

THE REGULATION OF SHAREHOLDER-OWNED ELECTRIC COMPANIES

Although the electric power industry is a diverse one with thousands of suppliers, not all of them are regulated in the same way. Some suppliers, such as shareholder-owned utilities, are highly regulated at the federal and state levels while others such as electric cooperatives and government-owned utilities are not subject to the same regulatory requirements. Regulation has resulted in both benefits and burdens for electric companies and their consumers. The evolution of electricity restructuring has caused many policymakers and consumers to take a second look at how regulation works in the electric power industry.

Traditionally, the Federal Government Has Regulated Interstate Transmission and Wholesale Transactions While Retail Service Has Been a State Concern.

State governments regulate shareholder-owned utility transactions at the retail level, where the utility is selling electricity directly to the end-user such as a home or store. The sale of electricity at the retail level falls under the jurisdiction of state agencies known as Public Utility Commissions or Public Service Commissions. In most cases, the states also regulate the construction and siting of power plants and transmission lines.

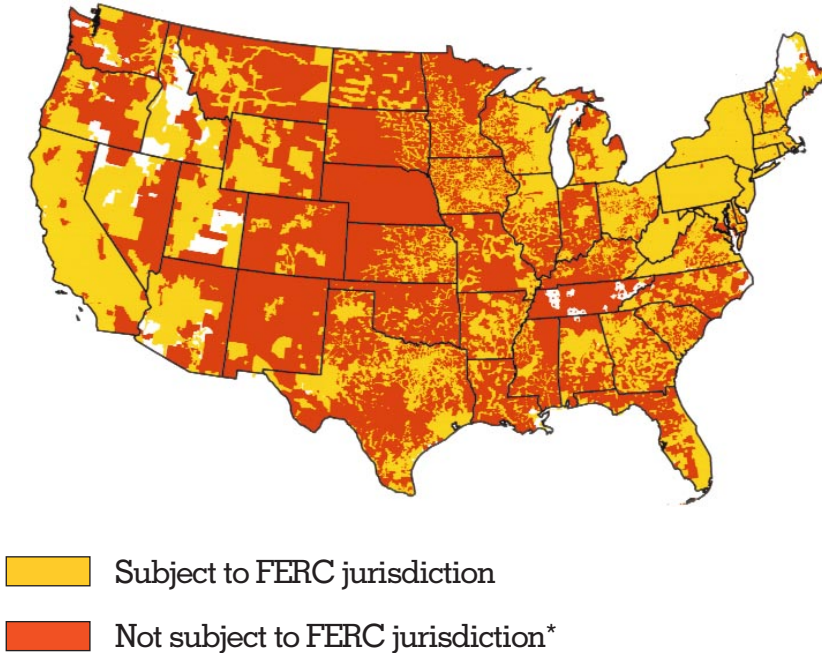
State commissions are made up of elected or appointed officials. Commissions are charged with making sure that all utility expenditures are reasonable in order to be passed on to customers in the form of rates. (Large investments, for example in power plants, are recovered over time at regulated rates.) They also regulate utility profits and ensure that utilities are responsive to customers' needs and service requests, and that service is adequate

and reliable. Many states do not regulate government-owned utilities or electric cooperatives.

The federal government, through the Federal Energy Regulatory Commission (FERC), regulates interstate wholesale transactions, which involve utilities buying or selling electricity from one another or from other power suppliers for resale to the ultimate customer. However, FERC has jurisdiction over only shareholder-owned utilities and not over federal- and state-owned utilities or electric cooperatives.

In 1996, FERC issued Order 888, opening the transmission lines owned by shareholder-owned utilities to all suppliers. Virtually thousands of suppliers are now competing for use of these lines in the wholesale electricity market.

In late 1999, FERC issued Order 2000 to encourage transmission-owning utilities to turn over control of their transmission systems to regional transmission organizations by the end of 2001.



* Some electric cooperatives that have repaid their RUS debt are subject to FERC jurisdiction.

Source: POWERmap, © Resource Data International, Inc.

The States Have Taken the Lead in Pursuing Electric Restructuring.

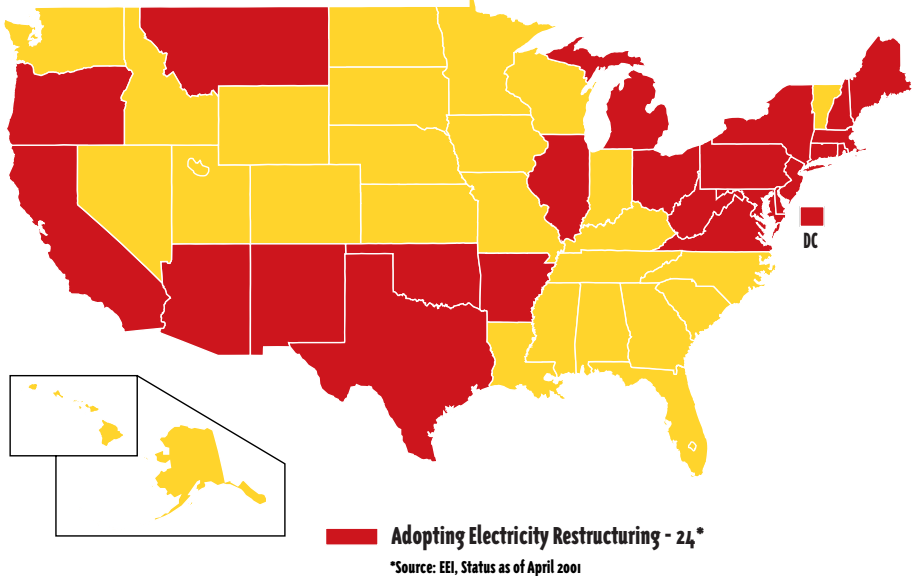
The most important changes in the history of the electric utility industry are happening now. The industry is being restructured from one that is highly regulated to one in which there is significant competition in power generation and sales to consumers. Transmission and distribution will remain regulated in a competitive marketplace.

The states have taken the initiative in restructuring electric service to expand competition to benefit retail consumers. Today all 50 states and the District of Columbia are addressing reforms to retail electric service. Some states have implemented pilot programs, while 24 states and the District of Columbia—representing nearly 62 percent of the U.S. population—have adopted retail competition. One additional state, Vermont, has endorsed retail competition, but legislation must be passed for implementation.

The states are pursuing electricity restructuring in a variety of ways and at varying paces. The differences in approach reflect each state's unique circumstances, including current and historic electric rates, the availability and cost of different fuels, purchased power contracts, environmental policies, state and local taxes, and social programs such as low-income energy assistance.

The experiments and initiatives that are occurring in the states are revealing what works—and what doesn't—in a new competitive market.

Sixty-Two Percent of Americans Live in States That Have Adopted Electric Competition.



All fifty states and the District of Columbia have addressed reforms to retail electric service. Twenty-three states and the District of Columbia have adopted retail competition. The states are: Arizona, Arkansas, California, Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, Michigan, Montana, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Virginia, and West Virginia.

'Transition Costs' Are Expenses That Were Incurred by Electric Companies to Serve Consumers in Their Local Service Area.

Transition costs occur when consumers are able to buy power from a supplier other than their local utility before the utility has had the opportunity to recover the costs it incurred to serve those consumers under traditional regulation.

Unlike other businesses, electric companies are not permitted to recover many of their costs when they are incurred. Instead, regulators have required electric companies to spread their costs over long periods of time, sometimes as long as 30 years, under the assumption there would be a stable customer base.

These costs usually consist of investments in power plants; taxes; and mandated programs that meet social policy and environmental objectives, including mandated long- and short-term purchased power contracts from independent power producers.

Recovery of "stranded" investments was authorized by FERC in its rules regarding wholesale competition, and also has been endorsed by states that have moved to adopt competition at the retail level as an essential part of the transition to competition.

The Public Utility Holding Company Act Applies to Any Company That Holds More Than a Ten Percent Interest in an Electric or Gas Company, Unless an Exception Is Granted.

The Public Utility Holding Company Act (PUHCA) was enacted in 1935 to regulate the corporate structure and financial operations of utility holding companies. Under PUHCA, any company that owns or controls ten percent or more of an electric or gas company is subject to certain regulatory requirements, unless it qualifies for exemption. Holding companies that do not qualify for exemption must register with the Securities and Exchange Commission (SEC) under PUHCA and are subject to the Act's provisions. There are currently 29 registered holding companies and 118 exempt holding companies. Company mergers and acquisitions are a trend in the industry today that is directly related to the number of holding and exempt companies under PUHCA. In 1999, there was a 30 percent increase in the number of registered holding companies, mirroring an increase in the number of companies that merged or were acquired.

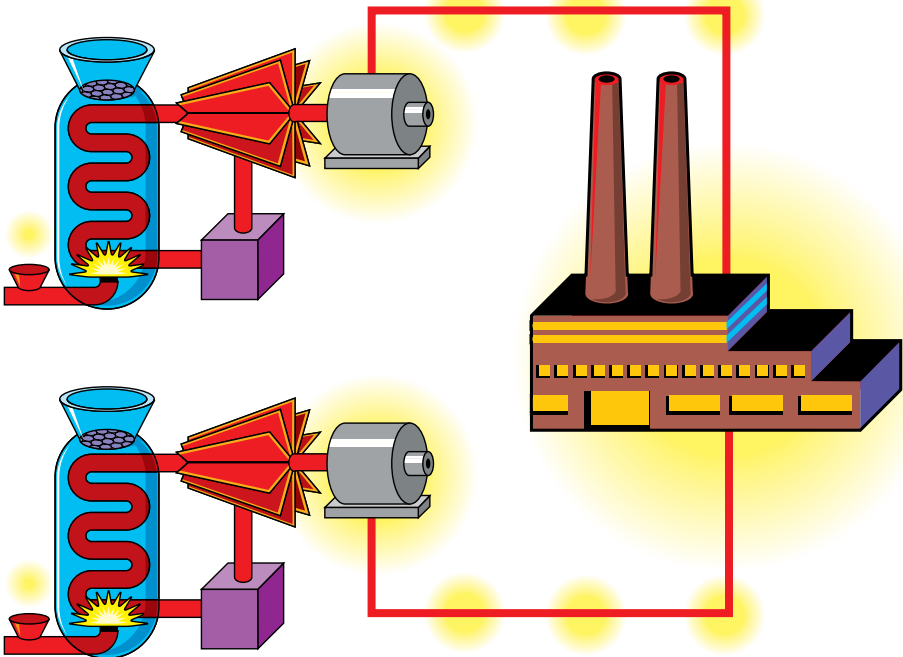
Under PUHCA, holding companies undergo extensive scrutiny by the SEC, including approval by the SEC of all financial transactions among affiliates and regulation of the capital structures of the holding companies and their affiliates. In addition, PUHCA reviews registered holding company boards of directors, limits the companies' operations to an integrated, geographic area, and prohibits diversification into unrelated lines of business. Expansion into related lines of business also must meet with SEC approval.

The SEC has recommended that PUHCA be repealed, with certain consumer protections transferred to FERC and state regulatory commissions.

The Public Utility Regulatory Policies Act Requires Electric Companies to Buy Power from Other Sources, Regardless of Whether That Power Is Needed.

The Public Utility Regulatory Policies Act (PURPA) is one of five bills signed into law on November 8, 1978, as the National Energy Act. A major objective of PURPA was to expand the use of cogeneration and renewable energy sources. After PURPA was initiated, regulated utilities were required to purchase power produced by a "qualifying facility" at a price equal to that which the utility would otherwise pay if it were to build its own power plant or buy power from another source (its avoided cost), regardless of whether they needed it.

To encourage the growth of qualifying facilities, a number of states set the avoided cost rate artificially higher than the true avoided cost rate. As a result, it has been estimated that, each year, electricity consumers pay nearly \$8 billion in excess power costs for power purchased under PURPA requirements.

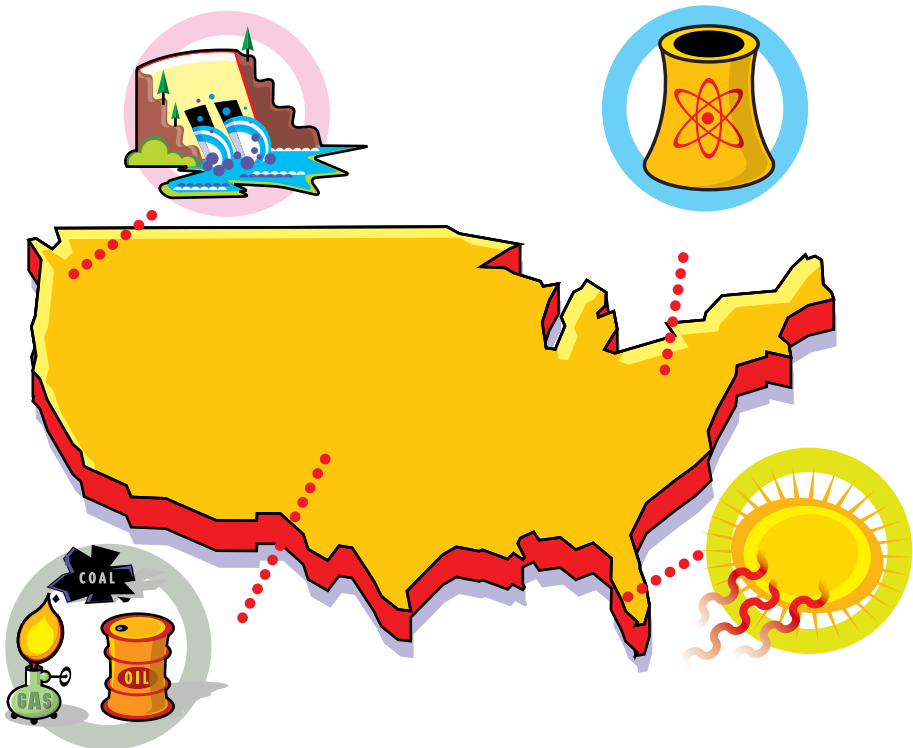


Electricity Rates Reflect State Policies and Priorities.

While all electric companies use similar methods to generate electricity, each operates differently to meet the unique needs of its service area. Variables such as regulatory policy, customer demographics, usage patterns, fuel availability, and geographic conditions have a major impact on the cost of providing service and, thus, on electric rates.

The cost of fuel used to generate electricity has a direct bearing on the price the utility charges for service. That cost not only depends on the type of fuel used, but also on the distance between the source of fuel and the power plant. The cost of transporting fuel is an important element.

Environmental considerations in many locations require the burning of fossil fuels of low sulfur content to meet strict air quality restrictions regarding power plant emissions. Such fuels tend to be



more expensive than those with higher sulfur content. Federal or state public policies may even preclude the use of certain fuel sources altogether.

State tax rates are another major variable that affects retail electricity rates. For example, some states impose a power generation tax. This tax is based on kilowatt-hours sold and is passed through to customers in the form of higher rates. The revenue from these taxes is used to address local needs.

Differences in customer electricity usage patterns have an effect on the price per kilowatt-hour. Most electricity is used during daytime hours when businesses are operating and residential customers are active. During the night, when businesses are closed and residential customers are asleep, the rate of consumption is much lower. Electric companies schedule the operation of their generating units to meet these changing patterns of use, with more expensive units operating only at times of high demand.

As electricity competition evolves in the states, state restructuring policies also are producing changes in retail rates. For example, electric service traditionally is provided on a "bundled" basis, meaning that generation, transmission, and distribution services are provided to consumers as a single package. However, when states implement retail choice (i.e., allowing consumers to choose their electricity supplier), rates must be unbundled to reflect separately priced components for these services. Additionally, some states are introducing regulatory incentives to stimulate increased productivity growth over time. All of these factors influence the rates charged to consumers.

GENERATING POWER AND GETTING IT TO THE CONSUMER

Delivering electricity to America's consumers is a complex task. Behind it lies a series of highly technical functions such as the generation of power, its transmission, and its final distribution to the consumer. Because of the physical nature of electricity, the entities performing these functions are not isolated. To a degree, all power suppliers and delivery systems are interconnected; thus, the decisions they make affecting the generation, transmission, and distribution of power have widespread effects on all consumers. Consequently, communication and cooperation among all power suppliers and delivery systems are essential to the smooth working of this industry.

Electric Companies Use a Broad Mix of Fuel Sources to Generate Electricity.

Many energy sources provide the fuel necessary to generate electricity. The combination of energy sources used is referred to as the generation or fuel mix. More than half of the nation's electricity supply is generated from coal. Nuclear fuel produces almost 20 percent of the supply. Natural gas supplies nearly 16 percent. Hydropower and, to a lesser extent, other renewable resources — such as wind, solar, geothermal, and biomass — provide nearly 11 percent of the electricity supply. Fuel oil provides almost 3 percent of the generation mix.

