

A World of Its Own: Electric Utility Regulation in California



Background: Public utilities bring essential commodities and services to the public – electricity, gas, water, telephones, transportation.

At their beginnings a century and more ago, they enjoyed (some more than others) a period of untrammelled competition. The results included a disorderly, sometimes dangerous and always needless multiplication of pipe lines and overhead pole lines, and demonstrated to the satisfaction of most that public utilities were “natural monopolies.”

Legislatures granted them exclusive service territories. Recognizing that this protection from competition could be abused, they also set up regulatory bodies to control utility rates and ensure that they operate in the public interest. A particular benefit, not always generally appreciated, was the ability this gave the utilities to make orderly, long-term plans to serve the public.

The Regulators and the Regulated: Our state is served by three major investor-owned electric utilities: Pacific Gas & Electric (PG&E), Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E). Other electric utilities are owned by municipalities or irrigation districts and not subject to state regulation. Three principal state agencies do the regulating:

The California Public Utilities Commission (CPUC), with both legislative and judicial powers. A principal duty of the five commissioners is to question and analyze detailed applications by the utilities for rate changes and set the final rates that are charged customers.

The California Energy Commission (CEC) (as it is generally known). Its five commissioners must forecast energy needs, license power plants, and promote conservation and alternative energy resources.

The California Independent System Operator (CA ISO), established in 1996 along with the legislation, AB 1890, which “deregulated” the private utilities. AB 1890 required the utilities to commit control of their transmission facilities to the ISO.

In addition, **the Federal Energy Regulatory Commission (FERC)** regulates natural gas and hydropower projects, and interstate transmission of natural gas, oil and electricity.

Electricity Generation: Through nearly all of the 1900s, most of California’s electricity was produced in plants owned by the three major investor-owned utilities (IOUs). As their fuel costs increased and as they invested in new facilities, they petitioned the CPUC for adjustments in their rates to recover these costs. For a variety of reasons, by the 1990s electric rates in California were among the highest in the nation. Demand was increasing, power plants were aging and new ones were not being built.

Hoping to bring prices down by encouraging the construction of new plants and by increasing the available fuel supply, the state legislature passed AB 1890, which ended the protected-monopoly status of the three IOUs. They were required to sell most of their largest generating plants. Competition was invited into the market.

The results are well remembered. “Merchant generators” – independent power producers, out-of-state utilities, and power brokers – established a *de facto* oligopoly. They kept prices high. In the 2000-2001 energy crisis they took plants off-line when demand was highest – like hot summer afternoons with massive air-conditioning usage – causing truly outrageous wholesale prices. Legislation now keeps them from doing this. And the CA ISO is developing ways to separate real from contrived price fluctuations, so the legislature or the CPUC can cap prices if manipulation again becomes evident.

In 2002 the legislature passed SB 1389, which requires the CEC to prepare an Integrated Energy Policy Report every two years. The staff is asked to look ahead five to 20 years and judge what California’s energy systems should look like, and what we need to do to get there. The LWVC Energy Committee has been working with the CEC staff for more than a year to present a public interest perspective on this.

Incentives – to produce and to conserve – remain the big issues in the area of generation. More than 9,400 MW of new capacity came on line in the last four years, but forecasters warn that without yet more investment in new plants, another power crunch is likely – and within two to six years. The weakened financial status of utilities and merchant generators remains a concern.

Electricity Transmission: Before deregulation, the major California transmission lines were owned and operated by the IOUs. They were responsible for reliability within their service territories, although their lines were (and still are) part of a coordinated 14-

western-state grid. Then AB1890 required the utilities to give control of their transmission facilities to the ISO. Owners of the lines still develop their own expansion plans, but the ISO judges the need and (if a proposed CPUC rule is adopted) the CPUC then defines the transmission routes that best serve the “public convenience and necessity.”

Current long- and short-term visions of the CEC, CPUC and CPA are set out in an action plan that supports development of a strategic, long-range plan for transmission. But even as this planning goes forward, a number of areas have transmission constraints, most notably the San Francisco Bay, Tehachapi, Devers and San Diego areas.

Some of the big questions in transmission include how to:

- Ensure system reliability when the public fights grid expansion.
- Ensure reliability when generators are far distant from end users.
- Develop a cost/benefit assessment process that includes merchant generators.
- Factor environmental justice into siting decisions.
- Remedy the present balkanized state of the transmission system.
- Find or establish statewide or regional land-use planning authorities.

Electricity Distribution: Distribution refers to the lower-voltage lines and equipment that deliver power from the high-voltage transmission lines to the consumers. Before AB 1890 all end-users – industrial, commercial and residential – were customers of the IOUs. With the passage of that bill, choice was offered: customers could negotiate **direct access** contracts with other suppliers. The hope – or dream – was that more generation would come into the market and prices would decline. What happened was the “perfect storm” of price increases.

The IOUs at that point had virtually no long-term wholesale contracts in place, and they became more and more dependent on the day-ahead market price for purchased power as set by the ISO through a bidding process. Power outages and financial hemorrhaging of the IOUs followed.

In a desperate attempt to save the situation, then-Governor Davis had the state enter into long-range contracts at the best prices available in an already stressed market. The resulting contracts called for payments to merchant generators of twice the actual cost of generation, for up to 10 years. These contracts account for most of the electricity being distributed to retail customers today (and made a significant contribution to the premature departure of Gov. Davis).

Predictably, as supplies tightened and prices rose, more industrial customers opted out of their utility relationships in favor of **direct access** contracts with merchant generators. This practice was ultimately barred, with about 14 percent of industrial customers left buying directly from non-utility suppliers. They have been required to pay a surcharge of 2.7 cents per kilowatt-hour, which supposedly covers their share of the excess costs incurred by the state’s long-term contracts; they continue to use the utility-owned transmission and distribution systems.

Recent Developments: The legislature and the CPUC are considering a new market structure with just two basic customer groups: **Core customers**, residential and small commercial; and **non-core customers**, large commercial and industrial. Non-core customers could negotiate **direct access** contracts with non-utility suppliers, but would lose the guarantee of back-up power from the utilities. And their contracts would have to protect the economic interests of core customers, unable to negotiate with outside suppliers. The CPUC proposals include additional options for both customer classes, including real-time (dynamic) pricing and green (renewable) power options. Governor Schwarzenegger, independent power producers, SCE and the Silicon Valley Manufacturing Group actively support this core/non-core or “hybrid market” approach.

A major worry: Non-core customers are expected to make up 25 to 40 percent of total capacity contracts, which could make it difficult to protect the economic interests of core customers.

Over the past year there have also been legislative efforts to re-regulate – to put the IOUs back into the boxes that were shattered by the 1996 deregulation. This would be difficult if not impossible. The utilities had to sell much of their generating capacity, which is now owned by out-of-state merchant generators, and the wholesale prices charged by these plants are not subject to CPUC control and get only cursory review by the Federal Energy Regulatory Commission.

Right now both planning and regulation of the electric industry in California are in a state of flux. Decisions that will restore some stability are vital to stimulating the investments that will build new power plants and re-power existing ones, and vital as well to stimulating investments in energy efficiency and the strengthened power grid that is essential to a reliable state electric system. ■