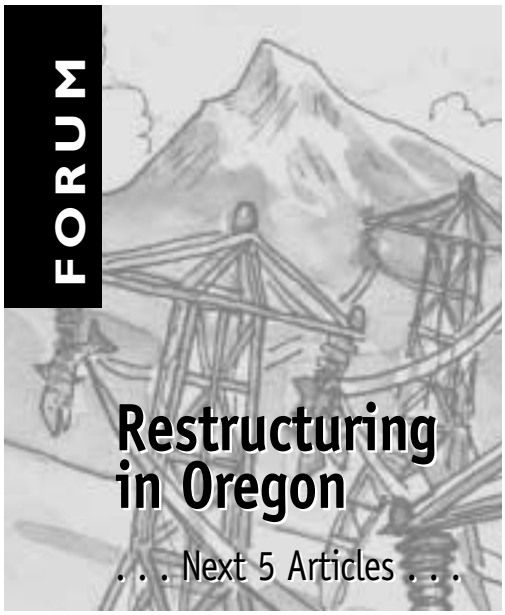
FORUM



Restructuring in Oregon

. . . Next 5 Articles . . .

Electricity Restructuring, Oregon Style

By Jason Eisdorfer, Citizens' Utility Board

Electricity is an essential service, not a commodity. Electricity is necessary for the health, welfare, and comfort of each and every one of us. Electricity also drives our economy.

Those who believe that the existing system of regulated utility monopolies encourages flawed decision-making by investor owned utilities initiated the move to restructure the electricity industry in the United States. The debate they began continues to evoke powerful feelings in proponents of two competing ideologies: that free markets are infallible, and that strong government control realized through centralized public decision-making and expenditure ensure fair market outcomes. Free marketers claim that a regulated system forces customers to pay for the costs of bloated investments and expensive mistakes made by regulated utilities and allows utilities managers to ignore cheaper and cleaner investments. Yet, free market solutions often ignore the political and social issues associated with small consumers when allowing the market to choose winners and losers among customers and customer classes.

Technology developments of the 1980s spurred Congress to pass the Energy Policy Act in 1992, making moot most of the arguments between opposing viewpoints at the national level (see side bar on technology). Encouraging deregulation of wholesale markets to provide for competition between non-utility power producers and utilities for the sale of power in bulk, the passage of the Act unleashed tremendous economic forces and set in motion a chain reaction of events that make headlines today. The federal directive to deregulate wholesale markets created pressure to restructure retail markets and required a practical response at the state level. The key to resolving the conflict between Oregon's needs and the pressures to change how retail markets worked, would be determined by Oregon's ability to resolve issues without strictly adhering to one economic ideology.

Setting the Stage for Deregulation

The Energy Policy Act treated transmission networks as open highways available to utility and non-utility users on an equal footing—a significant change from the previous system that favored utilities—and also exempted the independent power producers from other federal laws that restricted their participation in wholesale electricity sales. In addition, the Act gave the Federal Energy Regulatory Commission (FERC) the authority to issue a number of groundbreaking orders designed to "remove impediments to competition" in wholesale power markets. One order mandated open access to transmission facilities at non-discriminatory prices. Another order required each transmission owner to file a proposal to join a regional transmission organization (RTO), whose independent governing board would control interstate transmission systems. These orders sought to increase access to the transmission network significantly, and made a competitive market for wholesale electricity possible.

The Costs of Uncertainty and the Retail Markets

While these orders targeted wholesale competition, it was widely assumed that retail competition would not be far behind. Utilities, uncertain about the future market structure, began to ask questions: who would own and build generating assets, who would operate transmission networks and, most important, who would buy power from them in a deregulated market. Congress debated—but ultimately did not approve—legislation in the 1990s that would have mandated retail competition in every state.

The result of all this uncertainty was fairly predictable: most utilities stopped building new generating plants. Under the old regulatory regime, when a utility built an expensive new resource, the state utility commission would allow the utility to recover costs from ratepayers if the commission deemed the investment a prudent one. With little basis to evaluate these investments, utilities generally were allowed to recover the majority of their investments. After the passage of the Energy Policy Act, utilities had to compete with non-utilities that often could build generating resources less expensively. As a result, the utilities were no longer assured of recovering the costs of new generating plants. Nor was it clear whether they would be able to recover the costs of past investments, made under the old system, if they had no guaranteed customer base in the future. In the 1990s, despite the Pacific Northwest's record population and economic growth, utilities saw building new resources as a risky proposition. Only about a third as many new generation plants were built than had been constructed in the previous decade.

This decline in utilities' investments in the 1990s was not limited to generation plants. During the decade, utilities also significantly dropped their expenditures in energy efficiency programs. Generally speaking, utilities are not inclined to encourage customers to use less of their products. Now, with the new uncertainty of recovering costs

Under Enron's proposal, it was unclear who would invest in central or distributed generation, energy efficiency, or low-income weatherization—all of which are essential to sound energy policy.

(see glossary—stranded costs) and utilities' desire to get "lean and mean" so they could keep up in the new and more competitive environment, utilities decimated their energy efficiency programs. A common measure of success for energy efficiency programs, the three-year average of megawatts (aMW) saved dropped 66 percent—from 116 aMW in 1992-1994 to 40 aMW in 1998-2000.

The Benefits of Competition

The efforts to create competitive wholesale markets appeared to reduce the cost of electricity in the Northwest during the mid- and late-1990s. In these years the wholesale price of electricity fell at times to between one-half and one-third of the cost of power from most utility-owned generating plants. But competition may not be the only reason that prices declined. The over-building of utility plants prior to deregulation certainly played a part, as well as the several years of unusually wet weather that fueled the hydropower system. What is clear is that when utilities compared the costs of building a new resource, investing in energy efficiency, or buying from a low wholesale market, they chose the least expensive option: they bought from the market.

The Complex Issues Surrounding Retail Competition

Many industrial customers reacted to the low wholesale market prices by pressuring government for retail competition, which they saw as a means to escape the utilities' higher rates for power generated by the utilities' older, more expensive facilities. These customers negotiated special contracts with utilities at rates below the regular cost-based prices, even threatening to move out of state or build cogeneration facilities *(see glossary -ed.)* to compel the utilities to cooperate.

One of the genuine threats of electricity restructuring was shifting costs for infrastructure from larger customers onto smaller customers who would generally have fewer choices in a competitive environment. Special contracts, however, made "cost shifting" *(see glossary -ed.)* a reality even before restructuring. Oregon law allows the Public Utility Commission (PUC) to approve such contracts if it finds that an industrial customer has "competitive alternatives" to the regulated service—the theory being that it

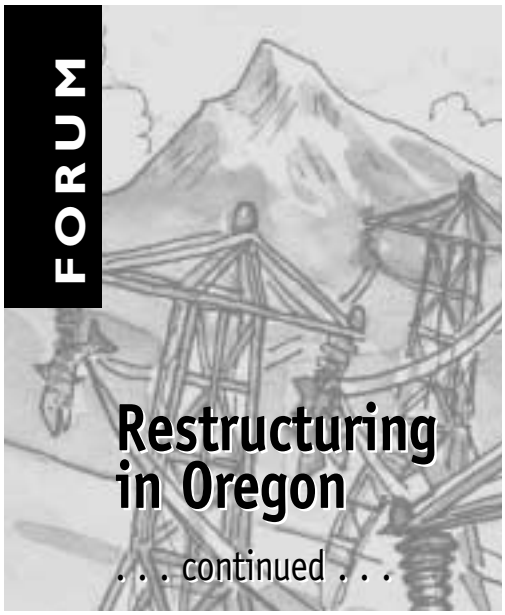
Gas Turbine Technology and Deregulation

Cold War research funded in the 1980s by the Reagan administration improved the efficiency of jet engines, inadvertently changed the electric industry, and led to deregulation. The combustion turbine ("CT") is essentially a stationary jet aircraft engine that generates electricity by burning natural gas. When used most efficiently, the waste heat created by the turbine is captured and used to run a second, steam-powered turbine. This two-turbine combination, called a Combined Cycle CT, has become a staple among utilities that need to generate more power to serve expanding markets. Combined Cycle CTs can be built in a range of sizes. A 250 MW system, for example, can power a city the size of Eugene. Many industries such as pulp and paper mills can even operate off the utility grid by running on-site CTs.

For decades, monopoly utilities had generally invested in very large, expensive fossil fuel or nuclear central-station power plants. Regulators assured these utilities of a reasonable profit on their investments and a guaranteed customer base, an arrangement that created strong incentives to build too many large and expensive generating plants.

CTs brought with them many advantages over these older technologies. First, they are more reliable. They are also relatively clean; they produce five to seven times the power per ton of pollutants compared to oil and coal plants and without the waste problems of nuclear plants. They are less expensive to operate; depending on the cost of natural gas, they can generate power for a cost of about 3 to 4 cents per kilowatt-hour, which is usually cheaper than coal plants and about half the cost of older oil-fired boilers or nuclear power. Finally, CTs require less capital and time to bring on-line than the older technologies, enabling smaller businesses to compete in the power market. Their smaller size and cleaner generation also means that they can be located closer to end users, reducing our dependence on expensive, often congested long-distance transmission systems.

Steve Weiss for Oregon's Future



Restructuring in Oregon

. . . continued . . .

benefits other customers to pay some of the industrial customers' costs in order to keep them on the system.

The conflict over competitive markets reached a crescendo when power-marketer Enron purchased Portland General Electric, Oregon's biggest utility, and used it as a stage to promote a radical deregulation proposal. Enron filed its proposal with the PUC, promising to create retail competition for all customers by forcing them by law away from the utilities into the laps of non-utility suppliers.

The Citizens' Utility Board of Oregon (CUB) led the fight against retail competition for residential customers. CUB argued that Enron's rhetoric about customer choice leading to lower rates and more options ignored public policy issues surrounding residential electricity service. CUB agreed there were problems with the status quo, in particular the shifting of costs created by special deals for large customers and the meager utility investment in new generation and energy efficiency. However, residential customers were clearly not asking for deregulation or retail competition.

CUB also believed that retail competition was not appropriate for small customers and most likely would not benefit them. CUB understood that most residential customers do not have the sophistication or desire to sift through complex options for service, and that most prefer the stability and protection of a guaranteed, regulated supply. Even though many other states have assumed that retail competition would be extended to residential customers, retail competition and market-based prices conjured for consumers the specter of volatile rates, scams, discriminatory service, misinformation, and slamming (having your service provider changed without your consent).

Many industrial customers negotiated special contracts with utilities at rates below the regular cost-based prices, even threatening to move out of state or build cogeneration facilities to compel the utilities to cooperate.

Oregon's Unique Response to the Changing Environment

Enron's PUC filing revealed that economic forces, federal policy and law, and politics were unavoidably leading the electric industry toward a more market-oriented approach. Under Enron's proposal, it was unclear who would invest in central or distributed generation, energy efficiency, or low-income weatherization—all of which are essential to sound energy policy. Historically, regulators had insisted that utilities consider these far-sighted investments in their planning activities.

While the filing indicated that market mechanisms would replace regulation at the wholesale level, reaction to the filing revealed that residential and small commercial customers did not see retail competition as necessary or inevitable.

During the 1999 session, legislators, customers, environmentalists, utilities, and the PUC worked together to design a restructuring plan for Oregon that addressed the technological, market, legal, and public policy changes in the electric industry. This plan became SB 1149 and included market-oriented components, but retained elements of regulation for smaller customers whom the market would not reach. SB 1149 has seven key strengths that meet the diverse electricity needs of Oregonians. After years of uncertainty, the law provides predictable rules for industry and consumers.

First, it allows larger customers to access competitive markets in a way that does not shift costs to smaller customers. Industrial customers will be charged for the unpaid portion of assets created to serve their needs before deregulation. CUB assumed that large customers would access wholesale markets with or without restructuring legislation because they were, in fact, already accessing them through special contracts. Second, the structure maintains regulated rates and retains the existing low-cost resources for small customers, who would not benefit from participation in the market. Residential customers will pay rates based on the cost of service by the existing utility's generating resources. Third, the bill allows larger customers into the market so that utilities no longer have a monopolistic hold on customers, and encourages investors to finance more efficient non-utility generation.

Fourth, while the bill does not expose residential customers to retail deregulation, it does establish a "portfolio model." In this model the utility purchases "green" power (power produced from renewable sources) at wholesale rates so that it can offer small customers several safe, regulated electricity packages, including the traditional cost-of-service rate. Fifth, a public-purposes charge replaces each of the utilities' energy-efficiency and renewables programs. The Energy Trust of Oregon will administer these funds as an independent board, and its greater flexibility and objectivity will help it implement energy efficiency programs with more vigor than the utilities can. Equal to three percent of utility

retail revenues, these funds by law will help customers of all classes reduce their usage and thus their bills, as well as mitigate the effects of the energy industry on the environment. Sixth, the law establishes a $10 million annual fund that will assist low-income Oregonians who struggle to pay their utility bills.

Seventh and finally, the law does not mandate the sale of generating resources. Though some may say that SB1149 gives incentives to utilities to divest generating resources, this is a lazy and opportunistic analysis of the law and results in a serious misunderstanding. The law provides for a thoughtful process to assess the value, or costs, of retaining the utility's existing generating resources.

Oregonians did not "freeze in the headlights," but reacted with imagination and compassion when the electricity industry began to change. The state made sure large customers did not escape their obligations to utilities and strand smaller customers with additional costs. Oregon did not let its energy efficiency and renewables program disappear and refused to force Oregonians to choose between paying their energy bills and eating.

Oregon has designed an electricity-restructuring law that uniquely addresses major technological, policy, and economic changes in the industry without surrendering to the pressure to deregulate completely, as so many other states have done. States that have pulled back from more radical deregulation schemes are now looking to Oregon as a model of restructuring, because SB 1149 acknowledges the major changes in the industry in a manner that protects and benefits all utility customers.

Jason Eisdorfer (no photo available) has served as legal counsel and energy program director of the Citizens' Utility Board of Oregon since joining CUB in 1994, and helped author Oregon's electricity industry restructuring legislation, which passed into law in July 1999. He sits on the Executive Board of the Energy Trust of Oregon, and serves on the executive boards of the Fair and Clean Energy Coalition, the Northwest Energy Coalition, and the Renewable Northwest Project.

The False Promise of Electricity Deregulation

By Peter DeFazio, U.S. Representative, 4th District of Oregon

Not too long ago, Americans didn't have to wonder whether the lights would come on when they flipped the switch or worry that they might have to forgo other necessities to pay their electric bill. What a difference a few years make!

Regulation & Deregulation in the 20th Century

Deregulation proponents have either historical amnesia or nostalgia for a high-priced, volatile electricity supply. After all, our nation experimented with a deregulated electricity market until the early 1930s. That system was discarded after the spectacular Depression-era collapse of the energy empire of Samuel Insull, which threatened to black out the entire industrial heartland of the Midwest.

Fortunately, Congress acted quickly and successfully to stabilize the volatile electricity markets. It created the Federal Public Works Administration in 1933 and passed five laws to correct the flaws of the deregulated system: the Tennessee Valley Act of 1933, the Public Utility Holding Company Act of 1935, the Federal Power Act of 1935, the Rural Electrification Act of 1936, and the Bonneville Project Act of 1937. These laws established a power generation and delivery system designed to stabilize power markets, ensure an