

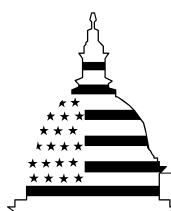
GAO

Report to the Ranking Minority Member,  
Committee on Governmental Affairs,  
U.S. Senate

August 2003

# ENERGY MARKETS

## Additional Actions Would Help Ensure That FERC's Oversight and Enforcement Capability Is Comprehensive and Systematic



G A O

Accountability \* Integrity \* Reliability



Highlights of [GAO-03-845](#), a report to the Ranking Minority Member, Committee on Governmental Affairs, U.S. Senate

## Why GAO Did This Study

In June 2002, GAO reported that the Federal Energy Regulatory Commission (FERC) had not yet adequately revised its regulatory and oversight approach for the natural gas and electricity industries' transition from regulated monopolies to competitive markets. GAO also concluded that FERC faced significant human capital challenges to transform its workforce to meet such changes. In responding to the report, FERC said that the new Office of Market Oversight and Investigations (OMOI) it was creating and human capital improvements under way would address these concerns. GAO was asked to report on FERC's progress in (1) establishing an oversight and enforcement capability for competitive energy markets and (2) improving agency-wide human capital management.

## What GAO Recommends

- GAO recommends that FERC
- more clearly define OMOI's role in overseeing competitive energy markets and develop formal processes and written procedures for the office's key activities and
  - revise the agency's human capital plan to (1) identify specific activities, resources, and time frames and (2) provide results-oriented measures to track progress in implementing its initiatives and evaluate their effectiveness.

FERC generally agreed with this report's recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-03-845](http://www.gao.gov/cgi-bin/getrpt?GAO-03-845).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Jim Wells at (202) 512-3841 or [wellsj@gao.gov](mailto:wellsj@gao.gov).

## ENERGY MARKETS

# Additional Actions Would Help Ensure That FERC's Oversight and Enforcement Capability Is Comprehensive and Systematic

## What GAO Found

FERC has made strides in putting an energy market oversight and enforcement capability in place, but work remains to ensure that its efforts will be comprehensive and systematic. Since FERC declared OMOI functional in August 2002, the office has focused primarily on outlining its vision, mission, and primary functions; developing basic work processes; integrating its use of an array of tools to oversee the markets; and hiring staff with market experience. OMOI is also assessing its data needs and developing its working relationships with others, such as the industry's market monitoring units. Nonetheless, the office still has work to do in the following two key areas:

- *Clearly defining its role.* OMOI has not clearly defined its role and the activities that it will engage in to achieve its mission. For example, the office has not yet decided on the level of detail at which it will review electricity markets. This decision has substantial implications for the office's data, technology, resource, and staff skill mix needs.
- *Developing formal processes and written procedures.* OMOI's processes are largely informal and ad hoc, and it has few written procedures to ensure that its efforts are coordinated, systematic, understood by its staff, and transparent to its stakeholders.

Although OMOI has had some early accomplishments—such as a \$20 million civil penalty against a company for anticompetitive behavior—it is difficult to judge how effective the office will be until its role and major processes are clearly set out.

FERC is also making progress toward addressing its considerable human capital management challenges, but additional actions could increase its likelihood of success. FERC's success in these efforts is important because the extent to which it can carry out its mission in a changing environment depends on its ability to adjust its staff skills and abilities in a difficult context. For example, over half of its workforce will be eligible to retire by 2007. In response, FERC has, among other things, expanded its use of certain personnel flexibilities, such as recruiting and retention bonuses, and is considering use of additional flexibilities. More importantly, FERC, in February 2003, developed a human capital plan. However, the plan does not contain some elements key to successful implementation, including (1) details on specific activities and resources needed to implement its human capital initiatives and (2) results-oriented measures that can be used to track the agency's progress in implementing the initiatives and evaluate their effectiveness. FERC also has not established time frames for many of its human capital initiatives.

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**Abbreviations**

ERCOT	Electric Reliability Council of Texas
FERC	Federal Energy Regulatory Commission
ISO	independent system operator
OMOI	Office of Market Oversight and Investigations
PJM	Pennsylvania, New Jersey, Maryland Interconnect
RTO	regional transmission organization
Transco	Transcontinental Gas Pipe Line Corporation

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United States General Accounting Office  
Washington, D.C. 20548

August 15, 2003

The Honorable Joseph I. Lieberman  
Ranking Minority Member  
Committee on Governmental Affairs  
United States Senate

Dear Senator Lieberman:

The U.S. electricity and natural gas industries' transition to competitive markets has not been smooth. Volatile prices, energy shortages, financial difficulties such as the bankruptcy of the Enron Corporation (the nation's largest energy trading company before its financial problems), and accusations of price manipulation have raised questions about the transition to competitive markets and the federal government's ability to regulate and oversee these new markets to protect market participants and consumers. The Federal Energy Regulatory Commission (FERC)—the federal agency primarily responsible for regulating and overseeing these industries—will play an important role in developing competitive wholesale markets and in protecting consumers against market abuses.

In June 2002, we reported that FERC had not yet adequately revised its regulatory and oversight approach to respond to the transition to competitive energy markets.<sup>1</sup> We also pointed out that FERC faced significant human capital and organizational structure challenges as it transformed its workforce to effectively regulate and oversee these evolving markets. For example, we noted that the agency did not have enough staff with knowledge of competitive energy markets, and that its market oversight function was too dispersed across the agency. In addition, we noted that FERC was attempting to regulate and oversee the markets with outdated legal authorities that were mostly derived from laws enacted when the industries were composed of highly regulated monopolies. We made a number of recommendations to address these issues and improve the agency's capability of overseeing competitive energy markets. FERC agreed with our conclusions and said that the report's recommendations were consistent with the agency's plans for its new Office of Market

<sup>1</sup>U.S. General Accounting Office, *Energy Markets: Concerted Actions Needed by FERC to Confront Challenges That Impede Effective Oversight*, [GAO-02-656](#) (Washington, D.C.: June 14, 2002).

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Oversight and Investigations (OMOI) and human capital management improvements.

In response to concerns about its capability to oversee the evolving energy markets, FERC announced, in January 2002, that it was creating OMOI. In making the announcement, FERC stated that the new office would report directly to the Chairman of FERC, and its functions would include understanding energy markets and risk management issues, measuring market performance, investigating compliance violations, and analyzing market data. In April 2002, FERC hired the office's director, who began to plan its operations and hire its staff. In August 2002, the FERC Chairman declared that OMOI, with about half of its planned personnel in place, was a formal, functioning office within the agency. This change in FERC's approach to monitoring markets—requiring a reassessment and reprioritizing of how it does business—will not be easy. Experience in public and private organizations has shown that for an organization to successfully “transform” itself, it must often change its culture to be more results oriented, collaborative, and customer focused.<sup>2</sup>

In light of FERC's stated commitment to and your interest in market oversight, you asked us to assess FERC's progress in (1) establishing an oversight and enforcement capability for competitive energy markets and (2) improving agencywide human capital management. As agreed with your office, we focused our review of FERC's market oversight and enforcement efforts on OMOI's formation and operations. To respond to this request, we reviewed appropriate plans, studies, reports, and other documents, such as budget justifications, relating to OMOI's activities and FERC's human capital management initiatives. We also interviewed OMOI's managers and FERC officials responsible for agencywide human capital management programs. In addition, we surveyed OMOI's employees to obtain their views on the office's effectiveness, morale, and work environment. About 87 percent of the employees responded to our survey.<sup>3</sup> Furthermore, we contacted the heads of four units operating at the time of our review with responsibility for monitoring regional wholesale electricity markets under FERC's guidance to obtain their views on OMOI's progress in establishing

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<sup>2</sup>See U.S. General Accounting Office, *Highlights of a GAO Forum: Mergers and Transformation: Lessons Learned for a Department of Homeland Security and Other Federal Agencies*, [GAO-03-293SP](#) (Washington, D.C.: November 2002).

<sup>3</sup>OMOI had 92 employees on March 28, 2003, when we made our survey available. Eighty of these employees responded to the survey.

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an oversight and enforcement capability for energy markets. We performed our review from October 2002 through June 2003 in accordance with generally accepted government auditing standards. (See app. I for a more detailed discussion of our scope and methodology and app. II for a copy of the OMOI employee survey with the quantitative results.)

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## Results in Brief

OMOI has made strides in putting an energy market oversight and enforcement capability in place, but these efforts are largely in their formative stage, and work remains to ensure that they will be comprehensive and systematic. In its first year, OMOI has focused primarily on outlining its vision, mission, and primary functions; developing its basic work processes; integrating its use of an array of tools to oversee the markets; and hiring new staff with market experience or expertise. OMOI is continuing to hire staff, assess its information needs, and develop its working relationships with others, such as the electricity industry's market monitoring units, that have related or overlapping responsibilities. Still, the office has work to do to clearly define its role and how it will achieve its mission. For example, OMOI has not yet decided on the level of detail at which it will review electricity markets, particularly the extent that it will rely on the market monitoring units to review daily market transactions for market manipulation and other anticompetitive behavior. This decision has substantial implications for the office's data, technology, resource, and staff skill mix needs. Moreover, OMOI has not yet formalized its processes and procedures. At this point, its processes are largely informal and ad hoc, and it has few written procedures to ensure that its efforts are coordinated, systematic, and well understood by its staff and stakeholders. OMOI has had some early accomplishments, for example, a \$20 million civil penalty against a company for anticompetitive behavior. However, it is difficult to judge how effective the office will be until its role and major processes are clearly set out. We are making recommendations to FERC aimed at more clearly defining OMOI's role and instituting formal processes and written procedures.

FERC is making progress toward addressing its considerable human capital management challenges. FERC's success in human capital management is important because the extent to which the agency can effectively carry out its mission in a changing environment, such as the move to competitive energy markets, depends on its ability to adjust its staff skills and abilities in a difficult context. For example, over half of FERC's workforce will be eligible to retire by 2007, with a loss of considerable institutional knowledge. In response, FERC is taking steps to

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help transform its workforce. For example, it has expanded its use of certain personnel flexibilities, such as a student loan repayment program and recruiting and retention bonuses, and is considering additional flexibilities that could improve its ability to recruit and retain needed expertise. More importantly, since we issued our June 2002 report, FERC has developed a human capital plan that is a promising first step toward strategically managing the agency's workforce. However, the plan does not contain some elements key to its successful implementation, including (1) details on specific activities and resources needed to implement the agency's human capital initiatives<sup>4</sup> and (2) results-oriented measures that can be used to track the agency's progress in implementing its initiatives and evaluate their effectiveness. The agency also has not established time frames for many of its initiatives. We are recommending that FERC revise its plan to include these elements.

We provided FERC with a draft of our report for review and comment. In its written comments, FERC generally agreed with our conclusions and recommendations.

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## Background

The natural gas and electricity industries perform three primary functions in delivering energy to consumers: (1) producing the basic energy commodity, (2) transporting the commodity through pipelines or over power lines, and (3) distributing the commodity to the final consumer. A range of federal, state, and local entities regulate different aspects of these functions. While generation siting, intrastate transportation, and retail sales are generally regulated by state or local entities, wholesale sales and interstate transportation generally fall under federal regulation, primarily by FERC.<sup>5</sup> Under federal law, FERC is responsible for ensuring that the terms, conditions, and rates for the interstate transportation of natural gas and electricity, certain sales for resale of natural gas, and wholesale sales of electricity in interstate commerce are "just and reasonable." Other federal agencies also play an important role in regulating energy markets. For

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<sup>4</sup>Human capital initiatives are the programs, policies, and processes that agencies use to build and manage their workforces.

<sup>5</sup>FERC was established in 1977 as a successor to the Federal Power Commission and is an independent regulatory agency. It also regulates the interstate transmission of oil by pipeline; licenses and inspects private, municipal, and state hydroelectric projects; and approves site choices as well as decisions to abandon interstate pipelines and related facilities no longer in use.



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example, the Commodity Futures Trading Commission regulates commodity futures and options markets in the United States and protects market participants against manipulation, abusive trade practices, and fraud.

For nearly a century, the natural gas and electricity industries were regulated as natural monopolies and dominated by a relatively few, large public utilities that produced, transported, and sold natural gas and electricity to the ultimate users.<sup>6</sup> This monopoly structure controlled the entry, prices, and profits of industry participants. Under this regulatory framework, FERC established individual utilities' terms, conditions, and rates for transportation and wholesale sale of natural gas and electricity in interstate commerce. To ensure that the rates these utilities charged were just and reasonable, FERC based the rates on the utilities' cost to provide the service plus a fair return on investment, which is generally referred to as cost-of-service regulation.

With technological, economic, and policy developments over the past two-to-three decades, these industries have undergone a transition—commonly known as “restructuring”—from this highly regulated environment to one that places greater reliance on competition to determine entry, prices, and profits. Natural gas was first to make the shift, facilitated by passage of the Natural Gas Policy Act of 1978 and subsequent FERC orders in 1985 and 1992 that opened pipeline transportation to all on equal terms and required pipeline companies to completely separate or “unbundle” their transportation, storage, and sales services. As a result, natural gas became a commodity bought and sold separately from its transportation.

The electricity industry has experienced similar restructuring, starting about the same time but evolving more slowly than the natural gas industry. The Public Utility Regulatory Policies Act in 1978 introduced competition by requiring electric utilities to buy electricity produced by nonutility, electric power generators. Then in 1992, the Congress passed the Energy Policy Act, authorizing FERC to require utilities, on a case-by-case basis, to allow competitors to use their transmission lines for wholesale sales of electricity. In 1996, FERC ordered that electric transmission systems be opened to all qualified wholesale buyers and sellers of electric energy.

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<sup>6</sup>A natural monopoly is a company that becomes the only supplier of a product or service because the nature of that product or service makes a single supplier more efficient than competing ones.

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FERC also required utilities to “functionally unbundle” their generation and transmission businesses to prevent discriminatory practices, such as not allowing competitors equal access to transmission lines. One option FERC provided the utilities to help them achieve unbundling was to transfer management of their transmission lines to an independent system operator (ISO) that would manage the system without any special interests and for all users’ benefit. Since 1996, six ISOs have formed and are operating, each with its own set of operating rules.<sup>7</sup> Of these, four ISOs—California; New England; New York; Pennsylvania, New Jersey, and Maryland Interconnect (PJM)—operate interstate wholesale electricity markets in which electricity suppliers and buyers submit bids to sell and buy power.

In 1999, FERC issued an order encouraging all privately owned electric utilities to voluntarily place their transmission facilities under the control of a broader market entity called a regional transmission organization (RTO). As a result, ISOs created under a previous FERC order would be supplanted by larger RTOs, which would cover the entire nation. The rationale behind FERC’s approach to forming RTOs was that the nation’s transmission systems should be brought under regional control in order to eliminate the remaining discriminatory practices in use, better meet the increasing demands placed on the transmission system, improve management of system congestion and reliability, and achieve fully competitive wholesale power markets. FERC is in the process of trying to establish these organizations to cover the continental United States and has currently approved two RTOs—Midwest ISO and PJM.<sup>8</sup>

In approving the formation and operation of ISOs and RTOs, FERC requires these organizations to, among other things, establish market monitoring units. These units are to provide for objective monitoring of the markets operated by the ISO or RTO to identify market design flaws, market power

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<sup>7</sup>These ISOs are the California ISO, ISO New England, Midwest ISO, PJM, New York ISO, and the Electricity Reliability Council of Texas (ERCOT) ISO. ERCOT established an ISO in 1996 to satisfy the requirements of the Public Utility Commission of Texas for deregulating the wholesale electricity market in that state. FERC has limited jurisdiction over the ERCOT region because its market is essentially intrastate. FERC initially approved the Midwest ISO and PJM as ISOs and has since approved them to operate as regional transmission organizations.

<sup>8</sup>As of December 2002, the Midwest ISO operated in all or parts of Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Montana, North Dakota, Ohio, South Dakota, Virginia, Wisconsin, and Manitoba (Canada). PJM operates in Delaware, District of Columbia, New Jersey, Maryland, Ohio, Pennsylvania, Virginia, and West Virginia.

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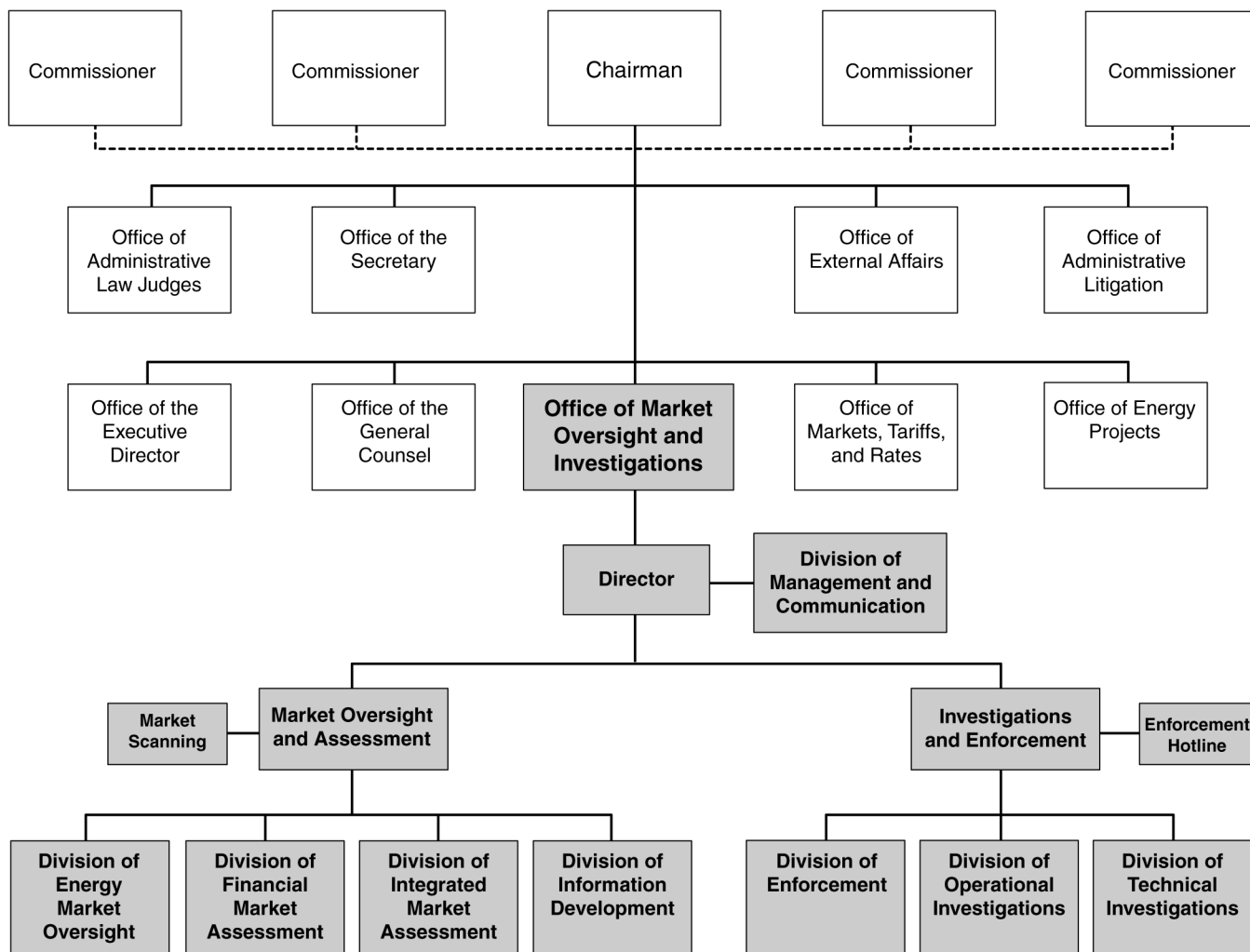
abuses, and opportunities for efficiency improvement. The market monitoring units of four ISOs or RTOs—California, New England, New York, and PJM—have been operating for several years under FERC’s approval. FERC has also approved a market monitoring unit for the Midwest ISO, but Midwest does not currently operate a centralized power market (it plans to do so by December 2003). FERC approves the units’ market monitoring plans and requires the units to periodically report on their monitoring activities.

In July 2002, FERC issued a notice of proposed rulemaking to provide a standard market design for all electric transmission providers. FERC’s fundamental goal in this initiative is to create “seamless” wholesale electricity markets, nationwide, that allow sellers to transact easily across transmission boundaries and allow customers to receive the benefits of a lower cost and more reliable electricity supply. Accordingly, FERC’s standard market design proposal contains a wide range of rules to standardize the structure and operation of wholesale electricity markets and transmission services. Among other things, it (1) describes the rules for how a portion of the nation’s electricity will be exchanged in organized markets, (2) defines a new transmission service, and (3) establishes new market power mitigation and monitoring requirements. The proposal has been highly controversial. FERC estimates that the proposed standard market design rule has generated about 1,000 sets of formal comments reflecting concerns and reservations about the scope and details of the proposal. In April 2003, FERC issued a white paper explaining how it intends to change its proposal in response to the comments and concerns that had been raised. When the white paper was issued, FERC expected the final rule to be promulgated later in the year. However, in commenting on our draft report, FERC said that it is planning to hold technical conferences in different regions of the country this fall and has postponed the issuance of any final rule.

With the opening of pipelines and transmission lines, other energy producers and marketers began to compete with the traditional utilities to the point that a complex structure of formal and informal primary and secondary energy markets has evolved. As competition has increased, FERC has allowed more and more producers and marketers to sell their energy at prices determined in the marketplace. This evolution to competitive energy markets is requiring FERC to fundamentally change how it does business. With the shift to market-based prices for natural gas and electricity, FERC has concluded that its approach to ensuring just and reasonable prices has to change: from one of reviewing individual

companies' rate requests and supporting cost data to one of proactively monitoring energy markets to ensure that they are working well to produce competitive prices. FERC established OMOI to coordinate and bring about this shift in the agency's energy market oversight efforts. Like the agency's other major offices, OMOI reports directly to the Chairman of FERC (see fig. 1).

**Figure 1: OMOI's Organizational Chart and Position in FERC's Organizational Structure**



Source: FERC.

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OMOI has organized its staff into eight divisions, which are grouped into three main units: (1) Market Oversight and Assessment, (2) Investigations and Enforcement, and (3) Management and Communication (see shaded area of fig. 1). The Market Oversight and Assessment unit performs a variety of tasks related to monitoring energy markets, monitoring financial markets, researching new data sources, publishing reports on market surveillance, and assisting with ongoing investigations. The Investigations and Enforcement unit performs a variety of tasks related to investigating market abuse, conducting audits of entities under FERC's jurisdiction, and manning the enforcement hotline. Finally, the Division of Management and Communication and the OMOI director's office provide administrative and management support.

OMOI's budget request for fiscal year 2003 is about \$13.5 million and provides funding for 110 staff years, which includes \$500,000 in contracting services. For fiscal year 2004, FERC has requested a budget for OMOI of about \$14.3 million and 110 staff years, which includes \$1 million in contracting services.

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## **FERC Has Made Progress, but Work Remains to Ensure That Its Oversight and Enforcement Capability Is Comprehensive and Systematic**

With the formation of OMOI, FERC is making headway in establishing an oversight and enforcement capability for competitive energy markets. OMOI has taken a significant step forward in setting out its vision, mission, and primary functions as a framework for comprehensively overseeing the markets; developing its basic work processes; and beginning to use an array of tools to oversee the markets. The office also has almost completed its staffing to authorized levels. Nonetheless, these efforts are largely in their formative stage and OMOI continues to hire additional staff, improve its oversight tools, and adjust its processes and procedures. Additional actions to formalize the office's work processes and procedures and to more clearly define its role would help ensure that its efforts to oversee energy markets are systematic and comprehensive. In addition, OMOI's role largely determines its resource, information, technology, and staff skill mix needs.

**OMOI Is Planning a Comprehensive Approach to Overseeing Energy Markets, but Important Steps Have Not Been Taken to Clearly Define Its Role**

OMOI’s statements of its vision, mission, and functions set out the framework for a comprehensive market oversight and enforcement approach. According to the statements, OMOI plans to analyze and assess both market performance and market rules in the broader context of the markets’ overall efficiency and effectiveness and market behavior and compliance with rules at the individual market participant level. (See table 1.)

**Table 1: OMOI’s Statements of Its Vision, Mission, and Functions**

Vision	Vigilant oversight and vigorous enforcement of proper market rules ensure dependable, affordable, competitive energy markets to benefit end use customers and other participants.
Mission	Guide the evolution and operation of energy markets to ensure effective regulation and protect customers through understanding markets and their regulation, timely identification and remediation of market problems, and assured compliance with Commission rules and regulations.
Functions	<p>Assess market performance through</p> <ul style="list-style-type: none"> <li>• analyzing market structures and proposing policies for improvement,</li> <li>• acquiring and analyzing public and proprietary information data bases,</li> <li>• conducting market research and developing market models and simulation,</li> <li>• analyzing effects of current and proposed regulations, market rules, and policy options, and</li> <li>• advising the Commission on the market effects of current and proposed policies.</li> </ul> <p>Ensure conformance with Commission rules through</p> <ul style="list-style-type: none"> <li>• verifying compliance with Commission rules and reporting requirements,</li> <li>• investigating actions of market participants,</li> <li>• facilitating resolution of disputes among market participants and regulated entities, and</li> <li>• enforcing Commission rules that govern the markets.</li> </ul> <p>Produce internal and external reports</p> <ul style="list-style-type: none"> <li>• describing the state of energy markets,</li> <li>• reviewing and analyzing market occurrences and trends,</li> <li>• providing early warning of vulnerable market conditions, and</li> <li>• making recommendations on the functioning and governance of energy markets.</li> </ul>

Source: FERC.

These statements were a starting point for planning and organizing OMOI’s activities and serve to provide a concise, if general, outline of the office’s planned oversight and enforcement approach. OMOI decided to begin operating under this broad framework and to work out more details as it became more organized and gained experience with the markets and available data and oversight tools. At this point, OMOI has not provided

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additional details in writing on how it will carry out these functions to achieve its mission.

However as OMOI moves forward, several issues have not been addressed that are important to the office's credibility and to ensuring that it comprehensively carries out its planned approach. Recognizing that responsibility for making energy markets work well is shared with the industries (including the ISOs and RTOs and their market monitoring units), individual market participants, the states, other FERC offices, and other federal agencies, it is important that OMOI clearly define its role in achieving comprehensive oversight of the markets. This role and how OMOI will carry it out largely determines its resource, information, technology, and staff skill mix needs.

First, OMOI has not directly and clearly connected its vision, mission, and functions to FERC's statutory responsibilities for ensuring that wholesale natural gas and electricity prices are just and reasonable. Second, OMOI has not defined undue exercise of market power, although identifying and addressing the exercise of market power is one of the major aspects of market oversight, especially when the markets are in transition. Third, the statements do not explicitly recognize that an important function of the office will be to integrate its work with that of the industries' market monitoring units, other agencies such as the Commodity Futures Trading Commission, and other parts of FERC, such as the Office of Markets, Tariffs, and Rates. Fourth, OMOI is still deciding at what level of detail it will review market transactions as it performs its oversight. Fifth, the office has not developed outcome or results-oriented performance measures that express what the office will be working to achieve and that can be used to assess its progress in carrying out its goals and objectives.

### FERC Has Not Clearly Defined Just and Reasonable Prices in a Competitive Marketplace

FERC is responsible for ensuring that certain sales for resale of natural gas and wholesale sales of electricity in interstate commerce are just and reasonable. With the move to competitive markets, these prices are generally determined in the marketplace rather than set by FERC. FERC has recognized that this change means that it needs a new approach to ensuring that prices are just and reasonable and has begun to provide some guidance on what just and reasonable means in the context of competitive markets, most recently in its proposed rule on standardizing electricity markets. Statements in the proposed rule indicate that just and reasonable prices are those produced by structurally competitive markets. However, the statements do not define what a structurally competitive market is. In addition, these statements concern the operations of market monitoring

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units rather than FERC's own role and responsibilities. Furthermore, the proposed rule has been highly controversial and may be substantially delayed and/or modified.

The heads of the market monitoring units told us they recognize the difficulty of defining just and reasonable prices. They also said that they believe FERC had made progress in doing so. However, they generally believed that FERC had not yet gone far enough. For example, the head of the California ISO's monitoring unit told us that for FERC to define what it will consider just and reasonable prices in a competitive marketplace is critical to achieving the Federal Power Act's goal. She stated that a clear standard for just and reasonable is also critical to performing monitoring and oversight functions, and, without such a standard, existing ISOs or RTOs cannot move forward and other geographical areas will have no confidence in ISOs or RTOs and will not wish to develop them. On the other hand, the heads of the ISO New England, PJM, and New York ISO monitoring units stated that FERC should not develop overly detailed or prescriptive definitions that would reduce needed flexibility. The heads of the PJM and ISO New England units said that FERC should instead develop a strong policy statement or paper defining the term at a general or theoretical level and leave it to the market monitoring units to operationalize or put it into practice. Similarly, the head of the New York ISO unit cautioned that, with overly prescriptive criteria, market participants can structure behavior to avoid specific rules, conditions, or definitions, while engaging in behavior that would not be deemed acceptable. He added that, in orders that it has issued in individual cases, FERC has established precedent that prices can be considered just and reasonable when they are the product of workably competitive markets, and determining whether a market is competitive requires some room for considering individual circumstances.

FERC officials, including OMOI managers, told us that they recognize the importance of defining just and reasonable prices in a competitive energy marketplace but are finding it difficult to do. For example, the Senior Energy Policy Advisor to the Chairman of FERC told us that FERC has been trying to define the term for several years. The Director of OMOI said that OMOI has the operational responsibility to give guidance on just and reasonable rates, but agreed that an important consideration for the agency is the level of detail at which it needs to be defined.

## FERC Has Not Clearly Defined Market Power

In its proposed standard market design rulemaking, FERC provides some details on what it considers market power. In the proposed rule, FERC



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states that market power is the ability to raise price above the competitive level. The agency further states that identifying market power with precision is difficult, both because it is difficult to identify the competitive price (which should recover both fixed and variable costs over the long run) and because it can be difficult to isolate the impact of one entity on the competitive market. FERC adds that, in the proposed rule, it is incorporating the concept of when to intervene in the markets, rather than defining what constitutes market power. The market monitoring units would review market data, such as bidding patterns, to identify and intervene in market situations in which market power could be occurring. In its April 2003 white paper explaining the changes it planned to make in the final standard market design rule, FERC said that it would require the ISOs and RTOs to have clear and enforceable rules to define and police market manipulation and gaming strategies by market participants trying to unduly exercise their market power. The white paper also said that the ISOs and RTOs would be required to have a clear set of rules governing market participant conduct with the consequences for violations clearly spelled out. The white paper then provided areas of anticompetitive behaviors—such as physical and economic withholding of supplies—that, at a minimum, should be included.

Again, the heads of the market monitoring units did not believe that FERC had yet gone far enough in defining market power. The head of the California ISO monitoring unit said that FERC needs to define what it will consider market power, and that the definition must be agreed on in order for FERC to perform its market development and oversight obligations. She added that inappropriate or anticompetitive behavior need not be defined through an exhaustive list of specific market behaviors but rather through a general set of characteristics. According to the heads of the market monitoring units of ISO New England and PJM RTO, FERC should develop a policy statement or paper on market power rather than a highly detailed definition. In contrast, the head of the NY ISO's market monitoring unit stated that FERC needs to define what it will consider market power only in the context of specific market monitoring proposals. He told us that his market monitoring unit has been very successful in preventing market power by using very specific tests for market power abuse, enabling the unit to take appropriate action with minimal delay. He added that FERC should not adopt generic definitions that would restrict the ability of the New York ISO to implement the tests and market mitigation measures that have been approved for its use.

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The Director of OMOI agreed that a clarifying definition of market power to communicate the parameters of acceptable market behavior is needed. He added that developing such a definition is complex, and his office has to be careful in deciding what constitutes market power abuse because there is a necessary element of judgment involved in determining what is and what is not abuse in individual cases that should not be eliminated with a definition.

### OMOI Has Not Explicitly Set Out How It Will Integrate Its Work with That of Others

An important OMOI function is to integrate its work with that of others inside and outside of FERC who also have a role in market oversight or who carry out related responsibilities. For example, FERC's Office of Markets, Tariffs, and Rates has major responsibilities relating to building competitive energy markets and authorizing companies to participate in those markets. The office is currently leading FERC's effort to establish a standard market design for wholesale electricity markets. Thus, it is important for the offices to work together so that OMOI can (1) better understand the markets that are being created and that OMOI is to oversee and (2) provide effective input from an oversight standpoint into structuring the markets. In addition, OMOI officials told us that they share oversight responsibility with other federal agencies—particularly the Commodity Futures Trading Commission—in areas where the financial and futures markets overlap or affect the physical natural gas and electricity markets. For example, OMOI officials stated that OMOI, along with the Commodity Futures Trading Commission and the Department of Justice, would be responsible for detecting the false reporting of natural gas prices or volumes to index publishers (see app. III). Moreover, as we discuss later in this report, OMOI is relying heavily on the market monitoring units to oversee electricity markets.

OMOI has various initiatives under way to build its working relationship with these parties. However, because of the market monitoring units' substantial role in its market oversight approach, OMOI has devoted considerable attention to improving its working relationship with these units, and its efforts with respect to other FERC offices and other federal agencies are in the early stages. For example, in responding to our survey, about 50 percent of OMOI managers and staff expressed dissatisfaction with communication with other FERC offices. (About 26 percent were satisfied, about 14 percent were as equally satisfied as dissatisfied, and 10 percent had no basis to judge.) In providing more detailed responses, several OMOI staff indicated that they thought communication and cooperation between OMOI and FERC's Office of Markets, Tariffs, and Rates was a problem. In addition, the head of a market monitoring unit told

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us that he has had to inform OMOI staff about the issuance of orders initiated in other FERC offices.

The Director of OMOI told us that he understands these concerns about the office's working relationship with other FERC offices. According to the Director, OMOI wanted to first get its "act together" before reaching out to the other offices. He added that OMOI has been working hard the past couple of months with FERC's Office of Markets, Tariffs, and Rates and Office of the General Counsel to establish more formal connections.

OMOI officials told us that they plan to coordinate their work with other federal agencies to better incorporate their knowledge and views about related market activities. For example, the Director of OMOI's Division of Financial Market Assessment told us that he would like to develop a formal information-sharing arrangement with the Commodity Futures Trading Commission so that OMOI has better access to financial information. He said that while FERC has limited jurisdiction over financial markets, OMOI wants to monitor these markets because the financial marketplace affects the health of wholesale electricity and natural gas markets. According to OMOI officials, they have regularly scheduled meetings with the Federal Trade Commission and the Department of Justice to discuss overlapping issues, specifically focusing on antitrust and market manipulation practices.

As we previously reported, events such as the collapse of the Enron Corporation bring to light the importance of clarifying jurisdiction across the federal government as restructuring progresses. As we pointed out, effective coordination between FERC and the Commodity Futures Trading Commission is particularly important because of jurisdictional uncertainties regarding the oversight of on-line trading activities, such as those previously operated by Enron. In the same way, we also noted that in a Senate Governmental Affairs report and memorandum,<sup>9</sup> and other congressional hearings, both FERC and the Security and Exchange Commission have been questioned about their lack of diligence in following through on Enron's activities—even though they had indications of improper conduct. The report commented that effective coordination

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<sup>9</sup>Report of the Staff to the Senate Committee on Governmental Affairs, *Financial Oversight of Enron: The SEC and Private-Sector Watchdogs*, Oct. 8, 2002, and Majority Staff Memorandum to the Committee on Governmental Affairs, *Subject: Committee Staff Investigation of the Federal Energy Regulatory Commission's Oversight of Enron Corp.*, Nov. 12, 2002.

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between agencies prevents companies from exploiting the lack of oversight in areas where neither agency may have taken full responsibility.

### OMOI Has Not Decided on the Level of Detail at Which It Will Review Market Transactions

According to OMOI, its primary functions are to assess market performance, ensure conformance with Commission rules, and produce internal and external reports on the results. This description of its functions is general and broad at this point. According to OMOI's Deputy Director for Market Oversight and Assessment, as the office builds its capability, it must decide at what level of detail it should monitor the markets. This issue largely centers around whether OMOI should operate at a high level—that is, assess the markets' overall performance and major outcomes, such as competitiveness, supply, and price, and leave the detailed monitoring to the market monitoring units—or “get down in the weeds” to review market transactional data as market monitoring units do for their individual markets. The Deputy Director anticipates that OMOI will operate somewhere in between these two levels. The level at which OMOI reviews the markets affects both the number and skill mix of the staff that OMOI needs. For example, the head of the New York ISO's market monitoring unit told us that, by the end of 2003, his unit will have 30 staff, consisting of engineers, economists, business majors, analysts, and information technologists, to cover the New York market alone. He indicated that OMOI would need many more staff than this if it plans to review the markets at the same level of detail on a national basis.

The responses to our survey and our discussions with OMOI staff indicate that opinions vary on this issue. In responding to our survey, 57 percent of OMOI's managers and staff said that top management had clearly defined what role OMOI will play in monitoring markets, while about 32 percent disagreed. (The remaining 11 percent neither agreed nor disagreed.) Additional comments provided for our survey indicate that agreement has not been reached on how OMOI should carry out that role. Survey respondents expressed concerns that OMOI was not reviewing and analyzing market data in enough depth. For example, some OMOI staff said that OMOI should be continuously reviewing market data on a real-time basis to identify market power abuses. During our interviews, OMOI managers also expressed different opinions about the issue. For example, an OMOI division director told us that the office will examine similar data at a level similar to what the market monitoring units currently do, and that OMOI has most of the data it needs to do so. On the other hand, another division director told us said that he was not certain what the office's vision for overseeing the markets will be, and that he was not sure if it has the information technology capability to perform detailed analysis of market

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transactions like the market monitoring units do. He also stated that OMOI would need to have staff who performed this work on a daily basis in order to become skilled at it, and that they could not gain this expertise on an ad hoc basis.

OMOI's stakeholders have also expressed varying views. For example, the heads of the market monitoring units have generally suggested that OMOI leave the detailed monitoring of market transactions to them and focus on broader, national issues. On the other hand, others such as consumer groups have called for FERC to closely monitor the markets to prevent market abuse or violations by market participants.

#### OMOI Has Not Yet Developed a Comprehensive Set of Results-Oriented Performance Measures

According to FERC's *Annual Performance Report for Fiscal Year 2001* (March 2002), the agency recognizes that accountability requires strong performance measures of the following two types:

- output measures that specify targets for the specific work items that the agency produces—such as orders, decisions, and environmental reviews—and for when it produces them, and
- results-oriented or outcome measures that specify the results that the agency is working to create in the larger world.

FERC has been developing output measures for many years for its strategic and annual performance plans but has established few outcome measures in the energy markets oversight area. The agency has stated that developing outcome measures is proving to be difficult but believes that it is possible. In our June 2002 report, we recommended that FERC develop such measures to assess how well it is doing in achieving its goals and objectives for overseeing competitive energy markets.

Although FERC developed new performance measures for its market oversight goals and objectives for fiscal years 2003 and 2004, the new measures are generally not outcome-oriented and do not lend themselves to assessing OMOI's effectiveness. For example, one key performance measure is to "track performance of natural gas and electric markets," while another is to "assess performance of natural gas and electric markets." The performance targets for these measures are to "issue market surveillance reports to the Commission twice each month" and "publish regular summer and winter seasonal market assessments, state of the market reports, and other reports as conditions warrant," respectively. While it can be determined if OMOI issues these products, the products'

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mere issuance does not indicate whether OMOI is achieving its goal of protecting customers and market participants through vigilant and fair oversight of energy markets. Although outcome measures most importantly allow the agency, the Congress, and other stakeholders to assess OMOI's performance in carrying out its mission, establishing these measures also helps to more clearly communicate what the office is working to achieve.

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### OMOI Implemented Informal Processes and Procedures to Begin Its Work

OMOI does not yet have formal processes and written procedures to direct its staff in their activities. Instead, it is using a series of key meetings and internal and external reports. According to OMOI managers, staff receive direction and guidance as they prepare for and participate in these meetings and help prepare these reports.

The key meetings are of two types: (1) regularly scheduled meetings of OMOI managers and staff and (2) OMOI's closed-door meetings with the FERC commissioners. The key regularly scheduled meetings have been weekly. However, according to the Director of OMOI, morning meetings to discuss plans for the day's activities are also becoming important to the office's operations. The predominant subject of the weekly meetings alternates from electricity markets one week to natural gas markets the next. At these meetings, which can last for several hours, OMOI managers and staff share the results of their market oversight activities and projects since the last meeting. Staff also use the weekly meetings to make a variety of decisions, including (1) whether the oversight staff should follow up on an issue with the appropriate market monitoring unit and/or begin collecting and analyzing their own data on the issue or (2) whether the enforcement staff should begin investigating a situation or should audit market participants' compliance with certain FERC requirements. They also identify issues to be discussed in the closed-door meetings. At the closed-door meetings, OMOI discusses national and regional issues concerning electricity and natural gas markets—such as changes in prices and the adequacy of supply and infrastructure—with the commissioners. The commissioners are also informed of any complaints received, progress on significant enforcement investigations, and any new investigations.<sup>10</sup>

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<sup>10</sup>According to OMOI staff, FERC patterned its closed-door meetings after similar meetings held at the Commodity Futures Trading Commission.

OMOI's also prepares a series of market oversight reports or products on a daily to annual basis (see table 2). These reports are intended to (1) help OMOI staff and the FERC commissioners stay abreast of market developments and activities and (2) inform market participants and others of market performance issues and OMOI's activities. OMOI managers also believe that the information needed for these reports helps inform the office's staff as to the types of analyses that they need to perform and how their work is linked.

**Table 2: OMOI's Principal Oversight Reports or Products**

Type of report	Timing/purpose/content
Daily	Produced daily from news reports and publicly available energy market data to keep FERC commissioners and staff aware of current events in the electricity and natural gas markets. OMOI has been producing these reports almost from its formation.
Biweekly market surveillance	Generally produced every 2 to 3 weeks to brief the FERC commissioners on emerging and ongoing national and regional energy market issues—such as high prices and energy companies' financial condition. The reports, which are in the form of briefing charts, also present information on OMOI's major market monitoring and enforcement activities, including major cases and overall statistics on the number of investigations and complaints and inquiries received from market participants and others. OMOI has been producing these reports since June 2002.
Seasonal assessment	Produced as public documents twice a year—once during the summer cooling season and once during the winter heating season. These reports seek to identify issues important to electricity/natural gas customers and market participants and to signal the areas of greatest concern to FERC at the time. The reports are intended to (1) provide FERC with an early warning on market issues, (2) guide short-term oversight and investigation priorities, and (3) communicate priorities to market participants. The first of these reports by OMOI was issued in late January 2003 on natural gas markets. OMOI had initially intended to issue the report in November 2002 at the beginning of the winter heating season. The report was delayed as the agency deliberated on what type of information should be in the report and how it should be presented. On issuance, the energy trade press produced more than a dozen articles outlining the report's major findings and conclusions as to the challenges facing the markets. The report also received some criticism in the press as providing little new information, especially on market conditions and performance at the end of 2002 and whether conditions had improved or worsened since 2001.
Annual state of the markets	To be produced annually and made available to the public. According to the Director of OMOI, the first such report by OMOI may be issued in September 2003. (FERC previously issued a state of the markets report in March 2000.) As currently planned, the reports are to give a comprehensive review of the year and provide measures for energy market performance.

Source: GAO analysis of FERC information.

In our survey of OMOI managers and staff, we asked if the office had established effective processes to oversee natural gas and electricity markets. Just slightly over half—about 53 percent—said that the office had established effective processes to oversee the markets. About 28 percent did not believe that effective processes had been established for electricity,

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while 22 percent did not believe they had been established for natural gas. The remaining respondents said that they neither agreed nor disagreed that effective processes had been established or said that they had no basis to judge. In providing more detailed responses to our survey, several OMOI staff commented on the office's processes and procedures. For example, one respondent stated that processes and procedures do not exist, and that most of what is done is ad hoc. Another said that the office needs adequate planning tools to be efficient and effective, while another stated that no operational market monitoring plan has been developed for electricity or natural gas and to the extent that any plans for the office's operations have been developed, they are at a high level and not suitable for monitoring markets. According to OMOI's Deputy Director for Market Oversight and Assessment, his divisions plan to establish a consistent process to monitor the electric, natural gas, and related financial markets, as well as both strong priority setting and management processes.

FERC officials, including OMOI managers, agreed that OMOI needs to formalize its processes. However, they said that they did not want to do so too quickly because OMOI is a new office and constantly learning. The Senior Energy Policy Advisor to the Chairman of FERC told us that formalizing OMOI's processes is a matter of timing. She stated that she would not want the office to "lock down" its processes until it is sure that they are working well.

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### OMOI Has a Variety of Oversight Tools and Is Working to Improve Them

To carry out its oversight activities, OMOI's major tools are its (1) Market Monitoring Center, (2) enforcement hotline, (3) investigations and operational audits, and (4) partnership with the market monitoring units. Although these tools potentially provide OMOI with the means to oversee the energy markets, they have some significant limitations in coverage and available data. For example, the Market Monitoring Center lacks important market information, and market monitoring units do not operate in most parts of the United States. OMOI is aware of and is working to address these limitations. Opportunities also exist to use these tools more systematically to improve their effectiveness.

### The Market Monitoring Center Is an Important Research Tool but Lacks Critical Data to Systematically Monitor the Markets

Patterned after market operation centers of the ISOs and major energy trading companies, the center uses computers and various market reporting services and software packages to make large amounts of data on natural gas and electricity markets available in a useable format. For example, electricity market information includes prices on the spot market and for futures contracts, plant outage information, business news, and



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historical data for trend analysis. Natural gas market data includes spot and futures prices, market commentary, storage levels, imports and exports, and supply/demand statistics. In addition, several weather services are available to monitor changing conditions nationwide, as weather and climate affect energy supply and demand in both spot and futures markets.

OMOI's staff uses the Market Monitoring Center as a research tool in carrying out their assigned projects. During these projects, they often review the center's wholesale price and other market information, such as the data on power plant outages and transmission constraints, for anomalies. These anomalies generally include large price increases or spikes or unexpected constraints in areas of the national grid of electric transmission lines or the natural gas pipeline network. For example, OMOI monitored a natural gas price spike in February 2003 and tracked its effects on the electricity market in the New York area. When anomalies are identified, OMOI staff investigate to determine the cause by calling the applicable market monitoring unit or using data in the center or otherwise available to FERC. Depending on the results of this examination, the results are presented to the commissioners and other agency managers as an early warning of market problems or OMOI initiates a preliminary investigation or operational audit. In some cases, OMOI staff has worked with ISO or RTO representatives to change market rules that led to the identified anomaly. OMOI may also become aware of a market anomaly or potential market problem through another source, such as a market monitoring unit, and use the center to collect additional data on it.

OMOI also uses a number of market performance measures or metrics to graphically capture market trends. OMOI is working to develop additional metrics and anticipates that, with a more comprehensive set of these metrics, it will be able to inform the FERC commissioners and stakeholders such as the Congress, market participants, and the financial markets as to how well the energy markets are working and give early warning of problems.

While the center's information is substantial, it is significantly limited in certain areas. For example, the center has limited up-to-the-minute information on electricity prices, fuel costs, and spot and futures contracts prices. It also has limited information on the operations of the electric system. Operations information, such as data on power plant outages and the availability of capacity on transmission lines, is important to detect and analyze changes in the markets and to identify potential anticompetitive behaviors.

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In addition, the center does not have access to nonfederal information needed to assess reliability of the electric power grid and monitor overall electricity market performance. This information includes data system frequency (a measure of how well the system is balancing electricity demand and supply), power flows on key transmission lines, and transmission between parties. According to OMOI officials, market performance and electricity system reliability are mutually dependent, and such information would help them to determine whether market participants are behaving anticompetitively. The center also does not have access to a third party source for price or quantity information on most bilateral transactions of wholesale electricity, which are the major portion of market transactions. However, FERC has revised its filing requirements for utilities to require them to electronically file quarterly reports on their electric power sales, including information on prices and quantities.

FERC is continuing to expand the information available in the center. It has added four information services since our June 2002 report. For example, Genscape measures power plant operations for selected power plants. In addition, OMOI is continuing to assess its energy market information needs. During fiscal year 2002, FERC completed studies to take stock of the agency's current and future market information needs. As part of that effort, FERC formed teams to identify information that FERC currently collects and additional information that it might need to perform its duties related to restructured markets. According to OMOI officials, the office is using the information from these teams as a baseline to assess its overall market information needs.<sup>11</sup>

Although these data shortcomings significantly limit the Market Monitoring Center's potential use for comprehensive and real-time monitoring of the markets, some OMOI staff knowledgeable about the center's operations and use highlighted the potential to use the center more systematically. For example, a process is currently not in place to use the center to continuously monitor the markets, and written protocols have not been developed for what data are to be reviewed and what actions OMOI staff should take when certain market situations are noticed. Currently, OMOI staff use the center intermittently as they do research for their projects. According to an OMOI staff person, the center is not in use at times.

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<sup>11</sup>See our June 2003 report, *Electricity Restructuring: Action Needed to Address Emerging Gaps in Federal Information Collection*, [GAO-03-586](#), for a more detailed discussion of the limitations in FERC's electricity information and its authority to collect it.

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## OMOI Is Incorporating the Enforcement Hotline into Its Market Oversight Efforts

FERC's primary purpose in creating the hotline was to provide a mechanism to informally receive complaints or inquiries from industry and the public so that the agency can deal with concerns more quickly and with fewer resources than would be required under FERC's formal complaint process. Since the hotline's creation in FERC's Office of General Counsel in 1987, the number of complaints and inquiries has increased substantially. For example, the hotline received 145 complaints and inquiries in fiscal year 1996, compared with 584 in fiscal year 2002. FERC's goal has been to respond to and resolve the complaints and inquiries very quickly. For example, FERC set a goal in its fiscal year 2003 performance plan to resolve 80 percent of the complaints and inquiries within 1 week of the initial contact. When a complaint or inquiry is received (by telephone, letter, or E-mail), an attorney is assigned to investigate. The attorney contacts the other party, usually the same day, and attempts to resolve the issue. If the issue cannot be resolved through this informal process, the complainant can file a formal complaint or, if OMOI finds indications of a more egregious violation of rules or regulations, it can launch an investigation into the matter.

With the hotline's transfer to OMOI in August 2002, it has become an important market oversight tool by providing market participants the opportunity to anonymously and informally make complaints to OMOI about anticompetitive actions by other parties. According to the Enforcement Hotline Director, the hotline's underlying philosophy is that of a neighborhood watch with participants patrolling their own markets. To this end, OMOI has encouraged market participants and the general public to call, e-mail, or write the hotline to complain or report market activities that may be an abuse of market power, an abuse of an affiliate relationship, a tariff violation, or another type of violation by an entity regulated by FERC. According to OMOI, hotline calls have included complaints about bidding anomalies, price spikes, inappropriate use of certain financial instruments, fluctuations in available capacity on electric transmission lines and natural gas pipelines, discrimination in interconnection to the electric grid, and improper market transactions between a company and an affiliate. Hotline complaints have led to or contributed to decisions to initiate several enforcement investigations.

OMOI officials also told us that the hotline staff has been focusing more attention on tracking market-related calls to look for trends because OMOI is trying to use the hotline as a tool for identifying market issues early. For example, the officials said that the hotline received several calls from energy marketers who said that they could be driven out of business by

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stricter standards for creditworthiness. According to the officials, FERC had been reviewing creditworthiness issues on a case-by-case basis but, after the calls, decided to convene a technical conference in February 2003 to begin to address these issues on a broader basis.

OMOI Has Increased Investigative Activities, but Its Audits Do Not Systematically Review Compliance with Market Rules

Led by attorneys in OMOI's Enforcement Division, investigations are designed to collect and analyze information regarding specific concerns about whether a party has violated the energy-related laws, regulations, and/or market rules administered by FERC. OMOI may initiate an investigation as a result of an action such as a hotline complaint, a formal complaint, a referral from a market monitoring unit or another office within FERC, the findings of an audit, or routine market monitoring. In addition, the enforcement staff may begin an investigation based on its scanning or tracking of industry or market events through news or other accounts. OMOI's Division of Operational Investigations is responsible for conducting audits to review compliance with FERC's regulations such as those governing companies' transactions or dealings with their affiliates to prevent discriminatory practices and reporting of market information. OMOI initiates operational audits for a variety of reasons, including providing input to policy deliberations, regulations development, and enforcement cases.

FERC's investigations and operational audits relating to energy markets have increased almost steadily each month since this responsibility was moved to OMOI. For example, on June 1, 2002—about a month before the enforcement staff was transferred to OMOI from FERC's Office of the General Counsel—FERC was conducting 37 investigations and operational audits related to the electricity and natural gas industries and other areas such as hydroelectric projects. This number was 68 as of May 31, 2003. During this period, OMOI opened a total of 79 investigations and operational audits and closed 48.

Of the investigations that OMOI closed, several resulted in entities paying refunds, civil penalties, or the costs of the investigations, as well as preparing compliance plans and taking other remediation actions. One highly visible example is the recently settled case against the Transcontinental Gas Pipe Line Corporation (Transco) for anticompetitive practices that included a civil penalty of \$20 million—the largest civil penalty in FERC's history. However, in other cases, no further action was taken—beyond working with the parties under investigation to bring them into compliance with the rules and regulations—because there is no civil penalty authority associated with the activities. The civil penalty imposed

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on Transco stemmed from the company's violation of rules in one of the few areas in which FERC had the authority to impose such penalties. While FERC can order refunds of excessive rates, FERC generally lacks authority to impose appropriate penalties. No section of the Federal Power Act allows FERC to levy monetary penalties against market participants who charge unjust or unreasonable rates for electricity. Although the Natural Gas Policy Act of 1978 gave FERC some authority to levy civil penalties, this authority applies to a limited number of natural gas transactions in interstate commerce. Given this situation, legislation was recently introduced in the Congress that would give FERC additional penalty authority. On April 11, 2003, the House passed H.R. 6, which would expand FERC's penalty authority under the Federal Power Act and increase the maximum civil penalty for certain violations from \$10,000 to \$1 million per violation per day. The bill is currently awaiting action by the Senate, which is considering similar legislation.

While investigations are almost always opened in response to specific complaints or concerns about a potential violation, operational audits provide the opportunity to review compliance with regulations and market rules on a broader basis. However, OMOI has limited resources devoted to these audits. At the end of June 2003, the Division of Operational Investigations was conducting audits of 16 entities under FERC's jurisdiction—11 in the Pacific Northwest, 1 in the Midwest, 2 in the mid-Atlantic, and 2 in the Southwest—with respect to certain aspects of FERC's regulations. According to the Director of the Division of Operational Investigations, most of the work by the division's staff is in supporting ongoing enforcement investigations rather than performing audits. He said that his staff provides technical support to these investigations by reviewing regulations and accounting and trading issues. The Director said that he would like to develop, but has not yet developed, a strategy for systematically auditing compliance with FERC's regulations and market rules on a cyclical basis. Absent this type of more comprehensive review, OMOI has to rely on the limited coverage provided by hotline calls and enforcement investigations. For example, hotline calls depend on individuals knowing about violations and being willing to report them to FERC.

OMOI Is Working to Improve Its Partnership with the Market Monitoring Units, but the Units Do Not Cover Much of the United States

Recognizing that market monitoring units play a significant role in overseeing wholesale electric power markets, OMOI is devoting considerable attention to improving its working relationship with these units. However, FERC has not yet put in place a process to periodically assess the monitoring units' effectiveness so that it will have assurances

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that they are effectively carrying out their responsibilities. Moreover, the partnership's effectiveness in overseeing the nation's electricity markets is limited because most of the United States is not covered by these units.

FERC has described the role of the market monitoring units in various terms, including as the "first line of defense" against market problems, its "eyes and ears," its "soldiers on the front line," and as "practically an extension of, or a surrogate for, the Commission's own market monitoring and investigative staff." The significance of the monitoring units' role is illustrated by OMOI's response to our request for information on how the office's market oversight approach will identify certain trading schemes, such as those used by the Enron Corporation in the California electricity market and other manipulations of the energy markets. In their response, OMOI officials said the monitoring units are responsible for detecting most of the schemes and manipulations in their respective electricity markets. (See app. III for OMOI's response.)

OMOI is taking a number of steps to improve communication and to better ensure that its staff and the market monitoring units work well together. For example, the office has assigned specific staff members as contact points for the ISOs/RTOs and their market monitoring units. Because many of the issues arising and enforcement cases being initiated concern California, OMOI has located two of its staff with the California ISO's market monitoring unit. OMOI has also formalized the frequency and nature of communication between itself and the units, for example, by establishing a series of routine meetings and drafting guidelines on how the units will communicate certain market events to OMOI. Furthermore, OMOI is working with the market monitoring units to develop a joint OMOI-market monitoring unit mission statement and has taken steps to standardize the way the market monitoring units will report on their markets. For example, OMOI is working with the monitoring units to develop a set of standardized measures or metrics by January 2004. With standard metrics, FERC can compare and contrast the individual regional markets and better report on how markets are performing nationwide.

According to the heads of the four market monitoring units, their communication with FERC has improved since the creation of OMOI. The head of one unit told us that the frequency and the detail of their discussions with OMOI were notable improvements, while another said that the improvement had been significant. The third market monitor told us that communication has improved considerably and the more frequent communication with OMOI has improved OMOI staff's knowledge of their

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markets. According to the remaining market monitor, his ability to communicate with FERC was very poor before OMOI was formed, but since then the frequency and content of this communication has improved. He added that he hopes that OMOI's enforcement staff is letting him know when it is conducting investigations relating to the markets that he monitors, but he does not know whether or not they are.

In our June 2002 report, we recommended that FERC update its strategic plan to set out clear expectations for how the ISOs/RTOs will monitor energy markets and how FERC will evaluate their monitoring units' effectiveness. While a key strategy in FERC's current strategic plan is to integrate FERC's market oversight activities with the work of the monitoring units, the plan does not yet set out clear expectations for these units or how FERC will ensure that they are effectively carrying out their market oversight role. OMOI's Director of Management and Communication told us that performance expectations for the market monitoring units make sense, and that the office expects to begin the process to incorporate expectations into FERC's fiscal years 2003-2008 strategic plan that is scheduled to be issued in September 2003.

The heads of the market monitoring units agreed that FERC needs assurances that their units are carrying out their monitoring functions effectively and suggested ways that the agency could obtain these assurances. For example, the head of the New York ISO's market monitoring unit said that FERC should monitor market outcomes, maintain close contact with the individual units, and operate a hotline that market participants can use to register concerns about the units. Similarly, the head of the New England ISO's monitoring unit said that OMOI should develop additional expertise for each market and, more importantly, should synthesize comments from stakeholders in each market regarding the units' performance.

While the market monitoring units are highly important to OMOI's efforts to oversee electricity markets, the units' coverage of the nation's electricity markets is limited. The monitoring units of the PJM Interconnection RTO, ISO New England, and New York ISO cover the Northeastern markets, while the California ISO's monitoring unit covers the markets in that state. The Electric Reliability Council of Texas, over which FERC has only limited jurisdiction because the market is essentially intrastate, also has a market monitoring unit that essentially covers Texas. FERC has also approved a market monitor for the Midwest ISO, which plans to operate a centralized power market by December 2003. In addition, FERC has efforts

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under way to expand the number and/or the market coverage of RTOs. At present, according to FERC, five other RTOs have been conditionally approved. However, it could be several years before these organizations are operating and have market monitoring units in place.

According to the Director of OMOI, one of the office's major challenges is how to monitor the markets in places where there is no market monitoring unit. He added that the office has limited access to market data without the existence of the formal markets provided by an ISO or RTO to generate the data and a market monitoring unit to make it available to them. OMOI officials told us that they are using calls to the enforcement hotline and audits as a way to provide some oversight in these areas. These efforts, however, do not replicate the extensive and detailed monitoring performed by the market monitoring units.

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### OMOI Faces Challenges as It Completes Its Hiring

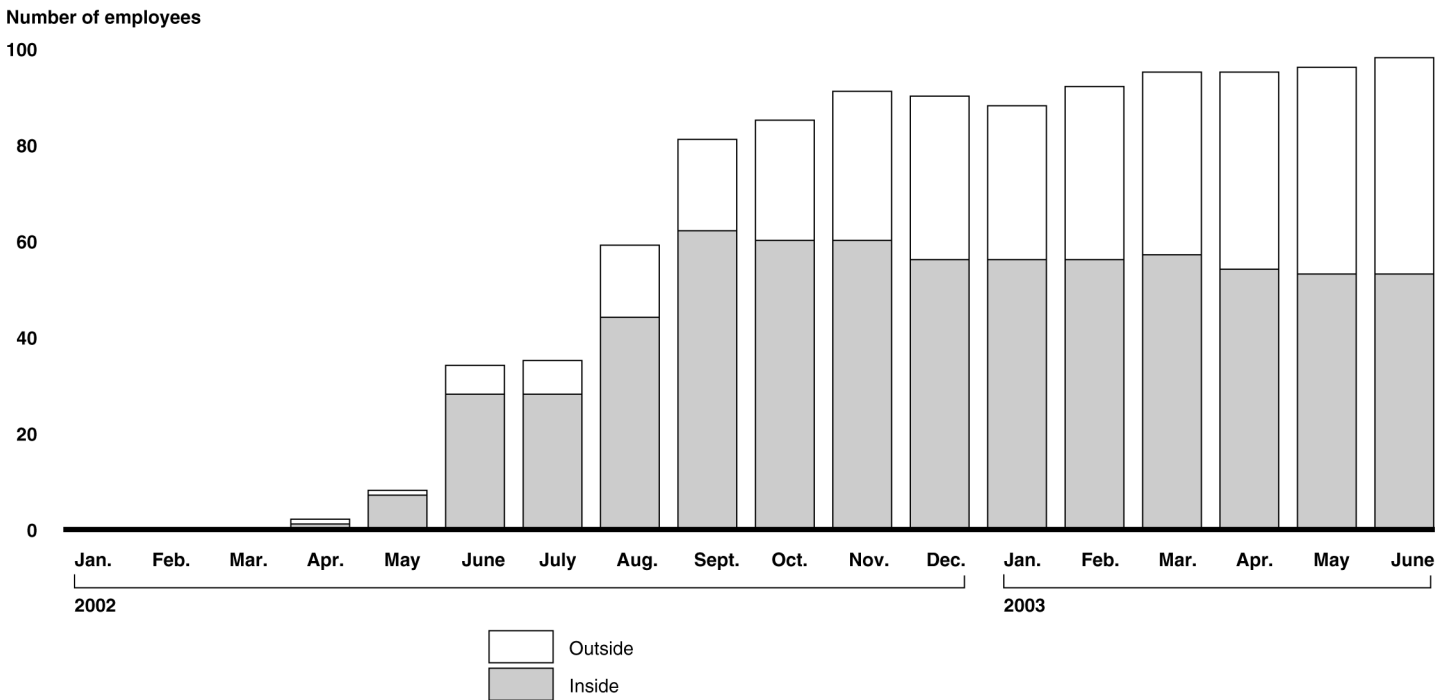
OMOI has almost completed its staffing to authorized levels, including the hiring of a substantial number of staff from outside FERC with energy market experience. The office also has trained staff to increase their knowledge about competitive energy markets, and has contracted to acquire additional market expertise. However, several key management positions have not been filled. In addition, OMOI staff raised several issues, including the adequacy of the office's staffing levels, skills mix, the need for additional training, and morale.

### OMOI Has Almost Completed Its Staffing to Authorized Levels

As of June 17, 2003, OMOI had a staff of 98 employees—12 less than the 110 positions budgeted for fiscal year 2003. OMOI has staffed the office with a mix of reassigned FERC employees and outside hires (see fig. 2). OMOI's director and two of three office directors are outside hires. During its first 4 months, the office principally consisted of its top leadership and employees reassigned from other FERC offices, such as the Office of Markets, Tariffs, and Rates and the Office of General Counsel's Market Oversight and Enforcement Division, that had some experience related to energy market oversight and investigation. These internal transfers continued until they reached a total of 61 employees in September 2002. Senior OMOI officials told us that transferring to OMOI was voluntary, but not everyone was selected. According to OMOI officials, approximately 180 FERC employees applied for OMOI.



**Figure 2: OMOI's Staffing Levels**



Source: FERC.

As of June 17, 2003, OMOI had hired 45 employees from outside FERC—5 less than the 50 positions budgeted for fiscal year 2003. To recruit qualified individuals with industry experience, OMOI offered a number of recruitment bonuses. Because of the specialized skills required to monitor energy markets, OMOI has generally offered larger recruitment bonuses than other FERC offices—an average of \$12,852 given to 10 individuals. According to OMOI officials, they are still receiving resumes from interested applicants and plan to continue their recruiting and hiring efforts over the next few months.

OMOI officials told us that, in hiring potential applicants, they looked at the applicants' experience in energy markets. In its fiscal year 2003 budget request, one of FERC's performance targets for OMOI was the "hiring of staff with market expertise." In the fiscal year 2004 budget request, FERC is revising the performance target to state that "30 percent of OMOI staff have energy market experience gained through direct activity in those markets." According to OMOI officials, 29 of the office's current employees (or 29.6

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percent) have energy market experience. More specifically, OMOI officials told us that 19 (or 19.4 percent) of the employees have worked for energy-related companies and have direct experience with some aspect of energy markets. An additional 10 employees (or 10.3 percent) have worked as consultants, legal counsel, or other positions that demonstrated detailed understanding of market activities without active participation, according to the officials. OMOI said that they review the resumes of both internal transfers and outside hires to determine market experience.

One reason that OMOI has not yet reached its authorized staffing level is that 13 of its employees have left to go to another FERC office, another federal agency, or to private industry. The majority of those leaving—10 of 13—had originally transferred in from other FERC offices. According to OMOI officials, most of these employees moved to other FERC offices to take more senior positions. They said that because OMOI had to bring in a number of outside hires at a high grade (at the GS-15 level), opportunities for promotion within OMOI are very limited. Of the three outside hires that have left, two were interns with limited appointments.

### OMOI Is Using Training and Contracting to Increase Its Expertise

In addition to hiring staff with needed skills, OMOI has offered a variety of internal and external training programs. For example, OMOI has

- instituted technical sessions on a biweekly basis during which OMOI staff informally share information and expertise with other staff,
- invited industry experts for presentations on market issues,
- invited representatives from market monitoring units to provide the versions of the training classes they offer their own staffs,
- visited market monitoring units at various RTOs to interact with them and learn about their markets and functions,
- interacted with vital market participants such as credit rating agencies and generation and transmission operators to enhance their overall knowledge of the gas and electricity markets, and
- identified leadership and managerial training as a critical need and plans to develop targeted training in these areas.

OMOI has also used contractors to obtain skills not available internally. For example, OMOI has hired, on a consulting basis, an energy trader formerly

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with the Enron Corporation. OMOI also has used contractors to assist them in a variety of other ways, including developing measurement metrics for the market monitoring units and studying power plant outages. In addition, OMOI used contractors to help develop its first seasonal market report. Furthermore, the office has contracted with knowledgeable vendors to provide employees with information on key aspects of energy markets. Since its inception in fiscal year 2002, OMOI has spent a total of about \$501,000 on contract services. The office is requesting an increase in funding for these services from \$500,000 for fiscal year 2003 to \$1 million for fiscal year 2004.

### OMOI Faces Several Additional Staffing Challenges

Although OMOI has made progress in hiring staff, OMOI continues to face challenges in filling some of its leadership and technical positions. As of June 17, 2003, OMOI had not permanently staffed three of OMOI's seven division director positions. According to a senior OMOI official, finding qualified applicants for the division director positions has been particularly difficult because not many applicants have both technical skills and leadership experience coupled with a public-service mentality. For example, OMOI has advertised a "Division Director" position at the senior executive service level for the Division of Energy Market Oversight on several occasions, but FERC hiring officials did not find any applicants suitable to meet OMOI's needs. The position has been relisted. OMOI's difficulty in filling its leadership positions is particularly important because sustained, committed leadership is indispensable to successful organizational transformations. By its very nature, the transformation process entails fundamental change. Consistent leadership helps the process stay the course and helps ensure changes are thoroughly implemented and sustained over time. Senior OMOI officials also told us that OMOI continues to face challenges hiring people with certain skills such as engineers with market experience, people with technical skills for performing sophisticated analysis, and people with forensic auditing experience.

In addition, in responding to our survey, OMOI employees indicated a relatively high level of concern about the office's staffing levels and skill mix. About 49 percent of OMOI employees did not believe that the office's staffing levels were satisfactory. In comparison, 22 percent thought that the levels were satisfactory. The remaining 30 percent neither agreed nor disagreed that the staffing levels were satisfactory or stated that they had no basis to judge. In addition, while about 45 percent of the employees believed that the office's skill mix was adequate, 35 percent did not. The remaining 21 percent neither agreed nor disagreed or had no basis to judge.

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In providing written comments for our survey, the employees often commented on staffing levels and skill mix. For example, one respondent wrote “the resources in the office are clearly inadequate to perform comprehensive oversight of industries as large as wholesale electricity and natural gas.” Another wrote “staffing levels are not sufficient to regularly, systematically evaluate all energy markets in the United States to look for aberrant behavior.” The written comments on skill mix varied. For example, some staff wrote that OMOI had too many employees with natural gas experience and too few with electricity experience. Others commented that the office had too few engineers, especially electrical engineers, or needed more investigations staff, economists, attorneys, or technical staff.

To some extent, these concerns about staffing levels and skill mix likely reflect the staff’s individual views about what this new office should do to oversee the markets, particularly the level of detail at which it should review market transactions. It is difficult to judge the validity of the staff’s concerns until OMOI has clearly defined its role. Of course, the FERC commissioners and the Congress would be involved in defining the role and committing the resources to carry it out.

Many of OMOI’s employees also indicated that they would benefit from additional training. For example, in responding to our survey, over 70 percent of OMOI employees expressed a need for more training in areas such as market functions, market structures, and the interaction of financial markets and energy markets. In addition, more than half of the staff indicated that additional training in economic theory and models would be useful. (See table 3.)

**Table 3: Percentage of OMOI Staff Indicating That Additional Training Would Help Them Better Oversee Energy Markets and Enforce Market Rules**

(Percentage)

Subject area	Additional training would assist me	Already proficient in this area	Does not apply or no basis to judge
How financial markets interact with energy markets (including trading, hedging, derivatives, and financial instruments)	76	15	9
Market structures	71	23	7
Market functions	70	24	7
Economic theory/models	52	34	14
Statistical software packages	48	15	37
Regulatory theory/process	44	43	13
Basic economic principles/definitions	35	53	12

Source: GAO survey of OMOI employees.

Furthermore, our survey of OMOI staff uncovered a potential issue regarding the office’s morale. In responding to the survey, about 49 percent of OMOI managers and staff characterized the office’s morale as generally high or very high, compared to about 31 percent that said morale was generally low or very low. (The remaining 20 percent characterized morale as neither high nor low or said they had no basis to judge.) However, there was a disparity of opinion between new hires and internal transfers. Among staff that had been with FERC for more than a year or before OMOI was established (internal transfers), about 40 percent said the office’s morale was low, slightly higher than the 38 percent that said it was high. In comparison, 14 percent of staff that had been with FERC for less than 1 year (new hires) said the office’s morale was low, while 68 percent said it was high. Additionally, several internal transfers expressed concern that OMOI’s top managers do not value them as highly as those hired from outside FERC. In their written comments to our survey, several staff expressed their sense that a “double standard” exists in that (1) the work of the “new FERC” employees (outside hires) is valued by top managers more than that of the “old FERC” employees (transfers) and (2) the new FERC employees receive higher pay and more than their share of the bonuses and other rewards. Several employees also commented that there is not much promotion potential for internal transfers. Furthermore, several employees that left OMOI to go to other parts of FERC told us that they had left for a promotion, but the sense that they were not valued was also a factor in leaving.

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## FERC Is Taking Important Steps to Improve Its Human Capital Management

Since we issued our June 2002 report, FERC has developed a human capital plan that lays the foundation for the agency to strategically manage its workforce. As our previous work has found, strategic human capital planning must be the centerpiece of any serious change management initiative, yet a key challenge for many federal agencies is to strategically manage their human capital.<sup>12</sup> Given that many federal agencies have not yet begun any comprehensive human capital planning, FERC's human capital plan is commendable and a promising first step. Nonetheless, the plan is in the formative stages and lacks key elements. The plan does not yet fully (1) identify specific activities, resources, and time frames needed to implement the agency's human capital initiatives and (2) provide results oriented or outcome measures to track the agency's progress in implementing the plan's initiatives and evaluate their effectiveness. By including these key elements in its human capital plan, FERC could better ensure that its workforce is able to effectively oversee and monitor energy markets. In addition to human capital planning, the agency is taking other steps to help transform its workforce, including assessing additional human capital flexibilities that could improve recruitment and retention efforts.

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## FERC's Human Capital Management Plan Is an Important First Step but Lacks Key Elements

In February 2003, the Chairman of FERC approved the agency's first human capital management plan, a step forward in fostering a more strategic approach to human capital management. In our June 2002 report, we pointed out that FERC was one of many federal agencies that had not given adequate attention to human capital management. Specifically, we found that FERC had not conducted systematic strategic human capital planning to guide its efforts to recruit, develop, train, and retain the type of workforce that can effectively oversee competitive energy markets. Properly done, human capital planning provides managers with a strategic basis for making human resources decisions and allows agencies to systematically address issues driving workforce change, such as those affecting OMOI. One tool that agencies can use to improve their human capital management is a human capital plan that systematically identifies the workforce needed for the future and identifies strategies for shaping this workforce. Accordingly, we recommended that FERC develop a

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<sup>12</sup>U.S. General Accounting Office, *High-Risk Series: Strategic Human Capital Management*, GAO-03-120 (Washington, D.C.: January 2003).

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comprehensive strategic human capital management plan to include the following:

- a skills assessment program that would identify gaps in skills currently held by the workforce that are necessary to carry out the agency's evolving regulatory and oversight responsibilities;
- a recruitment and retention initiative, based on priorities for meeting future regulatory and oversight staffing needs, which addresses filling skill gaps in the current workforce;
- a training effort targeted at increasing staff knowledge in the areas of market functions and market structures so that FERC staff will be better prepared to regulate and oversee competitive energy markets; and
- a comprehensive succession plan for solving challenges posed by the large number of impending retirements within the agency, including reliable projections of the number of eligible staff who may actually retire.

The plan, which covers a period of from 2 to 5 years, is essentially broken up into two major sections. The first section addresses issues facing the agency as a whole. For example, the plan's first section describes FERC's current human capital situation, including data on overall workforce demographics such as size and composition of the workforce, employee pay grade distribution, attrition rates, projected retirement eligibility, and retirement rates. The plan then uses these data to frame five broad workforce challenges and identifies five human resource goals and 19 objectives to achieve these goals. (See table 4.) The plan's second section provides information specific to each major FERC office. This section identifies each office's specific human capital challenges based on their particular workforce demographics and current and future work requirements and includes a short-term hiring plan and longer-term human capital initiatives.

**Table 4: FERC’s Agencywide Human Resource Goals and Objectives**

Human resource goal	Objectives
Goal 1: Attract and retain talented, diverse employees capable of maintaining excellence	<ul style="list-style-type: none"> <li>• Institutionalize an agencywide workforce planning process</li> <li>• Implement recruiting and retention strategies based on workforce planning results and office hiring plans</li> <li>• Use the full range of hiring flexibilities to increase hiring speed and success</li> <li>• Develop a demonstration project to increase hiring and retention success and improve accountability</li> </ul>
Goal 2: Provide development opportunities to expand individual and organizational capabilities	<ul style="list-style-type: none"> <li>• Link employee development activities to strategic goals and plans</li> <li>• Upgrade the effectiveness of office and central training programs</li> <li>• Increase the capabilities of underperforming employees</li> <li>• Institute rotational assignments to build skills and learn new business practices</li> </ul>
Goal 3: Build leadership to inspire and draw the best from all employees	<ul style="list-style-type: none"> <li>• Establish a leadership succession planning program</li> <li>• Deliver a comprehensive training program for new and experienced managers</li> <li>• Create feedback mechanisms and development plans to foster leadership development</li> <li>• Increase support for managers handling human resources and employee development responsibilities</li> </ul>
Goal 4: Foster a performance culture that rewards achievement	<ul style="list-style-type: none"> <li>• Ensure employees understand agency priorities and how to contribute</li> <li>• Strengthen the connections among accomplishments, awards and performance feedback</li> <li>• Develop options for addressing shortfalls in accountability and non-performance</li> <li>• Measure results and use the data to keep improving</li> </ul>
Goal 5: Create organizations with the ability to meet rapidly changing conditions	<ul style="list-style-type: none"> <li>• Use flexible processes for acquiring specialized, limited-duration expertise</li> <li>• Strengthen the role of subject matter experts in helping managers handle new program challenges</li> <li>• Compile best practices and apply them to help organizations and teams at FERC successfully meet difficult workload challenges</li> <li>• Share innovations and creative approaches across organizational lines</li> </ul>

Source: FERC.

The plan, to varying degrees, discusses the four major components that we previously recommended be included—skills assessment, recruitment and retention, training, and succession planning. Regarding skills assessment, the second section of the plan identifies for each office the current and future skills they need to achieve FERC’s strategic goals. Where gaps existed between current and future skill needs, the offices have developed human capital initiatives to close the gaps. According to a senior FERC human resource official, the plan will improve as this skills assessment



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process improves. The official said that the FERC offices are still learning how to determine their skill needs and, as a result, when someone retires or otherwise leaves, FERC managers tend to seek a replacement with the same skills, rather than thinking about future skill needs.

Concerning recruitment and retention, the plan establishes attracting and retaining talented, diverse employees capable of maintaining excellence as a human resource goal. To accomplish this goal, FERC identifies various objectives, including institutionalizing an agencywide workforce planning process and implementing recruiting and retention strategies based on the results of this workforce planning process and the offices' hiring plans. Another of the objectives is to develop a demonstration project to increase hiring and retention success and improve accountability for hiring and retention decisions. FERC's plan also identifies a number of initiatives to improve recruitment and retention. For example, FERC plans to implement an exit interview process to track and document why employees leave. According to the plan, the information gained from exit interviews will be used to support or modify agency personnel practices in order to improve employee retention.

With respect to training, the plan establishes development opportunities to expand individual and organizational capabilities as a goal. An objective under this goal is to upgrade the effectiveness of the central and individual office training programs. The plan recognizes that FERC needs to implement a revamped energy markets curriculum to ensure that staff, such as those in OMOI, have current market-oriented skills and expertise. One of the next steps in the plan is that the human resources staff will coordinate the offices' efforts to design and offer training for managers and to develop a markets-oriented curriculum to build organizational and staff capabilities. Human resources officials told us that FERC is already using an agencywide team to develop such a curriculum. According to senior human resources officials, the curriculum will likely be offered to all FERC offices to develop a common foundation across the agency. Although OMOI is the FERC office primarily responsible for monitoring competitive energy markets, FERC officials indicated that a number of offices in addition to OMOI are seeking markets training to do their jobs better. As FERC develops this new curriculum, the current central program has been temporarily suspended, and each office is responsible for providing informal training to its own staff. For example, OMOI has offered a variety of training to increase staff knowledge on competitive energy markets. According to a senior FERC official, the new agencywide training program should be implemented by the beginning of fiscal year 2004.

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FERC's plan identifies succession planning as a challenge and points out that over half of FERC's workforce will be eligible to retire by 2007. It also sets out the establishment of a leadership succession planning program as an objective under its building leadership goal. To address this challenge, many of FERC's offices intend to develop their own succession planning strategies. For example, the section of the plan for the Office of Markets, Tariffs, and Rates states that because of its "graying" leadership ranks, the office must develop a succession plan for its key leadership positions. The section also states that because of its overall graying workforce, the office must develop a larger entry-level/career ladder pipeline to maintain adequate numbers of employees, both in total numbers and at the top level of career-ladder positions. The section of the plan for OMOI also addresses succession planning. In the plan, OMOI states that it will develop a succession plan to address the loss of leadership and skills due to retirements and the return of employees to the private sector. However, the human capital plan does not provide any additional information on how these succession plans will be developed, what resources are needed, how they will be implemented, and when they will be completed. Leading organizations use their succession planning initiatives not only to identify individual replacements for current leaders but also as a strategic tool to build current and future organizational capacity by identifying and developing the right people, with the right skills, at the right time for leadership, managerial, and other critical positions.<sup>13</sup>

FERC's plan also addresses other related human capital issues. For example, it notes that the current performance management system may not be adequate to sustain and build the workforce needed for the future. As FERC takes steps to transform its workforce, performance management will be a critical element. Our previous work has found that instituting a results-oriented culture and creating a modern, credible, and effective performance management system can be strategic tools to drive change and achieve desired organizational results.<sup>14</sup> Under the plan's goal of fostering a performance culture that rewards achievement are four broad performance management objectives. For example, the plan indicates that the agency will strengthen connections among accomplishments, awards,

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<sup>13</sup>U.S. General Accounting Office, *Human Capital: A Self-Assessment Checklist for Agency Leaders*, [GAO/OCG-00-14G](#) (Washington, D.C.: September 2000).

<sup>14</sup>U.S. General Accounting Office, *Results-Oriented Cultures: Creating a Clear Linkage Between Individual Performance and Organizational Success*, [GAO-03-488](#) (Washington, D.C.: March 2003).

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and performance feedback but does not yet provide details on how this will be done, what resources are needed, and when it will be completed. According to senior FERC officials, the agency's current performance system does not meaningfully differentiate between high and low performers, and performance is not directly linked with annual pay increases. Instead of awarding pay increases based on annual performance appraisals, performance is rewarded through the use of bonuses throughout the year. As a result, employees are rewarded for specific events rather than their overall contribution to agency results. According to FERC officials, this system was put in place to avoid the problem of too many outstanding ratings.

Given that FERC is one of only a small number of agencies that have begun efforts to address their human capital challenges by developing human capital plans, FERC's efforts are commendable. However, work remains to be done to ensure FERC's plan is successful. Varying senior FERC human resources officials described the plan as having a "ways to go" or as a "baby step." As we previously discussed, the plan, at this point, provides limited information how the agency's goals and objectives will be achieved. While the plan includes strategies, it generally does not yet identify specific activities, resources, and time frames. This type of information helps provide more clarity of direction and organizational commitment as the plan is being implemented. The plan also does not provide results-oriented performance measures to help FERC gauge its progress in achieving the plan's goals and objectives. Our previous work has shown that high-performing organizations recognize the fundamental importance of developing and using indicators to measure both the outcomes of human capital strategies and how these outcomes have helped the organizations accomplish their missions and programmatic goals. For example, a human capital plan can include measures that indicate whether the agency executed its human capital initiatives—such as hiring, retention, training, or performance management strategies—as intended, whether it achieved the goals for these strategies, and how these initiatives helped improve programmatic results. Although FERC intends to review and update the plan on a quarterly basis and revise it annually, it may be difficult to review the plan's progress in a meaningful way without this type of specificity.

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## FERC Continues to Use a Wide Range of Human Capital Flexibilities, and Is Exploring Opportunities for Additional Flexibilities

In our June 2002 report, we noted that although FERC had taken steps to acquire and develop the staff knowledge and skills it needed to effectively regulate and oversee energy markets, it had not fully explored all the human capital flexibilities that are available to federal agencies for responding to workforce challenges. All federal agencies, including FERC, have personnel flexibilities and tools available to them to help overcome workforce recruitment and retention issues. Many of these flexibilities and tools can be initiated by federal agencies on their own, while others require approval from the Office of Personnel Management, the Office of Management and Budget, or the Congress. In our prior report, we found that FERC was using a number of available flexibilities such as recruitment bonuses, retention allowances, tuition reimbursement, and alternative work schedules but had not requested other flexibilities that could help improve recruitment and retention. Accordingly, we recommended that FERC (1) identify the personnel tools, flexibilities, and strategies, other than those already in use by FERC, available to federal agencies to recruit and retain employees; (2) conduct an internal assessment of the effectiveness and applicability of these to FERC; and (3) develop an action plan to use the appropriate tools, flexibilities, and strategies to recruit and hire needed expertise.

Since our prior report, FERC has expanded its use of some existing human capital flexibilities to improve its ability to recruit and retain employees. One example is FERC's student loan repayment program. As one of the first federal agencies to employ this flexibility, FERC has used a total of \$331,499 to help 41 employees repay their student loans. Participants in the program commit to staying at FERC for a minimum of 3 years. According to FERC officials, this program has been particularly successful in retaining attorneys, who often have high student loan debt. In addition, FERC has expanded its use of recruitment and retention bonuses. For example, FERC offered 10 retention bonuses in 2002 compared with 2 in 2001. FERC has also given 75 recruitment bonuses of around \$3,000 to \$4,000 each to attract qualified employees. As noted earlier, OMOI has typically offered larger recruitment bonuses than other FERC offices because of the specialized skills required to effectively monitor competitive energy markets.

In addition, according to FERC's human resources manager, the agency's senior human resources officials have identified additional human capital flexibilities that could prove useful in attracting and retaining quality employees and have assessed their applicability to FERC. However, the Chairman of FERC has not yet decided which, if any, of these additional

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flexibilities FERC will seek approval for from the Office of Personnel Management, the Office of Management and Budget, or the Congress. As part of their assessment, FERC officials examined the flexibilities in use at agencies including the Internal Revenue Service, the Federal Aviation Administration, the Securities and Exchange Commission, and the Transportation Security Agency to identify lessons learned and strategies for acquiring additional flexibilities. Senior FERC human resources officials said that they may look to acquire many of the same flexibilities currently available to the Securities and Exchange Commission, a similar regulatory agency. However, these officials also noted that FERC may have more difficulty obtaining approval for the additional flexibilities because of its relatively low attrition rate, an average of 7 percent since 1995. In contrast, the Security and Exchange Commission, which has a turnover rate of around 30 percent, uses compensation-based programs, such as special pay rates, more actively than other government agencies.

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## Conclusions

OMOI has made a credible start toward establishing an oversight and enforcement capability for competitive energy markets. Significantly, the office recognizes that additional efforts are needed and has under way or is planning a number of initiatives, including expanding its activities, further identifying its information needs, and improving its working relationships with the market monitoring units. While these initiatives are important to OMOI's success, the activities that the office needs to engage in, the information and other resources it needs to carry out these activities, and the working relationships it needs to establish with others depend on the role that it has defined for itself to achieve its mission. At this point, OMOI's role lacks clarity in several respects. For example, OMOI has not explicitly and directly related its role and activities to the agency's responsibility for ensuring just and reasonable prices nor decided at what level of detail it will review the markets. In addition, OMOI has not clearly defined market power, although market power is a major oversight concern and an issue that OMOI has to make sure is adequately addressed. Moreover, OMOI has not explicitly defined how it will work with others inside and outside of FERC that either share energy market oversight responsibilities or have related responsibilities.

OMOI is a new office with unique and broad responsibilities for overseeing the nation's energy markets. As such, its first months have been a learning experience as it hired its staff and began to carry out its activities. Thus, we do not disagree with the office's decision to begin its work with few formal processes and written procedures as it, in effect, was developing and

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testing them. However, after almost a year, OMOI has added more staff, and its oversight activities are becoming more complex. Establishing formal processes and developing written procedures are important to help ensure that they are systematic, understood, and implemented effectively. Formal processes and written procedures also help provide assurances to OMOI's stakeholders that the office has fully thought through and is systematically monitoring today's energy markets.

Although FERC's recently completed human capital plan begins to lay the foundation for the agency to strategically manage its human capital, it does not yet contain key elements that could increase the likelihood that the plan will be effective. It generally does not identify specific activities, resources, and milestones to implement the human capital objectives. It also does not contain results oriented performance measures that can help FERC measure progress toward achieving these objectives. Setting out specific activities, resources, and milestones provide a clearer road map for achieving the plan's objectives and more clearly defines the organizational commitment needed for the plan's implementation. Moreover, without results oriented measures, FERC will be unable to determine whether its initiatives are leading to better outcomes and achieving the desired effects, such as whether its workforce is better able to meet the challenges posed by competitive energy markets.

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## Recommendations for Executive Action

To help ensure that FERC's oversight of competitive energy markets is comprehensive and resources are effectively directed, we recommend that the Chairman of FERC more clearly define OMOI's role in overseeing the nation's energy markets by taking the following actions:

- Explicitly describe OMOI's activities relative to carrying out the agency's statutory requirements to ensure just and reasonable prices and to preventing market manipulation.
- Explicitly establish the level of detail at which OMOI will routinely review market transactions to carry out its oversight activities.
- Delineate how other FERC offices and other organizations, including the market monitoring units and other federal agencies, share in and contribute to OMOI's mission and establish expectations for how they will work together.

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To help ensure that OMOI carries out its role systematically and effectively, we recommend that the Chairman of FERC direct OMOI to establish formal processes and written procedures for its key activities.

To strengthen FERC's human capital plan, we recommend that the Chairman of FERC revise the agency's plan to (1) identify specific activities, resources, and time frames to implement the human capital initiatives and (2) provide results-oriented measures to track the agency's progress in implementing the initiatives and evaluate their effectiveness.

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## Agency Comments

We provided FERC with a draft of this report for review and comment. In his written comments, the Chairman of FERC generally agreed with the report's conclusions and recommendations. Specifically, the Chairman stated that the report offers valuable advice for additional improvement and accomplishment and that, in general, he agrees with the report on the steps that are needed next to more clearly define the role of market monitoring and expand the agency's human capital initiative. The Chairman further stated that he agrees that it is now time to formalize and document many of OMOI's processes. The complete text of FERC's comments on our draft report is presented in appendix IV.

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As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to other appropriate congressional committees; the Chairman, FERC; the Director, Office of Management and Budget; and other interested parties. We also will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

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If you or your staff have any questions about this report, please contact me at (202) 512-3841. Key contributors to this report are listed in appendix V.

Sincerely yours,

A handwritten signature in black ink that reads "Jim Wells". The signature is written in a cursive style with a large, looped "J" and "W".

Jim Wells  
Director, Natural Resources  
and Environment



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# Scope and Methodology

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To determine FERC's progress in establishing an oversight and enforcement capability for competitive energy markets, we focused our review on the formation and operation of OMOI. We reviewed pertinent FERC documents, including annual reports, budget requests, strategic and annual performance plans, reports, speeches, and congressional testimony by the FERC Chairman, commissioners, and other officials relating to energy market oversight. We also reviewed OMOI documents, including OMOI divisions' strategic plans, market oversight reports, enforcement reports, and information related to OMOI's staffing levels and budget. In addition, we interviewed OMOI managers at the division head level and above, including the director and deputy directors of the office. We also obtained the views of the heads of the four market monitoring units that were operating at the time of our review on OMOI's progress in establishing a market oversight and enforcement capability at the national level. Furthermore, we drew on our prior work in the areas of electricity and natural gas markets.

In addition to our document review and interviews, we conducted a survey of OMOI staff, up to and including those at the director and deputy director level. The survey was conducted using a self-administered electronic questionnaire posted on the World Wide Web. We sent E-mail notifications to 92 OMOI staff beginning on March 24, 2003. We then sent each employee who was surveyed a unique password by e-mail to ensure that only members of the target population could participate in our survey. We closed the survey on April 11, 2003, having received a total of 80 responses, for an overall response rate of 87 percent. A copy of this survey with the quantitative results can be found in appendix II.

While our survey results are generalizable to the current OMOI population as described above, the practical difficulties of conducting surveys may introduce errors into the results. Although we administered our survey to all known members of the population of OMOI employees, and thus our results are not subject to sampling error, nonresponse to the entire survey or individual questions can introduce a similar type of variability or bias into our results—to the extent that those not responding differ from those who do respond in how they would have answered our survey questions. We took steps in the design, data collection, and analysis phases of our survey to minimize population coverage, measurement, and data-processing errors, such as checking our population list against known totals of employees, pretesting and expert review of questionnaire questions, and follow-up with those not immediately responding.

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**Appendix I**  
**Scope and Methodology**

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To determine FERC's progress in improving agencywide human capital management, we reviewed pertinent FERC documents, including the agency's human capital plan and information related to the agency's training, human capital flexibilities, and performance management programs. In addition, we interviewed senior human resources officials at FERC, including FERC's Executive Director. We conducted our work between October 2002 and June 2003 in accordance with generally accepted government auditing standards.

# GAO Survey of Current FERC Employees in the Office of Market Oversight and Investigations

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This appendix contains the questions and responses from our survey of Federal Energy Regulatory Commission (FERC) employees in the Office of Market Oversight and Investigations. Responses are expressed as a percentage of those responding to the survey.

**Appendix II  
GAO Survey of Current FERC Employees in  
the Office of Market Oversight and  
Investigations**



**United States General Accounting Office**

**Survey of FERC Office of Market Oversight  
and Investigations Employees**

Introduction

The U.S. General Accounting Office (GAO), an independent agency of Congress, is conducting a follow-up review of management issues at the Federal Energy Regulatory Commission (FERC). As part of our study, we are soliciting the views of the FERC staff in the Office of Market Oversight and Investigations to obtain their opinions about a variety of topics relating to the work of the FERC.

Most of the questions in this survey can be answered by checking boxes or filling in blanks. Space has been provided at the end of the survey for any additional comments. The survey should take about 20 minutes to complete.

GAO will take steps to prevent the disclosure of individually identified data from this survey. Only GAO staff assigned to this study can access and view your responses. **No one at the FERC will see your individual responses.** The username and password associated with the survey is included only to allow you to access the survey and enter your responses, and to aid us in our follow-up efforts. Survey results will be reported in summary form. If individual answers are discussed in our report, no information will be included that could be used to identify individual respondents.

If you have any questions or are experiencing difficulties responding to the questionnaire, please contact Adam Hoffman at (202) 512-6667 or [hoffmana@gao.gov](mailto:hoffmana@gao.gov) or Jason Holliday at (202) 512-4582 or [hollidayj@gao.gov](mailto:hollidayj@gao.gov).

Your participation is very important and we urge you to complete this survey. We cannot provide meaningful information to the Congress on these issues without your frank and honest answers.

Thank you for your time and assistance.

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Please refer to the following definitions when completing this survey:

**Office** - Refers to the Office of Market Oversight and Investigations (OMOI)

**Division** - Refers to a division within OMOI such as the Division of Energy Market Oversight, Division of Management and Communication, etc.

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**Background Information**

The objective of this section is to obtain general information about your current position with FERC.

1. How long have you been employed by FERC, including its predecessor, the Federal Power Commission?  
*(Check one.)*

- 19% Less than 6 months
- 16% 6 to 11 months
- 15% 1 to 5 years
- 6% 6 to 10 years
- 24% 11 to 20 years
- 20% More than 20 years
- 0% No basis to judge

2. Which of the following generally describes your current area of work? *(Check one.)*

- 8% Accountant/Auditor/Examiner
- 13% Economist (Industry, Financial, etc.)
- 3% Engineer (Electrical, Mechanical, Petroleum, etc.)
- 38% Energy Industry Analyst
- 11% Other Analyst (Financial, Budget, Operations Research, Program Management, etc.)
- 0% Information Technology Specialist
- 23% Attorney
- 6% None of the above

If you checked "None of the above", please enter your current area of work in the space provided.

**Organizational Effectiveness**

The objective of this section is to obtain information about OMOI's effectiveness in meeting its mission goals and objectives.

3. In general, how clear or unclear to you are each of the following? *(Check one in each row.)*

	Very clear	Somewhat clear	Somewhat unclear	Very unclear	No basis to judge
a. FERC's overall mission/goals and objectives	60%	38%	3%	0%	0%
b. OMOI's goals and objectives	44	35	18	4	0
c. Your <b>division's</b> goals and objectives	47	25	18	9	1
d. Your current duties and responsibilities	48	33	16	4	0

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4. In general, with regard to oversight and enforcement of wholesale electricity markets, overall, how effective or ineffective is OMOI in doing the following: *(Check one in each row.)*

	Very effective	Somewhat effective	Neither effective nor ineffective	Somewhat ineffective	Very ineffective	No basis to judge
a. Monitoring wholesale electricity markets to determine whether prices are just and reasonable	13%	43%	11%	16%	3%	15%
b. Analyzing spikes in wholesale electricity prices to determine their cause	31	30	10	9	0	20
c. Responding appropriately to the causes of wholesale electricity price spikes	20	31	14	14	1	20
d. Detecting market power abuses in wholesale electricity markets	11	36	14	20	3	16
e. Correcting detected market power abuses in wholesale electricity markets	14	23	15	18	9	23
f. Identifying problems concerning wholesale electricity market structure and rules	21	34	13	20	1	11
g. Remediating problems concerning wholesale electricity market structure and rules	15	23	20	14	10	19
h. Resolving complaints and disputes among electricity market participants quickly and fairly	32	32	11	4	3	19
i. Enforcing violations of FERC's requirements relating to wholesale electricity markets	19	32	10	11	4	24

Please enter any other issue regarding the oversight and enforcement of wholesale electricity markets that you feel should have been listed above concerning OMOI's level of effectiveness.

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5. In general, with regard to oversight and enforcement of wholesale natural gas markets, overall, how effective or ineffective is OMOI in doing the following: *(Check one in each row.)*

	Very effective	Somewhat effective	Neither effective nor ineffective	Somewhat ineffective	Very ineffective	No basis to judge
a. Monitoring wholesale natural gas markets to determine whether prices are just and reasonable	18%	40%	10%	11%	3%	19%
b. Analyzing spikes in wholesale natural gas prices to determine their cause	33	35	5	9	1	18
c. Responding appropriately to the causes of wholesale natural gas price spikes	24	31	13	11	3	19
d. Detecting market power abuses in wholesale natural gas markets	10	35	15	14	1	25
e. Correcting detected market power abuses in wholesale natural gas markets	15	22	14	17	5	28
f. Identifying problems concerning wholesale natural gas market structure and rules	23	33	13	10	3	20
g. Remediating problems concerning natural gas market structure and rules	16	21	20	10	6	26
h. Resolving complaints and disputes among natural gas market participants quickly and fairly	35	25	9	4	1	25
i. Enforcing violations of FERC's requirements relating to wholesale natural gas markets	21	31	9	6	1	31

Please enter any other issue regarding the enforcement and oversight of wholesale natural gas markets that you feel should have been listed above concerning OMOI's level of effectiveness.

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6. Would you agree or disagree with the following statements as they relate to management/resources issues in OMOI? (Check one in each row.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No basis to judge
a. Top OMOI management has established effective processes and procedures to <u>oversee wholesale electricity</u> markets.	13%	40%	13%	24%	4%	8%
b. Top OMOI management has established effective processes and procedures to <u>enforce wholesale electricity</u> market rules.	10	41	18	16	6	9
c. Top OMOI management has established effective processes and procedures to <u>oversee wholesale natural gas</u> markets.	11	41	10	18	4	16
d. Top OMOI management has established effective processes and procedures to <u>enforce wholesale natural gas</u> market rules.	10	36	18	11	6	19
e. My immediate manager(s) provides clear and concise direction.	34	34	13	16	4	0
f. Top management has clearly defined what role OMOI is going to play in monitoring markets.	18	39	11	23	9	0
g. Staffing levels in OMOI are satisfactory.	3	19	25	34	15	5
h. The employee skill mix in OMOI is adequate.	9	36	18	26	9	3
i. Information technology support and services are satisfactory.	15	38	27	17	4	0
j. OMOI maintains a strong focus on achieving the FERC's mission.	30	37	18	6	6	3
k. OMOI has set clear performance expectations.	28	38	17	11	6	0
l. OMOI is able to retain quality employees.	9	26	23	16	16	10

Please enter any other issues regarding management/resources issues in OMOI you feel should have been listed above.



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7. Would you agree or disagree with the following statements as they relate to data/knowledge requirements issues in OMOI? (Check one in each row.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No basis to judge
a. Staff understands what data are required to effectively <u>oversee wholesale electricity</u> markets.	13%	46%	19%	9%	4%	10%
b. Staff understands what data are required to effectively <u>enforce wholesale electricity</u> market rules.	13	44	20	9	3	11
c. Staff understands what data are required to effectively <u>oversee wholesale natural gas</u> markets.	16	39	20	4	4	18
d. Staff understands what data are required to effectively <u>enforce wholesale natural gas</u> market rules.	14	41	20	4	3	19
e. Staff has adequate access to data on <u>electricity</u> market performance.	5	36	20	25	5	9
f. Staff has adequate access to data on <u>natural gas</u> market performance.	6	33	20	23	5	14
g. Staff has adequate knowledge of, or experience with <u>overseeing competitive electricity</u> markets.	5	40	22	21	4	9
h. Staff has adequate knowledge of, or experience with <u>enforcing market rules in competitive electricity</u> markets.	9	45	18	14	3	13
i. Staff has adequate knowledge of, or experience with <u>overseeing competitive natural gas</u> markets.	8	45	21	9	3	15
j. Staff has adequate knowledge of, or experience with <u>enforcing market rules in competitive natural gas</u> markets.	11	46	17	5	3	19
k. Staff understands the integration of gas and electricity markets.	19	48	18	10	0	5
l. Staff understands the relationship between financial markets and energy markets.	14	42	25	14	0	5

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8. Would you agree or disagree with the following statements as they relate to authority issues in FERC?  
(Check one in each row.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No basis to judge
a. FERC should have authority to enforce reliability rules for electricity.	35%	44%	11%	3%	0%	8%
b. FERC should have additional authority to require submission/sharing of data from Independent System Operators.	51	40	1	3	0	5
c. FERC should have additional authority to levy penalties.	69	23	3	0	0	6
d. FERC should have additional authority to collect necessary data to oversee energy markets and enforce market rules.	69	24	1	1	0	5

Please enter any other issues regarding authority issues in FERC you feel should have been listed above.

When answering the next question, please recall how we defined division earlier in the survey:

**Division** - Refers to a division within OMOI such as the Division of Energy Market Oversight, Division of Management and Communication, etc.

9. Thinking about your current division in OMOI, would you agree or disagree with the following statements?  
(Check one in each row.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	No basis to judge
a. My division has clearly defined its goals and objectives.	24%	35%	19%	18%	4%	1%
b. My division currently has adequate staff to do its work.	1	26	25	36	6	5
c. The staff in my division have the skills needed to do their jobs well.	15	54	15	8	3	5

Please enter any other issues regarding your current division in OMOI you feel should have been listed above.

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**10.** In your opinion, would additional training in the following subject areas assist you in overseeing energy markets and enforcing market rules? (Check one in each row.)

	Additional training would assist me greatly	Additional training would assist me somewhat	I feel I'm already proficient in this area	Training in this area would not be applicable to the work I do	No basis to judge
a. Basic economic principles/definitions	8%	27%	53%	6%	6%
b. Economic theory/models	11	41	34	9	5
c. Regulatory theory/process	11	33	43	8	5
d. Market functions	18	52	24	3	4
e. Market structures	22	49	23	3	4
f. Statistical software packages such as SAS or SPSS	10	38	15	32	5
g. Understanding how financial markets interact with energy markets (including trading, hedging, derivatives, and financial instruments)	34	42	15	6	3

In the space provided, please enter any other training that you believe would assist you in overseeing energy markets and enforcing market rules.

**Morale and Work Environment**

The objective of this section is to obtain your views on morale and the general work environment in OMOI.

**11.** Overall, how would you characterize the current level of morale in OMOI? (Check one.)

- 6% Very high
- 43% Generally high
- 15% Neither high nor low
- 21% Generally low
- 10% Very low
- 5% No basis to judge

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12. Specifically, how satisfied or dissatisfied are you with each of the following communication issues as they relate to your current work environment? (Check one in each row.)

	Very satisfied	Somewhat satisfied	Equally satisfied as dissatisfied	Somewhat dissatisfied	Very dissatisfied	No basis to judge
a. Communication between the Chairman and OMOI	14%	33%	15%	11%	8%	20%
b. Communication between the Commissioners (not including the Chairman) and OMOI	9	25	18	13	9	27
c. Communication between OMOI's top management and my division	31	21	9	14	18	8
d. Communication between different divisions within OMOI	23	26	15	18	13	6
e. Communication with offices within FERC other than my own	3	23	14	28	22	10
f. Communication between management of different offices within FERC	4	21	15	19	23	19
g. Communication with other federal agencies	9	29	21	11	5	25
h. Communication with state agencies	8	21	23	8	5	36
i. Communication with Market Monitoring Units	20	33	15	5	4	24

13. Specifically, how satisfied or dissatisfied are you with each of the following cooperation issues as they relate to your current work environment? (Check one in each row.)

	Very satisfied	Somewhat satisfied	Equally satisfied as dissatisfied	Somewhat dissatisfied	Very dissatisfied	No basis to judge
a. Cooperation between different divisions in OMOI	32%	28%	17%	14%	5%	5%
b. Cooperation with offices within FERC other than my own	5	22	27	27	10	10
c. Cooperation between management of different offices within FERC	4	18	21	29	14	15
d. Cooperation with other federal agencies	8	30	23	13	1	26
e. Cooperation with state agencies	6	23	20	10	3	39
f. Cooperation with Market Monitoring Units	21	25	13	6	4	31

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14. Specifically, how satisfied or dissatisfied are you with each of the following leadership/change issues as they relate to your current work environment? *(Check one in each row.)*

	Very satisfied	Somewhat satisfied	Equally satisfied as dissatisfied	Somewhat dissatisfied	Very dissatisfied	No basis to judge
a. Leadership provided by Commissioners and office directors at FERC	13%	34%	20%	16%	9%	9%
b. Leadership/supervision that I directly receive from my division in OMOI	34	29	10	16	6	5
c. Organizational changes within OMOI	13	20	18	18	9	24
d. Changes in my job duties as a result of organizational changes	20	14	21	8	5	33

15. Specifically, how satisfied or dissatisfied are you with each of the following resources/rewards issues as they relate to your current work environment? *(Check one in each row.)*

	Very satisfied	Somewhat satisfied	Equally satisfied as dissatisfied	Somewhat dissatisfied	Very dissatisfied	No basis to judge
a. Availability of resources (i.e., budget, technology, staff, etc.) necessary to do my job	13%	36%	23%	15%	13%	1%
b. Availability of rewards for job performance in OMOI	6	20	15	19	19	21

In the space provided, please enter any other issues related to your current work environment that you would like to mention.

16. Thinking about the issues covered in the previous few questions concerning your current work environment, overall, how satisfied or dissatisfied are you with the work environment in OMOI? *(Check one.)*

- 20% Very satisfied
- 36% Generally satisfied
- 15% Equally satisfied as dissatisfied
- 19% Generally dissatisfied
- 10% Very dissatisfied
- 0% No basis to judge

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**17.** Do you plan to leave FERC through retirement or resignation, within one of the following time periods?  
(Check one.)

- 3%      Less than 1 year
- 6%      1 to less than 2 years
- 4%      2 to less than 3 years
- 5%      3 to less than 5 years
- 35%     I have no plans to leave FERC within the next 5 years
- 45%     Unsure at this time
- 3%      No basis to judge

**Creation of OMOI**

The objective of this section is to obtain your views on the creation of OMOI.

**18.** Were you employed by FERC before the creation of OMOI in 2002? (Check one.)

- 64%     Yes → (Continue with question 19.)
- 35%     No → (Skip to question 21.)
- 1%      No basis to judge → (Skip to question 21.)

**19.** To what extent, if at all, do you believe that the creation of OMOI improved FERC's ability to oversee energy markets overall and enforce market rules in energy markets? (Check one in each row.)

	To a very great extent	To a great extent	To a moderate extent	To some or little extent	To no extent	No basis to judge
a. Creation of OMOI improved FERC's ability to oversee energy markets overall	22%	32%	14%	16%	6%	10%
b. Creation of OMOI improved FERC's ability to enforce market rules in energy markets	12	33	20	12	10	12

**20.** In your opinion, to what extent, if at all, has your work focus changed as a result of the creation of OMOI?  
(Check one.)

- 24%     Changed to a very great extent
- 20%     Changed to a great extent
- 26%     Changed to a moderate extent
- 16%     Changed to little or some extent
- 12%     Has not changed at all
- 2%      No basis to judge

If your work has changed at all as a result of the creation of OMOI, please describe the changes in the space provided.

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**Comments**

Here you are provided an opportunity to provide additional comments or suggestions.

21. If you have any additional comments relating to any of the issues raised in this questionnaire, please enter them in the space provided

22. If you have any additional suggestions not noted elsewhere on this questionnaire about how FERC or OMOI can improve operations, please enter them in the space provided.

**Final Survey Question - Be sure to answer this when survey is complete.**

23. If you have completed the questionnaire, please check the "Completed" box below.  
**Please note:** *You must answer "Completed" for your answers to be included.*

Clicking "Completed" is equivalent to "mailing" your questionnaire. It lets us know that you are finished, and that you want us to use your answers. It also lets us know not to send you any follow-up messages reminding you to complete your questionnaire.

- Completed  
 Not completed

**Thank you for your cooperation.**

# FERC’s Approach to Addressing Market Manipulation Schemes and Other Potentially Noncompetitive Actions

This appendix contains the Federal Energy Regulatory Commission’s (FERC) response to our questions concerning how the agency’s new market oversight approach will detect certain market manipulation schemes, such as the ones used by the Enron Corporation, and other potentially noncompetitive actions. (See table 5.) For each of these schemes or types of actions, Office of Market Oversight and Investigations (OMOI) officials provided the (1) FERC office or other organization responsible for detecting it, (2) type of oversight used, and (3) type/source of data used. We received this information from OMOI officials in April 2003.

**Table 5: FERC’s Approach to Addressing Market Manipulation Schemes and Other Potentially Noncompetitive Actions**

Type of action	Description of action	Organization/office responsible for detecting action	Type of oversight used to detect action	Type/source of data used to detect action
<b>Electricity markets</b>				
<b>Enron schemes</b>				
Scheduling fictitious load to receive congestion payments.  (Enron’s “load shift” scheme)	A company owns transmission rights on a transmission path connecting two separate areas or “zones.” In a schedule that it submits to the transmission provider, the company artificially overschedules load in one zone and underschedules load in the other zone. This fictitious schedule creates the appearance of congestion on the transmission path. The company then reschedules its load by “shifting” the overscheduled load to the other zone, which appears to relieve the congestion, and is paid by the transmission provider for doing so.	Not applicable for all markets except the California ISO, <sup>a</sup> the CAISO market monitor is responsible for detecting.	Review of detailed market data.	Schedule and bid data.
Scheduling fictitious load to manipulate electricity prices.  (Enron’s “fat boy” scheme)	A company artificially increases load on a schedule it submits to the transmission provider to correspond with the amount of generation in its schedule. The company then generates electricity in real time that is in excess of its actual load. As a result, the transmission provider pays the company for excess generation at the market clearing price established in the real-time electricity market.	Not applicable for all markets except the California ISO, <sup>b</sup> the CAISO market monitor is responsible for detecting.	Review of detailed market data.	Schedule and bid data.



**Appendix III  
FERC's Approach to Addressing Market  
Manipulation Schemes and Other Potentially  
Noncompetitive Actions**

(Continued From Previous Page)

<b>Type of action</b>	<b>Description of action</b>	<b>Organization/office responsible for detecting action</b>	<b>Type of oversight used to detect action</b>	<b>Type/source of data used to detect action</b>
Scheduling fictitious generation to receive congestion payments.  (Enron's "death star" scheme)	In a schedule that it submits to the transmission provider, a company schedules the transmission of electricity in the opposite direction of congestion on a transmission path. The company then collects payments from the transmission provider for appearing to relieve congestion. However, the company does not actually put electricity on the grid or take it off.	Not applicable for all markets except the California ISO, <sup>c</sup> the CAISO market monitor is responsible for detecting.	Review of detailed market data.	Schedule and bid data.
Ancillary services sellback  (Enron's "get shorty" scheme)	A company commits to provide ancillary services that it does not have (i.e., selling "short") to the day-ahead market, with the intention of buying back this capacity in the hour-ahead market at a lower price. This scheme is also known as "paper trading," in the sense that the trader does not have physical resources to back up the trade.	ISO/RTO market monitoring units	Verification of physical ability to supply reserves. <sup>d</sup>	Supplier bidding and unit operational performance data.
Megawatt laundering  (Enron's "ricochet" scheme)	A company buys electricity from the day-ahead market and exports it to a second company, which receives a fee from the first company. The electricity is later resold back to the transmission provider in the real-time market at a higher price.	NA (This scheme exploited features of the California Market rules before 6/20/2001, but most of those features have been eliminated in recent market rules.) <sup>e</sup>		
<b>Withholding</b>				
Withholding capacity (physical withholding)	A company withholds electricity from the market to create an artificial shortage of electricity, which increases real-time prices.	ISO/RTO market monitoring units, OMOI (Withholding is much more difficult to detect for non-ISO markets.)	<ol style="list-style-type: none"> <li>1. Reduce potential with good market rules.</li> <li>2. General monitoring of the health of electric markets.</li> <li>3. Specific investigations: review of historical outage data, on site audits, complaint and hotline calls.<sup>f</sup></li> </ol>	General monitoring: electric market price and supply data. Specific investigations: plant specific and industrywide outage data

**Appendix III  
FERC's Approach to Addressing Market  
Manipulation Schemes and Other Potentially  
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(Continued From Previous Page)

<b>Type of action</b>	<b>Description of action</b>	<b>Organization/office responsible for detecting action</b>	<b>Type of oversight used to detect action</b>	<b>Type/source of data used to detect action</b>
Withholding capacity (economic withholding)	A company submits an inflated bid for providing electricity to the day-ahead market. The inflated bid creates the perception of a shortage of electricity, which increases real time prices.	ISO/RTO market monitoring units, OMOI (Withholding is much more difficult to detect for non-ISO markets.)	<ol style="list-style-type: none"> <li>1. Reduce potential with good market rules.</li> <li>2. General monitoring of the health of electric markets.</li> <li>3. Specific investigations: review of bids compared expected bid thresholds, complaints and hotline calls.<sup>9</sup></li> </ol>	General monitoring: electric market price and supply data. Specific investigations: bid data, generator production cost data (unit heat rate, fuel costs, start-up costs, O&M).
<b>Discrimination</b>				
Discriminatory pricing practices	A privately owned utility sells power to an affiliated power marketer at prices lower than it sells to nonaffiliated buyers.	OMOI (Discrimination is much more of a problem and more difficult to detect for non-ISO markets.)	Complaints, hotline calls, analysis of Electronic Quarterly Reports (EQR) data, audits. <sup>h</sup>	EQR data, company records
Discriminatory access practices	A transmitting utility uses its control of transmission facilities and system operations to limit market access of competitors in capacity and energy markets.	OMOI, OMTR (Discrimination is much more of a problem and more difficult to detect for non-ISO markets.)	Complaints, hotline calls, audits	OASIS data, company records
<b>Other noncompetitive actions</b>				
Control of assets	A company assigns control of jurisdictional assets (e.g., a trading platform) to another company without receiving prior FERC approval.	OMOI, OMTR	Complaints, hotline calls, audits	Company records
Sleeve trading	A company acts as a middleman (or "sleeve") between two affiliates of a parent company in order to allow transactions to proceed that affiliates would be forbidden to undertake directly.	OMOI, OMTR, market monitoring units	Complaints, hotline calls, audits, analysis of EQR data	Company records, EQR data
Fraudulent ownership of a qualifying facility	An electric utility holding company uses fraudulent financial arrangements to own a qualifying facility, which is exempt from certain state and federal regulations. The qualifying facility then applies for recertification with FERC as a qualifying facility.	OMTR, <sup>i</sup> OMOI	Complaints, hotline calls, audits	Company records

**Appendix III**  
**FERC's Approach to Addressing Market**  
**Manipulation Schemes and Other Potentially**  
**Noncompetitive Actions**

(Continued From Previous Page)

Type of action	Description of action	Organization/office responsible for detecting action	Type of oversight used to detect action	Type/source of data used to detect action
<b>Gas markets</b>				
<b>Withholding</b>				
Withholding capacity (physical withholding of pipeline capacity)	A pipeline company withholds operationally available capacity from the market. This withholding of capacity creates an artificial shortage of capacity, which increases basis differential. This could lead to higher downstream prices or to reduced upstream prices.	OMOI Pipeline customers	When OMOI observes unusual basis differentials, pipelines are contacted to ascertain flow levels vs. capacity and get an explanation for why capacity not offered.	Basis differential observed from daily reported prices published in the trade press.
Withholding capacity (physical withholding of storage withdrawals)	A company owning natural gas in storage elects to keep the gas in storage rather than withdraw it for sale. This withholding of capacity creates an artificial shortage of gas, which increases overall gas prices in the marketplace.	OMOI	General monitoring of the health of gas markets	General gas storage, gas market price and supply data.
Withholding capacity (physical withholding of gas production)	A producer elects to keep its gas in the ground rather than offering it for sale. This withholding of capacity creates an artificial shortage of gas, which increases overall gas prices in the marketplace.	OMOI (FERC has no jurisdiction over gas production.)	General monitoring of the health of gas markets (If OMOI determines that withholding by producers is raising prices or threatening deliverability, we would alert the FTC and DOJ.)	General gas market price and supply data.
<b>Other noncompetitive actions</b>				
Communicating market information from pipelines to marketing affiliates.	A pipeline shares information about its capacity with an affiliated marketer, which is able to use the information to gain more advantageous positions in a marketplace than its competitors.	OMOI Pipeline customers	Monitor and audit pipeline internal information controls. Maintain contacts with market participants who may notice abnormalities.	Data requests and interviews with company personnel.
<b>Financial markets</b>				
Manipulating physical marketplaces to affect prices in financial marketplaces.	A company uses its dominant position within a market to manipulate prices in physical markets in order to affect associated financial markets.	CFTC, OMOI	Compare trading positions of players to assess whether a trader attempted to corner the market, or took unusual physical or financial positions.	CFTC receives trading position data from NYMEX. FERC can subpoena information.

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(Continued From Previous Page)

<b>Type of action</b>	<b>Description of action</b>	<b>Organization/office responsible for detecting action</b>	<b>Type of oversight used to detect action</b>	<b>Type/source of data used to detect action</b>
Providing false data about prices or volumes to index publishers.	A company deliberately reports inaccurate natural gas prices to the reporting firms (i.e., private, commercial companies such as Platts and Bloomberg that report electricity and natural gas prices) in order to manipulate the reported prices data.	CFTC, DOJ, OMOI	Observe daily prices for unusual patterns, request trading transaction data to compare to reports made to reporting firms. Audits, analysis of EQR data	Published daily prices and filed reports. Company records and EQR data.
Wash trading	Wash trades are transactions that give the appearance of sales and purchases, but which are initiated without the intent to make a bona fide transaction and which generally do not result in any actual change in ownership or the trader's market position.	CFTC, DOJ, OMOI (Wash trading of physical gas may be wrong, but it is not illegal.)	Observe daily prices for unusual patterns, request trading transaction data to compare to reports made to reporting firms. Audits, analysis of EQR data	Published daily prices and filed reports. Company records and EQR data.
Manipulating trading platforms	A company uses its electronic trading platform to obtain a competitive advantage and to distort published market price indices for natural gas and electricity.	CFTC, DOJ, OMOI	Monitor trading platform structure and controls. Audits.	Interview trading company employees, market participants. Company records.

Source: FERC.

Note: We prefer to prevent or minimize the potential for noncompetitive actions with good market structure, design, and rules.

<sup>a</sup>The "Load Shift" scheme was tailored to take advantage of flaws in the California market design, particularly its congestion management system. That is, the scheme depended on the development of a day-ahead schedule for power purchases without determining whether that day-ahead schedule was physically feasible. In real time, the California ISO made payments to entities to relieve "virtual" congestion. This created an incentive for a market participant to create congestion in the day-ahead schedule so that the same entity would be paid to relieve that congestion in real time.

Currently, however, PJM Interconnection, New York ISO, ISO-New England, and ERCOT use a different congestion management system (i.e., locational marginal pricing), together with a physically feasible and financially binding day-ahead schedule that make the schemes infeasible. The use of a locational congestion management system ensures that all transmission constraints are considered in developing day-ahead schedules, and any congestion is reflected in the prices for energy and transmission services. Thus, there is no need for transmission providers (e.g., ISOs) to make separate payments in real time to relieve congestion in the day-ahead schedule, as there was in California.

Moreover, the day-ahead schedules under current ISO markets, except the CAISO, are financially binding so that a marketer that changed its schedule in real time would still be financially liable for its day-ahead schedule. This eliminates opportunities and incentives for the "load shift" scheme that relies on differences between day-ahead and real-time prices.

Although the load shift scheme may not be directly applicable to the current ISO markets, it has been recognized in certain ISO markets (e.g., PJM) that market participants might try to take advantage of virtual bidding, which is allowed in some ISO markets, to create fictitious congestion to collect Financial Transmission Right (FTR) revenue in a day-ahead market. PJM currently has market rules and screening mechanisms in place to deal with this type of manipulation. To the extent that remedying this type of trading scheme in the current ISO markets involves detecting the manipulative behavior and changing of market rules, collaborative work among OMOI, OMTR, and regional MMUs may be required.

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**Appendix III**  
**FERC's Approach to Addressing Market**  
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<sup>b</sup>The Enron-type “fat boy” trading scheme was premised on submitting false scheduling information, artificially increasing load on a schedule it submitted to the Cal ISO in an attempt to take advantage of the fact that the three California public utilities, especially PG&E, habitually under-scheduled their load in the day-ahead market (Cal PX) in an effort to minimize their procurements costs. Currently, however, the other ISO markets (New York ISO, PJM, and ISO New England,) do not require load or generation to submit balanced day-ahead schedules. Therefore, such a scheme is not viable in these markets. ISOs have scheduling requirements and entities that do not follow them are subject to penalties under ISO tariffs.

<sup>c</sup>The “Death Star” scheme was tailored to take advantage of flaws in the California market design, particularly its congestion management system. That is, the scheme depended on the development of a day-ahead schedule for power sales without determining whether that day-ahead schedule was physically feasible. In real time, the California ISO made payments to entities to relieve “virtual” congestion. This created an incentive for a market participant to create congestion in the day-ahead schedule so that the same entity would be paid to relieve that congestion in real time. This is not a viable scheme under current rules of operating markets.

Currently, however, PJM Interconnection, New York ISO, ISO-New England, and ERCOT use a different congestion management system (i.e., locational marginal pricing), together with a physically feasible and financially binding day-ahead schedule that make the schemes infeasible. The use of a locational congestion management system ensures that all transmission constraints are considered in developing day-ahead schedules, and any congestion is reflected in the prices for energy and transmission services. Thus, there is no need for transmission providers (e.g., ISOs) to make separate payments in real time to relieve congestion in the day-ahead schedule, as there was in California.

Moreover, the day-ahead schedules under current ISO markets are financially binding so that a marketer that changed its schedule in real time would still be financially liable for its day-ahead schedule. This eliminates opportunities and incentives for the “death star” scheme that relies on differences between day-ahead and real-time prices.

Although the death star scheme may not be directly applicable to the current ISO markets, however, it has been recognized in certain ISO markets (e.g., PJM) that market participants might try to take advantage of virtual bidding, which is allowed in current ISO markets, to create fictitious congestion to collect Financial Transmission Right (FTR) revenue in a day-ahead market. PJM currently has market rules and screening mechanisms in place to deal with this type of manipulation. To the extent that remedying this type of trading scheme in the current ISO markets involves detecting the manipulative behavior and changing of market rules, collaborative work among OMOI, OMTR, and regional MMUs may be required.

<sup>d</sup>This scheme depended on Enron committing fraud by claiming to have capacity resources when they did not. This may only be used in markets where participants may financially trade ancillary services (reserves) in both the day-ahead and real-time markets. In current ISO markets, financial offers of ancillary service are not permitted. Only physical providers of services may bid, and their performance is subject to ISO/RTO verification and oversight by the market monitoring unit.

<sup>e</sup>Prior to 6/20/2001, a generator in California could produce energy or a marketer could buy energy, ship it out of state, and cause it to be shipped back in-state in the real-time market, in order to avoid a price cap on in-state electricity. This situation is no longer relevant in California, due to the imposition of a west-wide mitigation plan. Imposition of a bid cap eliminates the difference in treatment of electricity supplies, depending on their source and thus the profit-making opportunity associated with this scheme.

Megawatt laundering is not relevant within or between Northeastern ISO or RTO markets, as supplies are not subject to different price caps in these locations. This problem can be avoided in the future through greater consistency of market power mitigation rules across regions. The movement of energy to market locations is a good thing in functional markets as such market arbitrage can enhance market efficiency.

<sup>f</sup>We have a three-part strategy for addressing physical withholding. First, good market rules can help reduce the potential for physical withholding, as long as the rules do not undermine competition. In establishing rules, it is important to provide clear guidance on what constitutes physical withholding. Examples of rules in place in some ISO markets include: resource adequacy, special contracts for generators in load pockets, market mitigation procedures, and “must offer” provisions.

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### Appendix III FERC's Approach to Addressing Market Manipulation Schemes and Other Potentially Noncompetitive Actions

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Second, outside load pockets, physical withholding is a concern only when supply is tight. By monitoring supply and demand conditions in electricity markets, OMOI can watch for conditions where physical withholding is most likely to occur.

Third, when these "tight" market conditions occur, market monitoring units and OMOI can review outage data. The market monitoring units are responsible for monitoring for physical withholding in the organized markets. The comparison of quantities bid to historical offer thresholds is a first step in order to help determine if withholding conduct is occurring. Actual output may be compared to thresholds for output and for deratings. The thresholds are generally based upon "normal" levels of output for individual units. When a unit is derated or has an unscheduled outage, physical inspections or audits may be used to ensure that the outage is legitimate.

Outside the organized markets, OMOI is the entity responsible for monitoring for physical withholding of electric supply. Given the number of potential market players, detecting this type of physical withholding depends on complaints and hotline calls.

<sup>9</sup>We have a three-part strategy for addressing economic withholding. First, good market rules can help reduce the potential for economic withholding, as long as the rules do not undermine competition. In establishing rules, it is important to provide clear guidance on what constitutes economic withholding. Examples of rules in place in some ISO markets include: resource adequacy, special contracts for generators in load pockets, and market mitigation.

Second, outside load pockets, economic withholding is a concern only when supply is tight. By monitoring supply and demand conditions in electricity markets, OMOI can watch for conditions where economic withholding is most likely to occur.

Third, when these market conditions occur, market monitoring units and OMOI can review bid and generator production cost data. The market monitoring units are the entities responsible for monitoring for economic withholding within the ISOs and RTOs. They do so by comparing the offer information to thresholds for anticipated offer behavior (expected bids given historical norms, often adjusted for fuel prices). If the entities exceed the thresholds for offers, the ISO or RTO may then see if the withholding has affected the market prices.

Outside the RTOs and ISOs, it would be very difficult to determine when economic withholding occurred, rather than simply scarcity pricing for a scarce resource. Economic withholding may be associated with withholding of transmission capacity to keep the buyer from reaching other market alternatives. OMOI is responsible for monitoring for such withholding, and uses the complaint and hotline processes to determine when it is occurring.

<sup>10</sup>This is defined to be a situation in which a privately owned utility sells power to an affiliated power marketer at lower prices than it sells to other nonaffiliated buyers. This situation pertains to bilateral markets, because in organized RTO and ISO markets, the seller does not choose either the party to which it sells, nor can it differentiate across buyers. In the bilateral markets, the seller has an incentive to provide power at a discount to an affiliate when the seller can charge other sellers more through regulated rates.

OMOI is the organization responsible for monitoring for discriminatory pricing. Until now, we have been monitoring primarily by reviewing complaints which have been filed with the Commission and responding to hotline calls. With the Electric Quarterly Report data now organized in a data base, OMOI staff can analyze the information to check for differences between affiliated and non-affiliated transactions. Additionally, OMOI will be auditing transactions to check for evidence of affiliate abuse.

<sup>11</sup>The Office of Markets, Tariffs, and Rates (OMTR) reviews notices of self-certification of qualifying status or applications for Commission certification of qualifying facility status, which are subject to the ownership criteria of 18 C.F.R. 292.206 among other requirements.

# Comments from the Federal Energy Regulatory Commission

FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC 20426

OFFICE OF THE CHAIRMAN

July 25, 2003

Mr. Jim Wells  
Director, Natural Resources and Environment  
United States General Accounting Office  
441 G Street, N.W.  
Washington, D.C. 20548

Re: GAO Report Entitled *Additional Actions Would Help Ensure FERC's Oversight and Enforcement Capability is Comprehensive and Systematic*

Dear Mr. Wells,

Thank you very much for your thoughtful report *Additional Actions Would Help Ensure FERC's Oversight and Enforcement Capability is Comprehensive and Systematic*. As you note, electric and natural gas markets are very dynamic, and policing them effectively presents challenges that are novel to any government agency.

I am proud of the considerable progress FERC as a whole, and OMOI have made over the past year in addressing the market challenge. Beyond OMOI's efforts, numerous Commission offices - OMTR, OGC, OAL, and OEP - play important roles in creating rules and market designs that encourage appropriate, effective behavior; litigate specific issues and infractions, and help get more infrastructure built, which affects market effectiveness and competitiveness. And like other agencies, we face a significant human capital challenge, and here too we have made some satisfying progress. Your report offers valuable advice for additional improvement and accomplishment.

**Successes So Far.** It is gratifying that you noted so many of our successes over the past year. These include the following.

*The Office of Market Oversight and Investigations has implemented informal processes to begin its work (page 20).* While we will need to document and elaborate on these processes, they have served us well over the past year.

*The value of even informal processes is clear from the fact that OMOI is now producing a steady flow of regularly scheduled reports to the Commission and the public on market developments in both the short and long term (pp. 21-*

22). These reports cover energy markets more systematically than the Commission has ever been able to do before. In addition, these reports reflect a growing level of sophistication and insight about physical and financial gas and electric markets and the interaction between them.

*OMOI staff is gaining confidence in its ability to oversee markets. You note that 53 percent of the staff believes that processes are now in place to oversee gas and electric markets effectively (p. 22). That is a significant improvement over your findings in your June 2002 report *Energy Markets: Concerted Actions Needed by FERC to Confront Challenges That Impede Effective Oversight*, where you found that before we established OMOI only 32 percent of the staff believed the Commission could effectively monitor electric and gas markets.*

*OMOI has a variety of oversight tools and is constantly working to improve them (p. 23-25). One crucial improvement that you note is the Electric Quarterly Report (p. 25). This filing will show all jurisdictional power sales for companies that have authority to sell at market and cost-based rates. The information includes data on every transaction, including reports of price, quantity and counter-parties. While these data are delayed (filing occurs one month after the end of a quarter), they will let us examine market behavior at useful levels of aggregation.*

*OMOI is incorporating new sources of information into its market monitoring, including especially the use of the Enforcement Hotline not only to help solve disputes but also to serve as an early warning system for emerging market problems (p. 26-27).*

*OMOI has increased its investigative activities (p. 28). We have opened more investigations and audits than before. And we have had a number of important successes. You note the Transcontinental case (p. 28). We would also bring to your attention a series of other important cases:*

- A Nicor Gas case that found violations of the Commission's reporting requirements and regulations where Nicor settled these violations with a compliance plan and refunds and credits to its customers at a value of just under \$1.8 million.
- An Idaho Power Company case where Idaho Power admitted to having violated its Standards of Conduct and its Code of Conduct and agreed to a compliance plan and \$6.1 million in various refunds.



- A Cleco case where for various violations of the Federal Power Act, Commission regulations and tariff provisions, and the standards of conduct, Cleco's market-based rate authority was revoked and Cleco agreed to pay civil penalties and refunds totaling \$2.85 million.

*OMOI is improving its partnership with Market Monitoring Units (MMUs) around the country (pp. 30-31). We find our growing relationship with the MMUs valuable and highly informative and appreciate that all functioning MMUs testified to the improvement. This continues to be a high priority.*

*OMOI has addressed some key staffing needs (pp. 33-35). In particular, OMOI has almost completed its staffing to authorized start-up levels (p. 33) and is using training and contracting to increase its expertise (p. 35).*

Across the agency, we have developed office-specific and agency-wide Human Capital Plans (p. 39). The plan—which you characterize as commendable and a promising first step—will help us recruit, retain and develop the skilled staff needed to accomplish our mission. We appreciate your statement that FERC is one of only a small number of agencies to have begun addressing human capital challenges by developing such a plan.

Finally, I would like to mention one other crucial success that you did not highlight in your report. The Commission now has the ability to see critical market issues and to respond appropriately sooner than ever before. During the past year, for example, we have identified two major problems in market operation – the validity of published price indices and the expense of current credit clearing systems. In both cases, we have held technical conferences to elucidate the problems and lay the groundwork for solutions. I am confident that solutions will be in place much sooner than they otherwise would have been because of our timely intervention and facilitation of an industry-accepted solution rather than through regulatory mandate. This self-correction mechanism lies at the heart of the market oversight function. I am very proud of the results achieved so far, especially since they occurred during the first year of OMOI's existence.

**Next Steps.** In general, I agree with your report on the steps that are needed next. You raise several points in noting that we need to define the role of market monitoring more clearly and expand upon our human capital initiative:

- The Commission needs to define just and reasonable rates and market power more clearly (p.13, 14). The issue is inherently very difficult. The disagreements you note among the various MMUs testify to the wide variations in possible approaches and also to the sheer conceptual difficulty

of finding a good overall approach. Addressing the need to define just and reasonable rates and market power will be centered in OMTR.

- OMOI needs to integrate its work with that of other offices in the Commission and with other organizations (p. 15). I agree, this has been an ongoing focus of mine.
- OMOI needs to define the level at which it will review market transactions (p. 18). As a general matter, I agree. I would note three points. First, budget constraints will limit what we can do. Second, a key part of making our effort work will involve making best use of synergies with others, such as MMUs and states. Third, the answer here will almost certainly vary according to circumstance. During problematic periods, I would expect to see analyses at much finer level of detail than at other times.
- OMOI needs to develop a comprehensive set of results-oriented performance measures (p. 19). This point applies to the whole Commission and I agree with it. Our work to develop market metrics illustrates such an attempt.
- The Commission needs to expand its Human Capital Plan to identify specific activities, resources and time frames needed to implement its initiatives (p. 39). We will continue to implement the actions contained in the Human Capital Plan. As one example of how we intend to undertake more specific activities to implement the plan, the Commission recently requested buyout and early out authorities. The requests target specific positions--in both program and support offices--over a multi-year period, to assist with succession planning. This initiative, developed as a coordinated effort among the office representatives who developed and are implementing the Human Capital Plan, addresses aspects of the challenges posed by potential retirements and existing skills mix problems (p. 43), as identified in the plan. If the Commission can successfully take advantage of the opportunity retirements provide to open new positions with the new skills needed to oversee markets, we can turn these challenges in our favor.
- The Commission needs to provide results-oriented measures to track its progress in implementing its Human Capital Plan initiatives and evaluating their effectiveness (p. 39). As mentioned in relation to OMOI, I agree that results-oriented performance measures are desirable for this and other Commission activities.

You also say that OMOI needs to develop formal processes and written procedures to replace the largely “informal and *ad hoc*” processes in place today.

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**Appendix IV  
Comments from the Federal Energy  
Regulatory Commission**

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I agree that the current processes are informal, though I would not call them *ad hoc*. During this first phase of development, the informal procedures have served both the Office and Commission well by letting us experiment with varied approaches and build on what works. Overall, the processes have been remarkably coherent, in that they have all pointed toward better ways of understanding market behavior and better ways of communicating that understanding. I agree that it is now time to formalize and document many of the processes, but not at the cost of stifling creativity and experimentation so important for a new organizational unit.

**One Final Point:** In the background of the report (p. 9), you state that FERC hopes to issue a final rule on its initiative to create “seamless” wholesale electricity markets. At this time, FERC is planning on holding technical conferences in different regions of the country this fall and has postponed the issuance of any final rule.

Thank you again for the valuable insights in your report.

Best regards,



Pat Wood, III  
Chairman

# GAO Contacts and Staff Acknowledgments

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## GAO Contacts

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## Staff Acknowledgments

In addition to the individuals named above, Adam Hoffman, Jason Holliday, and Raymond Smith made key contributions to this report. Important contributions were also made by Stuart Kaufman, Ellen Rubin, and Barbara Timmerman.

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