earthquake in California, which affected Commission-licensed and exempted dams. No dam failures occurred at these sites.

Work on the Commission's Engineering Guidelines continued during FY 1994. A Probable Maximum Flood (PMF) Standard was added to ensure that PMF determinations are more confident and can be independently verified. Also, a chapter on Instrumentation and Monitoring was reviewed and will be published early in FY 1995. Work is essentially complete on a first draft of a chapter on other types of dams, such as Amburson, multiple arch, and timber crib dams. A chapter on arch dams is planned for FY 1995.

## Hydroelectric Power

Under the Memorandum of Agreement (MOA) with the DOE and the Nuclear Regulatory Commission, the staff continues to perform safety inspections of dams under the jurisdiction of these agencies. Approximately 100 such inspections were made in FY 1994. The Commission has also initiated efforts to work more closely with states to improve dam safety.

The Commission requires emergency action plans (EAPs) for all dams unless it is satisfactorily demonstrated that no reasonably foreseeable project emergency would endanger life, health, or property. EAPs provide an early warning system in case of sudden emergencies caused by natural disasters—such as hurricanes and earthquakes. Their purpose is to provide maximum public protection at all times. The Commission conducted 31 functional exercises in FY 1994 to test the EAPs under simulated disaster conditions. These exercises included the state and local disaster preparedness agencies responsible for emergency evacuation.

The Commission staff's initiative requiring licensees to periodically conduct a functional EAP exercise is gaining national interest. Representatives of several Federal agencies, including the Bureau of Reclamation, the U.S. Army Corps of Engineers, the Tennessee Valley Authority (TVA), and the Federal Emergency Management Agency (FEMA) have expressed interest in the Commission's EAP exercise program and have attended the exercise design course.

The TVA, which has jurisdiction over more than 50 dams, asked the Commission staff to conduct the EAP exercise design course at TVA's Knoxville, Tennessee, offices. Commission staff presented the EAP course in FY 1994 to representatives of the TVA, state government officials, and licensees.

The FEMA determined that EAP training should be provided for state regulated dam owners and emergency management agencies. The

FEMA completed a memorandum of agreement with the Commission for the Commission staff to develop and conduct an EAP training course. The Commission staff will instruct course participants in how to develop and test an EAP. A pilot course and one additional course will be conducted in FY 1995.

The Commission has issued *Guidelines for Public Safety at Hydropower Projects*. The Commission cooperates with project owners in assessing the need for safety devices or other safety measures and solving safety problems. The guidelines describe the types of possible hazards at hydropower facilities and the safety devices or measures that can be used to protect the public. The Commission staff ensures that licensees and exemptees install and maintain the appropriate public safety devices.

### Compliance

The hydropower compliance program ensures, through monitoring and investigation, that the terms and conditions of issued licenses and exemptions are adhered to and that actions to protect life, health, property, and the environment are taken promptly.

The number of compliance filings increased from about 100 in FY 1981 to 2029 in FY 1994. These filings reflect the compliance requirements contained in licenses and exemptions, proposed post-licensing changes to the original projects and other FPA requirements.

In FY 1994, the Commission issued 25 orders to require compliance with the FPA and Commission orders, rules and regulations.

Under Section 31 of the FPA, hydroelectric licensees, exemptees, and permittees are subject to civil penalties of up to \$10,000 per day for violating Part I of the FPA or any regulations or terms and conditions imposed under Part I. The Commission completed six civil penalty actions under Section 31 in FY 1994. A total of \$644,900 in civil penalties was assessed. The penalties ranged

from \$12,000 for unauthorized closing and failing to maintain a safe recreation area at a project site, and \$75,000 for unauthorized project construction, to \$450,000 for failing to follow approved construction plans and specifications resulting in failure of project works and soil erosion into a river.

During FY 1994, the Commission also conducted 20 audits to improve licensee and exemptee compliance with the terms and conditions of their licenses and exemptions.

### Water Quality

Maintaining state water quality standards and protecting existing aquatic resources are important considerations in processing license applications and post-licensing activities. When a license or an amendment to a license is issued, the Commission seeks to ensure that water quality resources are maintained or enhanced.

Project effects on dissolved oxygen, aeration, water temperature, and water chemistry are carefully examined. If, after reviewing site specific conditions, there is reason to believe that a project's operation may adversely affect water quality, changes in project facilities may be required to minimize or mitigate for these impacts. Monitoring may also be required to ensure that the project is operated to maintain the required water quality.

In May 1994, *Jefferson County Public Utility District v. Washington*, the U.S. Supreme Court significantly expanded state authority under Section 401 of the Clean Water Act. Individual states may now impose a wide range of conditions on hydropower licenses and relicenses. This will have a major impact on the hydropower program.

### Headwater Benefits

Section 10(f) of the FPA requires that the Commission determine how much an owner of a downstream non-Federal hydropower development must pay the United States or

an upstream licensee for the benefits provided by the upstream project. Total headwater benefits assessments of approximately \$241 million have been made since the program began in 1920. In FY 1994, the Commission assessed \$8.4 million for approximately 2,800 gigawatt-hours of additional energy generation from river regulation provided by upstream Federal projects.

Three headwater benefits determinations were completed and the beneficiaries of energy gains were assessed \$2.1 million. In addition, 17 new studies were initiated under the Stone/Webster contract. In addition, the Commission's Headwater Benefits Energy Gains computer program, was published and is now available through the National Technical Information Service. The program will run on PC computers, is easier to use, and now widely available to the hydropower industry which will help economize the study process.

## Jurisdiction

The Commission reviews unlicensed operating projects and declarations of intent for proposed projects to determine whether they are required to be licensed under Section 23(b) of the FPA. From April 1986 to September 1994, the review of these projects resulted in 116 orders finding that licensing is required and 118 orders finding that licensing is not required. In FY 1994, 15 orders on jurisdiction were issued.

## Efficiency Upgrade Program

During FY 1994, the Commission processed 16 efficiency upgrade related project amendments, resulting in an increase of 75.26 MW in generating capacity. The efficiency upgrade program encourages capacity and efficiency upgrades at existing hydropower projects. It is a direct result of Commission efforts to minimize the pre-filing requirements for projects having minimal expected impacts. The program's objective is

to promote domestic energy production, encourage utilities to evaluate investments in energy efficiency and make more efficient use of our existing hydroelectric resources.

A typical efficiency improvement at a hydropower project can include upgrades to the generating units, modernizing controls, or installing additional units. Since the program began in 1991, the Commission processed a total of 81 efficiency upgrades resulting in a total increase of 515.4 MW of on-line generating capacity.

## Power Site Lands

During FY 1994, the Commission processed 208 applications for non-waterpower uses of Federal lands reserved for waterpower purposes. These non-waterpower uses included 178 mining claims, one mineral lease, 16 rights-of-way, and 13 determinations under the FPA.

All of the approximately 750 active power sites established under Section 24 of the FPA have been identified by township, range and section for the public land states and by Federal Reservations for the other states. This allows the Bureau of Land Management and the Commission to handle requests for other uses of the power sites more expeditiously.

## Resource Issues

In the 1960s, original licenses included provisions (reopener articles) allowing the Commission to modify projects to ensure that adjustments could be made to accommodate future environmental resource needs. These provisions began to be used significantly in the 1990s. As the demands on the nation's water resources increase, the calls to modify the requirements of existing hydroelectric facilities will also increase.

Requests to modify license requirements include: withdrawal of water for municipal water supplies; installing fish passage facilities; enhancing recreational facilities;

modifying reservoir surface elevations; providing additional minimum flows below project dams; and improving water quality.

Municipal water supply is the primary focus at the Lake Gaston (No. 2009), the Lower Mokelumne River (No. 2916), and the New Don Pedro (No. 2299) Projects. In each case, the Commission is examining whether or how the water should be allocated to competing resource uses.

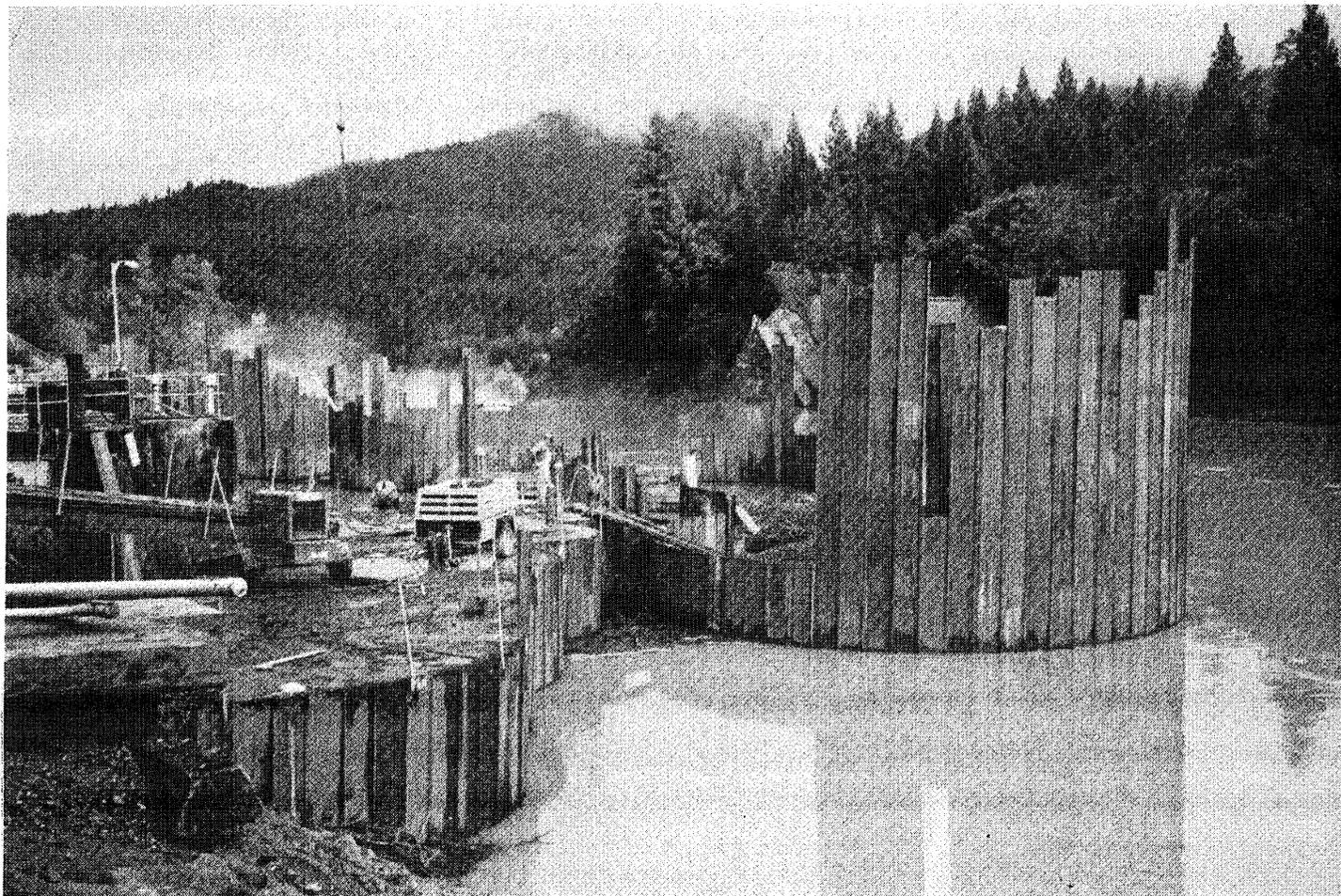
At the Lake Gaston Project, the licensee requested Commission approval to install a pumping facility in the reservoir that would allow the trans-basin diversion of reservoir water for municipal water supply.

A complaint of fish kills from resource agencies prompted a review of the operation of the Lower Mokelumne River Project. This review is being conducted based on the reopener articles in the existing license. The draft EIS recommends increases in the minimum flows below the project and a variety of non-flow related actions to protect the fish and wildlife resources. These recommendations are carefully weighed against the loss of storage in a reservoir that provides municipal water supply for 1.2 million people in Oakland, California, and vicinity.

The New Don Pedro Project license contains provisions for reexamining the flows available for the chinook salmon and the City of San Francisco. There is considerable controversy about how to protect the water supply for 2.3 million people and adequately protect the chinook salmon fishery.

At the Lower Mokelumne River and New Don Pedro Projects, we have implemented alternative dispute resolution processes to determine if a consensual settlement can be achieved.

## Hydroelectric Power



*Cofferdam on California's Eel River. The cofferdam is temporary, creating a dry area while a fish screen is constructed.*

### Fisheries

In FY 1994, the Commission continued its efforts to ensure that fishery resources are protected and enhanced. Before issuing a license, the Commission staff conducts an independent environmental analysis, using either an EA or an EIS, and develops appropriate terms and conditions to maintain and enhance the fishery. Of the 60 relicenses issued through FY 1994 for projects with licenses that expired in 1993, 44 had fish protective measures, including 23 with fishway requirements or other structural measures, such as screens to prevent fish from entering power intakes. These fish protection measures represent over

\$1.6 million per year annualized costs for these projects collectively. Licensees will have to spend \$4.4 million to construct and install these new fish passage facilities. After a license is issued, the staff monitors these terms and conditions to ensure compliance.

The compliance staff continues to work with other agencies and licensees to improve fish passage and to encourage development of fish protective measures. The Commission approved a settlement agreement that provides for the construction and operation of fish passage facilities at the Holtwood, Safe Harbor, and York Haven Projects on the Susquehanna River in Pennsylvania. The facilities are designed to

pass American shad, alewife, and blueback herring, which historically migrated as far upstream as Binghamton, New York.

### Recreation

Data collected by the Commission from 1990 through 1992 for approximately 1,000 licensed developments (a project may consist of one or more developments) show that annual public use exceeded an average of 81,000 recreation days per development. Recreational development includes facilities for camping, picnicking, swimming, boating, hiking, fishing, and hunting. There are over 28,000 tent/trailer/recreational vehicle sites, more than 1,100 miles of



*FERC employee Lee Emery (third from left) discusses a proposed hydroelectric site in Washington State's Skagit River Basin with a license applicant and contractors.*

trails, and 1,200 picnic areas at Commission-licensed facilities. The total surface area of reservoirs at licensed projects is more than three million acres.

License applications for major hydropower projects include recreational plans for the project area. Those applying for a license are expected to review recreational needs in the project area and to provide public recreational facilities during the license term. With few exceptions, such as unsafe areas, project lands and waters are open to the public.

Of the 60 relicenses issued through FY 1994, for projects with licenses that expired in 1993, 41 included recreation measures, such as boat launches, fishing piers, picnic areas, parking areas, sanitary facilities, and trails, as well as access to these facilities for the handicapped. The cost of constructing these facilities is expected to be over \$1.7 million.

Increased shoreline development and public recreation opportunities have resulted in a greater need to protect and minimize conflicts

between public uses, environmental resources and power production.

Every six years, licensees are required to submit a Licensed Hydropower Development Recreation Report for each project development. This report supplies data on recreational use and facilities at each development. Presently, we are revising and simplifying the report form. In addition, we are preparing a booklet for the general public identifying recreational opportunities at Commission-licensed hydropower projects. This booklet is expected to be available to the public in 1995. ♦

# List of Commission Personnel

**Chair** . . . . . Elizabeth A. Moler

**Commissioners.** . . . . . Vicky A. Bailey

James J. Hoecker

William L. Massey

Donald F. Santa, Jr.

## **Office Directors**

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**Office of Pipeline Regulation** . . . . . Kevin P. Madden  
(208-0700)

**Office of the General Counsel** . . . . . Susan Tomasky  
(208-1000)

**Office of Electric Power Regulation** . . . . . J. Steven Herod  
(208-1200)

**Office of Hydropower Licensing** . . . . . Fred E. Springer  
(219-2700)

**Office of Economic Policy** . . . . . Richard P. O'Neill  
(208-0100)

**Office of External Affairs** . . . . . Rebecca F. Schaffer  
(208-0004)

**Office of the Executive Director** . . . . . Christie L. McGue  
(208-0300)

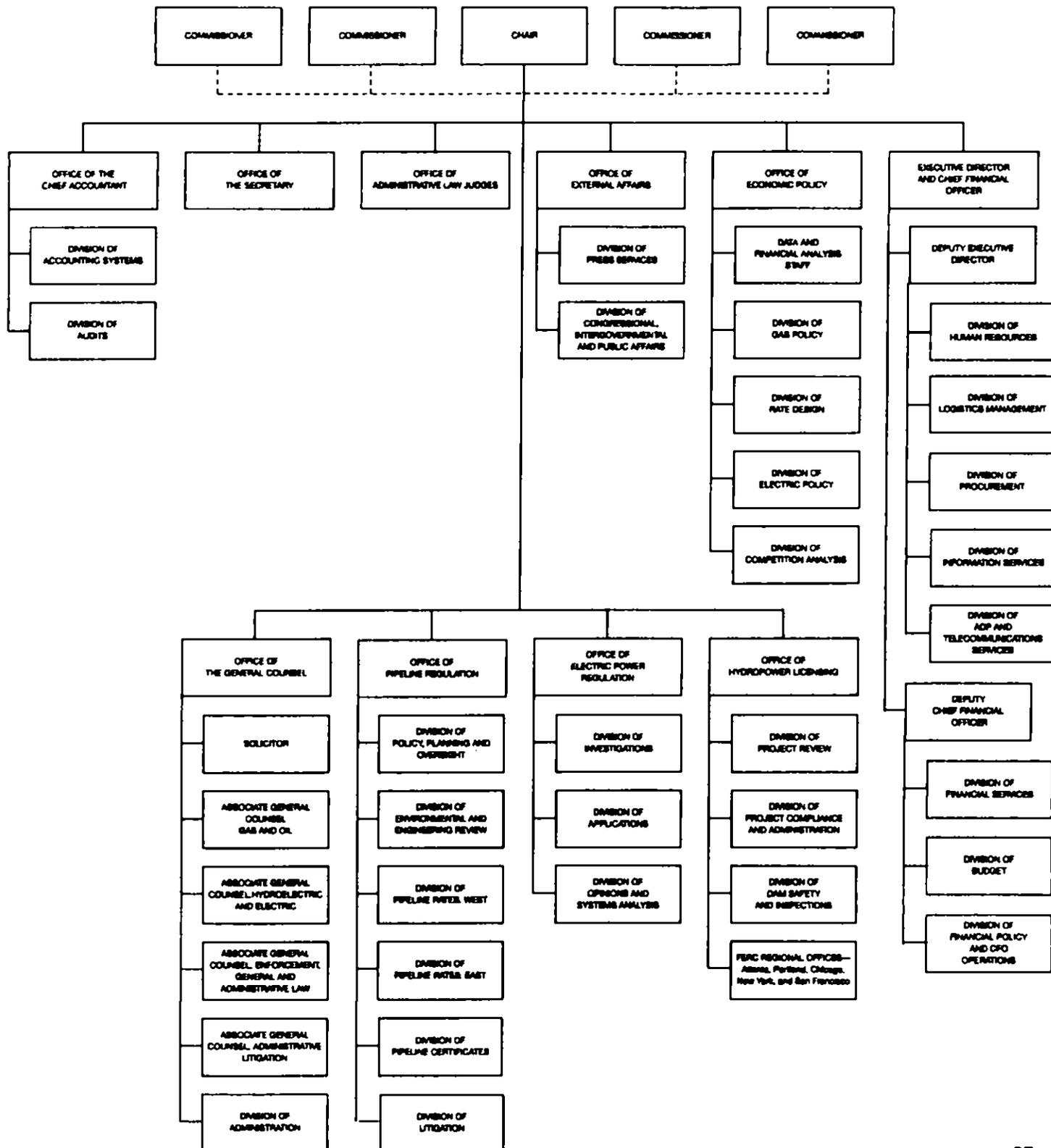
**Office of Chief Accountant** . . . . . Russell E. Faudree, Jr.  
(219-2600)

**Office of the Secretary** . . . . . Lois D. Cashell  
(208-0400)

**Office of Administrative Law Judges** . . . . . Curtis L. Wagner, Jr.  
(219-2500)

# Organizational Chart

## Federal Energy Regulatory Commission (FERC)



# Hydroelectric Power Table

(Projects For Which Licenses Will Expire

Between January 1, 1995, And December 31, 2000—See 18 CFR §16.3)

License Expiration Date	Licensee	FERC Project No.	State	County	River	Installation (KW)	Facilities Under License*	Period of (Years)	Subject Federal
95/04/30	Ketchikan, City of	1922	AK	Ketchikan	Beaver Falls Division Creek	7100	DM PH	50	N
95/06/30	Wisconsin Public Service	1999	WI	Marathon	Wisconsin	6400	DM PH	20	N
95/12/31	Pacific Gas & Electric Co	2887	CA	Shasta	Pit	63000	DM PH	30	N
95/12/31	Pacific Gas & Electric Co	2899	CA	Calaveras	Angels Creek	1400	DM PH	30	N
96/04/30	Southern Calif Edison Co	1930	CA	Kern	Kern River	24992	DM PH	60	Y
96/04/30	Southern Calif Edison Co	1932	CA	San Bernardino	Lytle Creek/ Santa Ana River	400	DM PH	50	Y
96/04/30	Southern Calif Edison Co	1933	CA	San Bernardino	Santa Ana River	4000	DM PH	50	Y
96/04/30	Southern Calif Edison Co	1934	CA	San Bernardino	Mill Creek/ Santa Ana River	3260	DM PH	50	Y
96/06/29	CP National Corp	1986	OR	Baker	Rock Creek/ Powder River	800	DM PH	50	Y
96/06/30	Maverick Co Wtr Dist	1952	TX	Maverick	Maverick Canal	0	RS	50	N
96/11/05	Pacific Gas & Electric Co	2019	CA	Calaveras	Angels Creek/ Clowey Creek	3600	DM PH	50	Y
97/01/29	Pacificorp	1927	OR	Douglas	N. Umpqua River	185000	DM PH	50	N
97/05/11	Minnesota Pwr & Light Co	2663	MN	Morrison	Crow Wing River	1520	DM PH	30	N
97/08/31	Georgia Power, Co.	1951	GA	Baldwin	Oconee River	45000	DM PH	50	N
97/12/20	Idaho Power Co	2061	ID	Twin Falls	Snake River	60000	DM PH	50	N
97/12/31	Central Maine Power Co.	2612	ME	Somerset	Dead River	0	DM RS	50	N
98/01/31	Wisconsin River Power Co	1984	WI	Adams	Wisconsin River	36000	DM PH	47	Y
98/02/28	Idaho Power Co	1975	ID	Gooding	Snake River	69000	DM PH	50	Y
98/02/28	Wisconsin Elec Power Co	1980	MI	Dickinson	Manominee River	22700	DM PS	50	Y
98/03/31	Bonnets Ferry, City of	1991	ID	Boundary	Moyie River	3975	DM PH	48	N
98/06/30	Northern States Power Co	1982	WI	Chippewa	Chippewa River	33000	DM PH	48	Y
98/06/30	Herber Light 49	1994	UT	Wasatch	Snake Creek	760	PH	49	N
98/02/28	Southern Cal Edison	2017	CA	Fresno	San Joaquin R	84000	DM PH	50	Y
98/03/30	Bangor Hydro Elec. Co.	2622	ME	Penobscott	W Br Penobscott R	3440	DM PH	33	N
98/06/31	Green Mt. Pwr. Corp	2674	VT	Addison	Ottar Cr.	2400	DM PH	60	N
98/06/31	Idaho Power Co	2777	ID	Twin Falls	Snake R	34500	2DM 2PH	50	N
98/06/31	Idaho Power Co	2778	ID	Jerome	Snake R	13400	DM PH	50	N
98/06/31	Holyoke Wtr & Pwr	2004	MA	Hampden	Connecticut R	42866	6DM 6PH	50	N
98/09/30	Lwr Val Pwr & Lt Co	2032	WY	Lincoln	Strawberry Cr	1500	DM PH	50	Y
98/09/30	Internat Paper Co	2375	ME	Oxford	Androscoggin R	19640	3DM 3PH TL	50	N
98/09/30	Aquamac Corp	2927	MA	Essex	S. Merrimack CNL	250	DM PH	39	N
98/09/30	Onis Hydro-elec. Co	2277	ME	Franklin	Androscoggin R	10350	DM PH	15	N
98/10/01	S D Warren Co	2897	ME	Cumberland	Presumpscot R	1360	DM PH	37	N
98/11/30	Merrimack Paper Co.	2928	MA	Essex	S. Merrimack	1088	DM 2PH	50	N
99/12/31	Montana Pwr Co	2543	MT	Missoula	Clark Fork R	3040	DM RS PH TL	34	N
00/06/30	Bangor Hydro Elec Co	2721	ME	Penobscot	Piscataquis	1875	DM PH	38	Y
00/10/31	Pacificorp	898	UT	Utah	American Fork	960	DM PH	25	N
00/11/30	Idaho Power Co	2065	ID	Owyhee	Snake	62800	DM PH	60	Y
00/12/31	Virginia Elec & Pwr	2009	NC	Halifax	Roanoke	277920	2DM PH	50	Y
00/12/31	Northern States Pwr	2056	MN	Hennepin	Mississippi	12400	2DM 2PM	50	Y
00/12/31	Nekoosa Packaging	2902	VA	Bedford	James	612	DM PH	38	N

\* Includes types of facilities at each project, but not total number of each type (e.g. A project may consist of multiple powerhouses or dams).  
 DM Dam, RS Reservoir, CL Canal, TU Tunnel, FM Flume, PI Pipeline, PK Penstock, PH Powerhouse, TR Turbine, GN Generator(s);  
 TC Tailrace, TL Transmission Line or connection thereto.



**For Additional Information Contact:**

Federal Energy Regulatory Commission  
Office of External Affairs  
825 North Capitol Street, NE  
Washington, DC 20426

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