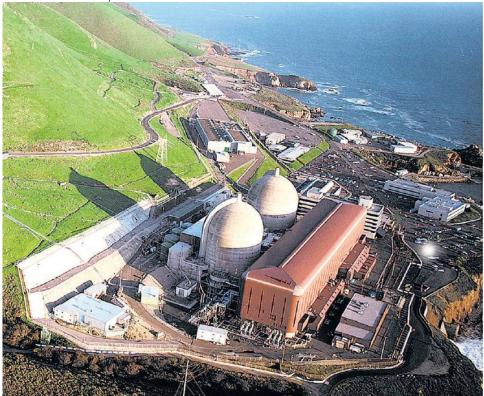
Diablo Canyon pact should put an end to nuclear power debate

PG&E concluded Diablo Canyon nuclear plant is not economical Nuclear power can't compete with solar, wind in new wholesale market 21st-century approach emphasizes flexibility, distributed generation

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BY S. DAVID FREEMAN Special to The Bee



Pacific Gas and Electric Co.

Pacific Gas and Electric Co. on Tuesday announced plans to close its Diablo Canyon nuclear plant within a decade. The deal will bring the company closer to the mandate that 50 percent of California's electricity generation comes from renewable energy sources by 2030.

Widespread concerns about safety, waste and nuclear weapons proliferation make the idea of building more nuclear power plants a politically hazardous sell.

The agreement between PG&E, Friends of the Earth, organized labor and other environmental organizations is the final chapter in the tumultuous history of nuclear power in California.

It began in the 1960s, when Chet Holifield, then chairman of the Congressional Joint Committee on Atomic Energy, envisioned nuclear power plants dotting the Pacific Coast every 50 miles. That dream never came true, but as Sacramento citizens will recall, we did build Rancho Seco. And Southern California Edison and PG&E completed large nuclear power plants of their own.

I helped bury Rancho Seco when I was general manger of the Sacramento Municipal Utility District in 1990. And contrary to the dire predictions, the lights stayed on, the rates didn't go up and SMUD has behaved rather well ever since.

The other large nuclear plants, San Onofre in Southern California and Diablo Canyon in San Luis Obispo, created their own controversies. Their costs spiraled out of control to the tune of billions of dollars that triggered massive rate increases. In fact, it is fair to conclude that these cost overruns at the nuclear plants triggered the deregulation policies the state adopted more than 20 years ago. Today, power plants that serve the investor-owned utilities must compete in the wholesale market created by California law. It is thus with some irony that the last remaining nuclear plant, Diablo Canyon, is now going to be closed because its owner, Pacific Gas and Electric Co., has concluded it is not economical. Nuclear power just can't compete with the sun and wind in the new wholesale market. Nuclear power plants epitomize the 20th-century approach to electricity production: The plants take lots of time and money to build, and generate immense amounts of electricity, but their inherent design requires them to be operated around the clock (except for refueling and repair pauses).

By contrast, the 21st-century approach to electricity production emphasizes flexibility, distributed generation and seeks to reduce overall demand. In 2030, California law will require that 50 percent of electricity be from renewables like wind and solar. That power must be used when available, except for the amount stored. On most days for many hours, these renewable resources will provide 100 percent of the electricity needed. In those hours, a "must run" nuclear plant would crowd out that renewable energy and actually cause us to waste it.

This new concern is called "overcapacity." It is a shorthand way of saying a large baseload of must-run power, like from Diablo Canyon, just doesn't fit into the power supply of the future. That was the conclusion reached not by me, but by PG&E.

WHETHER OR NOT YOU THINK NUCLEAR POWER IS A PROBLEM, IT IS ECONOMICS THAT EXPLAINS PG&E'S WILLINGNESS TO LEAVE NUCLEAR POWER BEHIND.

Adapting to change is a challenge for environmental leaders as well as the electric utilities. Nuclear power, in decades past, was heralded as the alternative to burning dirty coal and other fossil fuels to generate electricity. There was no apparent alternative. Three Mile Island, Chernobyl and Fukushima had not yet happened. We didn't have the sophisticated, affordable and powerful renewable technologies we have today.

Now we know better about nuclear power. It is dangerous and extremely expensive. No nuclear plant would ever have been built in America without giant subsidies from the federal government. The highly radioactive spent fuel is piling up at each reactor site. After 50 years of looking, we must conclude there is no safe place to store it. Nuclear proliferation in the age of terror is a real threat, and the fuel in power plants can be exploited for bombs. America's goal of eliminating nuclear weapons must start with ending nuclear power plants.

Whether or not you think nuclear power is a problem, it is economics that explains PG&E's willingness to leave nuclear power behind. This is the kind of clear-eyed acceptance of change that today's world requires of successful executives. By seizing the future rather than clinging to the past, PG&E's leaders are setting an example their colleagues throughout the utility industry should study and emulate.

The Diablo Canyon agreement should put an end to the debate about nuclear power. It provides a template for a timely transition for all the nuclear and fossil fueled plants to an all-renewable future.

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JOE JOHNSTON (San Luis Obispo) Tribune file