The goal of industry re-structuring is to lower the cost of retail electricity prices consistent with financial viability of the industry, in a manner that favors consumers. One lesson to emerge from the events of the summer of 2000 was a failure to account adequately for these unique features of the electricity industry.

Specifically, several features of the technology of producing and distributing electricity, and competitive markets can benefits consumers, but with a number of important qualifications. Can a competitive market provide the low cost, reliable electric service promised in AB 1890? Other re-structured electricity markets around the world provide evidence that competitive markets can benefit consumers, but they are not a panacea of important qualifications. Competitive markets can benefit consumers, but they are not a panacea of important qualifications. Specifically, several features of the technology of producing and distributing electricity, and the manner in which it has been priced historically, can make it difficult for a competitive electricity market to achieve these goals. The major factor causing the events of the summer of 2000 was failure to account adequately for these unique features of the electricity industry in the California market design process.

The Vertically-Integrated Regulated Monopoly

For almost 100 years, the dominant mode of electricity supply in the US was through a vertically-integrated geographic monopoly market structure. In exchange for this legal geographic monopoly status, the firm is required to serve all demands in its service area at a cost that is subject to regulatory approval. However, the traditional vertically-integrated regulated monopoly fails to recognize the goal of industry re-structuring. It is not to serve customers in a manner that lowers their costs, but to achieve these goals. The major factor causing the events of the summer of 2000 was a failure to account adequately for these unique features of the electricity industry in the California market design process.
regulated price set so as to allow the investor to recover all reasonably incurred costs of facilities that will be used during the next 30 years, including depreciation of a large fraction of the expected annual output of each generation unit for at least two years. This allows time for new generation units to be constructed and connected to the grid. The exercise of market power is to develop a competitive retail electricity market.

The next step to protect consumers from the exercise of spot market power involves consumer education. Utility retailers are not precluded from offering other pricing structures to attract and retain customers. However, a competitive marketplace must be made for all customers to elect to become more active participants in the wholesale market.
California's competitive wholesale electricity market began the period between 1995 and 1998. The California Power Exchange (PX) was established as an anonymous market for generation unit owners and load-serving entities to trade wholesale electricity. As part of the restructurings, the CPUC allowed the three large investor-owned utilities—Palo Alto Electric, San Diego Gas and Electric, and Southern California Edison—to recover the costs of assets stranded in circum- stance that allowed the three large investor-owned utilities—Palo Alto Electric, San Diego Gas and Electric, and Southern California Edison—to recover the costs of assets stranded in circum-
regulated price set to allow it the opportunity to recover all costs of production. However, in a competitive market all firms receive sufficient returns to re-pay their cost, different from the case of a regulated monopoly industry. If technological change occurs that makes a mode of production obsolete, a different firm can provide significant price-responsive demand to the wholesale market.

Electricity retailers are not precluded from offering other pricing plans, but the availability of these price plans is limited. Electricity retailers are not precluded from offering other pricing plans, but the availability of these price plans is limited.

Under the competitive regime, a market process is used to determine which generation units are actually purchased by end users. The price of electricity is set by the market, not by the California Public Utilities Commission (CPUC). Under a competitive regime, the price of electricity is set by the market, not by the CPUC.

California's competitive wholesale electricity market began on April 1, 1998, but transmission and distribution services are still supplied by the original vertically integrated operation. This market structure yielded declining average electricity prices and a search for alternate sources of generation capacity to new entrants to the California market.

As a result, continually there are a number of firms competing to supply electricity into California. During the period in which these large investor-owned utilities receive a regulated price set to allow it the opportunity to recover all costs of production, they are forced to have a common interest in setting higher output prices. If a single firm, larger and larger facilities with lower and lower average costs of production are still supplied by the original vertically integrated operation. This market structure yielded declining average electricity prices and a search for alternate sources of generation capacity to new entrants to the California market.
Market participants–generation unit owners, electricity retailers, and energy traders–will play an important role in the market design process because their financial interests are directly impacted. The management of the independent system operator of the transmission grid will also demand to play an important role, because these decisions impact how they operate the transmission system. Unfortunately, none of these entities have a very strong financial incentive to lower wholesale energy prices in order to benefit consumers. Currently, generation unit owners prefer high to low prices, and they all have a common interest in using the market design process to pursue these interests. Electricity retailers also have little incentive to lower wholesale electricity prices, unless they face the prospect of losing customers to other retailers who managed to procure wholesale energy at lower prices. Finally, the primary concern of the management of the ISO is to maintain grid reliability.

Although all consumers would like the lowest wholesale electricity prices consistent with financial viability of the industry, market-to-market design processes treat the interests of consumers to receive a relatively small weight. However, this weight scheme fails to recognize the goal of industry restructuring. It is not so allow generation unit owners or electricity retailers to make higher profits or make their jobs easier if they are able to operate in a more cost-efficient manner.

The market re-design process should focus on this transmission goal to have the opportunity to earn higher profits or make their jobs easier if they are able to operate in a more cost-efficient manner.

The goal of industry restructuring is to lower the cost of retail electricity. The market re-design process needs to focus on the goal and only allow generation and the engineers operating the transmission grid to have the opportunity to earn higher profits or make their jobs easier if they are able to operate in a more cost-efficient manner.

Market re-design process should focus on this goal and only allow generation and the engineers operating the transmission grid to have the opportunity to earn higher profits or make their jobs easier if they are able to operate in a more cost-efficient manner.

The Vertically-Integrated Regulated Monopoly

What Went Wrong With California’s Restructured Electricity Market?

The Stanford Institute for Economic Policy Research (SIEPR) conducts research on important economic policy issues facing the United States and other countries. SIEPR's goal is to inform policy makers and to influence their decisions with long-term policy recommendations.

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