# ANNUAL PERFORMANCE REPORT FOR FISCAL YEAR 1999



# FEDERAL ENERGY REGULATORY COMMISSION

**MARCH 2000** 

James J. Hoecker Chairman

# **CONTENTS**

Executive Summary	ii
Introduction	1
The Commission in Brief	1
Mission, Vision, and Values	2
The Commission's Goals	
FY 1999 Performance Measurement Results	5
Regulating Energy Markets	5
Overview	5
Efficient, Competitive Markets	6
Constraining Market Power	
Authorizing and Monitoring Energy Projects	21
Adequate Natural Gas Pipeline Capacity	
Licensing and Administering Hydropower	
Resources	24
Dam Safety	27
Commission Administration	
Reducing Administrative Burden	
Continue to Improve and Enhance the Commission's	
Fiscal and Budgetary Position	36

# **EXECUTIVE SUMMARY**

This performance report is the Commission's initial report on the results of its performance measures developed in 1997, under the Government Performance and Results Act (GPRA). The performance measures cover the Commission's two program activities – energy markets and energy projects – as well as Commission administration.

## The Markets Program

Thirty months ago, the Commission established a goal of promoting competitive markets. It also proposed a series of indicators to show where newly competitive natural gas and electric power commodity markets were working well and where problems were arising. In the time since then, the Commission has met the spirit of GPRA by examining its performance measures, identifying inadequacies in the markets, and instituting major initiatives to address the problems. The key initiatives are:

- Order No. 2000. This Order will foster new Regional Transmission Organizations (RTOs) in the electric industry. RTOs will integrate electric markets over broader regions than before and ensure the independence of the transmission grid, a key underpinning for wellfunctioning electric markets.
- Order No. 637. This Order responds to a number of emerging issues in natural gas markets that became clear as part of the Commission's effort to examine market performance more closely.
- FERC First. The Commission has undergone a complete internal reengineering, largely to ensure that it can focus more fully on developing energy markets, as well as on more traditional regulatory activities. The Commission has merged economic regulation for natural gas, oil pipelines and electric power. It has also established a new Office of Markets, Tariffs, and Rates, whose mission will be to oversee and analyze energy markets, building on the performance measurements reported here.

As part of these efforts, the Commission has come to understand that the best way to judge performance is not to consider each measurement in isolation, but to view them together as an integrated whole. Any one indicator in isolation could prove misleading, but several together can provide an accurate diagnostic of market performance. These measurements, taken together, are incorporated into a *State of the Markets 2000* report, which will be issued annually as the Commission continues to perfect its approach to regulating energy markets. The State of the Markets report will help the Commission to:

 understand developments in the markets, many of which cannot be anticipated;

- identify emerging market regulatory issues, including new forms of market power; and
- provide a foundation for Commission action in the future.

With *State of the Markets 2000*, the Commission believes has arrived at an approach that will allow it to track the indicators of a well-functioning energy market, such as efficiency, transparency, transactional liquidity, ease of entry and exit, and competition. As the energy markets change over time, future State of the Markets reports will reflect these changes by adjusting the indicators it examines. The energy markets section of this FY 1999 Performance Report contains a summary of key performance indicators from *State of the Markets 2000*. The complete *State of the Markets 2000* will be issued separately.

Finally, the Commission is working with the Office of Management and Budget to obtain blanket approval for customer surveys that would let it measure customer perceptions of how well the Commission is mitigating market power in the natural gas and electric markets. The Commission hopes to begin this measurement program during the coming year.

## **Energy Projects**

The Commission's internationally-recognized dam safety program continues to ensure that jurisdictional dams are properly constructed, operated and maintained. The dam safety program continues its high level of performance despite the ageing of dams under the Commission's jurisdiction and the resulting structural and operational challenges that entails.

For pipeline construction, it is becoming ever more important that the Commission process cases as efficiently as possible to meet rapidly evolving market conditions. For the first time in the FY 1999 performance plan, the Commission systematically grouped certificate applications by the level of effort required to respond to them and established clear targets for the time it should take to process each type of application. Among four types of certificate cases, three met or beat targets, and the fourth approximated the target time. The Commission has also worked to speed up its hydropower licensing program. When applicants have used the Commission's collaborative process for such licenses, processing time has averaged just under a year, as opposed to about 33 months for other cases.

Finally, the Commission has not yet established good measures for how well it balances environmental and other considerations in its projects programs. The measurements included in the FY 2001 performance plan represent progress in this area. However, finding good performance measures for balancing numerous conflicting interests remains a difficult problem.

#### Management

Many of the management performance measures referred to reducing processing time. Here the Commission has succeeded in both its natural gas certificates and hydropower efforts. During FERC First, the Commission reduced its workforce by 8 percent, while maintaining its high level of productivity. The Commission must repeat this performance over the next 5 years. Similarly, the Commission has continued its successful efforts to ensure fiscal responsibility, for example, through achieving another unqualified opinion from its outside auditors.

During the Commission's reengineering efforts, it became clear that he Commission must pay more attention to its management functions, especially for human resources. The Commission will need to make better use of its current employee base and also substantially change its skills mix to meet the challenges it will face over the next few years. As a result, the Commission's FY 2001 Performance Plan includes significantly more performance measures in this area than are reported on here.

# Meeting the Challenge

The Commission views performance measurement as a vital long-term effort to improve the quality of its work ensuring a secure supply of reasonably priced energy services on behalf of the American public. While much work remains to be done, much has already been accomplished. Most importantly, the Commission is already using its performance monitoring efforts as an integral part of assessing which policies are working well and which need to be changed and of informing its deliberations about how to change. The Commission is determined to build on this responsive approach to performance measurement because it is the only way to provide real benefits from competition to American consumers.

# INTRODUCTION

In September 1997, the Commission issued its first strategic plan, as required by the Government Performance and Results Act (GPRA). The strategic plan identified strategic goals and objectives for each of the Commission's program areas and for administration. It also proposed success indicators that, if measured appropriately, would show how well the Commission was succeeding at meeting its goals and objectives.

The Commission followed the strategic plan with its initial annual performance plan, issued in February 1998. In the performance plan, which covered FY 1999, the Commission built on the strategic plan by describing how the performance indicators for each program would be measured to determine success, describing sources for data, and highlighting strategies that would be used to achieve success.

This is the Commission's initial performance report, completing the process begun with the 1997 strategic plan and continued with the annual performance plan. The performance report builds on the preceding documents by providing detailed results of the Commission's performance in support of the Commission's goals and performance measurements.

### The Commission in Brief

The Federal Energy Regulatory Commission (the Commission) was created through the *Department of Energy Organization Act* on October 1, 1977. Its predecessor, the Federal Power Commission (FPC) established in 1920, was abolished, as the new agency inherited most of FPC's regulatory responsibilities.

The Commission administers laws and regulations involving key energy issues. These include the transportation and sale of natural gas in interstate commerce; regulation of electric utility wholesale rates and transactions; licensing, inspection and administration of non-federal hydroelectric projects; and oversight of related environmental matters.

The Commission consists of five members appointed by the President, with the advice and consent of the Senate, to five-year staggered terms. No more than three members may belong to the same political party. The President designates one member to serve as Chairman and administrative head of the Commission. Commissioners have an equal vote on regulatory matters.

The Commission generally meets twice a month to transact business. It considers, on a case-by-case basis, licenses and certificate applications, rate filings, and other matters submitted by regulated entities, and sets industry-

wide rules. Meetings are open to the public under the provisions of the *Government in the Sunshine Act*.

The Commission collects the full cost of its operations from annual charges and fees authorized by the *Federal Power Act (FPA)*, the *Omnibus Budget Reconciliation Act of 1986*, and other laws. Congress annually adopts a budget appropriation that gives the Commission the authority to use funds from the Treasury to meet operating expenses. The Commission must return to the Treasury all revenue from annual charges and fees, therefore, there is no direct taxpayer funding.

## Mission, Vision, and Values

During FY 1998 and FY 1999, the Commission undertook a comprehensive look at how it does business today and how it can meet the needs of tomorrow's competitive markets and public policy requirements – the FERC First initiative. Among other things, FERC First accelerated the evolution of both the mission statement and clarified the Commission's strategic vision. As an additional outcome of the reinvention process, the Commission has developed a series of eight values that set the parameters for *how* the Commission will pursue its work. They represent the current application of mission, vision, and values at the Commission.

#### **FERC Mission**

The Commission regulates key interstate aspects of the electric power, natural gas, oil pipeline, and hydroelectric industries. The Commission chooses regulatory approaches that foster competitive markets whenever possible, assures access to reliable service at a reasonable price, and gives full and fair consideration to environmental and community impacts in assessing the public interest of energy projects.

#### **FERC Vision**

Promoting Competitive Markets
Protecting Customers
Respecting the Environment
Serving and Safeguarding the Public

#### **FERC Values**

- *Employees* People are our most valued asset. We provide the support needed for all employees to excel.
- *Integrity* We maintain the highest level of professionalism and an environment of fairness, trust, respect, and honesty.
- *Diversity* We value diversity in people and ideas.

- Working Together We clearly communicate expectations, encourage cooperation and teamwork, and share responsibility.
- *Progress and Innovation* We are creative and flexible, and seek out opportunities to improve.
- *Action* Prompt and fair resolution of matters before the Commission is essential to our mission.
- Reaching Out Two-way communication with the public is key to our effectiveness.
- *Public Service* Our ultimate objective is to provide valued services to the public.

#### The Commission's Goals

When developing goals for the strategic plan, the Commission recognized that a number of its responsibilities and approaches to meeting those responsibilities were similar across industries. The Commission grouped its goals for each industry into several broad categories that cut across industries. Those broad categories are:

- regulation of markets and rates, terms, and conditions of energy services;
- authorizing and monitoring energy projects; and
- Commission administration.

During the Commission's reinvention effort in FY 1998 and FY 1999, the Commission recognized the need to realign itself to meet the changing needs of the energy industry. The Commission has moved from traditional regulation to a model more representative of the rapidly evolving energy industry. Through its reinvention efforts, the Commission is shifting its organization and program structure to reflect a more contemporary regulatory model. During FY 2000, the Commission is changing its program and organization structure to match these process categories.

# Regulating Energy Markets

#### **Electric Power**

The Commission will regulate electric transmission and bulk power markets to

- a) foster the growth of efficient, competitive commodity markets, and
- b) protect customers from excessive transmission rates and service discrimination.

#### Natural Gas

The Commission will regulate natural gas pipelines to

- a) ensure that pipeline transportation service supports efficient, competitive commodity markets, and
- b) protect customers from excessive transportation rates and service discrimination.

### **Oil Pipelines**

The Commission will ensure fair access to the oil pipeline systems for all customers under just and reasonable rates, terms, and conditions.

# Authorizing and Monitoring Energy Projects

#### **Natural Gas**

The Commission will regulate interstate natural gas pipelines to ensure that adequate capacity and reliable, flexible service is available in the interstate natural gas transportation systems.

## Hydropower

The Commission will regulate nonfederal hydropower projects to

- a) ensure that sustainable hydropower resources are licensed for the public's benefit,
- b) maintain the nation's existing hydropower development to serve all water resource interests, and
- c) ensure dam safety through inspection of facilities and operations.

# Commission Administration

#### **All Industries**

The Commission will reduce regulatory burden by

- a) reducing the processing time for docketed workload and for resolving disputes,
- b) minimizing filing burdens, and
- c) generating better information for use by industry and the public.

# **FY 1999 Performance Measurements Results**

FY 1999 marks the first appearance of performance measurements developed by the Commission to comply the Government Performance and Results Act (GPRA). Although these performance measurements were developed in 1997 for the Commission's FY 1999 performance plan, they foreshadow its strategic direction and organizational realignment. By FY 2001, the Commission's organizational structure, the budget request, and performance measurements will be in full alignment.

## **Regulating Energy Markets**

The Commission's overall objective in regulating energy markets is delivery of reliable, competitively-priced energy services, with customers protected from the exercise of market power. Natural gas and petroleum commodity markets have been competitive for some time. Electric power markets are becoming much more competitive in most of the country, placing stress on existing market and regulatory institutions. In each industry, the Commission has fostered the emergence of competitive markets and now must address key market issues by formulating new regulatory approaches.

The Commission has come to understand that the best way to judge the performance of energy markets is not to consider each measurement in isolation, but to view them together as an integrated whole. These measurements, taken together, are incorporated into a *State of the Markets 2000* report, which will be issued annually as the Commission continues to perfect its approach to regulating energy markets. With *State of the Markets 2000*, the Commission believes has arrived at an approach that will allow it to track the indicators of a well-functioning energy market, such as efficiency, transparency, transactional liquidity, ease of entry and exit, and competition. The energy markets section of this FY 1999 Performance Report contains a summary of key performance indicators from *State of the Markets 2000*. The complete *State of the Markets 2000* will be issued separately.

#### Overview

The nation's energy markets are in the midst of complex and rapid changes. Evaluating the success of the Commission's market programs requires innovative approaches to performance measurement, because many of the problems which the Commission identifies and addresses in energy markets cannot be predicted. The answer to this challenge lies in developing a process for the Commission to rapidly assess markets, to determine whether particular trends or events reveal policy-related problems, and to flexibly accommodate those trends.

To be fully successful at measuring its performance relative to energy markets, the Commission's market analysis needs to function on three levels. It must:

 understand in real time the developments in the markets, many of which susceptible to long-term advance planning;

- identify emerging market regulatory issues, including new forms of market power; and
- provide a foundation for Commission action in the future.

These three principles underlie the Commission's performance measurements for energy markets.

As information is received and analyzed at the Commission, a full picture of natural gas and electricity markets develops. This picture must be informed by experienced analysts and supplemented by inquiries and discussions with other parties. The raw information alone will not be helpful in assessing energy markets or the Commission's own activities. Because performance indicators can be quantified, they are intended to enable evaluation of whether performance goals are being met. Performance indicators should also be based on external outcomes, so actual events in energy markets should be the basis of performance indicators for the Commission's energy market activities.

This could imply that the Commission should develop a set of static or simple performance indicators, in the form of real market trends or events, and then attempt to influence them through its ongoing market activities. But such an approach could lead to policy interventions that interfere with efficient markets, as opposed to aiding the Commission in its mandate to further the public interest through encouraging efficient market institutions. There is thus a special burden in the energy markets area to develop an approach to performance reporting which reflects both accountability and sensitivity to the dynamic nature of energy markets.

## Efficient, Competitive Markets

**Performance Indicator:** Customers will have more new products and a reasonable range of suppliers from which to choose in both the electric and natural gas industries. This will indicate that commodity markets are reasonably competitive as well as responsive to customer needs.

This performance indicator is being reported in terms of its two components "more new products" and "a reasonable range of suppliers." In terms of performance measures for FY 1999, the Commission has developed the idea of "a reasonable range of suppliers" into the more specific concept of commodity market development. The Commission has developed the idea of "more new products" into the more specific concept of new service availability. The FY 1999 performance measures for this indicator will be discussed in these terms.

Beginning with the enactment in 1978 of the Natural Gas Policy Act and the Public Utility Regulatory Policies Act, successive Congresses, administrations, and Commissions have pursued policies leading to more competitive energy markets. The key structural changes during the development of these new energy markets involved granting or requiring access to multiple sources of the energy commodity, through the mechanism of mandated open access to the transportation systems.

Energy markets have three functions in terms of the physical delivery of energy:

- supply of the basic energy commodity;
- transportation of that commodity through pipeline or electric transmission networks; and
- final distribution of the energy to consumers.

These three functions are now being further separated through institutional restructuring as well as changes in the operational practices of existing institutions. The concept of unbundling traditional, vertically integrated monopoly utility functions is the first fundamental step toward competitive energy markets. Unbundling, in other words, is the action which promotes effective competition among commodity sources. While natural gas and petroleum have been competitive on the wholesale bulk commodity level for some time, the most progress recently has been in the electric power markets.

In terms of measuring the development of commodity markets, new techniques must be developed by the Commission. One of the major accomplishments of the Commission's efforts over the past 20 years has been the encouragement of commodity source options. As an indicator of the Commission's performance in the area of market development, commodity source options are among the most relevant measures of energy consumers' basic freedom to choose in the markets.

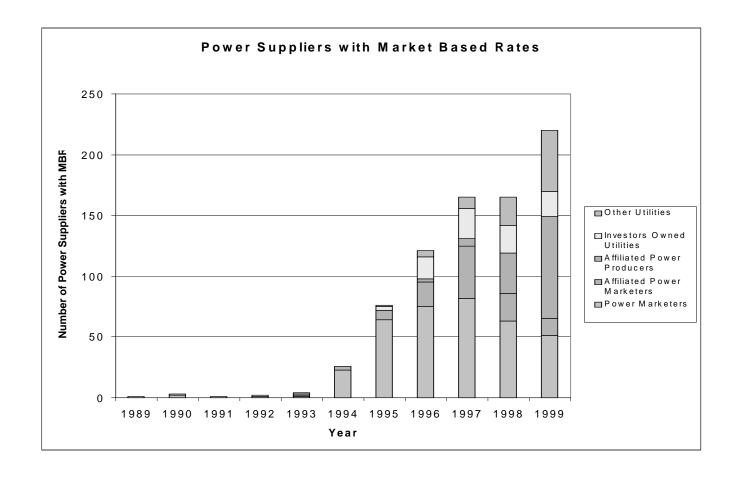
The promotion of commodity source options through Commission actions should have effects on the structure and characteristics of commodity markets for natural gas and electricity. Performance indicators in this area should be able to clearly track these developments. The challenge in developing and evaluating these indicators is twofold: defining commodity sources and related changes in commodity markets in a way that makes sense, and locating publicly available performance data that conforms to such a definition.

The measurement of commodity source options must begin with a definition that allows for meaningful evaluation. The concept of a commodity source option is not simply any entity which offers some type of energy-related product or service. Rather, the more relevant concept is that of a supplier of the basic commodity, bulk energy in the form of natural gas, petroleum, or electric power.

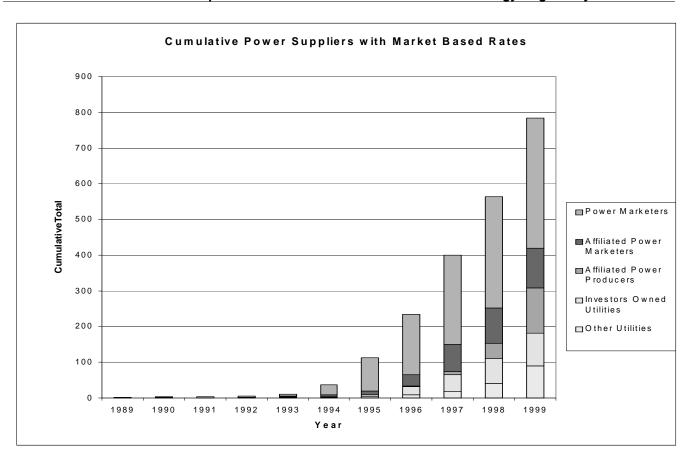
A commodity source is the upstream or wholesale energy provider. It is the existence of multiple commodity sources which in turn allows for the development of services such as risk hedging, and specialized delivery contracts using multiple supply sources. Commodity source options also begin to create more meaningful price information through competitive bidding, arbitrage, and other forms of buyer-seller interactions.

While the Commission has not normally collected systematic data on the number of commodity source options available to customers, some information is available which demonstrates the rapid growth of energy providers in the marketplace as a whole. For example, the Commission accepts filings from entities seeking approval to transact business under market-based rates, which are subject to lighter-handed review by the Commission.

By taking the list of such marketers and sorting them by type and year of market-based rate approval, a trend of rapid growth during the period of competitive commodity market development in the electric power markets can be seen, although more work needs to be done to develop and interpret this data. Specifically, more information on the current status and size of various commodity suppliers would be useful, since some entities which received market-based rate approvals may have since left the business or do not actively participate in the market. Information about other sources which may not have market-based rate filings would help to fill in the picture of how many commodity sources are available to consumer, and this larger picture should probably be developed at a regional level (which in turn relates to the issue of market definition and market concentration).



The development of competitive bulk wholesale commodity markets spurred the development of many new types of services. New service availability, then, is one way to describe the broad range of new opportunities for



consumers to receive energy, not simply the existence of more suppliers in the bulk commodity market. Such services include many innovative approaches to transportation and (for natural gas) storage, new forms of service delivery (for example, for different time periods), and financial instruments such as those based on risk hedging.

**Transportation Services.** Increasing commodity source options, along with the development of spot markets and the resulting opportunities for cost savings, have led to the creation of numerous innovative options for transportation service over the electric power transmission and interstate pipeline networks. Customers seeking to access the competitive bulk wholesale commodity markets are now being offered more options for moving the energy commodity once it is purchased.

**Delivery Services.** Similarly, the ability of wholesale customers to shop around for their energy services has led to a greatly increased focus on customer service on the part of market participants. The range of delivery and service choices is growing extremely rapidly. The types of delivery services now available to customers includes, for example, customized pricing and billing, sophisticated real-time metering, integrated energy portfolio management, and a full range of energy audit and strategic energy service planning services.

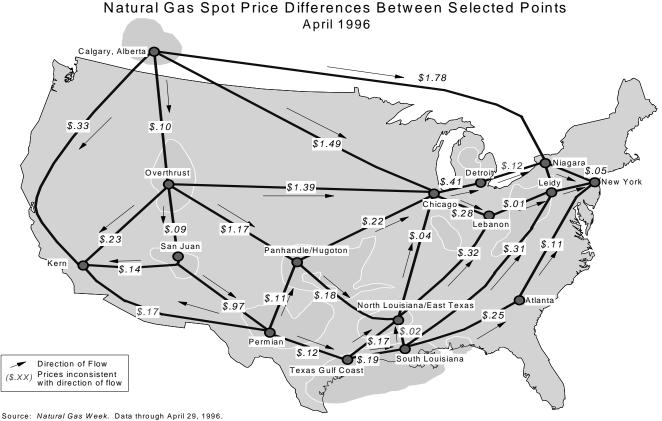
**Financial Instruments.** The development of competitive pricing in spot markets has spurred a large class of financial markets, instruments and

services. The basic motivation for these financial instruments is risk hedging. This has led to the development of active futures and forward contract markets such as those operated by the New York Mercantile Exchange (NYMEX). In addition, market prices have enabled new types of financial arbitrage instruments such as derivatives, which allow market participants to translate underlying market conditions and the resulting changes in commodity prices into value in the marketplace.

Performance measures in the area of service availability should be able to trace the development of innovative service options, and to show how the appearance of competitive bulk wholesale markets or other changes in the way energy markets are structured are related to the development of service options over time.

The Commission has not traditionally been in the business of explicitly tracking service availability indicators, although the perspectives of its customers in terms of what kinds of services they want and what kinds they can actually get are an important part of the Commission's overall understanding of markets and customer needs. Major innovations in service are often advertised and marketed, and there has been a rapid growth in the role of the trade press in reporting on some types of services. Performance measures in the area of service availability will continue to develop as the Commission rethinks its information needs and how to achieve goals regarding the use of external information (as opposed to information which is reported directly to the Commission).

One measure of how the Commission uses information about new service availability to make informed policy and further its mission is the development of information about the natural gas transportation market leading into the rulemaking for Order No. 637. The map below shows the national natural gas wholesale spot prices and the direction of flows on interstate natural gas pipelines in April of 1996.

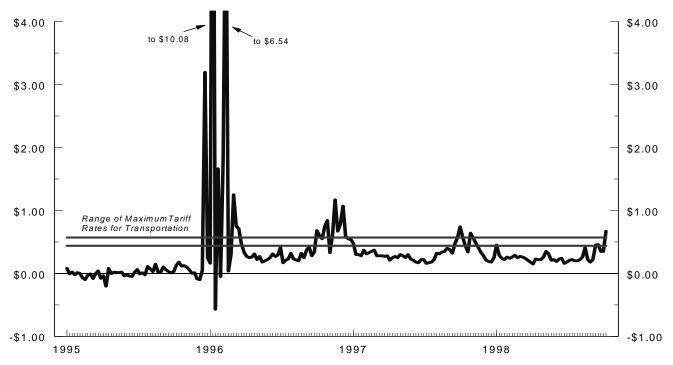


Notes: Monthly average prices for selected delivery points for deals in April. Prices for Alberta and Niagara are for Canadian spot transactions of 12 months or less.

Prices used for Detroit are from Columbia Gas at Maumee, Ohio. Spot prices reflect transactions of 31 days or less. Monthly price is the median of the prices assigned to a market center area.

What is important about this information is the fact that the developing natural gas market produced a situation where the differences in prices between distant regions created powerful market forces which dramatically changed the implicit price of gas transportation. This is shown in the following graph, which presents the implicit price of transportation service between New York and South Louisiana, compared to the regulated rate caps placed on that service.

Implicit Price of Transportation from South Louisiana to New York
Average Weekly New York Spot Price minus Average Weekly South Louisiana Spot Price



Sources: Gas Daily, Weekly Weighted Average Prices and PI Grid. Data through December 31, 1998.

Note: Tariff rates are IT rates from Columbia, \$0.45; Tennessee, \$0.59; Texas Eastern, \$0.57; and Transco, \$0.44.

The inter-regional spot price disparity created a value for transportation which was at times far in excess of what pipeline companies could charge for the service. This implicit value of pipeline transportation, which could not be recovered through flat rates, led to efforts by market participants to recover this value through other means. Through the use of informed analysis such as this, the Commission determined the need for a major rulemaking on short-term natural gas transportation services, culminating in the issuance of Order No. 637.

Performance indicators in the area of service availability should also be able to trace the pace of development of new services as the impact of commodity market competition leads to more market opportunities and innovation. This is again an area where the Commission has not typically collected information in a systematized way. However, an inventory and chronology of innovative service offerings, categorized in a sensible fashion, should be an attainable goal for preliminary performance indicators.

#### **New Electric Transmission Services (Post Order No. 888)**

Order No. 888 required public utilities owning, controlling, or operating interstate transmission lines to file nondiscriminatory open-access tariffs that offered others the same transmission service they provided themselves. The

companion rule, Order No. 889, Standards of Conduct and Open Access Same-Time Information Systems (OASIS), covered standards of conduct for public utilities, and ensured that transmission owners and their affiliates did not have an unfair competitive advantage in using transmission to sell power. Taken together, these rules have had a significant impact on electric transmission services:

1. Virtually all public utilities filed tariffs stating rates, terms and conditions for comparable service to third-party users of their transmission systems.

#### 2. Through OASIS:

- a) improved information about the transmission system is available to all participants in the market at the same time that it is available to the public utility's merchant function and market affiliate.
- b) movement toward computerized markets for transmission reservations and ancillary services.
- 3. Development of independent system operators (ISOs) as a way to maintain electric system reliability. The concept underlying ISOs is that the existing owners of transmission facilities would turn over operational control, but not ownership, of these facilities to new independent entities that would operate the transmission systems in conjunction with those of neighboring utilities.
- 4. Although broader than simply transmission, the development of power exchanges as trading centers where:
  - a) utilities, power marketers and other suppliers can submit price and quantity bids to sell energy or services,
  - b) potential customers submit offers to purchase energy or services, and
  - c) a spot or market-clearing price can be established.
- 5. Again, although not strictly a service, the development of congestion management pricing mechanisms by some of the leading ISOs (*e.g.*, PJM, Cal-ISO), provides for more efficient allocation of transmission capacity.

### New Gas Transportation Services (Post Order No. 636)

Order No. 636, among other things, established open access to the natural gas transportation grid by unbundling sales of natural gas from the transportation service. The order completed the transition of gas pipelines from primarily gas merchants to transporters of gas owned by others. Features of natural gas markets in the wake of Order No. 636 include:

- 1. Capacity release mechanisms that allow shippers to participate in the secondary capacity market.
- 2. Parking and loaning services that facilitate gas trading and improve pipeline capacity usage.
- 3. The development of over 30 market centers that allow shippers to reroute gas services from one pipeline to another.
- 4. Computer based electronic trading.
- 5. Hourly and daily demand charges to support the electric industry
- 6. Greater amounts of interconnects between pipelines outside of market centers.
- 7. Much greater use of offsets and compensating balances to resolve imbalance issues (now effectively mandatory under Order No. 637).
- 8. Greater use of incremental capacity pricing in some markets to encourage expansion.
- 9. Resolution of existing roll-in and incremental issues to reflect the economics of the greater opportunities for release. (Northwest Pipeline; PG&E Northwest).
- 10. Gradual elimination of the distortions caused in rate and gas pricing structures by obsolete gas contracts.
- 11. A sharp increase in the minimum dollar levels for light-handed or exempt capacity expansion. This leads to greater flexibility in adding services below the system expansion level (additional taps, local compression, laterals etc.).
- 12. Increased segmentation of capacity rights, which more closely matches demand to contractual obligations. (We have pushed this issue further under Order No. 637).
- 13. Pricing flexibility reflected in the use of negotiated rates this enables shippers to vary the level of commitment on volumetric requirements, the term, the rate level, and the risk sharing relating to future volumes or demand for transportation, or to hedge the delivery price of gas in the end user market.
- 14. Gas Industry Standards Board (GISB) standards, which has greatly increased uniformity in nominating and scheduling conventions, language and time frames, thereby significantly reducing transaction costs.

15. The use of auctions in some systems as a means of assigning value to limited transportation capacity.

In addition to these new types of physical service and contract mechanisms, entirely new financial services for risk hedging and the management of volatile gas prices have been developed. NYMEX initiated natural gas futures contracts in April of 1990, and today a full range of derivatives is available. Electric power futures trading began in March, 1996. The combination of new services and new financial risk management tools has transformed energy markets and given consumers options which would have been impossible in the past. The Commission continues to respond to these developments, most recently with the rulemaking on short-term gas transportation services.

As planned in the FY 1999 performance measures, the Commission has established a new indicator in its filing tracking system for each filing that proposes to offer a new service or expand the availability of an existing service. The Commission also collects data from natural gas pipelines on the identity of their customers. This information is being supplemented with data for capacity in the secondary market through the Commission's capacity release data. Open access in the electric power industry is much newer.

**Performance Indicator:** *Natural gas and electric power prices will become more responsive to market conditions – that is, prices will reflect changing supply and demand conditions more clearly and more quickly.* 

In an efficiently functioning commodity market, prices will convey a wealth of information about underlying conditions of supply and demand. This information allows market participants to make informed decisions. Efficient pricing plays the key mediating role in both short- and long-term market behavior. The transition from regulated to market-based prices should lead to prices that respond to rapid changes in demand during the day and across seasons. In addition, unexpected events such as facility outages and abnormal weather patterns should be reflected in commodity prices.

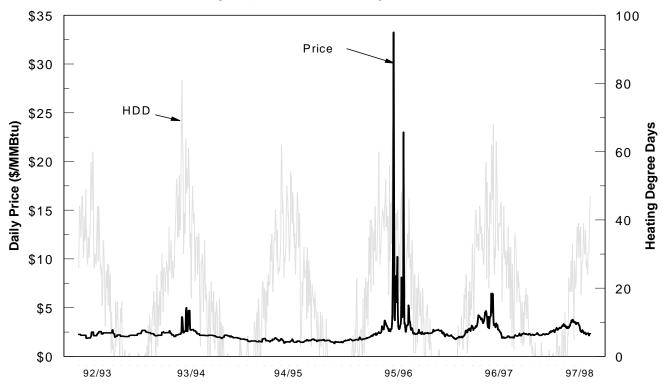
The Commission has already begun to use price data to understand these new markets, and draw valuable lessons which help guide policy. In the future, the Commission will use these short-term price data to address questions such as:

- What types of price events do electric and natural gas markets exhibit?
- What explains the occurrence of these price events?
- Are there price events which are in fact inefficient, i.e. reflect structural flaws in the markets themselves?
- How can such inefficient price events be avoided, for example, through changes in Commission policy or market operations?

The following example demonstrates some of the complex relationships between prices and physical events. Heating degree days reflect the need for space heating during cold weather, indicating how many degrees the mean temperature fell below 65 degrees for the day. For example, if a day's mean temperature were 45 degrees, there would be 20 degree days for that day. Their seasonal variation is apparent from the figure. The natural gas spot price appears to react to this seasonal variation in a number of distinct ways. First, note that there are some seasons in which the spot prices show no apparent response to the change in heating degree days. In other years, there is an increase in the spot price which coincides with the maximum in heating degree days. But in one year there is a dramatic increase in the spot price, which also coincides with that season's heating degree day maximum.

# Natural Gas Spot Price vs Heating Degree Days

Chicago (LDCs and Large End Users)

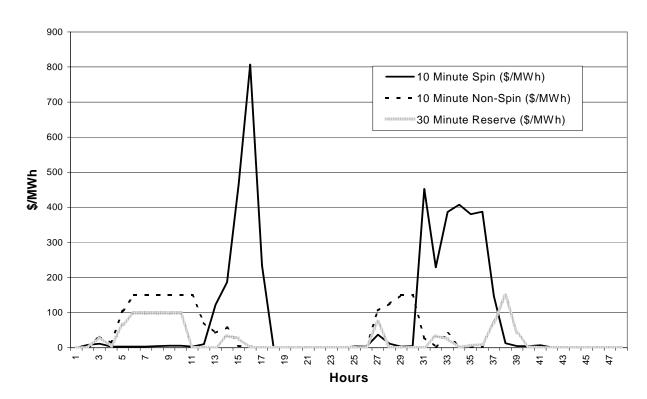


The explanation for these variations depends on several key elements. First, the fact that in some years the price does not react at all indicates that there are other factors that help to determine the spot price. These include demand for natural gas in other parts of the country, the adequacy of seasonal storage and pipeline availability. Second, the variety of responses in different years, along with the size of some of the price responses, indicates the presence of threshold effects, in which the combination of factors determining the price can lead to rapid price changes (that is, the price response is not continuous or smooth). Such threshold effects are characteristic of network industries

in which the transportation infrastructure can become constrained, or bottlenecked, leading to the isolation of portions of the market in which more expensive supply is required to meet demand. Third, the very large price response in one year may reflect inexperience on the part of market participants, as opposed to an underlying market imperfection which might warrant a change in policy.

An example of the Commission using price information to understand and identify an issue in an electric power market is shown below. The example is from the New England regional market for operating reserves. It is generally expected that for any specific generator, it costs more to provide reserves that can be used immediately than those that take time to access. In the New England market, the initial market design accepted bids for these operating reserve markets at the same time but then cleared each market sequentially. This, along with other incentives, allowed artificial shortages to emerge in some of the reserve markets. This can be seen in the figure below as periods in which types of reserve power that should be cheaper to produce were actually priced higher than other types of reserve power (10 minute spin), which should be more expensive. The appearance of this inefficient result in the reserve market indicated the need for institutional changes to head off similar events in the future.

### **NEPOOL Operating Reserve Prices, July 7-8, 1999**



To evaluate the efficiency of short-term prices and market response, the Commission has begun collecting price information for a variety of locations

and times (hourly, daily, etc.). There are two main sources for this information: for both gas and electric power, the main source of price data will at first be the trade press, which collects a great deal of information but has no standardized methodologies. For electric power, this will be supplemented by data from RTOs. It is possible that the Commission will require more access to real-time price information and related data to fulfill its mission in an increasingly complex market environment.

Market assessment and oversight will be an ongoing process which focuses on competition and discrimination in the natural gas and bulk wholesale electric power markets. Over time, information and knowledge developed in the market assessment and oversight process will be used to support case processing, rulemakings, and other Commission activities as needed.

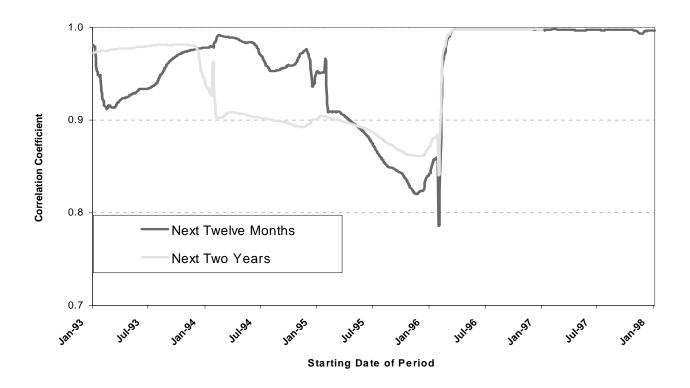
**Performance Indicator:** Natural gas prices within each trading region will tend to converge, except to the extent there are demonstrable transportation constraints or costs. Wholesale electricity price differences will also tend to narrow.

The Commission will also use the trade press, RTO, and other price information to develop its performance measurement of this success indicator. Such a performance indicator will evaluate how the broader, longer-term price trends are related to inter-regional trade and the constraints on trade imposed by the transportation infrastructure. Over time, the transitional effects of the move to competition should play out, leaving regional price differentials which can be tracked to identifiable infrastructure constraints. Some of these constraints may be removed through investment, while others will remain (wellhead gas will always incur some transportation cost, and transmission line losses will never be eliminated entirely). The Commission already uses this information as a diagnostic tool, although further fine tuning is expected during FY 2000.

The example below shows one way to measure the convergence of prices. Correlating the natural gas prices in neighboring states (which is equivalent to trying to predict one state's price on the basis of the price in the other state), it is evident that there was a dramatic change in early 1996.

Before that period, the prices only loosely correlated, while after that period, the correlation increased and stabilized at a nearly 'perfect' 1.0. This means that by 1997, if one knew the price of gas in Texas one also knew what the price should be in Louisiana. Efficient market arbitrage allows the prices to equilibrate at a rapid pace. however, these kinds of correlations will not always be perfect, since there will at times be constraints on the transportation system which lead to price divergences.

#### Correlation of Natural Gas Prices in Louisiana and Texas



**Performance Indicator:** *It will be less costly, administratively, to transact business on the interstate natural gas transportation grid.* 

The success of this indicator is related to the development of new services in the natural gas and electric power industries. As more players enter the markets, and as new services are developed, it becomes more commercially important to have access to information about the pricing and availability of services. As a result, a rapidly growing set of information services has appeared. These information services include e-commerce, in which many traditional energy companies, new market participants, and others offer Internet-based information services. The regional markets themselves offer extensive information on system conditions and prices on a real-time basis. The participation of major financial institutions such as the New York Mercantile Exchange bring new resources to bear on information provision.

As a result, large consumers of energy services have access to information with unprecedented speed. Hundreds or thousands of telephone calls to potential suppliers and middlemen can be replaced by a set of computers where marketing agents track prices across the country in real time. Over time, the benefits of this type of information access will spread to more customers, as experience, competition and technological improvements reduce the costs of access.

# Constraining Market Power

**Performance Indicator:** Market participants will have confidence that natural gas markets, electric markets, and oil transportation services are working fairly and that they are not subject to abuses of market power. That is:

- Broad customer classes (not necessarily every customer) will agree that buyers and sellers have access to competitively priced commodity markets in the national gas transportation and electric transmission grids.
- Customers will generally agree that gas pipeline, electric transmission and oil transportation rates and services are just and reasonable, fairly balancing the competing interests of the transporting or transmitting companies and their customers.

These indicators refer to the Commission's success in eliminating unnecessary market power and in fairly balancing the interests of all when market power cannot be eliminated. Both indicators refer to *customer perceptions* of how much competition they see. The second indicator reflects the fact that some degree of market power is inherent in the natural gas pipeline, oil pipeline and electric transmission industries, which is the basis for their being regulated.

In both cases, the best performance indicator will come from discussions with the industry and its customers. The reason for approaching the measure this way is that detailed, quantitative market power analyses are extremely difficult and expensive to perform. Even when performed, such analyses almost never tell the whole story by themselves. Non-quantified factors almost always substantially affect the degree to which observed levels of market concentration translate into the possibility of market power abuses. In controlling market power, the Commission is essentially balancing the legitimate interests of different parties. There is no direct way of quantifying how well the Commission is performing its balancing function. However, broad approval from each major industry sector would not be possible unless the Commission was succeeding in this balancing function. As a result, measuring customer perceptions is the most cost-effective way of judging the Commission's success in guaranteeing access to competitive markets where feasible.

Both indicators fall into a general class of issues that involve the Commission in getting closer to its customers. During its reinvention effort, the Commission met with its customers in numerous outreach meetings and focus groups. Given the number of contacts made during reinvention, it would have been difficult for the Commission to do more with its customers in this area. For this reason, the Commission is in the process of obtaining generic survey authority from the Office of Management and Budget (OMB). The generic authority, which OMB anticipates can be received within 60

days of application, will allow the Commission to coordinate its survey activities and receive approval for specific surveys within 10 days. A team has been formed to secure the generic authority, and the Commission anticipates developing baselines for this indicator in FY 2000.

# **Authorizing and Monitoring Energy Projects**

The Commission licenses nonfederal hydropower projects and issues certificates for construction of interstate natural gas pipelines. These projects have economic, environmental, and cultural implications, all of which must be considered in the licensing or certificating process. In addition, the Commission is responsible for the safety of hydropower projects and the operational safety and reliability of liquified natural gas (LNG) storage facilities. At the core of the Commission's efforts is the need to ensure that energy projects are sustainable environmentally and economically.

# Adequate Natural Gas Pipeline Capacity

Growing demand for natural gas in various regions of the nation will continue to drive an increase in applications for major pipeline extensions and new pipelines. The Commission will encourage efficient gas pipeline construction to provide individual customers and market entrants with increased choice and reliability of service by giving them multiple supply and delivery options. At the same time, the Commission will continue to balance and protect the competing interests of pipelines, individuals, organizations, and resources affected by the application of eminent domain for new and replacement construction of natural gas pipeline infrastructures.

**Performance Indicator:** The Commission's certification program will allow the appropriate amount of new pipeline capacity to be available to serve the market when needed.

**Performance Indicator:** Certification of new pipelines will be timely, while fairly balancing the interests of the gas market, project sponsor, landowners, and the environment.

These performance indicators are linked directly to the Commission's ability to process pipeline certificate cases fairly and timely. In general, depending on the level of complexity and the number of opposing parties and type of opposition (e.g., landowner complaints), the Commission acts expeditiously and issues construction certificates to allow the commencement of service on the date requested by the applicant.

**Timeliness.** In FY 1999, the Commission developed baselines and targets for approval of gas pipeline certificates. The baselines and targets are based on four types of gas certificate cases:

- Prior notice filings (typically small, uncontested cases);
- Certificate cases that are unprotested and where no precedential issues are present. Processing times for these cases will generally be shorter;
- Certificate cases that are protested. These cases may require litigation or alternate dispute resolution for completion, tending to require more time; and
- Cases of first impression or that have larger policy implications. Target
  processing times for these cases must take into account the fact that
  similar policy issues may be intertwined through a variety of cases,
  sometimes requiring the Commission to consider all aspects of the policy.

Baselines and targets for certificate cases are as follows:

Type of Case	Prior Years' Baseline	FY 1999 Targets
Prior Notice Filings	80% of cases processed with days.	nin82% of cases processed within 5 days.
Unprotested Filings	80% of cases processed with 159 days.	in82% of cases processed within 159 days.
Protested Filings	80% of cases processed with 304 days.	in 82% of cases processed within 304 days.
Cases of First Impression	80% of cases processed with 365 days.	in 82% of cases processed within 365 days.

#### Results for FY 1999 are as follows:

		Days to Complete 82%	
Type of Case	Case Count	Target	Actual
Prior Notice Filings	261	56	57
Unprotested Filings	174	159	152
Protested Filings	30	304	304
Cases of First Impression	39	365	365

While the Commission fell just short of its target for processing prior notice filings, it met its targets for protested filings and cases of first impression. Further, the Commission exceeded its target for unprotested filings by 7 days.

**Ensuring That Conditions Work.** Environmental concerns play a significant role in the review of certificate construction applications. Pipelines are facing increased opposition from landowners as new projects are proposed in more heavily populated areas. When new pipelines propose

to serve markets currently served by existing pipelines, the Commission must balance the benefits of alternative supplies of natural gas with the environmental impact of a new project. Critical to the Commission's efforts to balance benefits and environmental impacts are the environmental conditions the Commission builds into certificates. The Commission regularly inspects natural gas pipeline construction projects to ensure that the projects comply with the environmental provisions of the Commission's orders.

In FY 1999, baselines and targets were developed for two performance measures:

Measurement	Prior Year Baseline	FY 1999 Targets	
Inspect all onshore construction projects over 2 miles in length least once.		le363% of projects inspected at once.	least
Inspect each major onshore construction projects at least every four weeks during ongo construction activity.	controce.	t <b>16203%</b> of projects inspected a once.	it least

In the case of the first measurement, the target was created before the baseline was established. Thus, for FY 1999, the target percentage was lower than the baseline. However, the Commission exceeded both the target and the baseline percentage in FY 1999, as shown in the table below:

Type of Inspection	Number of Projects	Projects Meeting Inspection Criteria	Percentage
Onshore construction projects over in length inspected at least once.	2 miles96	93	97%
Major onshore construction project inspected at least once every four during ongoing construction activity	weeks	8	100%

The Commission has started a pilot program on third party, independent environmental compliance monitoring and reporting. This pilot program allows more frequent construction inspections and fosters quicker decisions on variances from Commission environmental conditions. Third party compliance monitors, hired by the pipeline but under Commission direction, will perform weekly inspections of each construction site. The monitors will allow minor variances within 3 days, and variances including expanded work areas within 6 days, with the time duration dependent on supervisory review by the contractors and the Commission. This should speed the construction process and result in more frequent compliance inspections, to the benefit of the environment. To ensure compliance with environmental regulations, the

Commission monitored pipeline construction and right-of-way restoration activities on 450 compliance trips in FY 1999.

Licensing and Administering Hydropower Resources Hydropower facilities provide tangible benefits to the regions where they are located. These benefits include additional recreational opportunities, economic benefits through commercial development, and the generation of electricity without use of fossil fuels. At the same time, operation of hydropower projects can adversely affect resources such as water quality, fishery resources, water-based recreational uses, terrestrial resources, and cultural resources. The Commission's challenge is to preserve the project benefits, while enhancing environmental resources.

The Commission issues licenses for nonfederal hydropower projects and monitors the projects to ensure that the conditions of the license are being met. The Commission's licensing and post-licensing processes have the multiple intents of maintaining power generation, enhancing and protecting the environment, and enhancing recreational assets of water resources. Integral to these processes is the participation of a myriad of stakeholders, including local citizen groups, power users, Native American tribes, environmental organizations, fish and wildlife agencies, and the hydropower companies. Through this participation, the Commission's authorizations address the needs of the stakeholders affected by the hydropower facilities.

While the Commission's responsibility under the Federal Power Act is to strike a balance among the many competing power and nonpower interests, various statutory requirements means the Commission must share its licensing conditioning authority with numerous state and federal agencies. These statutory authorities include the abilities of federal land management agencies to file conditions under section 4(e) of the Federal Power Act, federal fishery agencies to file fishway prescriptions under section 18 of the Federal Power Act, and state water quality agencies to require water quality certificate conditions under section 401 of the Clean Water Act. Shared jurisdiction poses unique challenges to the Commission in issuing timely and balanced licenses.

**Performance Indicator:** The Commission will reduce processing time under its control, particularly through the use of collaborative procedures and early involvement of staff.

To establish a baseline, the Commission compared the average processing time for all licenses filed since October 16, 1986 – the date the Electric Consumers Protection Act was passed – to the average processing time for those projects using the alternative licensing process (collaborative), codified in Order 596 in October 1997. The results are shown in the table below:

Licensing Process	Processing Time (Filing to Issuance)	
Non-collaborative	2.77 Years	
Collaborative	0.99 Years	

In the strictly voluntary collaborative process, environmental analysis is combined with the required pre-filing process. The early involvement of Commission staff guides the process and avails the participants of the expertise and guidance required to complete successfully the licensing process. The goal is for license applicants to work closely with all affected government resource agencies, non-governmental organizations, and local citizens to identify and resolve issues prior to filing an application with the Commission. The key component is using cooperative approaches in resolving issues and the use of settlements and other alternative dispute resolution (ADR) techniques to resolve disputes.

To avoid protracted licensing proceedings, the Commission has encouraged the use of settlements. With settlements, the licenses are more reflective of the desires of the local constituency and result in fewer legal challenges. Settlements are often an integral part of the collaborative process. In FY 1997, 15 percent of the 46 issued licenses involved settlement agreements. Of the 48 licenses issued in FY 1998 and FY 1999, the percentage involving settlements increased to 17 percent. Since 1992, only six projects have used the collaborative process. The Commission anticipates that a greater number of applicants will use the collaborative process in the future.

**Performance Indicator:** *Licensing conditions will protect and enhance beneficial public uses, both developmental and nondevelopmental.* 

In issuing or renewing licenses for hydroelectric projects, the Commission builds into those licenses certain conditions under which the project must be operated. These conditions may be developmental (power-related) or nondevelopmental (environmental). The Commission is including performancebased conditions in licenses with increased frequency. These conditions are designed to determine if environmental measures are effectively achieving specific levels of resource enhancement and protection. One of the Commission's databases contains the license requirements and the results of the monitoring studies conducted to verify whether the license requirements are achieving the stated goals or defined results. This information will be used to fine tune requirements and eliminate those that are ineffective. In addition, information from the system will help staff determine if, after accounting for biogeographical and operational similarities, licensing conditions at one project can be successfully applied to other projects. Tracking performance data also will assist in making decisions on what particular designs are appropriate for devices such as flow regulators and fish

passage facilities. At the river basin level, data from monitoring reports will be stored in the system to assist in evaluating the effects multiple projects may have on resources, such as water quality.

The Commission has developed databases and is working to reengineer these into an information system that will be critical in gauging the outcome of these measures. A major effort is to achieve the ability to relate facility, infrastructure, resource, and related-inventory information with our regulatory activities. Through this reengineering effort, the Commission will be able to more effectively and comprehensively evaluate whether these conditions are protecting and enhancing beneficial public uses.

An example of the type of protective conditions the Commission builds into hydropower licences involves the recent settlement reached in licensing the Clark Fork Project. The settlement included the creation of a mitigation program to prevent the loss of wildlife habitat, or mitigate for that loss, to an extent comparable to the estimated loss of habitat due to continued operation of the project. Another condition achieved in the settlement was the creation of a plan to mitigate the effects of the project as an obstruction to fish passage, with the long-term goal of increasing the native salmon population. At one project, the Commission required an evaluation of the public's response to recreational flow releases. The results of this study and the input of resource agencies and white water boaters allowed the Commission to revise required flow releases to better accommodate white water boating needs and reduce effects of white water releases on project performance. The Commission also has worked with licensees to develop shoreline management plans that consider both economic and environmental resource values. The Commission encourages licensees and, in some circumstances, requires them, to develop shoreline management plans, in cooperation with resources agencies, property owners, local governments, and other interested entities.

Although the Commission's automated tracking capability is in the developmental stage, it continues to monitor the hydropower projects to provide data on the performance of mitigative measures, such as fish passage facilities, fishery habitat improvements, wildlife benefits, recreational enhancements, and cultural resource protection. It ensures that the measures incorporated in licenses are implemented, and also determines whether the measures are sufficient for the level of environmental benefits envisioned at the time of licensing.

**Performance Indicator:** Administration of hydropower developments will accommodate increasing public use without diminishing key water resource values.

While hydropower facilities provide tangible benefits such as recreational opportunities, economic benefits through commercial development, and the

generation of electricity via a renewable resource, operation of hydropower projects can adversely affect resources such as water quality, fishery resources, water-based recreational uses, terrestrial resources, and cultural resources. The Commission's challenge in licensing or relicensing hydropower projects is to preserve the project benefits, while enhancing environmental resources.

During FY 1999, the Commission issued licenses for 19 hydroelectric projects. The results of the licensing requirements for recreational use are shown in the table below:

License Requirements	Number of Projects
Required new or upgraded recreational facil	ities 14
Existing recreational facilities adequate follo review	wing 5

In addition, the Commission approved or amended 20 recreation plans in FY 1999. These plans typically require the construction or improvement of facilities that provide fishing access to project waters. These facilities are available to the public for their benefit. In addition, during the term of a license, facilities may be added or modified if needs change. Facilities at regulated projects may include boat ramps, fishing platforms, canoe portages, parking areas, campgrounds, and picnic areas.

Beyond its licensing activities, the Commission works with other concerned parties to ensure the water resource value of its jurisdictional projects. As a member of the National Recreational Fisheries Coordination Council, the Commission developed a plan for enhancing recreational fishing opportunities at its licensed projects, to be implemented by the end of FY 2000. Implementation is ahead of schedule. In FY 1999, the Commission promoted recreational fishing at licensed projects through a brochure and a "Fishing Net" page on the Worldwide Web. The Commission is consulting with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on operations of several projects in four river basins in relation to a dramatic increase in the numbers of salmon species on the threatened and endangered species list.

#### Dam Safety

The Commission has statutory responsibility for the safety of more than 2,600 nonfederal hydroelectric projects. Inspections verify the structural integrity of dams and compliance with engineering, environmental, and public safety conditions and regulations. They also identify necessary maintenance and remedial modifications. Inspections safeguard the continued operation of projects, as well as downstream lives, property, and environment. As a second line of defense, emergency action plans make sure that the dam owner and community know how to deal with potential emergencies.

**Performance Indicator:** The percentage of high- and significant-hazard dams meeting all current structural safety standards will remain uniformly high.

During FY 1999, the Commission identified 961 high- and significant-hazard dams. (This number varies each year, and there were a few additional dams in these categories in FY 1999.) At the end of FY 1999, 55 high- and significant-hazard dams were involved with on-going dam safety modifications. The percentage meeting all current structural safety standards is determined as follows:

961 qualifying dams -55 dams undergoing safety modification ÷ 961 qualifying dams

= 94.3 % of high- and significant-hazard dams meeting all current structural safety standards

The remaining 5.7 percent of high- and significant-hazard dams are in remediation, and the Commission is deeply involved in the pre-construction and construction phases of this work.

**Performance Indicator:** One hundred percent of high- and significant-hazard dams will be inspected annually.

Dams assigned the significant hazard potential classification are those dams where failure results in no probable loss of human life but can cause economic loss, environmental damage, disruption of lifeline facilities, or can impact other concerns. Dams assigned the high hazard potential classification are those where failure will probably cause loss of human life. Given the definitions of these dam classifications, it is critical to the overall success of the Commission's dam safety program that high- and significant-hazard dams be inspected regularly.

The Commission's annual inspection data indicates that of the 961 dams identified in FY 1999 as being high- or significant-hazard dams, 100 percent were inspected during FY 1999.

**Performance Indicator:** One hundred percent of high- and significant-hazard dams will comply with emergency action plan requirements.

Inspections, evaluations, remediation, and monitoring cannot guarantee that emergencies will not occur. Failures of high- and significant-hazard dams, in most cases, cause large quantities of water to flow into nearby river basins. Downstream communities are susceptible to the possible consequences of such failures, including damage to property, damage to the environment, and

loss of life. A second line of defense to protect life, property, and the environment is the development, maintenance, and periodic testing of emergency action plans. These plans specify actions that owners must take, in coordination with federal, state and local preparedness agencies, in case of flood, earthquake, or project facility failure.

Of the 961 high- and significant-hazard dams identified in FY 1999, 99.8 percent – all but 2 dams – currently comply with emergency action plan requirements. The two that have not complied have been referred, within the Commission, for enforcement action.

### **Commission Administration**

The changing nature of regulation requires changes not only to the Commission's policies, but also to *how* it does its work. Many of the key initiatives in FERC First addressed human resources issues – how to develop and retain the right workforce – and information technology. The Commission has also undertaken several other changes to ensure that its management and administrative efforts will fully support its core programs. The following are highlights of the Commission's efforts to improve its administrative work:

- *Electronic Filing*. Through better management of information technology, the Commission will set up a largely paper-free environment with electronic filing and posting of documents and automated work flow management.
- Strategic Workforce Planning. As the Commission faces the challenges of the future, its overall success will depend on workforce planning that aligns strategic goals with people planning. Human Resources programs are being reexamined to ensure that they support changing resources and work requirements.
- *Diversity*. Employees must be appropriately experienced and educated, but also should come from all walks of life and be optimistic, versatile, energetic, and creative. A rich mix of talents and skills requires people with novel ideas and differing perspectives.
- *Leadership*. The Commission has begun an intensive effort to improve the quality of its leadership. Every manager now has performance standards based on how well they provide direction, achieve results, support teamwork, build trust and commitment, and communicate. This program, coupled with a reduction in the number of managers, will help the Commission make the best use of its entire workforce.

- Annual Charges. The Commission will continue to collect annual charges and provide timely payment of contractors' invoices using electronic funds transfer (EFT).
- Independent Auditing. To ensure that all financial requirements are in accordance with applicable laws, statutes and regulations, the Commission will continue to have external and independent audits conducted where appropriate.
- New Procurement Systems. Implementation of acquisition reform initiatives will continue to expedite procurement of goods and services. These initiatives include using the government-wide credit card, contractors' past performance, and Interagency Agreements, which will streamline the procurement process.
- Outreach. The Commission has undertaken a systematic effort to enhance relationships with Congress, federal and state agencies, and other stakeholders, to improve overall coordination and communication. More public conferences and information exchange opportunities are being hosted so that industry and other interested parties can meet and exchange information with the Congress and its staff.

As a result of its strategic realignment, the Commission's administrative support activities are in the process of becoming a separate program. This transition is taking place during FY 2000. The FY 2001 budget and performance plan reflect this change. The Commission will report on the results of its financial measurements as an adjunct to the other administrative measurements until a new set of indicators is introduced for FY 2001.

In addition to the administrative performance indicators published in the FY 1999 annual performance plan, the Commission has included financial measurements previously developed for the Commission's annual financial statements. The financial measurements have been included for two reasons. First, the financial measurements present an alternative view of administrative activity at the Commission by displaying performance based on the principles of good business practices. Second, they represent the more substantive measurements that will be used in FY 2001.

## Reducing Administrative Burden

The results for the three indicators in this category display some distinct similarities. The cause lies in the interconnectedness of the indicators themselves. For example, reducing processing times for workload, minimizing filing burdens, and generating better information for use by the industries are rooted in the Commission's ability to develop and maximize a robust information technology infrastructure. While this may lead to some repetition in the results, it also demonstrates the Commission's commitment to reducing the administrative burden it places on the industries it regulates.

**Performance Indicator:** Reduce the processing time for docketed workload and for resolving disputes.

**Energy Projects.** Delayed hydropower licensing and pipeline certification decisions can postpone the benefits of sustainable hydropower and available natural gas. While parts of the licensing and certification processes require extensive interactions with other agencies and compliance with other laws that have their own time schedules, the Commission is focusing its efforts on those parts of the processes that it controls. These areas include processing systems, conflict resolution strategies, and information technology developments.

Gas Certificates. As noted above, the Commission has been successful in meeting established time frames for processing gas certificate filings and for ensuring that environmental conditions of certificates are being met through site inspections. In addition to these successes, the Commission enacted the following initiatives regarding gas certificates in FY 1999:

- The Commission is implementing changes in its regulations and processes to respond more quickly to the anticipated market need for additional pipeline facilities. Order No. 603, issued in April 1999, streamlined the certificate process and clarified filing requirements. The order allows better response to changes in competitive market forces by, among other things, expanding the scope of blanket certificates to let pipelines construct, operate, rearrange, replace, and abandon more facilities automatically. It also expedites the certification process by establishing procedures to reject patently deficient applications for proposed projects before the Commission spends significant resources unnecessarily. The order requires pipelines to file more complete applications and sets a time limit of 10 days for the Commission to issue a notice of the application or reject patently deficient applications.
- The Commission has also offered natural gas pipelines the option of engaging in a voluntary collaborative process with the public and Commission staff before filing an application for a certificate to construct or abandon new facilities. The goal is to improve communication, expand public participation, and resolve potential conflicts earlier in the

filing process. Under the new option, applicants notify the Commission, the public (including landowners), and state and local government officials of their intention to start pre-filing consultations. In addition to resolving disputes at an early stage of the process, applicants also have the option of working with Commission staff and other interested parties to complete environmental studies in advance of a formal filing. The Commission issued its final rule for collaborative procedures, Order No. 608, on September 15, 1999.

- In April 1999, the Commission issued a notice of proposed rulemaking (NOPR) proposing methods for the early notification of landowners who may be affected by the construction of natural gas pipeline projects. The goal of the rulemaking is to ensure that landowners have sufficient opportunity to participate in the Commission's certificate process. The timely participation of landowners can result in the resolution of issues and in a more comprehensive record, allowing a faster Commission decision. The final rule was issued in October 1999.
- On September 15, 1999, the Commission adopted a new certificate policy for new pipeline construction. This was a result of the several proceedings initiated last year looking into the general topic of transportation services and the conference held last June on gas demand in the Northeast. It is also a response to the growing volume of public and congressional concerns over landowner and environmental issues in many of the Commission's current cases. The policy is expected to provide more certainty as to the issue areas the Commission will be looking at, while providing flexibility to applicants as to how much emphasis they want to place on any one issue.
- On September 15, 1999, the Commission issued Order No. 607, designed to clarify ambiguities in the existing ex parte rules and to provide better guidance on which communications to and from the Commission are permissible and which are prohibited. The revisions clarify the ground rules for communication, consistent with the Commission's outreach goals. The rule is intended to permit more fully informed decision making, while ensuring the continued integrity of the Commission's decision making process.

These procedural improvements may help to further improvements in the gas certificate area.

Hydropower Licensing. In hydropower, the Commission continues to emphasize the use of its alternative licensing procedure (ALP). The number of applications using ALP continues to increase. The resulting licenses have been issued in less than half the time required for applications that did not use the collaborative approach, and have demonstrated increased consideration for the environment. This procedure gives potential licensees the option of filing a preliminary draft National Environmental Policy Act

document with their application. The ALP also promotes early identification of issues, and cooperation and collaboration to resolve issues during the prefiling consultation phase of hydro licensing. In FY 1999, the Commission received license applications on 6 projects using the ALP. The Commission expects that nearly 40 percent of license applications received between FY 2000 and FY 2003 will use the ALP.

As noted earlier, the Commission's use of ALP and various alternative dispute resolution (ADR) techniques has had a dramatic effect on the processing time of license applications. The average processing time for license applications has shown a dramatic decrease since the issuance of Order No. 596, which codified the ALP:

Licensing Process	Processing Time (Filing to Issuance)	
Non-collaborative	2.77 Years	
Collaborative	0.99 Years	

**Energy Markets.** It is critical to the development of competitive, well-functioning energy markets that the Commission create and maintain a suitable environment within which energy industries can operate. The Commission must be able to assure the users of utility services that utility rates are just and reasonable, and that all terms and conditions of service are fair and not unduly discriminatory. Disputes generally arise when one party believes that it has been treated in an unduly discriminatory manner in an attempt to secure capacity, rates, or terms and conditions of transportation service.

While the Commission approves many settlements, it must, of course, resolve fairly and equitably those cases that do not settle. The Commission has streamlined the process by which complaints and declaratory orders are handled to make this service as fair and expeditious as possible. The Commission uses a variety of processes, including hearings before administrative law judges, litigation teams to represent the public interest, orders and rehearings, and appellate advocacy should a case go to court. Trial staff participates in cases set for hearing before an administrative law judge by providing trial teams, consisting of attorneys and technical experts, to represent the public interest. To facilitate the formal litigation process, the Commission developed expedited time lines applicable to cases set for hearing.

The vast majority of cases sent to litigation are resolved through the negotiation and settlement process – a more cost-effective and efficient means of resolution available to the parties, and a point of primary emphasis for the Commission's litigation staff and administrative law judges. Of the cases set for litigation, 80 percent are either fully or partially settled. In

FY 1998, the Commission achieved settlement on 84 cases. In FY 1999, the Commission reached settlement on another 71 cases. However, it is not possible to compare cases settled in those years with cases set for hearing in those years, because cases often do not settle in the same year in which they are set for hearing. For example, the 71 cases settled in FY 1999 include cases that were set for hearing – in some cases – two and three years ago. Similarly, many cases set for hearing in FY2000 may not settle until FY2001 or later. To maintain and enhance this record where possible, the Commission has trained staff in ADR techniques, employs ADR specialists, and has streamlined settlement procedures.

The Commission has also established a service center of excellence for alternative dispute resolution, to promote an environment in which the affected entities can achieve consensual resolution of their disputes. Dispute Resolution Service staff will provide ADR services throughout the Commission and to the Commission's external customers, when appropriate; function as mediators, facilitators, and neutrals on cases involving external participants; help identify other potential neutrals within and outside the Commission; and conduct educational outreach on the use of ADR techniques. In addition, the Commission has maintained a "settlement judge on-call" service for 2 years and appoints judges to serve as settlement judges and mediators to resolve disputes more expeditiously. These procedures are extremely effective and have resulted in significant cost savings to all parties.

In May 1999, the Commission amended its rules to permit participants in proceedings to voluntarily serve documents on one another electronically. This will streamline procedures and make information available more quickly. This action gave participants more flexibility in meeting the service requirements and the opportunity to gain experience with electronic service. The change was an important step in the Commission's plan to convert to electronic filing. This initiative will permit the Commission to make the content of filings available within minutes or hours, rather than days. Electronic notification and electronic processing of filings will take much less time than is necessary for paper notification, giving companies earlier access to filed information. Information technology development within the Commission will make information available more timely through the Commission's web site and will facilitate searching for specific information within the large body of data the Commission maintains. Data will become more accurate and consistent, contributing to better, more well-informed decision-making and more streamlined workload processing.

#### **Performance Indicator:** *Minimize filing burden.*

The Commission issued Order No. 603 on April 29, 1999, which, among other things, streamlined the gas certificate process to better fit today's less regulated environment of unbundled pipeline sales and open-access transportation. Among other things, Order No. 603 clarifies the regulations

and removes certain outdated and/or unnecessary filing requirements and reports, which will help speed up the processing of certificate and abandonment applications. By removing unnecessary filing requirements and reports, Order No. 603 reduces the existing industry reporting burden by a total of 8,284 hours.

The Commission also issued Order No. 604 in May 1999 to allow for electronic service of documents in certain circumstances. As noted above, this order will streamline procedures and make information available more quickly to both Commission staff and interested parties. The order gave participants more flexibility in meeting the service requirements and the opportunity to gain experience with electronic service, and is an important step in the Commission's plan to convert to electronic filing.

Due to the changes initiated under Order No. 604, the Commission projects reductions in reporting burden of 225,000 hours over the next three years. This estimate is based on the assumptions in the table below:

Assumptions	Projected Reduction in Burden
Number of applications receioed0	225,000 hours over the next three years
Number of interveners per 100000	
Additional hours for record keeping: 20,000	

Further, the Commission issued on September 15, 1999 reporting requirements for a pilot program to receive specified documents filed electronically through the Commission's Internet site. These documents include motions, interventions, protests, and comments, and were selected because of their lack of complexity. Initiation of the pilot will take place in FY 2000.

In FY 1999, the Commission updated software it provides to industry to complete the FERC Form 1, Annual Report of Major Electric Utilities, Licensees, and Others. The upgraded software was a Windows 95/98NT version that replaced the previous DOS version. The new software reduced the filing burden by allowing companies to file Form 1 information via the Internet rather than on diskette. It also improved the data integrity provided by the filing companies through the use of automated validation checks. The Commission issued an announcement for use of the updated software on January 13, 1999.

On January 8, 1999 the Commission issued guidance to the regulated industries on the types of storage media they may use for records retention. The Commission's regulations had required that records be retained either on paper or microforms. However, the Commission recognizes the advances that have been made in technology particularly in the development of alternative storage media. The accounting issuance gives each company the

flexibility to select its own storage media with the only requirement that the selected storage media must have a life expectancy equal to the applicable retention period unless there is a quality transfer from one media to another without loss of data.

**Performance Indicator:** Generate better information for use by the industries.

A key aspect of generating better information for use by the industries is to improve the industries' access to information at FERC. The availability of information is critical as the Commission moves away from traditional regulation. As a result, the Commission is developing its information technology capability to provide timely information and to facilitate data searches. During FY 1999, new features were added to both the Commission Issuance Posting System (CIPS) and the Records and Information Management System (RIMS). In addition to improved help screens, users may now combine searches and download multiple files through the Commission's Internet site. In FY 1999, the Commission completed plans for archiving data stored on the LAN. In addition, the Commission formed a subcommittee to redesign the Commission's Internet site and to improve the quality, type, and amount of information available to FERC's customers. Also, in April 1999, the Commission moved from its previous message board system (BBS) to full use of the Internet and FERC's web site. The change provides greater functionality for users and ensured Y2K compliance.

Continue to Improve and Enhance the Commission's Fiscal and Budgetary Position These performance indicators involve some of an agency's most fundamental activities. They represent the agency's financial standing, its ability to successfully plan for and manage its resources, its ability to meet its financial obligations, and its ability to maintain internal controls. The Commission has measured these activities since it began compliance with the Chief Financial Officers Act in the early 1990s, and is committed to continued success in this area.

The Commission will ensure effective management of its budgetary resources by instituting a decentralized budget structure called Manage to Budget. Manage to Budget is a major cost-containment measure that places more resource accountability at the office level. In keeping with increased fiscal responsibility and accountability, the Commission will require all managers to operate within their designated budget allocations. This initiative will allow Commission offices direct control of their spending levels in all funding areas, with particular emphasis on salaries, which represent more than 65 percent of total budgetary resources. Ultimately, each office's performance will rely on sound fiscal management of salary dollars and awareness of the impact personnel actions have on their budgets. The Commission will begin implementation of Manage to Budget in the third quarter of FY 2000.

**Performance Indicator:** Continue to receive an unqualified audit opinion on the Annual Financial Statements.

As interpreted by KPMG LLP, the Commission continues to receive an unqualified opinion on its financial statements along with no material weaknesses, reportable problems, or instances of noncompliance. This measurement is of utmost importance to the Commission in presenting our financial stability to our customers and regulated entities, and ensuring our financial statements reflect true and accurate balances.

**Performance Indicator:** Formulate the budget so that current year costs are within 5 percent of the total budgetary resources for the fiscal year.

The Commission's current year costs were within 5 percent of total budgetary resources for FY 1999. To determine the percentage, it is necessary to divide the total cost entries recorded against current year obligations by the total budget authority, less funds allotted to outside entities. The results for FY 1999 are shown in the table below:

Budget Authority	Costs Recorded	Target Percentage	Actual Percentage
\$168,527,551	\$163,855,970	5%	2.8%

Reaching this performance goal shows the Commission's dedication to reduce uncosted and unobligated balances. As it continues to develop sound budget requests during times of increased fiscal constraints, the Commission anticipates that it will continue to meet this goal in future years.

**Performance Indicator:** Pay 95 percent of all payments accurately and on time: vendors within the time required by the Prompt Payment Act; internal customers in 10 days or less.

The Commission's FY 1999 results for payments surpassed both the 95 percent on-time payment goal set for invoice payments to vendors within the time frame required by the Prompt Payment Act and the goal of 10 days or less for payment for internal customers.

The results for payments to commercial vendors are shown in the table below:

Total Payments to Outside Vendors  Payments Meeting the Prompt Payment Act	Target Percentage	Actual Percentage
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2,765 2,753	95%	99.57%
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The results of payments to internal customers are shown in the following table:

Number of Internal Vouchers	Target Days to Process	Actual Days to Process
2,793	10	3.9

These performance measurement results are based on the Commission's Performance Measurement Report transmitted to DOE for the fourth quarter ended on September 30, 1999.

**Performance Indicator:** Meet or exceed planned due dates 90 percent of the time for performing and completing Federal Managers' Financial Integrity Act requirements and internal financial and performance reviews.

In FY 1999, the Commission met 100 percent of the planned due dates for conducting and completing the requirements of the Federal Managers' Fiscal Integrity Act. All of the previous year's reportable problems were closed, and one potential reportable problem was resolved this year. Lower level reportable problems continue to be brought to the attention of management and are resolved at the organizational level necessary to take corrective action.