California's New Energy Reality Makes Diablo Canyon Unnecessary

Diablo Canyon nuclear power plant is about to be licensed at a time when an entirely new energy reality exists in California. In 1971, during the early phase of construction at Diablo Canyon, utilities planned on increasing their electricity supply by nearly 7½% each year. However, expected growth in electricity demand is now *below 1½% per year*. Because of this drop in electricity use, the equivalent of 13 new power plants (the size of each of the two units at Diablo Canyon) have simply not been built. According to the California Energy Commission (CEC), state government and most utilities agree that increased energy efficiency (conservation) and renewable energy sources such as cogeneration, wind, solar, geothermal, and small hydroelectric projects are now the best electricity supply investments. Both PG&E and Southern California Edison have begun major programs in these areas. California's chief energy problem has changed from building huge power plants in order to keep the lights on, to reducing its dependence on foreign oil. In this new energy reality, what do we do with Diablo Canyon: *2190 megawatts of nuclear electricity capacity located 2½ miles from a large active earthquake fault?*

PG&E's Case

Pacific Gas and Electric Company (PG&E) has spent $2.3 billion on the Diablo Canyon plant. The plant was initially projected to cost $350 million. PG&E is in precarious financial condition because of these cost overruns and wishes to recoup its investment. Their advertised arguments for operating Diablo Canyon are summarized as follows:

- **Diablo is safe.**
- **Diablo's electricity is needed.**
- **Diablo will replace 20 million barrels per year of foreign oil now being burned in oil- fired electricity plants.**
- **Diablo will save PG&E ratepayers $400 million per year as compared to the cost of electricity from oil-burning power plants.**

Our Rebuttals

Safety. Unfortunately, the Nuclear Regulatory Commission's (NRC) opinion is the only one that matters. They alone will decide if Diablo is safe to operate and no one doubts what their decision will be. Yet, even prominent members of NRC committees reviewing the earthquake issue have concluded the plant is not safe from an earthquake they expect could occur on the nearby Hosgri fault. Members of the U.S. Geological Survey reviewing the issue have come to the same conclusion. In addition, action the NRC has taken to improve PG&E's chances of receiving a NRC license have damaged the NRC's credibility as an impartial regulator. One NRC memo written in January 1976 indicated NRC reluctance to deny PG&E an operating license *"because of the large financial loss involved and the severe impact such action would have on the nuclear industry."*

Need. Although PG&E is now operating at somewhat below the ideal "reserve margin" (extra available electricity in case of a sudden unexpected need) they can get by without brownouts or blackouts at least for the next four years. The CEC states that *"further delay in the licensing of PG&E's Diablo Canyon nuclear power plants and in the construction of the San Onofre 2nd and 3rd units — should not result in power shortages that would disrupt California's economy."* In any case, Diablo Canyon will not likely be able to supply electricity to the PG&E system until after the peak electricity need in the summer of 1982. Meanwhile, new conservation, hydroelectric, geothermal, and cogeneration electricity sources in very substantial quantities are regularly coming on line to boost PG&E's supply comfortably above what is needed.

Electricity demand in the PG&E area is growing rather slowly. But PG&E also needs new electricity sources to maintain an adequate reserve margin, to replace retiring power plants and retiring contracts for electricity purchased from other utilities, and to displace oil and gas fuel now burned in power plants to generate electricity. But the California Energy Commission says that California (and PG&E) *"has a large and varied menu of electricity options for supplying the additional electricity needed by 1992."* The options, all preferable to nuclear power, are *"enormous, far exceeding the total need for this period."* It is political inertia and not energy reality that must be overcome in order to give us these better options.

Oil Displacement. It is clear that Diablo could, in theory, reduce the need to burn foreign oil to generate electricity. But conservation measures and renewable energy can do it more cheaply and reliably. As reported in the July 21, 1981 San Francisco Chronicle, PG&E will have great difficulty reducing oil use, as they have advertised, because of some unfortunate *"take or pay"* oil contracts they have with Chevron. The contracts obligate PG&E to buy 15 million barrels of very expensive oil per year, most of it imported, until January 1, 1986 *even if they don't need it.* (PG&E ratepayers are now paying much more for power plant oil than they need to because of these contracts.) Finally, PG&E has calculated oil savings on a very optimistic assumption of how much electricity Diablo will produce. The average electricity output for a large Westinghouse reactor such as the Diablo reactor is 51.7% of maximum possible output compared with PG&E's