

GAO

Report to the Chairman, Subcommittee  
on Energy and Power, Committee on  
Energy and Commerce, House of  
Representatives

January 1992

# ELECTRICITY SUPPLY

## Potential Effects of Amending the Public Utility Holding Company Act



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United States  
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**Resources, Community, and  
Economic Development Division**

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January 7, 1992

The Honorable Philip R. Sharp  
Chairman, Subcommittee on Energy  
and Power  
Committee on Energy and Commerce  
House of Representatives

Dear Mr. Chairman:

As you requested, this report discusses the potential impacts of amending the Public Utility Holding Company Act of 1935 on the reliability and cost of the nation's electricity supply and on state and federal regulation of electric utility activities.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to the Secretary of Energy; the Chairman, Securities and Exchange Commission; and the Chairman, Federal Energy Regulatory Commission. We will also make copies available to others upon request.

Should you have any questions or need additional information, please contact me on (202) 275-1441. Major contributors to this report are listed in appendix II.

Sincerely yours,

Victor S. Rezendes  
Director, Energy Issues

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# Executive Summary

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## Purpose

Seeking to reap the potential benefits of greater competition, proposals to exempt certain electricity generators from the ownership restrictions of the Public Utility Holding Company Act of 1935, as amended (PUHCA), could alter the structure of the nation's \$170 billion electric utility industry. To help assess the effects of amending the act, the Chairman, Subcommittee on Energy and Power, House Committee on Energy and Commerce, asked GAO to evaluate, among other things, how the proposals might affect (1) the reliability and cost of the nation's electricity supply and (2) state and federal regulation of electric utilities.

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## Background

Most electricity is produced in the United States by privately owned utilities operating as monopolies within defined service areas. In exchange for monopoly status, utilities are required to provide reliable service, and their rates (prices) and financial activities are subject to state and federal regulation. PUHCA is designed to discourage utility holding companies from structuring their operations in ways that would prevent effective state regulation. Among other things, the act generally confines a holding company's utility operations to a single geographic area and requires utility holding companies to maintain simple corporate and financial structures. The act is administered by the Securities and Exchange Commission (SEC).

Partly in response to economic and regulatory changes, wholesale electricity markets have grown significantly in recent years. The transmission and sale of wholesale electricity is regulated by the Federal Energy Regulatory Commission (FERC), an independent commission within the Department of Energy (DOE). A 1978 law, enacted in part to encourage efficiency in electricity production, authorized the creation of electricity sources, called qualifying facilities, to sell wholesale electricity to utilities. Qualifying facilities, which are exempt from PUHCA's restrictions, now account for about 5 percent of the nation's installed electricity-generating capacity. As GAO recently indicated in testimony,<sup>1</sup> other electricity sources that are not exempt from PUHCA have also entered wholesale markets, but PUHCA acts to deter widespread development of such sources.

Proposals to amend PUHCA would authorize the creation of additional exempt wholesale suppliers. While the details of the proposals vary, they are generally designed to expand opportunities for competition among wholesale power suppliers, thereby lowering electricity supply costs.

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<sup>1</sup>Electricity Supply: Regulation of the Changing Electric Utility Industry Under the Public Utility Holding Company Act (GAO/T-RCED-92-2, Oct. 3, 1991).

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## Results in Brief

The reliability and cost impacts of the proposed amendments depend on the specific provisions that are enacted, the extent to which utilities and other companies participate in wholesale power markets, and the way in which transactions are arranged. Enactment of proposed amendments would likely lead to an increase in the number of wholesale suppliers and the portion of electricity generated for wholesale consumption. Unlike utilities, nonutility suppliers are not required by regulation to provide reliable electrical service; however, state regulators and utilities have taken steps to ensure that nonutility suppliers operate reliably. Furthermore, utilities' experiences with qualifying facilities indicate that these suppliers have operated reliably to date.

Potential effects on electricity supply costs depend on the degree of competition that amending PUHCA would bring about, the long-run performance of wholesale suppliers, and the effectiveness of federal and state regulation. Generally, competition among suppliers could cause them to lower their prices and thus lower a purchasing utility's electricity supply costs. However, such an outcome also depends on a number of other factors affecting competition, including the conditions under which transactions are accomplished and the degree of access to electricity transmission facilities for wholesale transactions. Utilities' experience indicates that qualifying facilities and other nonutility suppliers can supply electricity at a cost acceptable to utilities and state regulators.

An increase in wholesale power purchases could increase state regulatory responsibilities and reinforce a trend among state regulators towards reviewing utilities' selection of suppliers. At the federal level, FERC's regulatory role would be likely to increase as the portion of electricity produced by wholesale generators increases. SEC would no longer oversee utility holding companies' acquisitions of wholesale facilities, and other companies could own and operate wholesale facilities without becoming subject to PUHCA. Because suppliers could include companies affiliated with a utility holding company, both federal and state regulators could face an increased challenge to ensure that, among other things, (1) utilities do not give affiliated suppliers an undue advantage over other potential suppliers and (2) holding companies do not unfairly allocate expenses to their utility subsidiaries.

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## GAO's Analysis

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### Impacts on System Reliability Appear Small

Amending the act as proposed is likely to increase the number of nonutility wholesale generators. Although experience with purchases from nonutility suppliers is limited, GAO noted in a 1990 report<sup>2</sup> that such suppliers have an incentive to operate reliably and that utilities and state regulators have taken steps to ensure the reliability of nonutility sources from whom the utilities purchase power. GAO's recent survey of state utility commissions showed that in 41 states regulators address their reliability concerns by either requiring or encouraging the utilities they regulate to include in power purchase contracts provisions designed to ensure the reliability of wholesale suppliers. (See ch. 3 and app. I.)

Because the nation's electrical system is highly interconnected, additional wholesale suppliers could increase the complexity of electrical system operations. The North American Electric Reliability Council's utility operating guidelines specify technical standards and operating procedures to ensure system reliability and control. Utilities have incentives to ensure that their generating sources, including nonutility suppliers, follow these guidelines. In addition, information provided by utilities with nonutility-generator experience, state regulators, and DOE indicates that nonutility generators have been integrated into the nation's electrical system without impairing its reliability.

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### Increased Competition Could Lower Costs

Amending PUHCA would create the potential for an increased number of wholesale electricity producers to participate in wholesale electricity markets, generally increasing supply options for utilities. Competition between suppliers could lead to lower prices and thus lower a purchasing utility's electricity supply costs. However, such effects depend on the degree of competition that would exist. Industry trends suggest that the number of potential wholesale electricity sellers would likely grow. From 1980 through fiscal year 1990, FERC received over 4,600 requests to certify generators as qualifying facilities, and over 40 other nonutility generators are in service or under development. Proposals to increase access to electrical transmission facilities, if adopted, could further increase the number of potential suppliers to a given wholesale market. Also, an increasing portion of wholesale transactions could occur under regulatory

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<sup>2</sup>Electricity Supply: The Effects of Competitive Power Purchases Are Not Yet Certain (GAO/RCED-90-182, Aug. 23, 1990).

programs that are adopted or are being considered by over two-thirds of the states and that are designed to identify the least costly way of balancing electricity supply and demand.

Cost impacts also depend on the performance of wholesale suppliers and the effectiveness of state and federal regulation in mitigating potential market abuses. The supplier's long-run performance is an important cost factor because the supplier's failure to deliver power as expected could force the utility to obtain more costly electricity elsewhere. Because the proposed amendments could result in more wholesale electricity transactions between affiliated companies, federal and state regulators would need to ensure that, among other things, the transactions do not take undue advantage of the affiliation to inappropriately raise a purchasing utility's electricity supply costs.

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### State and FERC Regulator Responsibilities Could Increase

While amending PUHCA as proposed would affect the regulatory role played by SEC, changes at state commissions and FERC would appear to be greater. State utility commissions would be responsible for reviewing the decisions of utilities under their jurisdiction to participate in wholesale markets and for protecting ratepayers from abusive practices between purchasing utilities and affiliated wholesale suppliers. While their experiences vary, many states have reviewed and acted on such transactions.

Because FERC regulates the rates, terms, and conditions for the generation and transmission of wholesale power, its regulatory role would likely increase as the portion of electricity produced by wholesale generators increases. FERC would also be responsible for guarding against potential abuses when reviewing wholesale transactions between affiliated companies. Under most proposals, SEC would no longer oversee utility holding companies' acquisitions of certain wholesale facilities, and other companies could own and operate wholesale facilities without becoming subject to PUHCA.

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### Recommendations

GAO is making no recommendations in this report.

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### Agency Comments

As requested, GAO did not obtain written comments on this report but discussed it with responsible DOE, FERC, and SEC officials, who generally agreed with its contents. Their comments have been incorporated where appropriate.

# Contents

<b>Executive Summary</b>		2
<b>Chapter 1</b>		8
<b>Introduction</b>	<b>The Electric Utility Industry</b>	8
	<b>PUHCA Complements Other Federal and State Regulation</b>	10
	<b>Amendments to PUHCA Could Prompt Industry Changes</b>	13
	<b>Objectives, Scope, and Methodology</b>	14
<b>Chapter 2</b>		17
<b>Changes Could Lower Electricity Supply Costs Without Significant Reliability Effects</b>	<b>Potential Effects on Electric Service Reliability Appear Small</b>	17
	<b>Changes Could Lower Electricity Supply Costs</b>	22
	<b>Increased Access to Transmission Facilities Could Further Competition</b>	26
	<b>Observations</b>	28
<b>Chapter 3</b>		29
<b>State and FERC Regulatory Responsibilities Could Increase</b>	<b>State's Regulatory Role Would Likely Increase</b>	29
	<b>State Regulators Have Experience With Changing Utility Industry</b>	31
	<b>FERC's Regulatory Role Would Likely Expand</b>	34
	<b>SEC's Role Would Likely Be Diminished</b>	36
	<b>Observations</b>	38
<b>Appendixes</b>	<b>Appendix I: Survey of State Utility Regulatory Commissions</b>	40
	<b>Appendix II: Major Contributors to This Report</b>	53
<b>Bibliography</b>		54
<b>Related GAO Products</b>		57

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### **Abbreviations**

<b>DOE</b>	<b>Department of Energy</b>
<b>GAO</b>	<b>General Accounting Office</b>
<b>FERC</b>	<b>Federal Energy Regulatory Commission</b>
<b>mw</b>	<b>megawatt</b>
<b>NARUC</b>	<b>National Association of Regulatory Utility Commissioners</b>
<b>NEPOOL</b>	<b>New England Power Pool</b>
<b>NERC</b>	<b>North American Electric Reliability Council</b>
<b>NIEP</b>	<b>National Independent Energy Producers</b>
<b>NRRI</b>	<b>National Regulatory Research Institute</b>
<b>PUHCA</b>	<b>Public Utility Holding Company Act</b>
<b>PURPA</b>	<b>Public Utility Regulatory Policies Act</b>
<b>SEC</b>	<b>Securities and Exchange Commission</b>

# Introduction

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In recent years, partly because of economic and regulatory changes, the electric utility industry has experienced an expanding wholesale market. The number of wholesale electricity suppliers has grown substantially to include both utilities and nonutility sources. However, the Public Utility Holding Company Act of 1935, as amended (PUHCA), enacted to prevent abusive practices of utility holding companies, restricts participation in the electric utility industry. Proposals to amend PUHCA would authorize the creation of additional exempt wholesale suppliers. While the details of the proposals vary, they are generally designed to expand opportunities for competition among wholesale power suppliers, thereby lowering electricity supply costs.

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## The Electric Utility Industry

Electric power in the United States is produced by a combination of privately, publicly, federally, and cooperatively owned electric utilities. Revenues from electricity sales exceeded \$170 billion in 1989. Privately owned electric utilities account for more than 75 percent of the nation's 730,000 megawatts (MW)<sup>1</sup> of generating capacity. More than half of the privately owned companies, also referred to as investor-owned utilities, are organized as holding companies. Holding companies are generally corporations that own a controlling interest in other corporations to influence their policies and management.

The majority of investor-owned utilities are integrated monopolies. Integrated utilities own and operate the facilities for all three stages of supplying electricity—generation, transmission, and distribution. Generation is typically divided into two categories: wholesale electricity (power for resale) and retail electricity (sales to consumers). As monopolies, electric utilities supply retail electricity within designated geographic service areas, without competition from other suppliers. In exchange for their monopoly status, utilities are allowed to earn a fixed rate of return, approved in advance by regulators, on their approved utility assets (the “rate base”).

Wholesale electricity markets have grown in recent years; according to the Department of Energy (DOE), sales of wholesale electricity have increased steadily over the past 15 years and currently represent an amount equal to more than half the quantity of electricity sold to consumers in retail trade. Some utilities have long-term power supply contracts with other utilities; in addition, utilities engage in economy transactions and wheeling

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<sup>1</sup>A megawatt is 1 million watts, a watt being the basic unit of measurement of electrical power.

arrangements to lower their operating costs. A utility engages in economy transactions when it purchases a portion of its electricity from another utility because that utility's electricity is cheaper than self-generated power. Wheeling arrangements occur when utilities make their transmission facilities available to other utilities and nonutility suppliers of electric power to transfer electricity.

In conjunction with a larger volume of wholesale transactions, the number of wholesale suppliers has increased to encompass nonutility generators—generating sources that are not part of a regulated utility's rate base. The nonutility-generating industry has evolved substantially since enactment of the Public Utility Regulatory Policies Act of 1978, as amended (PURPA). Enacted in part to encourage efficiency in electricity production, PURPA authorized the creation of electricity sources, called qualifying facilities, that sell wholesale electricity to utilities. PURPA required utilities to purchase qualifying facilities' power output at prices established by state regulators and allowed qualifying facilities to be exempt from PUHCA. However, PURPA imposed fuel and technology requirements on the facilities. Qualifying facilities are limited to (1) generators that produce electricity using solar, wind, waste, or other energy sources and (2) cogenerators, which produce electricity and heat or steam for industrial or commercial purposes.<sup>2</sup>

Other nonutility sources, typically referred to as independent power producers, have also developed to produce wholesale power. These sources do not meet the fuel or technology requirements to be considered qualifying facilities under PURPA and thus are not exempt from the restrictions of PUHCA. Nonutility generators now account for more than 40,000 MW, or about 5 percent of the nation's installed electric generating capacity, and utilities are expected to turn to them increasingly to meet future electricity demands.

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<sup>2</sup>With some exceptions, PURPA limited qualifying facilities using renewable resources and other resources to generators of 80 or less megawatts. The size restrictions were partially removed in 1991 by P.L. 101-575 and 102-46.

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## PUHCA Complements Other Federal and State Regulation

The electric utility industry is subject to both federal and state economic regulation. PUHCA, administered by the Securities and Exchange Commission (SEC), regulates the corporate and financial structures of public utility holding companies, and generally limits their operations to specific geographical areas.<sup>3</sup> Enacted as companion legislation, the Federal Power Act, as amended, authorizes the Federal Energy Regulatory Commission (FERC), an independent regulatory commission within DOE, to regulate the transmission and sale of wholesale electricity. PUHCA and the Federal Power Act complement state regulation of electric utilities. Among other things, state utility commissions generally set retail rates and oversee utility transactions.

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## PUHCA Regulates Industry Structure

PUHCA is designed to promote an industry structure that enables effective state regulation of utility transactions. In passing the law, the Congress sought to protect the public, investors, and consumers from abuses associated with the control of electric and gas utilities that had occurred through the use of holding company structures. Such abuses included

- the issuance of securities<sup>4</sup> without approval by states having jurisdiction over subsidiary companies;
- an absence of arms-length bargaining, resulting in a subsidiary company's having to pay excessive charges for services, construction work, equipment, and materials;
- the allocation of charges by the holding company among its subsidiaries in different states, so that the states could not effectively regulate; and
- the growth and extension of holding companies in ways unrelated to economy of management and operation or to the integration and coordination of related operating facilities.

Under PUHCA, all companies that meet the definition of a holding company must file with SEC to become either a registered or exempt holding company. Those that do not qualify for an exemption are called "registered holding companies" and are subject to extensive SEC oversight. These companies must file annual reports with the SEC, as well as obtain SEC

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<sup>3</sup>Under PUHCA, public utilities include electric utility companies, defined as companies that own or operate facilities used for generating, transmitting, or distributing electric energy. PUHCA defines a holding company as any company that directly or indirectly owns, controls, or holds with the power to vote, 10 percent or more of the outstanding voting securities of a public utility company, or any person who SEC determines to exercise a controlling influence over the management or policies of any public utility or holding company.

<sup>4</sup>Securities include any note, draft, stock, bond, debenture, or instrument used to guarantee an obligation.

approval for (1) the issuance or sale of securities; (2) the acquisition of securities or utility assets, or any other interest in any business; (3) other transactions, such as intercompany loans; and (4) contracts for services, sales, and construction between holding company subsidiaries.

The act's provisions have led to a restructuring of the industry. These provisions generally require the SEC to limit registered holding companies to operating a single integrated system, confined to a single area or region. The act further requires a holding company and its subsidiaries to maintain simple corporate and financial structures, and authorizes SEC to require the reorganization of utility holding company systems and divestment of properties where necessary to achieve the act's goals. Since 1938, SEC has reduced the number of registered holding companies from a high of more than 200; currently, nine electric and three gas utility holding companies are registered under and subject to the act's provisions. According to SEC officials, in 1989, the nine registered electric holding companies accounted for about 25 percent of the electricity generated in the United States.

Utility holding companies qualifying for an exemption, called "exempt holding companies," are free from most, but not all, SEC regulation. Regulation of exempt holding companies is generally left to the states, although exempt companies are required to obtain SEC approval for the acquisition of 5 percent or more of another utility's securities. Virtually all exempt holding companies obtain their exempt status for one of two reasons: (1) the holding company and its utility subsidiaries operate predominantly in one state or (2) the holding company is predominantly a utility company whose operations do not extend beyond the state in which the holding company is organized and contiguous states.<sup>5</sup> SEC may revoke a company's exemption if it determines that such action is warranted in the interests of the public, investors, or consumers. Since the act's passage, SEC has revoked the exemptions of one electric utility holding company (in 1945) and one gas utility holding company (in 1981). According to SEC officials, 73 electric and 26 combination electric and gas utility holding companies are currently exempt under the act, and, in 1989, these companies accounted for about 54 percent of the electricity generated in the United States.

Other federal laws help to govern electric utility and utility holding company structures and operations. For example, the Clayton Act, as

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<sup>5</sup>The act also exempts companies that are only incidentally or temporarily holding companies, or that predominantly own or operate utility properties abroad.

amended, and the Sherman Act, as amended, prohibit certain transactions, such as mergers or acquisitions, that would result in a restraint of trade or exercise of monopoly power. In addition, the Securities Act of 1933, as amended, and the Securities and Exchange Act of 1934, as amended, require utilities and utility holding companies to file reports and disclose investor-related information to SEC when securities are sold to the public. However, these two acts differ from PUHCA in that they do not require SEC approval for securities transactions and are designed to protect the interests of investors only, not electricity consumers.

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### FERC, States Regulate Utility Rates and Transactions

Under the Federal Power Act, FERC is primarily responsible for setting rates, terms, and conditions for the sale and transmission of electricity sold at wholesale; regulating mergers, dispositions, and acquisitions of facilities used for the transmission of electricity in interstate commerce or the sale of wholesale power in interstate commerce (referred to as jurisdictional facilities); and authorizing the issuance of securities in those instances where states do not regulate them. The Federal Power Act requires that rates for wholesale electric energy sales and for the transmission of electric energy in interstate commerce be "just and reasonable," without undue preferences or advantages to buyer or seller.

State utility commissions are primarily responsible for setting retail electricity prices for utilities under their jurisdiction and for regulating utility transactions, such as dividend and securities issuances and contracts between utilities and affiliated companies. As discussed in chapter 3, the scope and extent of state regulation of utility and holding company transactions varies among the states.

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### Regulators Have Helped Foster Competition in Wholesale Markets

Both federal and state regulators have acted in recent years to promote competition in wholesale electricity markets. For example, FERC has approved wholesale electric rates that are market-based, that is, determined through a competitive or negotiated process between the purchasing utility and the potential supplier. Previously, FERC generally approved rates only if they were cost-based, that is, based on the seller's cost of supplying the power. Since 1983, FERC has reviewed 34 requests for market-based wholesale rates and has approved all but 5.

In 1988, FERC proposed rules that attempted, among other things, to promote competitive procurement programs for utilities to select

wholesale suppliers. The purpose of the proposed rules was, in part, to establish minimum requirements for bidding programs used to determine the rates for power purchases from qualifying facilities under PURPA. The proposed rules also provided for streamlining the regulation of nontraditional independent power producers. Although the proposed rules have never been made final, FERC has applied certain aspects of the proposed rules in approving market-based rates.

For a number of reasons, state regulators have increasingly encouraged or required utilities to solicit electricity suppliers through competitive procurement programs. These programs allow utilities and state regulators to identify lowest-cost sources for meeting future electricity demand. According to the National Independent Energy Producers (NIEP), an organization representing nonutility generators, since 1984 36 states have either adopted or are in the process of adopting competitive procurement programs.

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## Amendments to PUHCA Could Prompt Industry Changes

Several proposals have been made in recent years to amend PUHCA to allow utilities, utility holding companies, and nonutility companies to own and operate wholesale electricity-generating facilities.<sup>6</sup> Generally, the proposals are designed to increase the number of potential wholesale suppliers in any given region of the country. The proposals differ in how they address federal and state regulation, and in other areas, such as utilities' ability to separate (spin off) existing power plants from their utility subsidiaries and create subsidiaries to operate the plants as exempt wholesale facilities. In addition, H.R.2825, as well as a separate bill (H.R.2224), would amend the Federal Power Act to give FERC more authority to mandate access to the electric transmission system for wholesale suppliers. These amendments generally would allow a greater number of wholesale suppliers to enter the market.

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## Structural Changes

Among the most important changes that could result from enactment of proposed amendments are those affecting the overall industry structure. Collectively, these changes could create the opportunity for more electricity producers to enter a given wholesale market and allow competitive forces to identify the most efficient producers. Both utility companies and nonutility companies, such as construction firms or

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<sup>6</sup>For this report, we reviewed amendments proposed in the 102nd Congress: S.570, S.1220, H.R.1301, H.R.1543, and H.R.2825. Similar bills were introduced in the 101st Congress. S.570 and H.R.1301 are part of the administration's National Energy Strategy.

equipment manufacturers, that have relevant expertise—such as power plant design or engineering—could become wholesale electricity producers without becoming subject to current PUHCA restrictions.

Changes to the act could also lead holding companies to spin off power plants as wholesale facilities. However, the proposals address this situation in two ways: Some of the proposals preclude the option while others require approval from the appropriate state commission, and in the case of registered holding companies, from SEC.

Removing owners of wholesale facilities from PUHCA's geographic constraints would replicate the exemption currently provided for qualifying facilities under PURPA, except that the wholesale facilities would not be subject to PURPA's fuel or technology requirements. Thus, much larger plants could become wholesale facilities, and wholesale suppliers could account for a larger share of the total electricity supply.

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### Change Could Vary Among States and/or Utilities

The extent to which utilities choose to purchase power from wholesale suppliers, or to own and operate wholesale facilities, will depend on the needs of each utility company as well as the actions of state regulators. Utilities facing anticipated increases in electricity demand may wish to avoid the risks of new plant construction and instead purchase power from a wholesale supplier, as many have done in recent years. Thus, the demand for wholesale power will depend on the specific needs of the utilities in any given region of the country. Regions with sufficient electricity supplies to meet anticipated future demand may experience less change than regions with a need for additional sources.

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### Objectives, Scope, and Methodology

The Chairman, Subcommittee on Energy and Power, House Committee on Energy and Commerce, asked us to evaluate the potential effects of amending PUHCA. Specifically, we were asked to evaluate, among other things, the ways in which the proposals, if adopted, might affect (1) the reliability and cost of electricity and (2) state and federal regulation of electric utilities.

To determine the ways in which proposed amendments might affect the reliability and cost of electricity, we surveyed available literature and reviewed various studies and reports on the implications of amending the act and other aspects of the electric utility industry. (App. II contains a

selected bibliography.) In reviewing potential impacts on cost, we focused on utilities' cost of supplying power, rather than on the ratepayers' prices, because consumers' prices for electricity can be affected not only by the utilities' costs, but also by the ways in which state regulatory commissions treat utilities' costs. We reviewed testimony from recent congressional hearings on amending the act. In addition, we interviewed officials from federal and state regulatory agencies responsible for the oversight of the electric utility industry; an independent power producer with experience in constructing and operating electric utility power plants; representatives from NIEP; representatives from the Electric Reliability Coalition, an organization representing several large utilities; and a consumer advocate familiar with the potential implications for electricity customers of amending the act. We also interviewed and obtained information from representatives of the New England Power Service, Pacific Gas and Electric, Southern California Edison, and Virginia Electric and Power Company. These utilities were selected on the basis of their experience with nonutility generators and the operation of electric transmission systems.

To determine the potential effects of changes to the act on federal and state regulation of electric utility transactions, we interviewed FERC and SEC staff responsible for electric power regulation. We also referred to recent GAO testimony on SEC's enforcement of PUHCA.<sup>7</sup> We sent a questionnaire to utility regulatory commissions in all 50 states and the District of Columbia to obtain their views on their authority to regulate electric utilities and utility holding companies and on the potential implications of amending PUHCA. All but three commissions responded. (A copy of the questionnaire is in app. I.)

In addition, we interviewed officials from the California Public Utility Commission, the Massachusetts Department of Public Utilities, the Michigan Public Service Commission, the Public Service Commission of Maryland, and the Virginia State Corporation Commission. These utility commissions were selected on the basis of their experience with qualifying facilities and other nonutility generators. We also spoke to representatives of the North American Electric Reliability Council (NERC)<sup>8</sup> and the

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<sup>7</sup>Electricity Supply: Regulation of the Changing Electric Utility Industry Under the Public Utility Holding Company Act (GAO/T-RCED-92-2, Oct. 3, 1991).

<sup>8</sup>NERC, an association of nearly all the electric utilities in North America, was formed in 1968 to promote the adequacy of the power supply and the reliability of the electric system.

National Association of Regulatory Utility Commissioners (NARUC).<sup>9</sup> In addition, the Associate Director for Electricity and Gas Research, National Regulatory Research Institute (NRRI)<sup>10</sup> in Columbus, Ohio, reviewed a draft version of the report.

As requested by the Chairman's office, we did not obtain written agency comments on this report. However, we discussed factual information in the report with officials from DOE, FERC, and SEC, who expressed agreement with the information presented. We conducted our work between January 1991 and October 1991 in accordance with generally accepted government auditing standards.

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<sup>9</sup>NARUC is a quasi-governmental nonprofit organization representing state public utility commissioners.

<sup>10</sup>NRRI is a research facility established in 1976 by NARUC.

# Changes Could Lower Electricity Supply Costs Without Significant Reliability Effects

The reliability and cost effects of amending PUHCA depend on the specific provisions that are enacted and subsequent industry changes, particularly the extent to which utilities choose the supply option of purchasing wholesale electricity. As we reported in 1990, wholesale purchases from nonutility sources are a relatively recent development, and there is little experience to demonstrate conclusively the long-term reliability of such suppliers.<sup>1</sup> However, actions taken by utilities and state regulatory commissions to ensure reliability under existing wholesale purchase arrangements suggest that additional wholesale suppliers would not impair the reliability of providing electric service. Furthermore, utilities' experiences to date with qualifying facilities indicates that these suppliers have operated reliably.

Generally, amending the act as proposed could lower the cost of electricity to the purchasing utility because an increased number of suppliers could be available to compete for wholesale power contracts. However, such an outcome depends on a number of other factors affecting competition, including state regulatory initiatives, proposals to promote greater access to electricity transmission facilities, and the effectiveness of state and federal regulation in mitigating potential market abuses. Cost impacts also depend on the long-term performance of wholesale suppliers.

## Potential Effects on Electric Service Reliability Appear Small

Although wholesale suppliers are not required by regulation to supply electricity, utilities and state regulators with experience in purchasing power from wholesale suppliers have generally taken steps to ensure the reliability of these sources, through selection criteria and/or the terms of wholesale power contracts. Furthermore, utilities' experiences to date with qualifying facilities indicates these sources have operated reliably. Adding more wholesale suppliers could increase the complexity of electrical system operations. However, according to information provided by utilities with nonutility-generator experience, state regulators, and DOE, nonutility generators have been integrated into the electrical system without impairing the reliability of electrical service.

## Aspects of Reliability

"Reliability" is a term that can describe both the ability of a utility's overall electrical system—including generators, transmission facilities, and distribution facilities—to maintain continuous electric service to consumers and the availability of an individual generating source.

<sup>1</sup>Electricity Supply: The Effects of Competitive Power Purchases Are Not Yet Certain (GAO/RCED-90-182, Aug. 23, 1990).

According to NERC, the reliability of an electricity system is the extent to which system components (generation, transmission, distribution) deliver power to customers within accepted standards, in the amount desired, and at the time desired. In contrast, the reliability of a particular generating source is the degree to which it can be counted on to provide power when needed. Assessing the reliability of a proposed new generating source encompasses not only expected performance once it is operating, but also the likelihood that it will actually come into service on time.

According to NERC and DOE, the majority of interruptions in electricity service are caused by failures in local distribution systems, not by outages of specific generating sources. Utilities can usually compensate for the temporary loss of a generator without affecting service to consumers by using reserve generating sources within their systems or by purchasing power from other utilities. Thus, while an unreliable generating source may be problematic or costly, it generally would not affect the reliability of electric service.

In 1987 guidelines for incorporating nonutility generators into the nation's electrical system, NERC noted that system reliability could be affected because (1) utilities do not necessarily directly control nonutilities' operational decisions and (2) utilities' obligation to serve the public may not coincide with nonutility generators' interests. States obligate utilities to provide reliable service to all customers in their service territory; in contrast, nonutility generators are responsible for fulfilling contracts to provide power to utilities.

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### **Utilities and State Commissions Have Taken Steps to Ensure Reliability**

In preparing our 1990 report on competitive power purchases, we reviewed the experiences of three utility companies that were among the nation's first utilities to purchase wholesale power using a competitive bid process. We found that the utilities as well as their state regulators had taken steps to ensure that winning bidders would be reliable suppliers and that system reliability would be maintained. These steps included devising project selection criteria that favored projects that appeared more reliable and contract terms that specified certain conditions designed to promote reliability. Among other things, the utilities collectively required

- the developers of wholesale facilities to demonstrate the feasibility of the project;
- security deposits to protect the utility against project failure;

- utility control of the wholesale supplier's power output;
- penalties for failure to comply with the utility's operating requirements;
- the right to purchase a failed plant; and
- limits on the amount of debt that a wholesale supplier could use for project financing.

Of the 48 state utility commissions that responded to our survey, 41 indicated that utilities under their jurisdiction had entered into contracts to purchase power from nonutility generators. Seventeen of the commissions indicated that they require their regulated utilities to include contract provisions designed to promote reliability. These provisions include security deposits; first right to purchase a wholesale plant in case of failure; control of the output of a wholesale plant by utility operators; penalties for failure to operate; penalties for noncompliance with standard utility operation and maintenance practices; penalties for failure to achieve construction milestones; and payment incentives for peak-time availability. Twenty-four state commissions indicated that they do not require such provisions in wholesale power contracts but do encourage the utilities to include them.

State utility commissions responding to our survey were generally divided on the reliability of power purchased from nonutility generators, as compared with power purchased from a regulated utility. Of the 48 commissions responding, 19 indicated that they were uncertain about the issue. Fourteen commissions indicated that nonutility generated power is more or equally reliable as power from regulated utilities. Another 14 commissions indicated that nonutility generated power is generally less reliable than power generated by a regulated utility. Among the reasons cited for less reliability were (1) lack of a regulatory requirement for nonutility generators to provide reliable service and (2) utilities have less operating control over these facilities than over utility-operated facilities.

Utility officials told us that their nonutility wholesale suppliers have proven to be reliable sources. Officials from Southern California Edison, which received 29 percent of its electricity from nonutility sources in 1990, indicated that, overall, nonutility wholesale suppliers have operated reliably. Officials from Pacific Gas and Electric, a California utility that receives about 12 percent of its electricity from nonutility sources, indicated that these sources have been highly reliable and that their operators have proven to be very knowledgeable about the system. In

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addition, officials from Virginia Power, which receives 9 percent of its electricity from nonutility suppliers, told us that they have been satisfied with the reliability of their wholesale suppliers.

Reliability can also be promoted by lenders, in cases in which the developers of wholesale facilities borrow heavily from lenders to finance their projects. Lenders seek to minimize their financial risk by ensuring the reliability of wholesale projects. According to one lender, wholesale projects face a screening process that examines several factors: experience of the participants and developers; level of equity used to finance the project; the electricity needs of the area where the project will be located; the cash reserves of the wholesale supplier; and the type and source of the fuel that will be used at the facility. Proposed generating facilities that do not satisfy the screening criteria are less likely to receive necessary financing.

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### **Adding More Suppliers Could Increase the Complexity of System Operations**

Because the electrical system is highly interconnected, additional suppliers could add to the complexity of operating and coordinating the nation's electricity supply system. However, according to NERC officials, as long as all generators adhere to NERC's operating guidelines, additional wholesale generators should not impair system reliability. Many utilities have effectively integrated nonutility wholesale suppliers into their systems.

The electric utility industry is an interconnected system designed to allow a variety of transactions, such as utility-to-utility power sales, economy transactions, and wheeling arrangements. U.S. electric utilities are interconnected into three large transmission grids (not including interconnections with Canada and Mexico). Within each of these interconnected grids are utility control areas, typically designated by geographic boundaries, within which one or more utilities are located. Additionally, in some areas of the country, utilities have established arrangements to pool their power resources through joint planning and central control. Such power pools may encompass utilities located in several states; for example, the New England Power Pool (NEPOOL) covers most of the New England states. NEPOOL member utilities generate about 99 percent of the region's electricity.

NERC has taken steps to ensure the coordinated operation of the electrical system by establishing voluntary operating guidelines for the nation's bulk

power system (basically, all facilities except local distribution systems). The guidelines specify certain technical standards and operating procedures to ensure system reliability and control. For example, system operators are required to maintain transmission voltage levels within NERC-established ranges, and to coordinate the operation of all power plants within a specific control area. In addition, NERC's guidelines for incorporating wholesale suppliers into the nation's bulk electrical system call for utilities to consider a number of factors, including interconnection requirements between the facility and the utility system and the information and communication agreements needed between the utility and the wholesale supplier. According to NERC officials, consideration of these factors will help to ensure that wholesale facilities will operate reliably and will not compromise overall system reliability.

Representatives from NEPOOL and the New England Power Service<sup>2</sup> expressed general satisfaction with both qualifying facilities and other nonutility sources of electricity. Members of NEPOOL are among the heaviest users of nonutility-generated electricity in the country. These officials explained that utility operators have been able to obtain needed information from nonutility suppliers regarding operations. Although some nonutility suppliers initially encountered problems in obtaining necessary operating permits and in coordinating the operation of their plants with the needs of the NEPOOL system, they have overcome these difficulties and are operating successfully. In addition, NEPOOL has operating guidelines for integrating nonutility generators into the electricity system. These guidelines, which are similar to NERC guidelines, require a security deposit from all pool participants, including nonutility suppliers.

Utility officials from Pacific Gas & Electric, Southern California Edison, and Virginia Electric and Power Company also expressed general satisfaction with their ability to coordinate nonutility generators. In addition, officials from the California Public Utilities Commission, the Massachusetts Department of Public Utilities, and the Virginia State Corporation Commission indicated that the addition of nonutility generators to their states' electrical systems has not caused reliability problems.

In its PUHCA analysis for the National Energy Strategy, DOE found that the utilities most reliant on purchasing wholesale power (including Pacific Gas & Electric and Virginia Power) had not encountered any major

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<sup>2</sup>The New England Power Service is a subsidiary of New England Electric System, a registered holding company that accounts for nearly 20 percent of NEPOOL's generating capacity.

problems with adding wholesale suppliers to their systems. DOE also noted that proposed amendments to the act would not compel utilities to add wholesale suppliers to their system but would allow both utilities and wholesale suppliers the opportunity to do so.

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## Changes Could Lower Electricity Supply Costs

Generally, allowing more electricity producers the opportunity to enter wholesale markets could increase supply options for utilities; competition between suppliers could lead to lower prices and thus lower the purchasing utilities' costs of supplying electricity. However, such effects depend on the degree of competition that would exist. Competition, in turn, may be affected by (1) the number of potential suppliers in wholesale markets and (2) industry trends already underway, particularly state regulatory initiatives to encourage utilities to identify and adopt "least-cost" methods for balancing electricity supply and demand. Cost impacts also depend on the performance of wholesale suppliers and the effectiveness of state and federal regulation in mitigating potential market abuses.

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## Industry Trends Suggest Increase in Competition

The degree of competition—and thus the cost effects of competition—depends in part on the number of buyers and sellers involved in a market and on the circumstances under which sales transactions are arranged. Industry trends suggest that the number of potential wholesale electricity sellers would likely increase; in addition, an increasing portion of wholesale transactions would occur under programs designed to identify the least costly methods of balancing electricity supply and demand.

## Number of Wholesale Electricity Producers Would Be Likely to Increase

Despite factors that can limit the number of participants in wholesale electricity markets, including PUHCA, additional producers have emerged, particularly since enactment of PURPA.<sup>3</sup> Experience under PURPA suggests that amending PUHCA could prompt the formation of additional wholesale electricity suppliers. As discussed below, proposals to increase access to electricity transmission facilities could further increase the number of potential suppliers for a given wholesale market.

PURPA encouraged the development of nonutility generators, called qualifying facilities, by requiring utilities to purchase their electricity at prices established by state regulators. In the past decade, qualifying

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<sup>3</sup>From 1980 through fiscal year 1990, FERC received over 4,600 requests to certify generators as qualifying facilities under PURPA.

facilities have provided an increasing amount of power to utilities and, along with other nonutility sources, now comprise over 5 percent of the nation's total generating capacity.

Other nonutility sources have also entered the wholesale market and successfully competed for wholesale supply contracts. These suppliers, typically referred to as independent power producers, do not meet the fuel or technology requirements of qualifying facilities under PURPA and thus are not exempt from the restrictions of PUHCA. According to NIEP, 5 of these facilities are in operation and 38 others are under development.

Many utility holding companies have helped develop qualifying facilities, and some have ownership interests in independent power projects, both inside and outside their service areas.<sup>4</sup> For example, Mission Energy, a subsidiary of SCE Corporation, the (exempt) parent holding company of Southern California Edison, currently holds ownership interests in more than 20 qualifying facilities and other nonutility generators located in more than 6 states. Many of these facilities are located outside the service area of Southern California Edison. Similarly, Dominion Energy, a subsidiary of Dominion Resources, Inc., the (exempt) parent holding company of Virginia Electric and Power Company, holds interests in 16 qualifying facilities located in 6 states and the District of Columbia, all located outside the service area of Virginia Electric and Power Company. Amending the act to remove geographic constraints would help these and other interested companies to continue their expansion into wholesale markets.

In addition, nonutility companies with expertise related to electricity generation have invested in wholesale generating facilities. For example, Westinghouse, a manufacturer of electricity-generating equipment, and Bechtel, a construction and design firm, currently have ownership interests in qualifying facilities but are effectively precluded by PUHCA's provisions from having control or a controlling influence over other generating facilities. Amending the act to remove such ownership restrictions would allow such companies to increase their participation in wholesale electricity markets.

Removing PUHCA's geographic and ownership restrictions would permit more companies to compete in wholesale electricity markets, but would not require more suppliers to enter the market nor compel any utility to

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<sup>4</sup>Utilities are precluded from more than a 50-percent ownership share in qualifying facilities.

**Least-cost Programs Promote  
Comparison of Competing  
Sources**

purchase wholesale power rather than generate it with its own facilities. Utilities would retain the right to build their own facilities, subject to existing state regulatory arrangements.

In response to a number of factors, including projected generating capacity shortages and large rate increases associated with adding new capacity, state regulators and utilities have adopted "least-cost" programs (also called integrated resource programs) to balance electricity supply and demand at the lowest cost. Such programs typically require that utilities investigate a range of potential electricity supply options, including wholesale purchases, as well as methods of reducing electricity demand. By emphasizing selection of the least costly options, such programs, in effect, promote competition among alternative suppliers. According to a 1990 report prepared for the Electric Power Research Institute,<sup>5</sup> 23 states have adopted a least-cost planning framework, and another 19 states are considering, developing, or implementing one.

Competitive bidding programs, in which utilities solicit bids to supply a given amount of electricity, are one means of identifying lowest-cost suppliers. Each of the three utilities we reviewed for our 1990 report on competitive bidding programs indicated that the cost of electricity from wholesale suppliers was less than the cost of self-generated power. As mentioned in chapter 1, 36 states have either adopted or are in the process of adopting competitive procurement programs. As of January 1991, utilities had contracted to purchase nearly 12,000 MW of wholesale generating capacity through competitive processes.

Bidding programs are helpful because they generally allow selection of a supplier not strictly on the basis of price but also on nonprice factors, including provisions to ensure reliability. However, we reported in 1990 that the flexibility allowed utilities in competitive bidding programs can vary. For example, Virginia Power developed its own bidding programs, and the utility's management has discretion over the final selection and contract negotiation of the winning bid. In contrast, Massachusetts utilities are required to use a more formal project scoring system and must award contracts to bidders who achieve the highest scores in the project selection process.

Proposed PUHCA amendments neither require nor preclude competitive bidding or other state or utility programs designed to identify the least

<sup>5</sup>The Institute was founded in 1972 by the nation's electric utilities to develop and manage a technology program for improving the production, distribution, and utilization of electric power.

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costly methods of balancing electricity supply and demand. However, the potential for additional suppliers to enter wholesale markets could enhance the effectiveness of such programs by providing a greater number of supply options.

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**Cost Depends on  
Long-term Performance of  
Suppliers**

The long-term performance of a supplier is important because a failure to deliver power as expected could force the utility to obtain more costly electricity from another source; thus, there is an inherent relationship between the cost and reliability of electric service. Potential cost impacts, therefore, depend to some extent on how utilities assess reliability when selecting wholesale suppliers.

According to a 1991 NIEP study of the reliability of wholesale power suppliers, less than 15 percent of 172 projects that were awarded contracts for wholesale power were canceled before entering service. Factors contributing to the cancellations included lack of a security deposit, failure to meet the regulatory requirements of a qualifying facility, and problems with arranging access to transmission facilities. In addition, seven projects were delayed because they could not obtain necessary air quality permits.

Because competitive power purchases from nonutility sources are a relatively recent development, there is little experience to demonstrate conclusively such suppliers' long-term reliability. However, as noted above, utilities and state regulators have taken steps to ensure selection of reliable electricity suppliers.

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**Regulatory Oversight Can  
Affect Costs**

Cost effects resulting from potential industry changes depend in part on the effectiveness of oversight by state and federal regulators in preventing market abuses. Under proposed PUHCA amendments, potential wholesale suppliers could include companies that are affiliated with the purchasing utility's holding company. Thus, federal and state regulators would need to ensure that, among other things, (1) a utility does not provide information or otherwise give an affiliated supplier undue advantage over other potentially more efficient nonaffiliated suppliers in securing a wholesale power contract, (2) utilities do not collude and locate facilities in each other's service territories to the detriment of other potential suppliers, and (3) a holding company does not unfairly allocate holding company expenses common to all of its subsidiaries to the utility subsidiary. Such

actions would inappropriately raise the purchasing utility's electricity supply costs, which could lead to higher electricity rates. The issue of regulation is discussed in greater detail in the following chapter.

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## Increased Access to Transmission Facilities Could Further Competition

In order to purchase or sell electricity, both the generating source (seller) and the utility (purchaser) must be connected via electrical transmission and/or distribution systems. Transmission facilities are owned by individual utilities. Although FERC, under certain limited circumstances, can mandate access to accomplish specific electric power transactions, access is largely voluntary on the part of owners; access can be limited on the basis of economic and/or reliability considerations, or the system's physical constraints.

Existing transmission arrangements have accommodated the growth in wholesale transactions between utilities, as well as the emergence of nonutility generators. However, many proposals designed to promote greater access to transmission facilities have been made in recent years. Like proposed PUHCA amendments, increased transmission access could lead to further competition and potentially lower electricity supply costs. One bill that would amend PUHCA includes provisions promoting greater transmission access that could allow even greater numbers of potential suppliers to enter a given wholesale electricity market.<sup>6</sup>

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## Transmission Access Is Largely Voluntary

The nation's electrical transmission facilities were originally designed and constructed by individual utilities to serve their own customers. To increase the reliability and efficiency of the overall electrical system, the transmission systems of individual utilities were eventually interconnected. Most utilities in the United States are now interconnected and voluntarily conduct many transactions with other utility systems, including utility-to-utility contracts, economy transactions, and wheeling arrangements. However, utilities generally have a monopoly on transmission facilities within their service areas.

In 1978 PURPA amended the Federal Power Act by authorizing FERC to order utilities to interconnect with other electric utilities or qualifying facilities, among others. PURPA also amended the Federal Power Act to authorize FERC to order an electric utility to provide transmission services, such as wheeling, to another electric utility if, among other things, such services

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<sup>6</sup>These provisions are included H.R. 2825. H.R. 2224 contains similar provisions.

would (1) conserve a significant amount of energy, (2) promote efficient use of facilities and resources, or (3) improve reliability.

However, FERC's authority to mandate transmission services is limited. For example, the PURPA amendments provided that before issuing such an order, FERC must determine that the transaction(s) would not be likely to impose an uncompensated economic loss, not place an undue burden on any utility, and not impair reliability in general or any utility's ability to provide adequate service to its customers. Moreover, any transmission order must reasonably preserve existing competitive relationships.

In 1988 we reported that in transmission access cases decided by FERC and/or federal courts, the requested transmission services were denied more often than granted; however, a large number of the cases resulted in either a compromise or FERC-approved settlement between the parties involved.<sup>7</sup>

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### **Increased Access Could Increase Competition in Wholesale Markets**

The degree to which wholesale electricity producers can arrange transmission access affects their participation in a given market. For example, a producer who is located outside of a purchasing utility's service area might have to arrange to use another utility's transmission facilities in order to wheel power to the purchaser. Inability to arrange such access would effectively preclude the supplier from transferring electricity to that particular market. In contrast, a purchase from nonutility generators located within the service area of the purchasing utility would not require access to another utility's transmission facilities.

The growth of nonutility generators has occurred largely by utilities purchasing from sources located within their service areas. In a 1989 study of electricity transmission policy, a FERC Task Force noted that utilities choosing to purchase power from independent wholesale suppliers had found adequate offers to be available within their service territories. Similarly, for the three utilities reviewed in our 1990 report, state regulatory commission and utility officials noted that access to transmission had not been a problem in obtaining bids for the amount of power solicited; in each case, more electricity was offered than the utilities solicited.

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<sup>7</sup>Electric Power Transmission: Federal Role in System Use and Regulation (GAO/RCED-88-98, Apr. 12, 1988).

Increasing access to transmission facilities could expand the range of potential suppliers to a given electricity market. Furthermore, increased access could enhance the ability of an independent supplier to sell electricity from a single facility to more than one purchaser, potentially enabling larger wholesale generating facilities to take advantage of economies of scale. Each of these effects could tend to lower a purchasing utility's electricity supply costs.

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## **Observations**

While amending the act could increase the complexity of operating the electricity supply system, experience with current wholesale suppliers indicates that these suppliers can be added without impairing the reliability of providing electric service. Although electric utilities have limited experience with purchases from nonutility sources, utilities and state commissions have taken steps to ensure the reliability of the electricity system by including provisions in wholesale power contracts that promote reliable operation of individual generating sources.

Furthermore, industry experience indicates that wholesale suppliers would enter markets to compete for supply contracts, potentially lowering utilities' electricity supply costs. The level of competition in wholesale power markets will depend on utilities' electricity needs, the extent to which nonutility generators can obtain access to transmission facilities, and regulators' actions to promote and/or control competition.

# State and FERC Regulatory Responsibilities Could Increase

While amending PUHCA as proposed would affect the regulatory role played by SEC, changes at state commissions and FERC appear greater. State utility commissions would be responsible for reviewing the decisions made by utilities under their jurisdiction to participate in the wholesale market and for protecting ratepayers from any abusive practices between purchasing utilities and affiliated wholesale suppliers. While their experiences vary, many states already have monitored and regulated utilities' wholesale activities. At the federal level, FERC's regulatory role would likely increase as the portion of electricity produced by wholesale generators increases. SEC would no longer oversee utility holding companies' acquisitions of wholesale facilities, and other companies could own and operate wholesale facilities without becoming subject to PUHCA.

## State's Regulatory Role Would Likely Increase

Utilities' participation in wholesale power markets could reinforce a state regulatory shift from reviewing construction costs of utility power plant projects to reviewing the decisions of utilities to make wholesale power purchases and/or to own and operate wholesale facilities. Also, some of the proposals would allow holding companies to separate their existing power plants from the utility subsidiary, and state regulators would need to review such transactions.

## States Would Be Likely to Review More Wholesale Transactions

A greater reliance on wholesale power would shift the focus of state commissions from reviewing utility costs of constructing new utility power plants to reviewing utility decisions to purchase wholesale power. Currently, state commissions are responsible for reviewing the costs of construction for utility power plants and other utility investments. The commissions also review utility expenditures for such items as fuel, operations and maintenance, and purchased power.

As noted in chapter 2, many states have required or encouraged their regulated utilities to adopt planning programs designed to identify the least costly methods of balancing electricity supply and demand. This development has shifted the focus of state regulators to the utilities' performance in finding the lowest-cost sources of additional power supplies and/or demand reductions. In reviewing purchased power costs, states consider whether less costly power was available from another source. Because the proposals could increase the portion of power purchased at wholesale, with a corresponding decrease in utilities'

construction of power plants, they could contribute to a further shift of state regulatory focus.

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### **Utility Holding Companies May Establish Wholesale Subsidiaries**

Utility holding companies could form subsidiaries to own and operate wholesale facilities. Holding companies could then compete for wholesale supply contracts in the service area of other utilities, or within the service area of their own utility companies. In addition, situations could arise where two or more utilities could locate wholesale facilities within each other's service area. Although these relationships could have beneficial competitive effects, they could also create the potential for abusive practices.

To the extent that utilities choose these strategies, state commissions may face more complex transactions in protecting ratepayers from potentially abusive practices between the buyers and sellers of wholesale power. For example, in cases where a utility holding company's wholesale supplier establishes a wholesale power contract with an affiliated electric utility (i.e., both companies are owned by the same parent holding company), state commissions may need to ensure that, among other things, (1) the supplier does not use its relationship with its affiliated utility to preclude other potentially more efficient wholesale suppliers; (2) the utility ratepayers are shielded from any risks presented by the wholesale supplier; and (3) costs are not improperly allocated between the utility and the affiliated wholesale supplier or other subsidiaries.

Some utility holding companies may choose to form wholesale power subsidiaries that will own and operate facilities outside the service territories of the utilities owned by the same holding company. In these cases, state commissions would be responsible for ensuring that their utility ratepayers are not negatively affected by the activities of out-of-state subsidiaries owned by the same holding company.

State commissions that responded to GAO's survey noted that a utility's ratepayers could be potentially harmed as a result of nonutility subsidiary transactions not directly involving the utility subsidiary. The majority of the survey respondents indicated that nonutility subsidiaries, such as wholesale facilities, could affect the utility subsidiary by, among other things, (1) increasing the utility subsidiaries' cost of capital if the nonutility subsidiary is unsuccessful and (2) creating the incentive to increase utility dividends to fund nonutility subsidiaries. Several commissions also

indicated that nonutility subsidiaries could affect the utility subsidiary by diverting the attention of utility managers away from the operation of the utility and toward the operation of wholesale facilities and by improperly allocating expenses to the utility subsidiary.

Allowing utilities to own wholesale facilities could create an incentive for utilities to spin off existing power plants from their utility subsidiary and sell wholesale power back to their utility subsidiary and to other utilities. As noted in chapter 1, some of the proposals prohibit this option, while others allow the option subject to regulatory review. To the extent that the proposals allow utilities to pursue this option, state commissions would be responsible for protecting the interests of ratepayers and, in cases where a transfer takes place, for preventing the same potential abusive practices that may occur with other wholesale facilities. In the case of registered holding companies, SEC approval would be required.

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## **State Regulators Have Experience With Changing Utility Industry**

Proposed amendments would allow utility holding companies to own and operate wholesale facilities without regard to the geographic location of these facilities. Because of industry changes brought about by qualifying facilities, independent power producers, and other nonutility subsidiaries of utility holding companies, many state commissions have experience with regulating transactions between buyers and sellers of wholesale power, including those between affiliated companies.

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## **Regulators Review Prudence of Wholesale Purchases**

As a result of the increase in the number of wholesale transactions in recent years, state commissions have experience in reviewing utility wholesale power purchases. Because the number of wholesale transactions is likely to increase under proposed amendments to the act, state regulators may face more reviews of utilities' power purchases. However, the extent of state commission authority has been a central issue in several state and federal court cases.

Federal authority over interstate wholesale electric rates has been affirmed by the U.S. Supreme Court. In a 1951 decision, the Court established the filed-rate doctrine, which ensures that sellers of interstate wholesale power governed by FERC can recover the cost incurred by their payment of just and reasonable FERC-set rates in a subsequent state retail transaction.<sup>1</sup> A 1986 decision slightly expanded the filed-rate doctrine by

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<sup>1</sup>Montana-Dakota Utilities Co. v. Northwestern Public Service Co., 341 U.S. 246 (1951).

preventing a state commission from revising a FERC-approved cost allocation for wholesale power purchases, which is the basis for wholesale rates.<sup>2</sup> In a 1988 case, the Court again held in favor of FERC by overturning the Mississippi Supreme Court decision to investigate a cost allocation made in determining a FERC-approved rate.<sup>3</sup>

In 1977 the Rhode Island Supreme Court determined that, on the basis of the filed-rate doctrine, the state commission could not challenge the reasonableness of a FERC-approved wholesale rate.<sup>4</sup> However, in 1983 the Pennsylvania Commonwealth Court determined that while the state must accept a given wholesale rate as just and reasonable once it is approved by FERC, the state commission may review the prudence of a utility's decision to purchase a certain quantity of wholesale power at a FERC-approved rate, but not the rate itself. This became known as the Pike County doctrine.<sup>5</sup>

Our survey results suggest that state practices are consistent with the Pike County doctrine. Forty state commissions indicated that they have the authority to disallow utilities from passing on, through retail rates, a portion of the cost of a wholesale power purchase approved by FERC. Twenty commissions indicated that they have already taken such action. In one of these cases, a state commission determined that the purchased power was not needed; in another case, a state commission ruled that a lower-cost source of power was available elsewhere.

## Regulators Currently Review Wholesale Affiliates

State commissions have experience monitoring nonutility subsidiaries of utility holding companies, including subsidiaries that own and operate wholesale generating facilities. In general, state commissions have many reporting requirements designed to prevent practices that could put utility ratepayers at risk, although the requirements vary among the states. In addition, most state commissions have procedures to prevent a utility holding company from improperly allocating expenses to a utility subsidiary.

For example, according to a 1986 NRRRI study, nearly all of the 40 state commissions that participated in the study have procedures to prevent the utility subsidiary from unfairly subsidizing nonutility subsidiaries. The

<sup>2</sup>Nantahala Power & Light Co. v. Thornburg, 476 U.S. 963 (1986).

<sup>3</sup>Mississippi Power & Light Co. v. Mississippi ex rel Moore, 108 S.Ct. 2428 (1988).

<sup>4</sup>Narragansett Electric Co. v. Burke, 381 A.2d 1358 (1977), cert. den., 435 U.S. 972 (1978).

<sup>5</sup>Pike County Light and Power Co. v. Pennsylvania Public Utility Commission, 465 A.2d 735 (Pa. Commw. 1983).

study also found that (1) 30 of the 40 state commissions periodically review relationships between utility and nonutility subsidiaries to prevent abusive practices; (2) most of the 40 commissions reported having authority to gain access to the books and records of utilities, utility holding companies, and any nonutility subsidiaries; and (3) nearly all of the 40 commissions have procedures for examining the joint and operating costs of an electric utility and its subsidiaries.

In addition to their existing authorities, state commission responses to GAO's survey indicate experience with wholesale suppliers. Of the 48 state commissions that responded to our survey, 41 indicated that utilities in their states have signed contracts with nonutility generators. Of the 41 commissions with nonutility generation under contract, 20 have utility holding companies in their states that own wholesale power subsidiaries. Of the 20 commissions, 13 allow the wholesale suppliers of the holding companies to sell power to the utility subsidiary of the same holding company.

Some state commissions have taken steps to mitigate some of the potential problems associated with affiliated company transactions. For example, the Virginia State Corporation Commission prohibits wholesale suppliers from participating in bid programs of any affiliated utility companies. In California, the Public Utilities Commission allows only qualifying facilities to participate in bidding programs for wholesale power. The California Commission has also begun to review existing contracts between one California utility and an affiliated company that sells wholesale power to the utility through qualifying facilities.

For situations where utility holding companies locate wholesale facilities outside the service area of any affiliated utilities, several methods are available to state commissions for monitoring the activities of nonutility subsidiaries. According to GAO's survey respondents, 18 state commissions indicated that they monitor the transfer of securities or assets between a holding company and its nonutility subsidiaries. In addition, 32 of the 48 commissions responding indicated that, if PUHCA was amended, they would monitor the activities of wholesale subsidiaries whether or not the activities of the wholesale facilities directly involved the utility subsidiary.

In addition, most state utility commissions currently have authority to regulate a utility company's attempt to spin off an existing power plant to a nonutility subsidiary. According to survey results, 28 of the 48 state

commissions responding require approval on the price of the plant before it is divested. Nineteen of the remaining commissions do not require approval on the transfer price of the plant but do have other remedies available to protect the ratepayer, such as determining a fair price during a subsequent rate hearing with the utility company.

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## **FERC's Regulatory Role Would Likely Expand**

Enactment of proposed amendments would be likely to lead to an increase in the number of wholesale suppliers and the portion of electricity generated for wholesale consumption. Thus, FERC could be responsible for examining an increased number of requests for approval of wholesale power transactions and transmission services.

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## **Wholesale Power Transactions**

An increased number of wholesale transactions would be likely to increase the number of requests for FERC approval of wholesale rates, terms, and conditions, and wholesale suppliers would be likely to request market-based, rather than cost-based, rates. Incentives for market-based rates include the opportunity to earn an unregulated rate of return on wholesale power sales and reduced filing and reporting requirements.

In considering market-based rates, FERC reviews the rates resulting from a negotiated or competitive process, without specifying a rate of return. FERC has approved market-based rates (1) when the wholesale supplier is not affiliated with any regulated utility; (2) when the wholesale supplier is affiliated with a utility but, in FERC's judgment, either does not have market power in the relevant market or has taken steps to mitigate any market power it may have as a result of the affiliation; and (3) when the wholesale supplier itself is a utility but has taken steps to mitigate market power. According to FERC staff responsible for electricity regulation, many of the wholesale suppliers that would be expected to participate in the market if PUHCA is amended would likely fall into one of the first two of these categories.

In setting market-based rates, FERC remains responsible under the Federal Power Act for ensuring that wholesale rates, terms, and conditions are just and reasonable. To accomplish this, FERC reviews aspects of the negotiation process to ensure that neither the seller nor its affiliates have exercised market power over the buyer or other potential suppliers and that no abusive practices have occurred between the buyer or the seller. For example, in July 1991, FERC approved market-based rates for a

wholesale transaction after a wholesale supplier was selected and a wholesale rate was established through a competitive procurement process. Although the supplier was affiliated with a regulated utility, which normally raises concerns over the fairness of the procurement process, FERC concluded that the supplier's relationship with the utility did not give the supplier an advantage in the process. FERC concluded that the selection process was sufficiently competitive and that neither the seller nor its utility affiliate enjoyed any undue influence in the process.

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### **Transmission Services**

FERC's regulation of the electricity transmission system is likely to increase as the number of wholesale transactions increases. Under the Federal Power Act, wholesale suppliers must apply to FERC for approval of a proposed transmission rate schedule or for an order that an electric utility provide access to its transmission system. An increased number of wholesale transactions would be likely to result in more transmission rate filings, thus increasing FERC's role in regulating the transmission system.

FERC's role could increase further under proposals to amend the transmission provisions of the Federal Power Act because these proposals could have the effect of further increasing the number of potential wholesale suppliers for a given market. These proposals would generally expand the circumstances under which FERC may order a utility to provide transmission services to another utility or a nonutility generator, thus potentially creating more opportunity for wholesale suppliers to participate in wholesale power markets.

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### **Transactions Involving Wholesale Facilities**

The extent to which additional wholesale generators affect FERC's regulatory responsibilities for facility transactions depends upon whether or not the generators are considered jurisdictional facilities—that is, subject to FERC regulation. With some exceptions, jurisdictional facilities are those used for (1) the transmission of electricity in interstate commerce or (2) the sale of electricity at wholesale in interstate commerce. Owners and operators of jurisdictional facilities are required to obtain FERC approval before selling, merging, consolidating, or otherwise disposing of those facilities. They are also required to obtain FERC approval for issuing securities and assuming liabilities if state commission approval is not required.

According to FERC officials, normally neither FERC nor a state has authority over an electric generating facility until the facility begins generating electricity; only then is the facility considered a public utility. However, developers of recently initiated independent power projects have requested FERC to approve market-based rates after obtaining a contract to supply a utility, but before the facilities have begun generating electricity (or before they are even constructed). According to the FERC officials, by requesting rate approval, the developers of these projects have consented to regulation as a utility under the Federal Power Act; thus, FERC is responsible for regulating any securities issuances unless the state commission asserts authority over such issuances. In recent cases FERC has chosen to issue blanket authorizations to issue securities, rather than to review and approve each issue.

According to FERC officials, additional nonutility generators are unlikely to own the equipment for the transmission of power; thus the suppliers would consist of generation equipment only. The Federal Power Act exempts generation-only sources from FERC jurisdiction. In addition, because most states regulate securities transactions, and FERC would likely continue issuing blanket authorizations in cases where wholesale suppliers seek market-based rates, FERC is not likely to be faced with an increased number of security issuances to approve.

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## **SEC's Role Would Likely Be Diminished**

SEC approval is currently necessary for an exempt holding company's acquisition of 5 percent or more of another utility's securities and for virtually any acquisition by a registered company. Proposed amendments would allow registered and exempt holding companies to acquire wholesale facilities without the need for SEC approval. To the extent that holding companies would acquire wholesale facilities rather than choosing other supply strategies, SEC's role would be diminished. However, SEC would still retain its wide-ranging authorities to regulate registered holding companies, including approval of securities sales for acquiring a wholesale utility, approval of the guarantee of a security of a wholesale facility, and approval of service contracts established between registered holding companies and wholesale facilities.

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## **Registered Companies' Wholesale Facility Acquisitions**

Currently, under PUHCA, registered holding companies must obtain SEC approval for the acquisition of any utility asset, any interest in any business, or the issuance or acquisition of securities. In considering

approval of a proposed transaction, SEC reviews a wide range of potential effects on the registered holding company, including effects on the capital and corporate structure of the holding company, and the potential anticompetitive effects on the electricity market. SEC limits acquisitions by a registered holding company to facilities that can be integrated into the holding company's existing public utility system and to utility-related businesses, although registered companies are allowed to hold ownership interests (up to 50 percent) in qualifying facilities without regard to the geographic location of such facilities.

Proposals would remove the need for SEC approval on acquisitions of wholesale facilities. However, SEC approval would continue to be required for the issuance and sale of securities by a registered holding company for financing the acquisition of wholesale facilities. Furthermore, SEC would continue to monitor utility holding companies for potentially abusive practices by reviewing service, sales, and construction contracts, and other relationships between a registered holding company and its subsidiaries.

Because owners of wholesale facilities may use levels of debt higher than those typically allowed under SEC guidelines, SEC has indicated that, in order to allow registered holding companies to compete effectively in the wholesale market, it may allow registered companies to use higher levels of debt to finance wholesale facilities. In March 1991, during congressional testimony, an SEC commissioner explained that the risk to holding companies of investing in wholesale facilities would be limited because these projects will be typically financed using nonrecourse debt. This type of debt would limit the liability of a holding company to its investment in a specific project (i.e., creditors would have no recourse to any other assets of the holding company system beyond the holding company's investment in the specific project).

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### **Exempt Holding Company Acquisition of Wholesale Facilities**

PUHCA currently requires exempt holding companies to obtain SEC approval for acquisition of 5 percent or more of another utility's securities, such as in mergers or acquisitions with other utility companies. SEC approval of such acquisitions, as with registered companies, is contingent on several criteria, and depending on the type of merger or acquisition, a company may lose its exemption and be forced to operate as a registered holding company. Under proposed amendments to the act, exempt holding

companies would be allowed to acquire and finance wholesale facilities without SEC approval.

As with registered companies, exempt holding companies are allowed to hold up to a 50-percent ownership interest in qualifying facilities, without regard to the geographic location of such facilities. Enactment of proposed amendments would allow exempt holding companies (as well as registered holding companies) to own and operate wholesale facilities fully, without the fuel and technology requirements of qualifying facilities and without the act's geographic restrictions.

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## **Observations**

The actions of federal and state regulatory agencies will greatly influence the effects of PUHCA amendments on the electricity supply industry. At the state level, many commissions have been moving towards a more proactive role in utility planning processes, a development that places more emphasis on reviewing utilities' selections of wholesale suppliers. In addition, some state regulators have experience in regulating transactions between affiliates, similar to those that would be possible by amending PUHCA.

At the federal level, FERC's increased role in the regulation of the electric power industry would not add new tasks but rather increase the number of requests to approve wholesale transactions, especially those involving market-based rates. While SEC's role in approving holding company acquisitions would diminish, the agency would retain a great deal of its regulatory responsibilities under PUHCA.



# Survey of State Utility Regulatory Commissions

In conducting our survey, we sent a questionnaire to the chairs of the utility commissions for the 50 states and the District of Columbia. Commissions not responding to the initial mailing were sent follow-up questionnaires and additional follow-up was made via telephone. The survey was conducted between June and October 1991, and 48 of the 51 commissions responded. The following is a tabulation of the responses obtained from the questionnaire.

United States General Accounting Office



## Survey of State Utility Regulatory Commissions

### INTRODUCTION

The U.S. General Accounting Office (GAO), an agency which conducts studies for the Congress, is surveying officials of state utility regulatory commissions to obtain their views about potential amendments to the Public Utility Holding Company Act (PUHCA). The Subcommittee on Energy and Power, House Committee on Energy and Commerce, asked us to determine how proposed amendments to PUHCA might affect the cost and reliability of the nation's power supply and the ability to regulate electric utilities effectively. We are also interested in obtaining information on existing state regulation of electric utility holding companies.

Please return the completed questionnaire in the enclosed self-addressed, postage-paid envelope. You may also send us your responses by facsimile to the telephone number shown below. Responding within 2 weeks of receipt will help us avoid costly follow-up mailings. If the envelope becomes misplaced, please mail the completed questionnaire to:

Daniel Feehan  
U.S. General Accounting Office  
Room GB-230  
1000 Independence Ave., S.W.  
Washington, D.C. 20585

FACSIMILE # (202) 586-9125

If you have questions about the survey, please call Mr. Feehan or Jaime Lizarraga at (202) 586-1400. Thank you for your cooperation.

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

**DEFINITIONS**

As you complete the questionnaire, refer to the following list of definitions.

*Regulated electric utility*--any electric utility company which is subject to retail rate regulation by your state utility regulatory commission

*Holding company*--any company that owns, controls, or otherwise holds power to vote 10 percent or more of the outstanding voting securities of a regulated electric utility company

*Nonutility generator (NUG)*--any electric generating source, including qualifying facilities under the Public Utility Regulatory Policies Act of 1978, that is not part of a regulated electric utility's capital included in its ratebase

*Nonutility subsidiary*--any company or enterprise that is a subsidiary in a holding company system, **EXCLUDING** regulated electric utility companies that sell electricity

**NOTE:** In completing the questionnaire, the word "commission" refers collectively to commissioners and commission staff involved in electric utility regulation.

**Part 1: Electricity suppliers in your state**

1. As of June 1, 1991, have any electric utilities regulated by your commission contracted to purchase electrical power from nonutility generators (NUG)?  
(Check one)

1. 41 Yes

2. 5 No → Skip to Q 5

2 No Response

2. As of June 1, 1991, what was the total amount of electric generating capacity in megawatts (MW) under contract to regulated electric utilities from NUGs?  
(Enter amount; if the precise amount is unavailable, enter your best estimate)

44,952 MW

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

3. GAO found in a previous study that wholesale power purchase contracts may contain provisions intended to maintain the purchaser's system reliability. Which of the following provisions, if any, does your commission require in a wholesale power contract between NUGs and regulated electric utilities? *(Check all that apply)*
1. 24 The commission has no specific contract requirements directed at reliability
  2. 9 The NUG must make a monetary security deposit
  3. 6 The purchasing utility has first right to purchase a NUG facility whose operators cease operation
  4. 6 The NUG must meet utility dispatchability agreements
  5. 7 The NUG must pay penalties for forced outages (i.e., unplanned outage of generators)
  6. 2 The NUG must pay penalties for failure to abide by standard utility operation and maintenance practices
  7. 4 The NUG must pay penalties for failure to achieve construction milestones
  8. 4 The NUG receives payment incentives to be available during peak times
  9. 15 Other *(Please explain)*

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

4. Other than the requirements listed in question 3, how does your commission ensure the reliability of the purchasing utilities system? *(Please explain)*

34 Commissions provided comments

5. If a regulated electric utility proposes to divest a generating asset from the ratebase, is commission approval required for the price at which the asset is divested? *(Check one)*

1. 29 Yes → *Skip to Part 2*  
2. 11 No  
3. 7 Uncertain → *Skip to Part 2*  
1 No Response

6. If commission approval is not required for the price at which an asset is divested, are remedies available to the commission to protect ratepayers' interest?

1. 0 No  
2. 0 Uncertain  
3. 11 Yes *(Please explain)*

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

**Part 2: Electric Utility Holding  
Company Transactions**

Under PUHCA, holding companies are required to register with the Securities and Exchange Commission (SEC). Those holding companies that meet specific criteria (e.g., the utility company is located predominately in one state or the holding company is predominately an electric utility company) are exempt from some of the act's regulations; these are designated as "exempt" holding companies and their regulation is largely left to each state's discretion. Those holding companies not obtaining an exemption are subject to more intensive SEC regulation and their activities are more restricted; these are designated as "registered" holding companies. Unless otherwise stated, the following questions apply to both registered and exempt holding companies.

7. Do any holding companies which own a regulated electric utility in this state also own (wholly or partially) any subsidiaries that own or operate NUGs? (*Check one*)
1. 20 Yes
  2. 26 No → *Skip to Q 10*
  3. 1 Do not know → *Skip to Q 10*
  - 1 No Response

8. In this state, are holding company subsidiaries that own or operate NUGs allowed to sell power to regulated electric utilities owned by the same holding company? (*Check one*)

1. 13 Yes → *Skip to Q 10*
2. 2 No
3. 5 Uncertain → *Skip to Q 10*

9. Under what authority are power sales as discussed in question 8 prohibited? (*Check all that apply*)

1. 0 Transactions are prohibited by state statute
2. 1 Transactions are prohibited by commission regulations
3. 1 Other (*Please explain*)

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

10. In your opinion, to what extent can transactions made by a holding company **THAT DO NOT DIRECTLY INVOLVE REGULATED ELECTRIC UTILITY SUBSIDIARIES** negatively affect the utility subsidiaries' ratepayers? (Check one)
1. 8 Very great extent
  2. 13 Great extent
  3. 10 Moderate extent
  4. 7 Some extent
  5. 2 Little or no extent
  6. 6 Uncertain → Skip to Q 12
  - 2 No Response
11. In what way could such transactions (those not directly involving regulated electric utility subsidiaries) negatively affect the utility subsidiaries' ratepayers? (Check all that apply)
1. 37 Increase the utility subsidiaries' cost of capital if nonutility subsidiary(ies) is (are) unsuccessful
  2. 33 Create incentive to increase utility dividends to fund nonutility subsidiary(ies)
  3. 22 Other (Please explain)
12. Which of the following transactions **not directly involving regulated electric utility subsidiaries**, if any, does your commission monitor? (Check all that apply)
1. 18 Transfer of securities or assets between a holding company and its nonutility subsidiaries
  2. 16 Intercompany loans between a holding company and its nonutility subsidiaries
  3. 22 The commission does not monitor such transactions  
→ Skip to Q 14
  4. 13 Other transactions between a holding company and its nonutility subsidiaries (Please explain)

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

13. What type of monitoring is conducted by your commission to review transactions *not directly involving regulated electric utility subsidiaries*? (Check all that apply)

1. 21 Review holding company's or subsidiary company(ies) annual reports to shareholders
2. 16 Review holding company's filings to SEC
3. 15 Investigate media reports of holding company or subsidiary company(ies) activities
4. 8 Other (Please explain)

14. If the commission determines that a transaction by a holding company, *not directly involving regulated electric utility subsidiaries*, could have or is having an adverse impact on the utility subsidiaries' ratepayers, does the commission have explicit authority to intervene to prevent this transaction? (Check one)

1. 3 Definitely Yes
2. 12 Probably Yes
3. 12 Probably No → Skip to Q 16
4. 3 Definitely No → Skip to Q 16
5. 11 Uncertain → Skip to Q 16
- 7 No Response

15. Has the commission taken such action within the past 5 years? (Check one)

1. 3 Yes
2. 12 No

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

16. If the commission determines that a transaction by a holding company, *not directly involving electric utility subsidiaries*, has had or is having an adverse impact on the utility subsidiaries' ratepayers, does the commission have explicit authority to intervene to remedy the impact? (Check one)
1. 15 Definitely Yes
  2. 17 Probably Yes
  3. 5 Probably No → Skip to Q 18
  4. 1 Definitely No → Skip to Q 18
  5. 9 Uncertain → Skip to Q 18
  - 1 No Response
17. Has the commission taken such action within the past 5 years? (Check one)
1. 6 Yes
  2. 26 No
18. Has the commission ever sought technical or legal assistance from SEC regarding the regulation of exempt holding companies? (Check one)
1. 9 Yes
  2. 29 No
  3. 9 Uncertain
  - 1 No Response
19. Does the commission require a holding company to obtain commission approval before pledging the credit or assets of its regulated electric utility subsidiaries to obtain financing? (Check one)
1. 28 Yes
  2. 10 No
  3. 9 Uncertain
  - 1 No Response
20. Which of the following best describes the commission's policy regarding diversification by exempt holding companies into nonutility-related businesses? (Check all that apply)
1. 2 The commission requires prior approval of all nonutility-related diversification
  2. 7 The commission regulates on a case-by-case basis
  3. 30 The commission does not regulate nonutility-related diversification → Skip to Q 22
  4. 10 Other (Please explain)

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

21. What criteria does the commission use in deciding whether or not to approve nonutility diversifications of exempt holding companies? (*Check all that apply*)

1. 7 No explicit established criteria
2. 0 Percentage of the holding company's total revenue represented by nonutility subsidiaries
3. 1 Percentage of the holding company's total assets represented by nonutility subsidiaries
4. 7 Other (*Please explain*)

22. In the last 10 years, which of the following changes in the structure or activities of holding companies, if any, have occurred which have negatively affected your commission's ability to regulate electric utilities? (*Check all that apply*)

1. 21 Increased number of utilities reorganizing into a holding company structure
2. 25 Increased number of nonutility subsidiaries
3. 5 Increased number of mergers of electric utilities
4. 18 Other (*Please explain*)

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

23. To what extent does the commission depend on SEC to regulate the activities of exempt holding companies? *(Check one)*

1. 10 Very great extent
2. 6 Great extent
3. 4 Moderate extent
4. 3 Some extent
5. 12 Little or no extent
6. 11 Uncertain
- 2 No Response

**Part 3: Wholesale Power Purchases**

24. Does the commission have authority to determine the portion of wholesale power purchase costs that can be passed through to retail ratepayers? *(Check one)*

1. 30 Definitely yes
2. 10 Probably yes
3. 1 Probably no
4. 0 Definitely no
5. 6 Uncertain
- 1 No Response

25. Has the commission ever denied a regulated electric utility's request to pass through to retail ratepayers 100 percent of the wholesale cost of purchased power? *(Check one)*

1. 24 No
2. 20 Yes *(Please briefly explain the circumstances surrounding the decision(s))*
- 4 No Response

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

26. In your opinion, is power purchased from NUGs more reliable or less reliable than power generated by a regulated electric utility? (Check one)

- 1. 0 Always more reliable
- 2. 2 Generally more reliable
- 3. 12 Neither more nor less reliable
- 4. 13 Generally less reliable
- 5. 1 Always less reliable
- 6. 19 Uncertain
- 1 No Response

27. Please briefly explain your response to question 26.

40 Commissions responded

**Part 4: Regulation of Electric Utilities If Amendments to PUHCA are Enacted**

If PUHCA is amended to exempt certain wholesale electric power producers from the Act's regulations, several changes may occur in the electric utility industry. These potential changes include an increased percentage of power purchased at wholesale and an increase in the percentage of new generating capacity that is likely to be constructed and operated by NUGs. It is possible that holding companies may form subsidiaries that would own and/or operate NUGs, either by "spinning off" (i.e., removing from the ratebase) existing generating facilities or constructing new facilities. GAO is interested in determining how state utility commissions might alter their regulation of electric utilities, if at all, in response to any changes in the Act.

28. If PUHCA were amended, would the commission allow a NUG to sell wholesale power to a regulated electric utility if the NUG and the utility are owned by the same holding company, regardless of whether it is currently allowed? (Check one)

- 1. 1 Definitely yes
- 2. 20 Probably yes
- 3. 5 Probably no
- 4. 0 Definitely no
- 5. 21 Uncertain
- 1 No Response

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

29. If PUHCA were amended, would the commission allow regulated electric utilities to create wholesale electric generating subsidiaries by divesting generating assets from the ratebase? (Check one)

1. 0 Definitely yes
2. 6 Probably yes
3. 15 Probably no
4. 2 Definitely no
5. 23 Uncertain
- 2 No Response

30. If PUHCA were amended, would the commission monitor the activities of holding company subsidiary(ies) that own or operate NUGs, regardless of whether it sells wholesale power to any regulated utility owned by the same holding company? (Check one)

1. 9 Definitely yes
2. 23 Probably yes
3. 4 Probably no
4. 0 Definitely no
5. 9 Uncertain
- 3 No Response

31. Should the rules and practices regarding the use of the electrical transmission system be changed to ensure that all potential wholesale electricity suppliers, both inside and outside a purchasing utility's service area, have access to the transmission system in order to compete for wholesale power contracts? (Check one)

1. 7 Definitely yes
2. 19 Probably yes
3. 5 Probably no → Skip to Q 33
4. 2 Definitely no → Skip to Q 33
5. 13 Uncertain
- 2 No Response

32. If changes should be made to transmission rules and practices as stated above, should these changes be combined with changes to PUHCA or should transmission issues be decided separately? (Check one)

1. 9 Combined with PUHCA
2. 26 Decided separately
3. 4 Other (Please explain)

**Appendix I  
Survey of State Utility Regulatory  
Commissions**

33. If you have additional comments on the topics covered, please write them here or on a separate sheet if necessary.

18 Commissions responded

34. In the event we need to contact you to obtain clarification of any of the information in this questionnaire, please provide the following information:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: (\_\_\_\_\_) \_\_\_\_\_

35.  Please check here if you would like to receive a copy of GAO's report on the holding company act.
36.  Please check here if you would like to be placed on GAO's mailing list for reports on electric utility regulation.

Thank you for your cooperation.

# Major Contributors To This Report

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Resources,  
Community, and  
Economic  
Development  
Division, Washington,  
D.C.

Judy A. England-Joseph, Associate Director  
David G. Wood, Assistant Director  
Daniel J. Feehan, Evaluator-in-Charge  
Jaime E. Lizarraga, Staff Evaluator  
Philip G. Farah, Economist  
Jonathan Bachman, Senior Social Science Analyst

---

Office of General  
Counsel

Jackie A. Goff, Senior Attorney

---

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# Related GAO Products

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Electricity Supply: Utility Demand-Side Management Programs Can Reduce Electricity Use (GAO/RCED-92-13, Oct. 1991).

Electricity Supply: Regulation of the Changing Electric Utility Industry Under the Public Utility Holding Company Act (GAO/T-RCED-92-2, Oct. 3, 1991).

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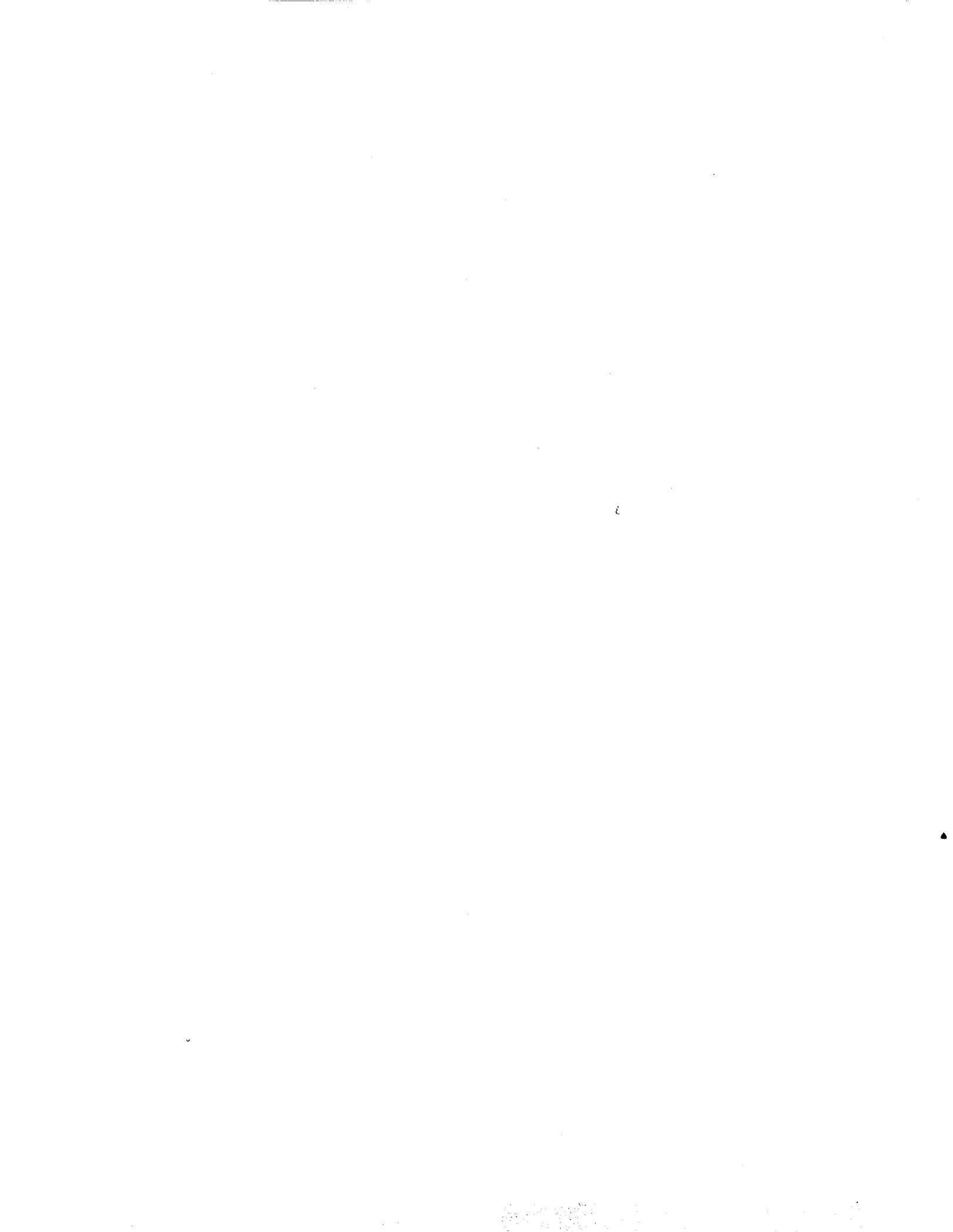
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