



California Policy Memo

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CALIFORNIA'S POWER CRISIS: Utilities Preach Conservation But Cut Funds for Efficiency Programs

In the five years before electricity deregulation, California utilities cut funding in half for programs that save energy, save customers money, and help save the environment. According to an analysis of federal data by the Environmental Working Group (EWG), the wasted energy would supply a year's worth of power to more than 600,000 homes, and would have cost California consumers almost \$450 million at pre-deregulation rates.

Utilities filings required by the U.S. Department of Energy show that from 1994 to 1998, California's 43 investor-owned and municipal utilities reduced investments in consumer energy efficiency programs by 52.3 percent. (DOE 1998.) According to figures supplied by the utilities, if the power companies had simply maintained efficiency investments at 1994 levels they would have saved 4.1 million megawatt-hours of electricity over the period. That amount is equal to more than two years of the out-of-state reserve power California must keep under contract for days when demand for electricity exceeds in-state supplies. (CEC 1999.)

The Shock of Deregulation

California is the first state to deregulate electricity, and this summer the first effects of deregulation have rocked the state like an earthquake. Average residential electric bills in San Diego and southern Orange County have more than doubled, a shock that other Californians may face when price caps are lifted statewide in January 2002. Schools may have to trim programs and hire fewer teachers to pay for the increased cost of power. (Fisher 2000.) In June, unprecedented rolling blackouts hit the Bay Area, interrupting power to nearly 100,000 residential and small-business customers and causing millions of dollars in losses for the electricity-thirsty digital economy. (PUC 2000.) On more than a dozen days this year the California Independent System Operator, the private company that runs the state power grid, has narrowly avoided a full-scale statewide supply emergency. The previous record for near-emergencies in a year was three. (Brooks 2000.)

In response, utilities have given rate breaks to some industrial and agricultural customers who voluntarily reduce consumption, and asked the state to let them fire up older, dirty power plants whose emissions may exceed current air pollution permits. Gov. Davis and state legislators, who strongly supported deregulation, have blamed the red-hot economy's soaring demand for electricity,

Table 1. California's electric utilities cut funding in half for programs that save money, energy and the environment, at a cost to customers of \$450 million.

Utility	Total Revenue, 1998	Investments in Energy Efficiency, 1994	Investments In Energy Efficiency, 1998	Reduction In Efficiency Investments, 1994-98	Power Wasted by Reduced Efficiency Investments, 1994-98 (MWH)	Home Supply Capacity of Wasted Power, 1994-98	Consumers' Cost (1998 Rates) for Wasted Power, 1994-98
Southern California Edison Company	\$7.38 billion	\$99.2 million	\$61.4 million	38.1%	3,222,018	488,185	\$367 million
Pacific Gas & Electric Company	\$7.21 billion	\$125 million	\$52.6 million	57.9%	115,224	17,458	\$12.4 million
City of Los Angeles	\$2.17 billion	\$14.6 million	\$1.06 million	92.7%	105,841	16,037	\$10.9 million
San Diego Gas & Electric Company	\$1.87 billion	\$30 million	\$23.2 million	22.6%	82,685	12,528	\$8.38 million
Sacramento Municipal Utility District	\$764 million	\$46.9 million	\$12.0 million	74.3%	491,081	74,406	\$41.9 million
Sierra Pacific Power Company	\$586 million	\$2.52 million	-0-	100%	32,943	4,991	\$2.72 million
Statewide	\$22.2 billion	\$322 million	\$154 million	52.3%	4,116,661	623,737	\$449.8 million

Source: Environmental Working Group, from U.S. Department of Energy Electric Utilities Database.

a shortfall in new generating plants and price-gouging by out-of-state power producers. Both California Attorney General Bill Lockyer and the Federal Energy Regulatory Commission are investigating the crisis. The state Public Utilities Commission went into emergency session Aug. 21 to grant San Diego customers short-term rate relief, while warning that down the line someone will have to pay.

Utilities Preach Conservation, But Cut Efficiency Programs

Utilities and politicians alike are also pleading with the public to save precious energy, urging common-sense actions like shutting off lights or air conditioning during peak use times. But EWG found that for California electric utilities, it's one thing to preach conservation to your customers; it's another to back it up with a corporate commitment to efficiency.

The three large investor-owned utilities who serve the great majority of Californians – Southern California Edison of Los Angeles, Pacific Gas & Electric Co. of San Francisco and San Diego Gas & Electric Co. – cut their spending on efficiency by 38 percent, 58 percent and 23 percent respectively from 1994 to 1998. Cuts at the two largest municipally-owned utilities were worse: The City of Los Angeles slashed efficiency funding by 93 percent and the Sacramento Municipal Utility District by 74 percent. During that period, Sierra Pacific Power Co. of Reno, Nev., the investor-owned utility serving Lake Tahoe and other Northern California markets, completely eliminated its energy efficiency spending.

California's declining investment in energy efficiency is part of a national trend, but so are the excuses offered for this summer's supply problems and price spikes. Like other companies nationwide who have been hit by power shortages in recent years, California utilities are exploiting the problem to lobby for new power plants and the right to keep running older, dirtier ones. What they don't always say is that energy efficiency is the cheapest, easiest and cleanest way to increase capacity – by reducing demand.

Saving Energy, Saving Money . . .

Simple efforts like replacing ordinary incandescent light bulbs with compact fluorescents can save customers \$50 over the life of each bulb, while saving one-fourth of the energy used by the old model. Home weatherization programs often produce energy savings in excess of 25 percent. Under consumer-efficiency programs like these, smart utilities offered ratepayers rebates for installing energy-saving technology.

That was before deregulation, when utilities had incentives to promote energy efficiency. Utilities were not allowed to purchase power on the open market on an as-needed basis, so saving energy to meet peak demand was cheaper than building new power plants. But under deregulation, utility companies who once rewarded customers for saving energy now sell all the power they can as fast as they can and buy more at that day's market price, which they pass on to their ratepayers immediately.

According to a 1999 analysis by EWG, since 1993, when utilities began full-scale preparation for deregulation, U.S. power companies reduced funding for consumer efficiency programs by 45 percent. Energy efficiency investments at 52 utilities with revenues over \$1 billion shrank to less than one-half of 1 percent of their total revenues. (EWG/WWF 1998.)

Even California utilities that have historically been ahead of the pack in efficiency investments have cut their programs significantly under deregulation. In 1997, the year before the California Legislature passed the deregulation law, the Sacramento Municipal Utility District (SMUD) spent 2.4 percent of revenues on energy efficiency, the sixth-highest in the nation. That same year Pacific Gas and Electric spent 1.04 percent of revenue on efficiency programs, enough to rank 25th nationally. Now SMUD spends less than 1.6 percent of revenues on efficiency and PG&E spends less than three-quarters of 1 percent.

Evidence is abundant that efficiency programs are an effective way to save energy and save money, and not only on customers' monthly statements. The California Energy Commission estimates that efficiency investments made in 1998 will return \$2 for every \$1 spent. The RAND Corporation, a prestigious Santa Monica think tank, places the economic benefit of energy efficiency programs over the last 20 years at \$1,000 for every Californian. (PUC 2000.)

. . . And Protecting Public Health

By contrast, the cost of inefficient and undependable power supplies is considerable. On a daily basis, inefficiency forces utilities to generate more power and thus more pollution. But when utilities are forced to cut power, either as a voluntary incentive or as part of an involuntary blackout, many industrial users turn to emergency generators. This summer, some California utilities have also asked state or regional air pollution officials to grant waivers allowing them to use their own backup generators on an ongoing basis to reduce demand before an emergency occurs. But according to the California Energy Commission, reliance on emergency generators causes significant short-term and long-term environmental and public health damage:

Emergency generators are old, typically burn diesel fuel and have few if any pollution controls . . . First, they create significant air quality and health problems when they run. These problems are exacerbated because hot days where electricity is in short supply are often also very smoggy days. Second, although investment in pollution controls can reduce some of the pollution, allowing these generators to run on a periodic or semi-regular basis might cause the [state] to come to rely upon these power sources more regularly. Instead of investing in cleaner, more efficient fuels, dirty old technology would become part of the power baseline, and it could displace investment in cleaner, more efficient means. (CEC 2000.)

The Public Goods Charge

As part of deregulation, California established limited public funding for consumer efficiency programs. The Public Goods Charge program (PGC) directs utilities to collect a surcharge of no more than 3 percent on all customers' bills to fund efficiency programs. The PGC was supposed to be eliminated after 2001, but as of August 2000 the Legislature and governor seem likely to extend the program through 2011. Most environmental groups have supported extension of the PGC. But some consumer advocates argue that because the utilities have not aggressively promoted efficiency in the past, even when they had economic incentive, the state should take control of the fund to ensure that it goes toward efficiency programs that actually benefit consumers. According to The

Utilities Reform Network of San Francisco, "Having utilities in charge of energy efficiency is like asking your local auto dealer to run public transportation programs." (TURN 2000.)

Even with adjustments for inflation, the total collected under the Public Goods Charge will be capped at \$270 million a year in 1998 dollars. As a measure of the state's commitment to efficiency, this represents a significant decline from 1994, which was the peak year for investment in efficiency programs. According to utility records filed with the U.S. DOE, California utilities spent \$322 million on efficiency programs that year, the last before most utilities began restructuring in preparation for deregulation. The California Energy Commission, using additional data, puts the investment in efficiency in 1998 at closer to \$500 million.

Conclusion and Recommendations

Struggling to cope with unprecedented rate increases and blackouts, California's electric utilities are scrambling to find additional supplies, asking for waivers from air pollution laws to operate older, dirtier energy sources and urging consumers to save energy. However, in anticipation of deregulation, which removed their incentive to conserve power, the utilities themselves slashed spending for energy efficiency programs by more than half. Cutting demand through electricity efficiency programs is the fastest, cheapest and cleanest way to cope with supply shortages, but utilities are putting their short-term profits before their customers' long-term interests -- and the state is discovering that deregulation leaves limited options for stopping them.

In the wake of this summer's crisis, some politicians have become born-again believers in regulation, and there are growing calls to repeal or amend deregulation. Whether electricity is regulated or deregulated, if the state wants to make the market work for consumers, it must not accept compromises in public health and environmental quality. California must not only maintain but significantly increase the level of the Public Goods Charge investment in efficiency programs, and remove control of these funds and programs from the utilities, for whom consumer efficiency has a negative impact on their balance sheets.

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