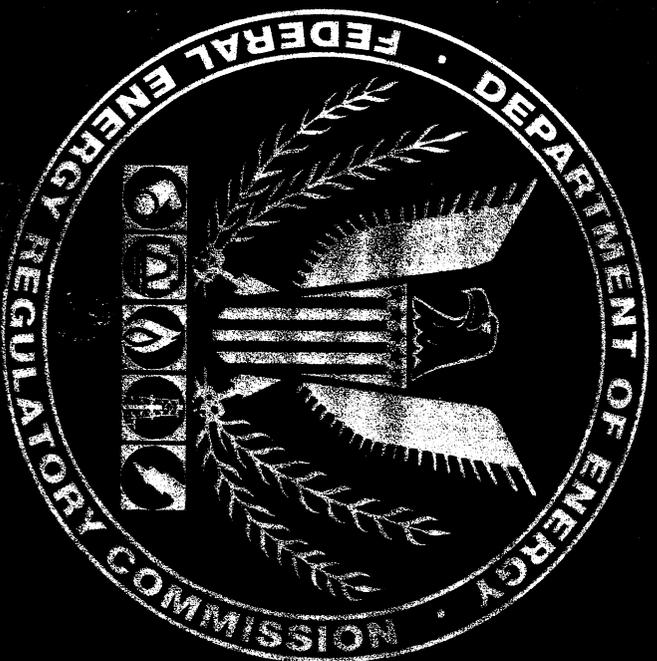


# Federal Energy Regulatory Commission



## 1993 Annual Report

*Photo credits:*  
U.S. Department of Energy

For sale by the U.S. Government Printing Office  
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328  
ISBN 0-16-045163-9



# Federal Energy Regulatory Commission

# 1993 Annual Report



*The first Federal Power Commission in 1931. From left to right, Commissioners Marcel Garsaud, Frank R. McNinch, George Otis Smith (Chairman), Ralph B. Williamson (Vice Chairman), and Claude L. Draper.*



*The Federal Energy Regulatory Commission in 1993. From left to right, Commissioners Donald F. Santa, Jr., Vicky A. Bailey, Elizabeth A. Moler (Chair), James J. Hoecker, and William L. Massey.*

# Members of the Federal Energy Regulatory Commission

(As of June 1993)



Elizabeth A. Moler  
Chair



Vicky A. Bailey  
Commissioner



James J. Hoecker  
Commissioner



William L. Massey  
Commissioner



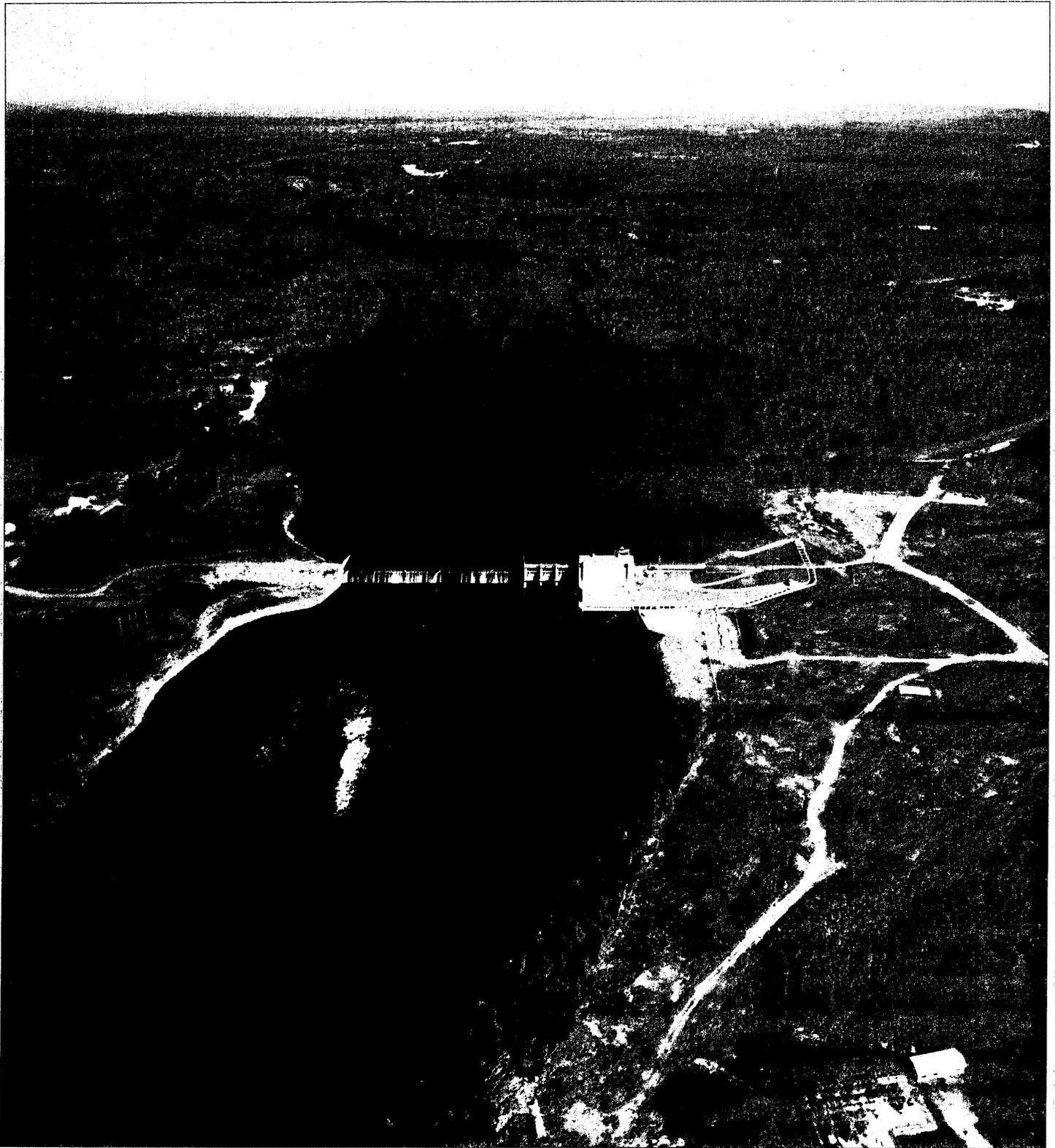
Donald F. Santa, Jr.  
Commissioner

# Table of Contents

The Commission in Brief .....	v
Letter from the Chair .....	vi
Commission Responsibilities .....	1
Administration .....	2
Natural Gas .....	4
Electric Power .....	11
Hydroelectric Power .....	17
List of Commission Personnel .....	26
Organization Chart .....	27
Hydroelectric Power Table .....	28



*A wide variety of recreational activities are available to the public at FERC-licensed hydroelectric projects.*



*The West Enfield Hydroelectric Project, P-2600, on the Penobscot River in Maine. It has a 13,000 KW capacity and boasts a 45-foot-high concrete gravity dam.*

# The Commission In Brief



*A typical gas pipeline gathering system. In the wake of Order 636, the Commission is reassessing its policy on gathering.*

The Federal Energy Regulatory Commission (FERC) is an independent agency. 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, the Natural Gas Act of 1938, the Natural Gas Policy Act of 1978, the Public Utility Regulatory Policies Act of 1978, and the Energy Policy Act of 1992.

The Commission has five members who are appointed by the President with the advice and consent of the Senate to 5-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.◆

# Letter From the Chair

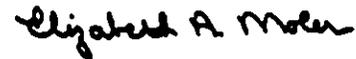
To the Senate and House of Representatives:

I am pleased to submit to the Congress the Federal Energy Regulatory Commission's annual report, covering the fiscal year from October 1, 1992 through September 30, 1993.

This is the 73rd 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 1993, Congress appropriated \$158,639,000 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 Natural Gas Act of 1938 (NGA), the Natural Gas Policy Act of 1978 (NGPA), the Outer Continental Shelf Lands Act (OCSLA), the Natural Gas Wellhead Decontrol Act of 1989 (NGWDA), and the Energy Policy Act of 1992 (EPAAct) 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 Federal Power Act of 1935 (FPA), the Public Utility Regulatory Policies Act (PURPA), and the EPAAct. 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 EPAAct, and certifies qualifying small power production and cogeneration facilities.

## Hydroelectric Power

Hydroelectric power regulation was the first work undertaken by the Federal Power Commission, the Commission's predecessor agency, after Congress passed the Federal

Water Power Act in 1920. Subsequent statutes under which the Commission regulates the non-federal development of United States Lands and Commerce Clause waters include the FPA, the PURPA, the Electric Consumers Protection Act of 1986, and the EPAAct. This work includes project licensing and exemptions, dam safety, project compliance activities, investigation and assessment of headwater benefits, review of project proposals by other Federal agencies, and interagency coordination.

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 EPAAct, 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



*A backhoe breaks ground as construction begins on the new FERC headquarters building, 888 First St., NE. It will be ready to house all employees in late 1995.*

## Operating Expenses

The Commission's budgetary resources for fiscal year (FY) 1993 totalled \$166.0 million. The Commission had \$139.7 million in obligations that were divided into four major categories:

- ❖ Salaries and benefits—\$96.7 million or about 69 percent;
- ❖ Fixed costs (i.e., building rent and utilities) and other support costs (i.e., postage, telecommunications, data processing and printing)—\$31.7 million or 23 percent;

- ❖ Contracts (e.g., environmental reviews)—\$9.4 million or about 7 percent;
- ❖ Travel to conduct dam safety inspections, audits, compliance investigations, and work related to certificate and rate filings—\$1.9 million or about 1 percent.

## Obligations for the three program areas were:

- ❖ Natural Gas and Oil—  
\$66.2 million                      47 percent
- ❖ Hydropower—  
\$45.7 million                      33 percent
- ❖ Electric Power—  
\$27.8 million                      20 percent

## Revenue

In FY 1993, the Commission collected revenues of \$175.1 million. Of that, \$158.6 million was applied directly to offset the Commission's FY 1993 appropriation, which reduced it to \$0. The remaining \$16.5 million of revenue exceeded the appropriation and was deposited in the U.S. Treasury. Following is a breakdown of the type of revenue collected:

❖ Annual charges— \$ 155.3 million	89 percent
❖ Filing fees— \$5.0 million	3 percent
❖ Miscellaneous— \$14.8 million	8 percent

## Automated Data Processing

The Commission continues its effort to provide the public and Commission staff with the most effective means for gathering and using information.

The Commission's Remote Public Access (RPA) system went "live" in October 1992. It has proven to be extremely successful in providing the public with access to Commission records. RPA now provides access to eight different Commission systems including the Records and Information Management System (RIMS) index. When completed, the new RIMS design will permit users to search for information through indices, and will have the potential to search using key words and phrases contained in each document. The system also features notices of Commission meetings ("Sunshine Act" notices) and general user notices and instructions. Over 500 different entities access RPA.

The Commission now has over 1,600 multipurpose professional and secretarial workstations as well as numerous portable and notebook computers for use by staff while on travel. The Commission began changing over from its older local area network (LAN) technology to a newer, more technologically advanced, client/server LAN during fiscal year 1993. The Commission-wide network has now connected over 500 workstations utilizing its LAN facilities, including the offices of the Chair and Commissioners. The addition of the rest of the Commission's workstations and the Office of Hydropower Licensing regional offices to the Commission-wide LAN during 1994 remains a priority.

## Printing and Distribution

During FY 1993, the Commission changed its printing plant operations to a copy center. This has allowed more work to be completed with fewer personnel, less equipment and space, and at an overall savings to the Commission. During the year, the Management Services Branch produced and distributed 49.6 million pages of material. This included orders, notices, decisions, court briefs, environmental impact statements, 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 hardcopy, electronic and microfilm/microfiche formats.

During FY 1993, the Public Reference Room incorporated several new operational and procedural systems designed to offer a more responsive level of service while improving turnaround time to the public and staff. These included:

- ❖ Implementing a new Voice Mail-System that has increased productivity, while providing for a more personalized level of service;
- ❖ Installing Mobile/Compact Shelving in the Records Maintenance Center to contribute to an overall savings of space and money, while helping to expedite retrieval of official files;
- ❖ Completing a major records retirement program resulting in transferring approximately 2,000 boxes of official records to the Federal Records Center in Suitland, Maryland;
- ❖ Expediting the release of draft orders on Commission meeting days;
- ❖ Awarding a new contract to assist the public by providing in-house copier support services;
- ❖ Initiating an improved automated Correspondence Control and Tracking System to help manage the volume of written correspondence from the public.

In addition to these operational changes, staff has also streamlined operations internally to be more responsive to the public's information needs.◆

# Natural Gas



*PGT constructs its Canada-to-California pipeline system to meet growing demand for natural gas.*

## 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 Federal Energy Regulatory Commission 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 marks 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. In fiscal year 1993, the Commission completed the enormous task of restructuring interstate natural gas pipeline services in accordance with the rule. The Commission approved start-up dates for the 76 pipelines that are subject to the rule and met its goal of approving implementation dates for restructuring before the 1993-94 winter heating season.

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

The Commission also ended the regulation of producer prices in FY 1993 and established procedures to clear up any remaining workload.

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

## Natural Gas Pipeline Restructuring

In fiscal year 1993, completion of the first phase of natural gas pipeline restructuring under Order No. 636 was the highest priority among the Commission's natural gas policy initiatives. Order No. 636 substantially completes the structural changes in the Commission's regulation of the natural gas industry. These changes were brought about by:

- ❖ The Natural Gas Policy Act of 1978;
- ❖ The Commission's open access transportation program; and
- ❖ The Natural Gas Wellhead Decontrol Act of 1989.

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 envisioned by the NGPA and the Wellhead Decontrol Act.

Order No. 636 mandates:

- ❖ Unbundled transportation and sales services;
- ❖ Open access transportation;
- ❖ No-notice firm transportation service for customers formerly receiving bundled sales service;
- ❖ Use of the straight fixed variable method of cost classification, allocation and rate design, with mitigation to limit cost shifts to no more than 10 percent for any customer, and continued use of one-part rates for small customers;
- ❖ Capacity release programs;
- ❖ Blanket certificates for sales at market rates (small local distribution companies eligible for cost-based rates for one year); and
- ❖ Mechanisms for recovering gas supply, stranded investment, and other transition costs resulting from compliance with the rule.

The Commission established individual restructuring proceedings for each pipeline. Of the 94 pipelines initially covered by the rule, the Commission has:

- ❖ Approved implementation dates for 76 pipelines;
- ❖ Exempted 14 pipelines from compliance (one case pending rehearing); and
- ❖ Deferred action on four pipelines not yet in service.



*FERC staff discuss information displayed on new Electronic Bulletin Boards (EBB's).*

The Commission sought to achieve implementation by the start of the 1993-94 winter heating season. This ambitious schedule required that the 76 pipelines develop compliance plans, seek customer and intervenor input, and file their individual plans between September and December 1992.

The schedule also required that the Commission act on the restructuring plans expeditiously. The Commission conducted more than 150 pre-filing and technical conferences and issued over 150 orders on the various compliance plans. It approved implementation dates for all 76 pipelines by October 1, 1993. The Commission issued initial compliance orders within an average of less than 5 months after pipelines filed their compliance plans.

The first phase of restructuring pipeline services is complete, but the Commission still faces considerable oversight work and fine tuning of the pipeline compliance plans as both the industry and the Commission gain experience under Order No. 636.

### **Straight Fixed Variable Method**

Most pipelines bill their major customers under a two-part rate structure, consisting of:

- ❖ A fixed reservation charge based on the capacity reserved for peak periods and paid whether the customer uses the capacity or not; and
- ❖ A usage charge based on the amount of gas transported by the customer.

Order No. 636 endorsed the straight fixed variable (SFV) method for developing rates to recover a pipeline's cost of providing service. Under SFV, a pipeline assigns all fixed costs related to transportation to the reservation charge.

Order No. 636 entails two types of potential cost shift to or among local distribution companies:

- ❖ Those that might arise from moving to straight fixed variable rate design; and
- ❖ Those that might arise from lower revenues from interruptible service.

The Commission is committed to mitigating these potential cost shifts. It requires that pipelines mitigate any cost shift greater than 10 percent that arises from a shift to SFV. The Commission also expects that parties will address allocation of costs between firm and interruptible shippers in rate cases where they can bring actual working experience with the post-restructuring world to bear on the issue. In the meantime, the Commission has ordered that 90 percent of all revenues in excess of costs be returned to firm transportation customers.

### **Transition Costs**

The Commission recognizes that pipelines will incur costs as a result of Order No. 636. These costs fall into four 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;
- ❖ **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; and
- ❖ **New facilities costs** associated with physically implementing the rule (e.g., meters, valves, communication equipment).

As of September 30, 1993, 14 pipelines had filed for \$747.1 million in transition costs, including:

- ❖ \$298.4 million of gas supply realignment costs;

## Natural Gas

- ❖ \$303.8 million of Account No. 191 costs; and
- ❖ \$144.9 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 10 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 will scrutinize all claims of transition costs closely to ensure that pipelines only recover legitimate costs under Order No. 636. The Commission is also striving to lower total transition costs.

### 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 electronic bulletin boards (EBBs) to provide shippers with equal and timely access to relevant information about the capacity on their system. This includes information on capacity available through release transactions and firm and interruptible capacity available directly from the pipeline.

The Commission concluded that capacity release would be enhanced by standardizing both the content of capacity release information and the methods by which shippers can access that information. After a technical conference in February 1993, the Commission set up five industry working groups and held informal conferences to develop consensus standards for EBBs.

The Commission issued a notice of proposed rulemaking on July 29, 1993, and a final rule on December 23. The final rule adopts the standards suggested in the proposed rule, with slight modifications, and reflects consensus agreements developed through the working groups. The Commission extended the proposed effective date from April 1, 1994, to June 1, 1994, to give the industry time to comply.

### Data Collection and Validation

During fiscal year 1993, the Commission found that certain filing requirements were no longer necessary to regulate an industry characterized by open access transportation and deregulation of wellhead prices. Therefore, it eliminated the requirements to file:

- ❖ FERC Form No. 15/15-A: Annual Report of Total Gas Supply;
- ❖ FERC Form No. 16: Report of Gas Supply and Requirements.

Elimination of these forms will reduce industry reporting burden by an estimated 50,000 hours per year.

The Commission also began a comprehensive review of its data collection requirements in light of the regulatory changes adopted by Order No. 636. The objective of this review is to streamline those requirements, while providing the Commission with the information it needs to meet its future regulatory responsibilities.

### Pipeline Rates

Under the NGA, the Commission regulates 150 pipelines that 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. This protects consumers from excessive prices and abuses of market power and ensures that pipelines receive compensation for prudent and necessary service costs—including a fair return on investment.

Pipelines file rate changes under Section 4 of the NGA. The Commission generally uses an historical costing approach in major rate cases. The pipeline bases its rate change request on a historical period with adjustments for known and measurable changes expected to occur over a 9-month period. Recorded costs follow the Commission's Uniform System of Accounts.

The Commission has 30 days to accept, reject, or suspend the filing's effectiveness for up to 5 months. If the Commission accepts and suspends the filing, rates go into effect after the suspension period. The rates are subject to refund—with interest—for any amounts that the Commission ultimately finds are not just and reasonable.

Interstate pipelines made 102 formal rate change and tariff filings during fiscal year 1993, including:

- ❖ 19 filings for general rate changes involving total revenue increases of \$542.6 million;
- ❖ 17 filings involving changes to specific rates; and
- ❖ 66 filings to change tariff operating terms and conditions.

The Commission completed 42 Section 4 general rate cases; approved 25 full or partial settlements on pending rate cases; and completed 69 Section 4 tariff-related filings in FY 1993.

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 expect to receive the postponed rate change filings in 1994 and 1995. These filings will involve issues that 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 interruptible throughput projections;
- ◆ Eligibility of costs for recovery under Order No. 636;
- ◆ Market-based rates; and
- ◆ Discrimination in providing transportation services.

### Take-or-Pay Issues

Commission Order Nos. 500 and 528 deal with recovery of pipelines' take-or-pay costs associated with a pipeline's voluntary acceptance of a blanket certificate. Pipelines incur these costs when they fail to take delivery of gas but have a contractual obligation to pay for it. Order No. 500 prescribed a purchase deficiency method to allocate the direct-billed portion of take-or-pay costs. After the Court of Appeals rejected this method, Order No. 528 established guidelines and initiated proceedings to examine possible

reallocation schemes for the direct-billed portion of these costs. It did not affect the other aspects of Order No. 500.

As of September 30, 1993, pipelines have filed for \$10.2 billion in take-or-pay costs under Order Nos. 500 and 528. Sixteen pipelines filed under Order No. 528 to recover take-or-pay costs paid to producer-suppliers; 19 pipelines filed to flow through take-or-pay costs paid to upstream pipeline suppliers.

The Commission established 30 proceedings to settle the issues raised by the filings. It has approved 19 settlements and resolved one proceeding with a decision on the merits. Pipelines absorbed 36 percent of these costs, direct-billed 35 percent, and collected 29 percent through a volumetric surcharge. The Commission is continuing its efforts to settle the remaining 10 proceedings.

### Purchased Gas Adjustments

Purchased Gas Adjustments (PGA) are filings to recover a pipeline's cost of purchasing gas for resale to jurisdictional sales customers. These filings are made when a pipeline, functioning as a merchant, buys gas from a supplier and sells it to customers, another pipeline, or local distribution company.

Under Order No. 636, all restructured pipelines ended their PGA mechanisms. Market forces, rather than the PGA, will determine the price for natural gas. The termination of the PGA resulted in balances in the pipelines' purchased gas cost accounts which will either be refunded or collected from jurisdictional customers as transition costs. The close-out filings will cause significant workload during FY 1994 to assure that costs were properly collected or refunded.

PGA filings decreased dramatically during fiscal year 1993 due to restructuring. By the end of the fiscal year 1994, only two pipelines that were not subject to restructuring will have PGA clauses in their tariffs.

### 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 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 through rates. 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
- ◆ Siting and constructing facilities for the import or export of natural gas and liquefied natural gas.

## Natural Gas

The following factors are considered in evaluating applications:

- ◆ Identifying and assessing 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 rate-payers; and
- ◆ Operational reliability of liquefied natural gas facilities.

Reviewing the many filings for expanded capacity continued to be a major Commission priority in fiscal year 1993. The Commission acts on these proposals as quickly as possible to allow applicants to begin construction. During late 1993, the Commission began an effort to allow applicants to pay contractors to prepare environmental documents for Commission review. This effort, which was completed in early 1994, will expedite Commission review of construction projects.

### Pipeline Construction

In fiscal year 1993, the Commission issued over 150 certificates under Natural Gas Act Section 7(c) for construction and operation of facilities. These included:

- ◆ 39 major construction projects (over \$1 million each);
- ◆ 1,400 miles of pipeline;
- ◆ 1 billion cubic feet per day of capacity; and
- ◆ \$1.75 billion in construction costs.

Average processing time for these applications was 308 days from the initial filing—256 days from filing of significant amendments or supplements to the original application.

The Commission authorized over 300 additional construction and operation activities on a prior notice basis under its blanket certificate program.

At the end of fiscal year 1993, pending certificate applications for major construction projects, excluding Alaska, involved:

- ◆ 43 major construction projects (over \$1 million each);
- ◆ 2,465 miles of pipeline;
- ◆ 6 billion cubic feet per day of capacity; and
- ◆ \$3.1 billion in construction costs.

**Northeast Projects:** In July 1993, the Commission issued certificates authorizing Texas Eastern Transmission Corporation and its downstream pipeline affiliate, Algonquin Gas Transmission Company, to implement an "Integrated Transportation Project" (ITP) to serve customers in the Northeast. The project involves 103 miles of new and replacement facilities, 50,000 horsepower of compression, 216 million cubic feet per day of additional capacity, and a construction cost of \$222 million. ITP shippers will have access to a variety of domestic producing areas and the means of obtaining transportation service along a sequence of pipelines in a "packaged" service.

**Florida Projects:** In September 1993, the Commission issued a certificate to Florida Gas Transmission Company to expand pipeline capacity to its Florida customers by 541 million cubic feet per day. This \$900 million Phase III expansion consists of 814 miles of pipeline and 101,500 horsepower of compression.

**Mobile Bay Pipeline Projects:** Transcontinental Gas Pipe Line Corporation filed a joint application with Florida Gas Transmission Company in March 1992 to expand its existing Mobile Bay line. In October 1992, Transco received Natural Gas Act Section 7(c) authority to operate the

line previously constructed under Natural Gas Policy Act Section 311.

### Construction Certificate

**Phasing:** In appropriate cases, the Commission now issues an order on the merits of nonenvironmental issues before environmental analysis is complete. These "preliminary determinations" (PDs) give applicants an early indication of the form ultimate Commission approval might take and can reduce the time required to place new pipeline capacity in service. In fiscal year 1993, the Commission issued four PDs and five final certificates for cases receiving PDs in 1993 or prior years.

### Environmental Compliance

In FY 1993, the Commission expanded its environmental post-construction compliance review of NGPA Section 311 new construction and Section 2.55 facilities replacements.

Order No. 544, issued September 21, 1992, requires companies to notify the Commission at least 30 days before beginning construction if the project cost exceeds the cost limit specified in the Commission's regulations (\$6.4 million in 1993). Projects falling below the limit do not require advance notice, but must be reported to the Commission annually in May. The Commission staff completed 167 on-site environmental inspections to ensure compliance with certificate conditions during 1993.

The Commission also conducted a series of six regional training courses on environmental compliance. This highly successful program, started in 1992, continues to draw interest from all parts of the industry, including Federal and State agencies, industry employees, environmentalists, consultants, and the public. These courses provide a better understanding of:

- ◆ Compliance with environmental certificate conditions;
- ◆ The National Environmental Policy Act (NEPA); and

- ◆ Other environmental laws and regulations.

In September 1993, the Commission implemented two recommendations from the May 1993 General Accounting Office Report on the Commission's compliance and enforcement activities. The Commission now requires weekly or biweekly environmental compliance reports on mitigation plans for projects requiring Environmental Impact Statements or major Environmental Assessments. In addition, the Commission requires schedules and 14-day advance notification of trenching or blasting in each waterbody more than 10 feet wide and in coldwater fisheries. Commission staff will inspect the sites based on the issues associated with each waterbody and the availability of staff resources.

On September 15, 1993, in its order in Florida Gas Transmission Company, the Commission set forth a new policy on forested wetlands. The Commission required Florida Gas to implement a "Forested Wetland Restoration and Enhancement Plan" to minimize the impact of construction through forested wetlands. National environmental policy strongly favors the development of mitigation techniques that minimize impacts on this valuable natural resource and contribute to the national goal of no overall net loss of wetlands. The plan adopted in the order includes both on-site and off-site restoration and enhancement:

- ◆ On-site: active planting of vegetation in disturbed areas;
- ◆ Off-site: restoration of previously disturbed areas to forested wetland functions and value.

The result of this two-fold mitigation will be "no net loss" of wetlands for the entire project. The use of similar mitigation techniques for other projects will be evaluated on a case-by-case basis.

## Blanket Sales Certificates

Prior to Order No. 636, pipelines were able to provide their customers with bundled sales and transportation services authorized under individually issued Natural Gas Act Section 7(c) sales certificates. Order No. 636 unbundled sales and transportation services and eliminated the need for individual certificates by issuing a blanket sales certificate to pipelines providing open access transportation. In Order No. 547, the Commission extended blanket sales certificates to other gas sellers who are not interstate pipelines. Blanket certificates are automatic—without application—and place all sellers of natural gas on equal footing.

## Affiliates and Fair Market Practices

The marketing affiliate program guards against pipelines favoring their marketing affiliates in providing transportation services. During 1993, the Commission initiated an effort to reduce the reporting burden associated with the program.

## Gas Supply Competition

Natural gas imports and exports are regulated by the Department of Energy. 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. Nine projects involving Canadian gas sources were approved in fiscal year 1993.

Deregulation and imports are significant forces in gas supply competition. According to the Energy Information Administration, imports accounted for 2.3 trillion cubic feet, or 11 percent of America's total gas consumption of 19.9 trillion cubic

feet in fiscal year 1993. Canada supplied 96 percent of the imports; liquefied natural gas from Algeria accounted for the rest. Virtually all imported gas volumes moved through interstate gas pipeline facilities. Exports to Canada and Mexico during fiscal year 1993 totalled nearly 200 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 wellhead 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 Natural Gas Wellhead Decontrol Act of 1989 completed the decontrol process by deregulating wellhead gas prices and removing the NGA's certificate and rate filing requirements for producers on January 1, 1993.

The Commission continues to process a backlog of filings from state and federal jurisdictional agencies which are necessary for producers to qualify for certain non-conventional fuels tax credits available under the Crude Oil Windfall Profits Tax Act. The Commission will accept these filings through April 30, 1994, and will complete its producer-related workload by the end of fiscal year 1994.

## 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

## Natural Gas

Department of Energy Organization Act. These pipelines have total yearly revenues of over \$6 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 EPAct requires that the Commission:

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

To meet this mandate, the Commission issued a Notice of Proposed Rulemaking in Docket No. RM93-11-000 on July 2, 1993, and a Final Rule on October 22, 1993. With the Final Rule, the Commission instituted two new proceedings specifically to inquire into market-based rates for oil pipelines (Docket No. RM94-1-000), and the cost information that oil pipelines should include with their cost-of-service rate filings and in their annual reports to the Commission (Docket No. RM94-2-000).

The Final Rule provides a simplified and generally applicable way for pipelines to change their rates through use of an index. The Final Rule also provides alternatives to indexing. Pipelines may seek to change their rates based on their cost of service to justify rates higher than a ceiling level. In addition, they may seek rate changes reflecting agreements with shippers to the new rate, or pipelines may qualify for market-based rates.

The Final Rule also includes new rate filing requirements and procedural reforms that reflect the new ratemaking methods and streamline



*Kettle Creek Crossing in Pennsylvania after pipeline construction by National Fuel Gas Supply Corporation.*



*Another view of Kettle Creek Crossing one year after construction.*

the Commission's internal processes for oil pipeline cases. Certain functions are delegated to the Chief Accountant or the Director of the Office of Pipeline and Producer Regulation. When the delegations are effective, the Commission will abolish the Oil Pipeline Board.

The revised regulations on certain tariff filing requirements and Commission practices were effective December 6, 1993. The more substantive section of the final rule concerning streamlined oil pipeline rate regulation and other procedural changes will not become effective until January 1, 1995, in accordance with the EPAct. ♦

# 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 1993, public utilities filed 987 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, 11 sought major wholesale rate increases totaling \$157 million.

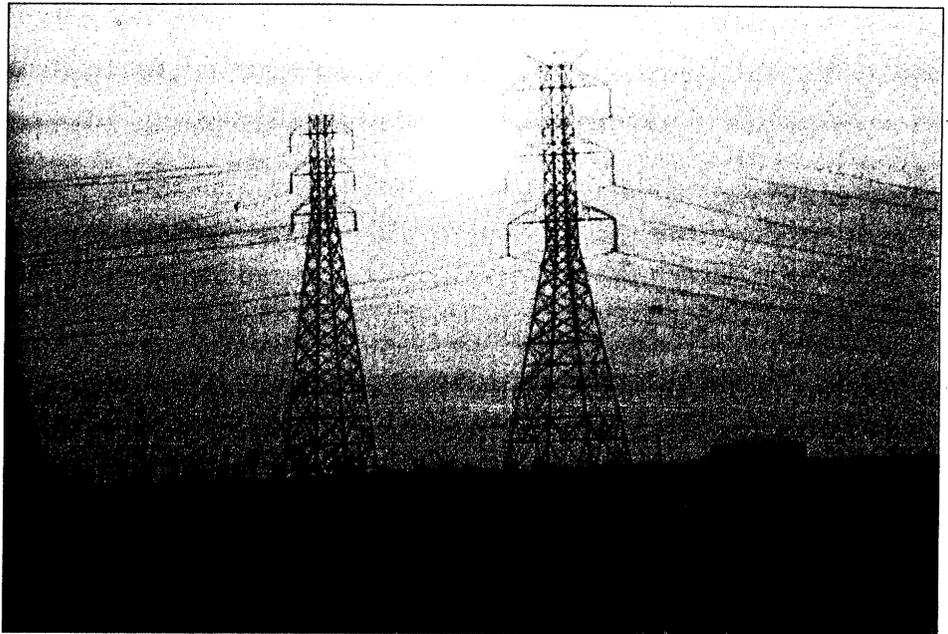
### FERC Electric Utility Rate Workload, 1992

Filings	Non-Formal	Formal
In process at beginning of year	151	90
Filed during year	950	60
Total workload	1101	150
Processed during year	895	83
In process at end of year	206	67

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;



*Transmission access is a key aspect in meeting the electric industry's future power needs.*

- ❖ Reject all or part of the application; or
- ❖ 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 5 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 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 1993, the Commission accepted 70 settlements which resolved some or all of the issues presented. In addition, the Commission issued 23 hearing orders involving 29 dockets.

### Exempt Wholesale Generators

The EPAct added a new Section 32 to the Public Utility Holding Company Act of 1935 (PUHCA). Section 32 established a new 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 persons seeking EWG status. Order No. 550-A was issued on April 14, 1993.

## Electric Power

During FY 1993, the Commission received 80 applications for EWG status. Of those, 65 were granted, 12 were denied, and three applications were withdrawn by the applicant.

### Electric Opinions

The Commission issued five electric opinions reviewing Administrative Law Judge's (ALJ's) decisions, and two rehearings of opinions. The opinions issued and the primary issues were:

- ◆ Boston Edison, Opinion No. 376—transmission rates;
- ◆ Southern Company Services, Opinion No. 377—intercompany cost allocation;
- ◆ New England Power, Opinion No. 379—post-retirement benefits other than pensions policy;
- ◆ Kentucky Utilities, Opinion No. 380—prudence of fuel procurement policies;
- ◆ Indiana Michigan, Opinion No. 382—prudence of fuel purchases from affiliates.

The rehearing cases were:

- ◆ Boston Edison, Opinion No. 370-A—partial requirements service;
- ◆ Southern Company, Opinion 377-A—intercompany cost allocation.

Additionally, the Commission issued five orders dealing with court remands. These included:

- ◆ Rehearing of the PacifiCorp merger case on the issue of QF access;
- ◆ A second order on the court remand of the PacifiCorp merger case, on the retail access issue;
- ◆ Rehearing of the Tax Reform Act adjustment to rates in Southwestern Public Services;

- ◆ An order on remand in a case involving Ohio Power concerning affiliate fuel prices;
- ◆ An order establishing settlement procedures on remand of a discrimination complaint in a case involving Southern California Edison.

### 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 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 1993 fell slightly from the previous year. During the same period, the delivered prices for both oil and gas increased.

### 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 1993, the Commission received 346 filings and completed 335 filings for QF status. Of the latter, 167 were small power production and 168 were cogeneration. Among the completed cases there were:

- ◆ Granted—72 applications;
- ◆ Denied, rejected, withdrawn, or dismissed—four applications; and
- ◆ Self-implementing (i.e., notified the Commission of status)—259 applications.

Applications for QF status during FY 1993 represented approximately 5,000 megawatts (MW) of generating capacity. Of this total, 1,600 MW were for small power and 3,400 MW were for cogeneration.

In the 1980–1993 period, QF filings were made for approximately 114,300 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.

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

	12 Months Ending September 30, 1992	12 Months Ending September 30, 1993	Percent Change <sup>2</sup>
Coal <sup>3</sup>	141.6	139.1	-1.8
Oil <sup>4</sup>	250.2	258.9	+3.5
Gas <sup>5</sup>	223.8	263.1	+17.6

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 50 MW or greater).

<sup>1</sup> Coal: Bituminous, Subbituminous, Lignite and Anthracite.

<sup>2</sup> Oil: Fuel Oil Nos. 2, 4, 5, and 6, Crude Oil, Jet Fuel, Kerosene, and Liquefied Petroleum Gas.

<sup>3</sup> Gas: Natural Gas and Small Quantities of Coke Oven, Refinery, and Blast Furnace Gas.

- ◆ RM93-10: Section 213(b) Transmission Information NOPR;
- ◆ RM93-19: Notice of technical conference and request for public comments on transmission pricing;
- ◆ PL93-3: Good faith transmission-service request and response policy statement; and
- ◆ RM93-22: NOPR with respect to notice requirements under Section 211.

In addition, the Commission initiated the following rulemaking RM93-20-000 with a NOPR to amend reporting regulations to require electronic filing of FERC Form No. 1 beginning with the 1993 reporting year.

The Commission also completed the following rulemakings:

- ◆ RM92-1-000: A final rule for establishing accounting requirements for allowances for emission of sulfur dioxide under the Clean Air Amendments of 1990 and assets and liabilities created through the ratemaking actions of regulatory agencies. The final rule also made changes to FERC Form Nos. 1, 1-F, 2 and 2-A by adopting new reporting schedules and revising other schedules for allowances and regulatory assets and liabilities;
- ◆ PL93-1-000: A statement of policy in response to the Financial Accounting Standards Board Statement No. 106 to provide guidance to jurisdictional entities for rate recovery of post-employment benefits other than pensions.

With respect to the streamlining effort, among other things, the NOPR in RM92-12 proposed to modify the securities issuance regulations, modify some rate filing regulations and update regulations under Part 292 (reflecting changes that have occurred since the QF program was initiated). Additionally, in FY 1993 the Commission issued a

**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 to deal with them. 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.

On November 16, 1992, the Commission, in Docket No. RM92-12-000, issued a Notice of Proposed Rulemaking that includes, among other things, a proposal for amending Part 294 of our regulations to allow a public utility not to file a contingency plan or a modified plan, if the utility includes certain provisions in the appropriate rate schedules. Such provisions would ensure that the utility will treat firm power wholesale customers without undue discrimination or preference and would require

reporting of modification to the appropriate State regulatory agency and to the affected wholesale customers.

**Rulemaking and Policy Statement Initiatives**

The Commission has dealt with several rulemaking initiatives, including two mandated under the EPAct. The first related to qualifying for Electric Wholesale Generator (EWG) status and the second to providing information on transmission availability. Other rules related to carrying out the Commission's new transmission authority under the EPAct, issuing the Post-retirement Benefits Other Than Pensions (PBOP) Policy Statement and continuing the effort begun in 1992 to streamline our regulations.

With respect to carrying out our new EPAct responsibilities, the Commission issued the following Notices of Proposed Rulemakings (NOPR), final rules, policy statements and inquiries:

- ◆ RM93-1: NOPR, final rules on procedures to determine EWG status;
- ◆ RM93-3: Policy Statement (July 30, 1993) on Regional Transmission Groups;

## Electric Power

rehearing of Order No. 541 eliminating obsolete regulations and rule dealing with the accounting and ratemaking for DOE Special Assessments (RM93-18 NOPR).

### 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 1993.

Two significant merger cases were undertaken during FY 1993. These were the Entergy/Gulf States Utilities Merger (EC92-21) and the PSI Energy, Inc./Cincinnati Gas & Electric merger (EC93-6). Opinion No. 385, approving the Entergy/Gulf States Utilities merger, was issued on December 15, 1993. Settlements have been filed for the PSI Energy, Inc./Cincinnati Gas & Electric merger.

### 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," rates arrived at by negotiation between 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.

Power marketers buy and sell power but neither own generation or transmission facilities nor have a franchised territory. In FY 1993, the Commission approved two applications by power marketers to sell at market-based rates: Louis Dreyfus Energy Corporation in Docket No. ER92-850-000 and MG Electric Power, Inc. in Docket No. ER93-839-000.

In Docket No. ER93-493-000, the Commission granted Milford Power Limited Partnership's application to sell power from its generating unit at market-based rates. In Docket No. ER93-557-000, the Commission granted Lakewood Cogeneration, L.P.'s application to discontinue its plans to sell power as a qualifying cogenerator and instead to sell power as an independent power producer at market-based rates. The Commission expects the number of applications involving power marketers and independent power producers to rise in future years.

The Commission also accepted market-based rate proposals by Louisville Gas & Electric Company in Docket No. ER92-533-000 and United Illuminating Company in Docket No. ER93-3-000 on the basis that the utilities had mitigated any market power they possessed by filing open access transmission tariffs as part of their proposals.

### Transmission Issues

A key aspect of meeting the industry's future power needs through competitive processes is transmission. 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.

On June 30, 1993, the Commission issued a notice of technical conference and requests for public comments on the technical, policy, and legal aspects of transmission pricing reform. The inquiry pursues whether fundamental changes should be made in our historic pricing practices. The inquiry requested com-

ment on, among other things, distance-sensitive rates, pricing of actual versus contract path flows, spot pricing of transmission service, and whether our present pricing policy promotes or discourages efficiency and competition in the wholesale generation markets. The Commission's goal is to reform transmission pricing, if necessary, to serve in increasing competition, reliability, efficiency and equity.

Most of the transmission rate schedules the Commission has on file result from voluntary transmission by the utility that owns the transmission system. The EPAct expanded the Commission's authority to compel a utility to provide transmission service. As a result, in FY 1993 the Commission evaluated its first four requests to order transmission service under the FPA as amended by the EPAct.

In Docket No. TX93-1-000, the Commission denied an application by Tex-La Electric Cooperative to compel Texas Utilities Company to provide transmission service. The Commission determined that Tex-La, in requesting terms for a power sale, did not make a proper request for transmission service.

In Docket No. TX93-2-000, directing American Electric Power Company (AEP) to provide transmission service for the Blue Ridge Power Agency, the Commission set for hearing a question of contract interpretation.

In Docket No. TX93-3-000, an application by Wisconsin Electric Power Company requesting the Commission to order Upper Peninsula Power Company to provide transmission service, was withdrawn by mutual agreement of the parties.

In Docket No. TX93-4-000, the Commission ordered Florida Power & Light Company to provide network transmission services to Florida Municipal Power Agency.

In the last year, there has been an increase in the number of utilities filing transmission tariffs. In FY 1993, the Commission approved

or set for hearing transmission tariffs for Florida Power & Light Company, American Electric Power Company, New England Power Company, and Southwestern Electric Power Company.

At the compliance stage of a merger proceeding, the Commission approved an open access tariff filed by Public Service Company of Colorado in Docket No. ER92-317-000. Also, as noted above, the Commission accepted transmission tariffs filed by United Illuminating Company and Louisville Gas and Electric Company as part of their market-based rate proposals. Finally, in the Northeast Utilities merger proceeding, the Commission left, to the compliance stage, all issues about the transmission tariff that NU had promised to file in support of its merger. The Commission summarily resolved, without hearing, 37 issues raised in that docket.

In a number of dockets, the operating utilities of Southern Company proposed to price transmission service by assessing a separate charge for service provided by each of the affiliated utilities. The Commission rejected this methodology and directed that the transmission rates reflect a single Southern Company's average system-wide transmission rate. This rate treatment is consistent with that adopted for transmission services provided by other affiliated multi-utility systems like American Electric Power, Northeast Utilities, Northern States Power Companies, Entergy, and Western Resources.

### **Rule Requiring Transmission Information**

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 Energy Policy Act of 1992, is to inform potential transmission customers, State regulatory authorities, and the public of potentially available transmission capacity and known constraints.

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 certain "transmitting utilities" to file information. A transmitting utility is any electric utility that owns or operates electric power transmission facilities used for the sale of electric energy at wholesale. Besides investor-owned utilities, the term also encompasses any person or State agency (including any municipality), cooperatives, and qualifying facilities. Filings are due April 1, 1994.

### **Waiver of Notice**

Under the FPA, utilities are required to provide 60 days notice to the Commission and to the public of any rate schedule changes, unless the Commission otherwise orders.

In Docket No. ER91-457-000, the Commission placed all utilities on notice that, to the extent they were transacting under agreements not yet on file with the Commission, the utilities had 60 days after publication of the order to file such rates without penalty. For filings submitted after the 60-day amnesty period, utilities would be permitted to charge only the variable operation and maintenance expenses until the Commission accepted the rates.

In a series of subsequent cases, the Commission's waiver policy was further clarified with respect to outstanding issues and interim amnesty periods were established. This led to a technical conference with the industry on January 25, 1993, to discuss issues involving jurisdiction, waiver of notice and future application of the Commission's refund policy. On July 30, 1993, the Commission, in Docket No. PL93-2-002, issued an order providing guidelines on jurisdiction and creating a final amnesty period expiring on December 31, 1993. Under this amnesty period, all utilities providing juris-

dictional service are required to have their agreements for such service on file to ensure that they will not face refund exposure for the interest costs associated with revenues collected prior to having the agreement on file.

### **Federal Power Marketing Rates**

Congress assigned the responsibility for marketing power from various Federal hydroelectric developments to the Department of Energy (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, 1993, 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.

## Electric Power

During FY 1993, the Commission received 12 Federal rate filings (representing rate increase amounts totalling \$476 million) and completed 11 filings (representing rate increase amounts of \$464 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 1993, the Commission processed 72 Section 204 applications authorizing about \$11 billion of security issues and assumption of obligations and liabilities.

### Regional Transmission Groups

The Commission issued a Policy Statement in July encouraging the development of regional transmission groups. The policy statement contains guidance on the basic components that should be included in regional transmission group agreements filed with the Commission by jurisdiction investor owned utilities.

Activity in this area is progressing in several regions. The policy statement includes the following criteria for properly structured regional transmission groups:

- ❖ Broad contiguous membership;
- ❖ Service and expansion commitments;



*In system control center, the operator tracks the major transmission lines and flags any trouble spots.*

- ❖ Coordinated planning mechanisms;
- ❖ Open participation that includes state commissions;
- ❖ Fair governance; and
- ❖ Alternative dispute resolution procedures.

The criteria are flexible but contain a fair amount of guidance. An important part of the Commission's policy statement for regional transmission groups is a willingness to give appropriate deference to decisions rendered by regional transmission groups.

Properly structured regional transmission groups may enable the wholesale market to operate in a more competitive, efficient manner. Regional transmission groups, with the information coming out of the information rulemaking 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.◆

# Hydroelectric Power

Hydroelectric power offers an abundant, clean source of electric energy. In FY 1993, hydroelectric plants supplied approximately 10 percent of America's electrical energy. The Commission regulates about half of this amount.

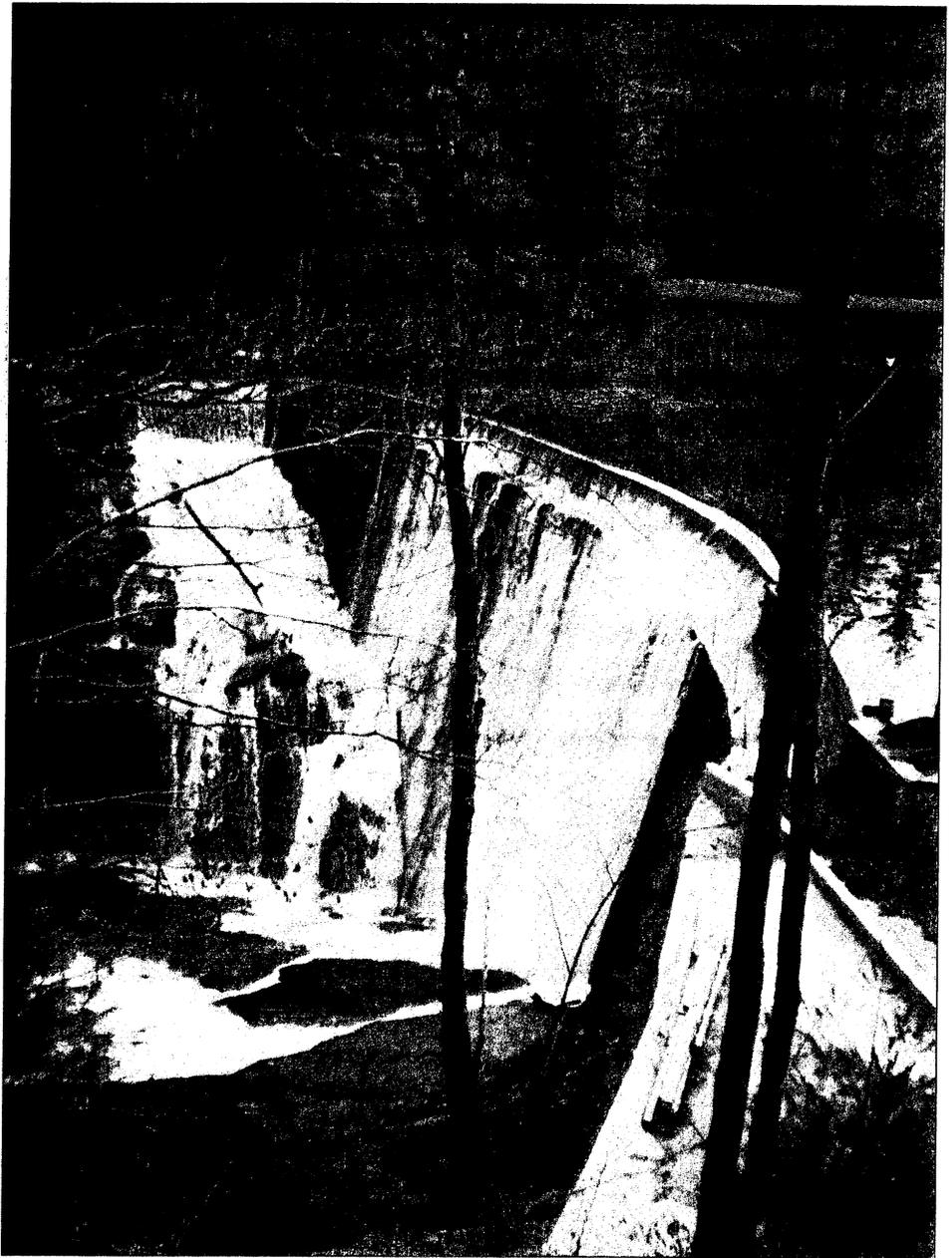
Conventional hydroelectric projects generated an estimated 295.7 billion kilowatt-hours of electricity during the year, saving some 506 million barrels of oil or 116 million tons of coal. In addition to providing significant generating capacity, hydroelectric projects authorized by the Commission can improve fish and wildlife habitats, recreational opportunities, flood control, and water supply.

Legislation passed during the 1970s offered regulatory and tax incentives for new hydroelectric projects. Electric utilities were required to purchase power from certain small power producers, including hydro projects under 80 MW. An energy tax credit was established under the Crude Oil Windfall Profits Tax Act. (The Act has since expired, affecting filings not docketed at the Commission by December 31, 1985. Application filings increased prior to this deadline and have declined since.)

## Hydropower Resources Assessment

As of September 30, 1993, 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, 74.1 million kilowatts are already developed.

The September 30, 1993, estimate of hydroelectric resources is based on an annually updated inventory of potential hydroelectric power sites. In addition to 2,332 existing plants, 79 plants under construction are capable of producing 3.8 billion kilowatt-hours of electricity annually. There are 5,022 sites with undeveloped generating potential of 224 billion kilowatt-hours.



*Cascade Power, a small hydro project located on Little River near Brevard, North Carolina, with a capacity of 825 KW.*

## Hydroelectric Power

The leading states in hydroelectric production are Washington, California, and Oregon with 100.1, 41.1, and 28.8 billion kilowatt-hours, respectively. The greatest undeveloped average annual generation exists in Washington, California, and Idaho, with 31.5, 24.3, and 22.7 billion kilowatt-hours, respectively.

### Licensing

The FPA and the PURPA provide alternatives in developing a 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 1993, the Commission issued nine licenses for new projects, 20 relicenses, and three 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 June 1993, the Commission issued two draft environmental impact statements (DEISs) and one supplement to a DEIS (SDEIS). One DEIS was for seven projects (total existing and proposed capacity of 55.58 megawatts [MWs]), all on the Androscoggin River in New Hampshire. That DEIS analyzed the effect

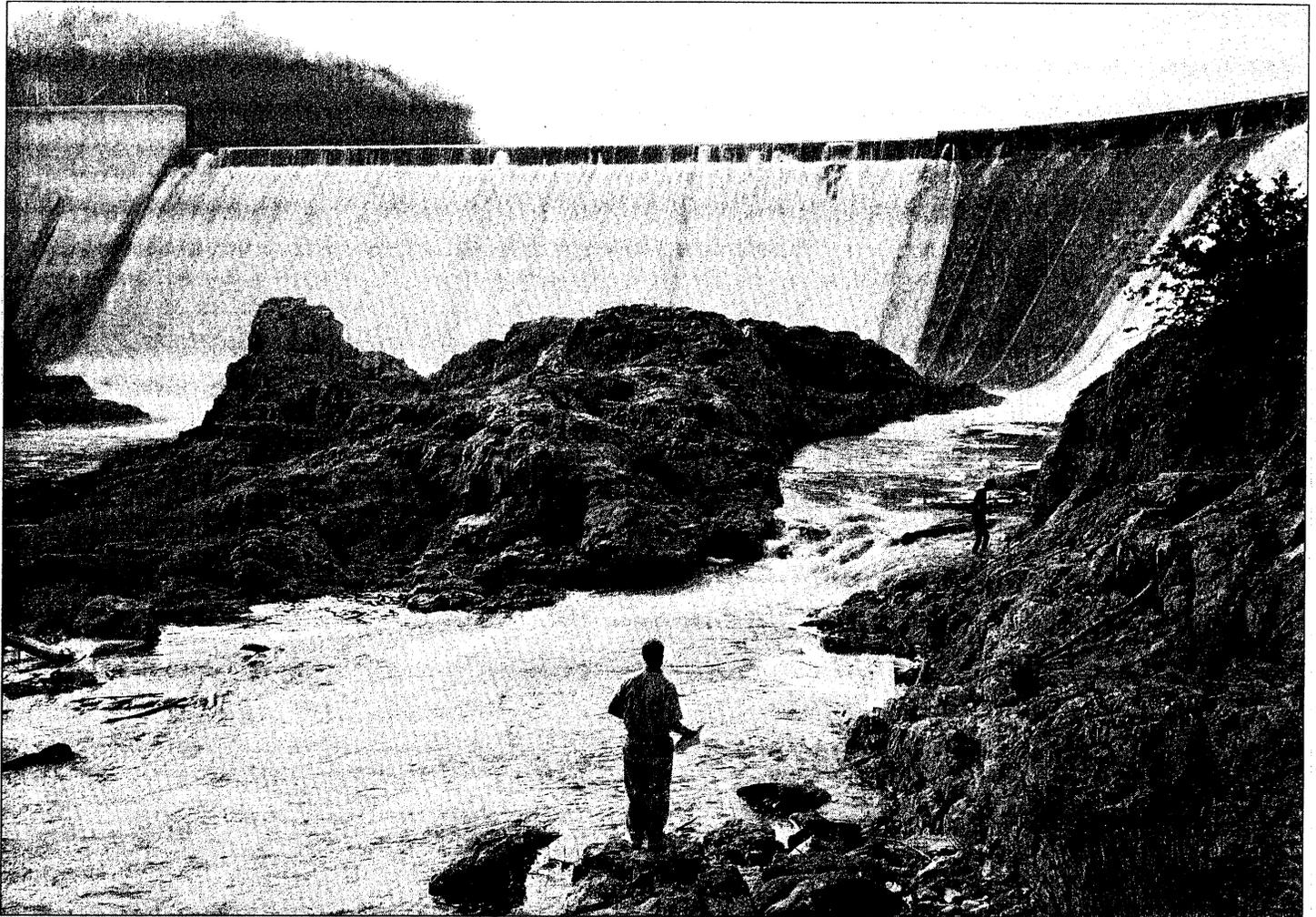
of issuing new licenses for the continued operation of the projects, the effect of installing additional generating capacity at two projects, and the effect of raising the reservoir surface elevation for increased energy generation at one project. The second DEIS was for the proposed 600-MW River Mountain Pumped Storage Hydroelectric Project No. 10455, to be located west of Russellville, Arkansas. Lake Dardanelle, an existing 34,300-acre Federal facility managed by the Corps of Engineers, would serve as the project's lower reservoir.

Further, the Commission staff also issued a SDEIS for the proposed 10.3-MW Shelley Hydroelectric Project No. 5090, to be located on the Snake River in Bingham County, Idaho. The Commission reevaluated the project's environmental consequences because of new information received on riparian habitat mitigation, river ice formation, wildlife impacts, and project economics.

### Third-Party Contracting

When the Commission is required to prepare an EIS under the NEPA for a license application, the EAct 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 EAct 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 will then review the choices, approve the selection and oversee all contractor-prepared documents. This process will allow a potential licensee to expedite the environmental review process by not having to wait until the Commission has sufficient funds available to prepare an EIS.

The Commission selected 27 firms as qualified contractors to prepare environmental impact statements (EISs) for hydroelectric projects.



*A flow demonstration study at the Winooski River Project in Vermont, one of many under consideration for relicensing.*

## **Project Relicensing**

The 157 relicense applications filed for projects with licenses expiring 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 1993 issued 18 new licenses. One relicense application was withdrawn. In addition, the Commission completed nine single-project environmental assessments and one draft environmental impact statement covering seven projects.

In FY 1993, 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.

## **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 Army Corps of Engineers.

## **Relicensing Roundtable**

On June 17, 1993, the Chair offered a unique opportunity for a broad spectrum of organizations to discuss the Commission's approach to processing pending relicense applications. Participants in the Relicensing Roundtable represented American Rivers, Trout Unlimited, the American Whitewater Affiliation, the Native American Rights Fund, the Department of the Interior, the National Marine Fisheries Service, the Forest Service, the Environmental Protection Agency, the National Hydropower Association, and the states of Wisconsin, Michigan, Maine, and New York.

Discussions focused on how the Commission would address the cumulative environmental impacts of multiple projects located in the same river basin in NEPA documents.

### **Administrative Reforms and Proposals**

As a result of the Relicensing Roundtable, several administrative reforms have been implemented, including: increasing the number of EISs; regrouping analyses of pending original and new license applications into more multiple-project NEPA documents; providing increased opportunities for public input in preparing environmental assessments; and promoting settlement agreements.

In addition to these administrative reforms, the Commission also issued two notices on September 15, 1993, requesting public comment on significant programmatic issues raised at the Roundtable and elsewhere. The notices concern the decommissioning of licensed projects and the use of reserved authority in licenses to address cumulative environmental impacts.

### **The Energy Policy Act of 1992**

The EPAct contains seven sections relating to the Commission's hydropower program.

Section 1701(b) vacated the definition of "fishway" in the Commission's regulations and provides that any future rulemaking definition would need the concurrence of the Departments of the Interior and Commerce.

Section 2403 authorizes third-party contracting that permits certain applicants to select a Commission-approved contractor to prepare an EIS.

Section 2408 requires the Commission to file a study with Congress, prepared in consultation with the State of Hawaii, on hydroelectric licensing in Hawaii. The study's pur-

pose is to consider whether licensing authority should be transferred to the State of Hawaii.

Other provisions of the EPAct address: (1) collecting administrative charges for federal and state agency studies or other reviews that were carried out in administering their responsibilities under Part I of the FPA; (2) restricting a licensee's right of eminent domain under Section 21 of the FPA over certain categories of lands owned by a state or political subdivision; (3) amending Section 501 of the Federal Land Policy and Management Act to include under its provisions Commission licensees; and (4) prohibiting the Commission from issuing an original license or exemption for a new project located within the boundaries of any unit of the National Park System, if the project would have a "direct adverse effect on Federal lands within any such unit."

### **Memoranda of Understanding**

On November 6, 1992, the Commission and the U.S. Department of the Interior signed a memorandum of understanding (MOU) to establish procedures and guidelines for determining if the Commission, or the Bureau of Reclamation (BOR), has jurisdiction over non-Federal hydropower development at individual BOR projects. This is a joint effort to expedite development of renewable hydroelectric power resources at existing BOR facilities.

On January 11, 1993, the Commission and the U.S. Fish and Wildlife Service signed a MOU for cooperating and coordinating agency review of hydroelectric development applications. An interagency hydropower taskforce was formed to develop future written understandings.

### **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.

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 290 dam safety modifications have been completed at a total cost of about \$500 million. At the end of FY 1993, there were 90 ongoing modifications at a total estimated cost of \$300 million.

If dam safety repairs are not feasible or too costly, dam removal is an option. In FY 1993, the Commission approved the licensee's proposal to remove Mussers Dam (a wooden dam) in Pennsylvania. The dam, classified as having a high hazard potential (failure of the dam might endanger human life or cause significant property damage), could not be adequately repaired to meet Commission standards. The staff closely monitored the decommissioning activities and coordinated with Federal and State resource agencies to ensure that necessary mitigative measures were implemented.

## Hydroelectric Power

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 magnitude 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.

Work on the Commission's Engineering Guidelines continued during FY 1993. A Probable Maximum Flood (PMF) Standard was developed to ensure that PMF determinations are more confident and can be independently verified. Plans were also completed for developing new Guidelines for monitoring and instrumentation of dams and for analyses of dams. Also, a study was completed in cooperation with the Electric Power Research Institute to develop a methodology to refine, on a regional basis, the National Weather Service Probable Maximum Precipitation (PMP) estimates for the states of Michigan and Wisconsin.

Under the Memorandum of Agreement (MOA) with the Department of Energy and the Nuclear Regulatory Commission, the staff continues to perform dam safety inspections of dams under the jurisdiction of these agencies. Approximately 100 such inspections were made in FY 1993. The Commission has also initiated efforts to work more closely with states to improve dam safety. The Commission has entered into an MOA with the State of Washington and has a number of informal agreements with other States.



*Commission employee Eugene Gall (on the right), accompanied by personnel from Orange and Rockland Utilities, conducts emergency inspection of penstock at the Swinging Bridge project in New York on Christmas Day.*

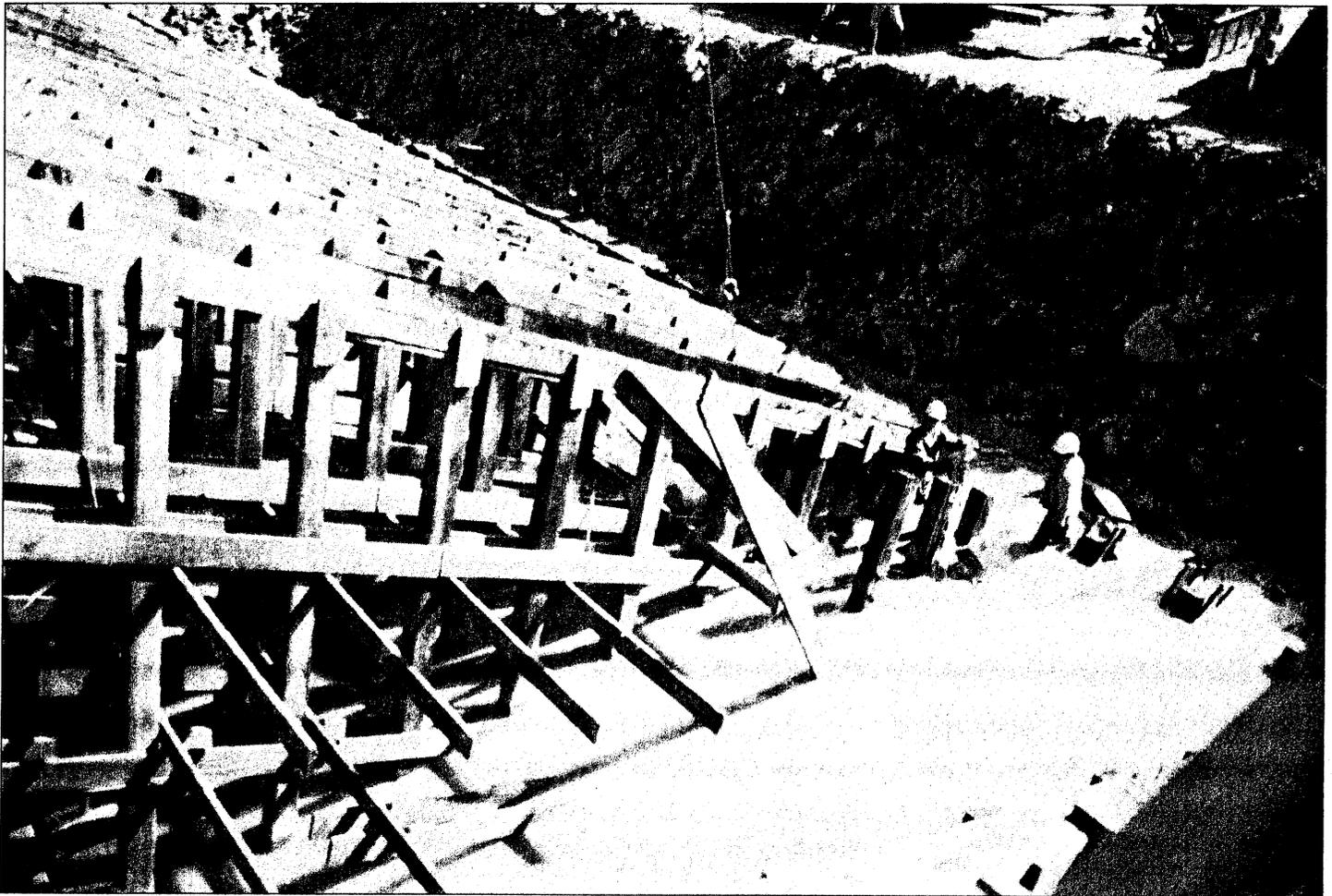
The Commission also requires emergency action plans (EAPs) for all dams unless it is satisfactorily demonstrated that no reasonably foreseeable project emergency would endanger life, health, or property. EAPs provide an early warning system in case of sudden emergencies caused by natural disasters—such as hurricanes and earthquakes. Their purpose is to provide maximum public protection at all times. The Commission conducted 40 functional exercises in FY 1993 to test the EAPs under simulated disaster conditions. These exercises included the state and local disaster preparedness agencies responsible for emergency evacuation.

At the end of FY 1993, a Memorandum of Agreement (MOA) was finalized with the Federal Emergency Management Agency (FEMA) to provide training for state regulated dam owners and evacuation agencies. The training will include EAP development and comprehensive EAP exercises consistent with

the Commission program. The training will also be coordinated with the Association of State Dam Safety Officials.

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. These 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.

During FY 1993, the Commission staff conducted about 2,200 dam safety inspections and completed final review of 135 reports of inspections by independent consultants.



*Commission staff monitor decommissioning activities as Mussers Dam on Middle Creek in Pennsylvania is dismantled.*

## **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 filings related to non-capacity amendments of license increased from about 100 in FY 1981 to 2,163 in FY 1993. These filings reflect the compliance requirements contained in licenses and exemptions and proposed post-licensing changes to the original project.

In FY 1993, the Commission issued 42 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 that Part. The Commission completed 13 civil penalty actions under section 31 in FY 1993. A total of \$279,100 in civil penalties was assessed. The penalties ranged from \$206,100 for a dam safety violation, \$8,000 for failing to comply with fish protection requirements, to the termination of licenses for failing to construct the project.

During FY 1993 the Commission also conducted 36 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.

## Hydroelectric Power

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.

To promote basin-wide synthesis and modeling of water quality and flow information, the Commission required nine projects on the Ohio River to form a Water Quality Management Group (WQMG). Under the Commission-approved plan, projects belonging to the WQMG will share water quality data collected at each project. The WQMG will use this information to present recommendations to the Commission for future license provisions to allow maximum power generation without violating state water quality standards.

### 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 \$233 million have been made since the program began in 1920. In FY 1993, the Commission assessed \$5.3 million for approximately 2,800 gigawatt-hours of additional energy generation from river regulation provided by upstream Federal projects. In addition, the Commission finalized a \$2.7 million assessment for benefits received at Louisville Gas and Electric Company's Ohio Falls Project No. 289.

To accelerate the collection of assessments due the U.S. Treasury, the Commission initiated 20 river

basin studies during FY 1993. These studies will finalize interim annual assessments for seven previously studied river basins and generate new assessments for approximately 52 hydropower projects in 13 river basins. The Commission also completed the conversion of the Headwater Benefits Energy Gains Computer Model from a mainframe to a personal computer application. The conversion will permit wider distribution of the model to the hydropower industry and help economize the study process.

### Jurisdiction

The Commission reviews unlicensed operating projects to determine whether they are required to be licensed pursuant to Section 23(b) of the FPA. In FY 1993, 10 orders on jurisdiction were issued. From April 1986 to September 1993, the review of unlicensed operating projects resulted in 81 orders finding that licensing is required and 69 orders finding that licensing is not required.

### Power Site Lands

During FY 1993, the Commission processed 265 applications for non-waterpower uses of Federal lands reserved for waterpower purposes. These non-waterpower uses included 110 mining claims, seven mineral leases, 17 rights-of-way, and 131 determinations under the FPA.

All of the approximately 754 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 more expeditious handling of requests for other uses of the powersites by the Bureau of Land Management and the Commission.

### Resource Issues

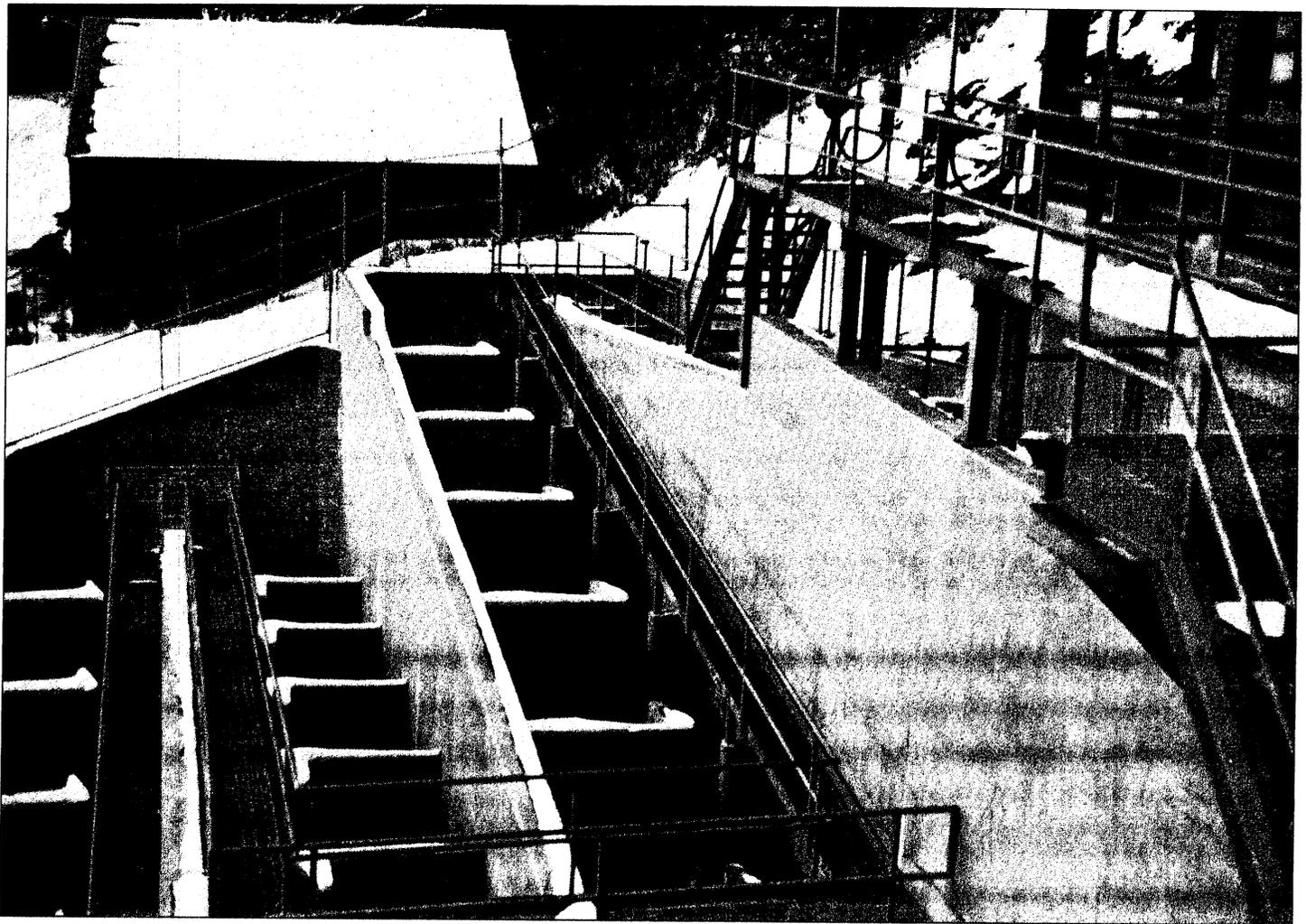
In the 1960s, original licenses included provisions (reopener articles) allowing the Commission to modify projects to ensure that adjustments could be made to accommodate future environmental resource needs. Use of these provisions to any significant degree began in 1990. As the demands on the Nation's 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. An environmental assessment was issued which recommended an EIS be prepared.

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.



*Vertical slot fish ladder at the Bellows Falls project on the Connecticut River in Vermont.*

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 reallocate the water to protect the water supply for 2.3 million people and adequately protect the chinook salmon fishery.

### **Fisheries**

In FY 1993, 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 envi-

ronmental assessment or an environmental impact statement, and develops appropriate terms and conditions to maintain and enhance the fishery. After a license is issued, the compliance staff monitors these terms and conditions to ensure compliance.

The compliance staff continues to work with other agencies and licensees to improve fish passage. For example, a new Denil fishway and fish elevator, including trap and sort facilities, began operating in the summer of 1993 at the Cataract Project No. 2528, on the Saco River in Maine. These facilities will aid in restoring Atlantic salmon, American shad, and river herring to the

river. The Commission also reviewed and approved fish passage facilities, fish screens, and trashrack designs to protect migrating fish from entrainment at the Wilton (No. 11055) and Halifax (No. 2552) Projects in Maine, the Lake Flower Project (No. 8369) in New York, the Ashton St. Anthony Project (No. 2381) in Idaho, and the Spring-Gap-Stanislaus Project (No. 2130) in California.

The compliance staff continues to encourage development of fish protection measures. In August 1993, the Commission approved the construction of a Bioengineering Test Facility. This facility would be financed and built through a cooperative effort

## Hydroelectric Power



*Kayaking in the Tallulah Gorge of the North Georgia Project.*

among nine licensed hydroelectric projects in the Upper Ohio River Basin. The facility would be designed to test the latest technologies available to minimize fish entrainment and turbine-induced mortality.

During FY 1993, the environmental contractor assessed how outmigrating Atlantic salmon smolts utilized the bypass reach at the China Mill Project No. 10900. As part of the Atlantic Salmon Restoration Program, the project bypass reach is stocked with salmon fry.

### 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 trails, and 1,200 picnic areas at Commission licensed facilities. The total surface area of reservoirs at licensed projects is more than 3 mil-

lion 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 available to the public.

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. ♦

# List of Commission Personnel

(As of end of FY 1993)

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

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

James J. Hoecker

William L. Massey

Donald F. Santa, Jr.

## Office Directors

---

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

Office of 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 Schaffer  
(208-0004)

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

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

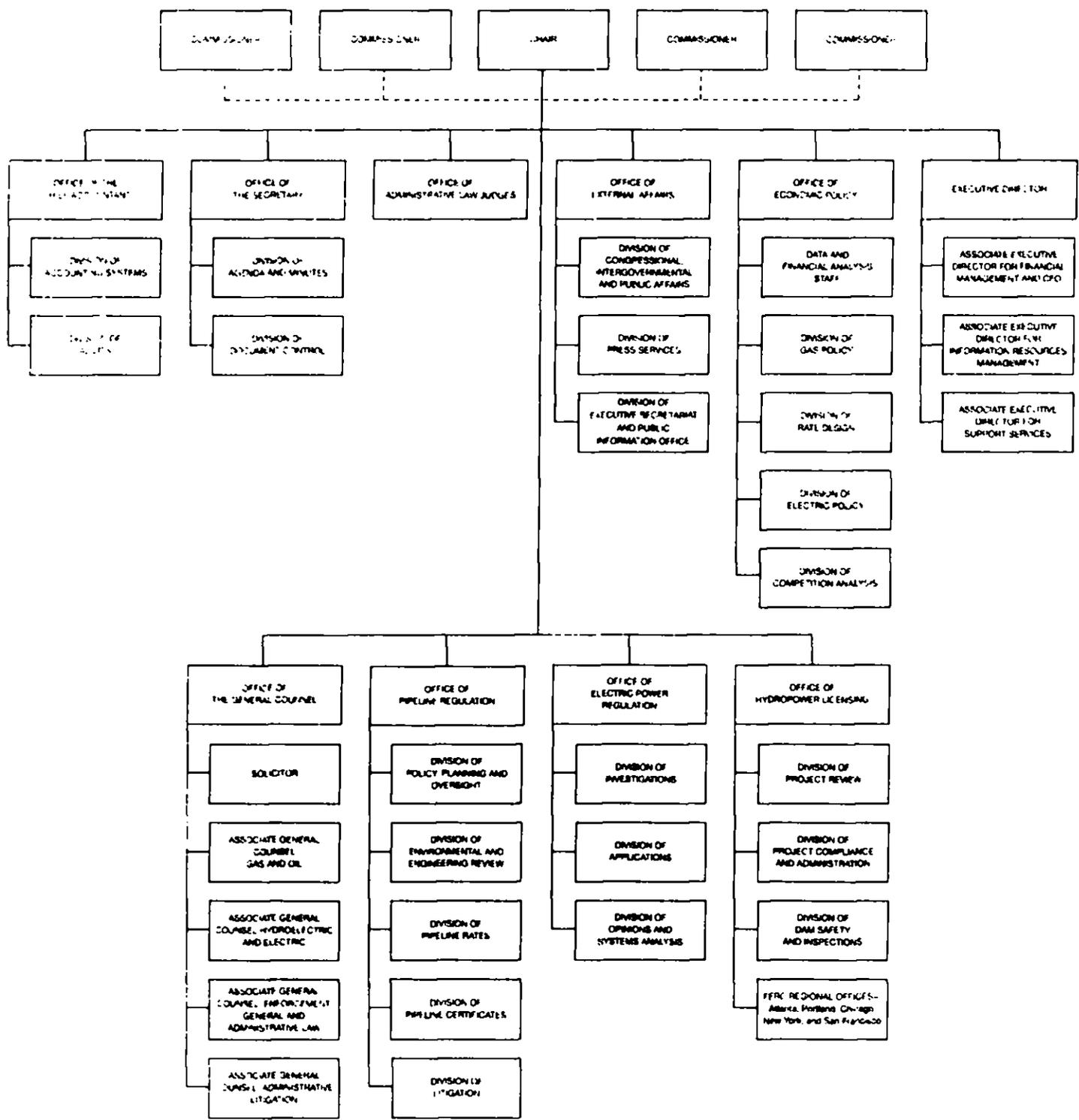
Office of the Secretary. . . . . Lois D. Cashell  
(208-0400)

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

# Organizational Chart

(As of end of FY 1993)

## Federal Energy Regulatory Commission (FERC)



# Hydroelectric Power Table

(Projects For Which Licenses Will Expire

Between January 1, 1994, And December 31, 1998—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
94-11-30	Montana Power Co	2188	MT	Cascade	Missouri	286100	DM RS PH TL	46	N
94-12-31	Arizona Public Service Co	2089	AZ	Yavapai	Fossil Creek/ Verde River	7000	RS PI TU PK PH TL	50	N
94-12-31	City of Seattle	2705	WA	Whatcom	Newhalem	1750	DM PH	24	N
95-04-30	Ketchikan, City of	1922	AK	Ketchikan	Beaver Falls Division Creek	7100	DM PH	50	N
95-06-30	Wisconsin Public Service Corp	1999	WI	Marathon	Wisconsin	5400	DM PH	20	N
95-12-31	Pacific Gas & Electric Co	2687	CA	Shasta	Pit	63000	DM PH	30	N
95-12-31	Pacific Gas & Electric Co	2699	CA	Calaveras	Angels Creek	1400	DM PH	30	N
96-04-30	Southern Calif Edison Co	1930	CA	Kern	Kern River	24992	DM PH	50	Y
96-04-30	Southern Calif Edison Co	1932	CA	San	Lytle Creek/ Bernardino	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	3250	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	MIN	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
97-12-23	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	1994	WI	Adams	Wisconsin River	35000	DM PH	47	Y
98-02-28	Idaho Power Co	1975	ID	Cooding	Snake River	69000	DM PH	50	Y
98-02-28	Wisconsin Elec Power Co	1980	MI	Dickinson	Menominee River	22700	DM PS	50	Y
98-03-31	Bunners 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	LT	Wasatch	Snake Creek	750	PH	49	N
99-02-28	Southern Cal Edison	2017	CA	Fresno	San Joaquin R	84000	DM PH	50	Y
99-03-30	Bangor Hydro Elec. Co.	2622	ME	Penobscott	W Br Penobscott R	3440	DM PH	33	N
99-05-31	Green Mt. Pwr. Corp	2674	VT	Addison	Otter Cr.	2400	DM PH	50	N
99-05-31	Idaho Power Co	2777	ID	Twin Falls	Snake R	34500	2DM 2PH	50	N
99-05-31	Idaho Power Co	2778	ID	Jerome	Snake R	12400	DM PH	50	N
99-08-31	Holyoke Wtr & Pwr	2004	MA	Hampden	Connecticut R	42865	6DM 6PH	50	N
99-09-30	Lwr Val Pwr & Lt Co	2032	WY	Lincoln	Strawberry Cr	1500	DM PH	50	Y
99-09-30	Internat Paper Co	2375	ME	Oxford	Andruscoggin R	19640	3DM 3PH TL	50	N
99-09-30	Aquamac Corp	2927	MA	Essex	S. Merrimack CNL	250	DM PH	39	N
99-09-30	Otis Hydro-elec. Co	8277	ME	Franklin	Andruscoggin R	10350	DMPH	15	N
99-10-01	S D Warren Co	2897	ME	Cumberland	Presumpscot R	1350	DM PH	37	N
99-11-30	Merrimack Paper Co.	2928	MA	Essex	S. Merrimack	1068	DM 2PH	50	N
99-12-31	Montana Pwr Co	2543	MT	Missoula	Clark Fork R	3040	DM RS PH TL	34	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

202/208-0004

Published August 1994

ISBN 0-16-045163-9



9 780160 451638