Quakes at center of nuclear debate

David Sneed, San Luis Obispo Tribune, 3-4-10

Concerns about earthquakes again dominated federal hearings held Wednesday in San Luis Obispo to discuss extending the operating life of Diablo Canyon nuclear power plant by an additional 20 years.

Staff with the federal Nuclear Regulatory Commission took about six hours of public testimony at afternoon and evening hearings about the environmental effects of extending the life of the plant.

However, unlike many NRC meetings, Wednesday's hearings were not a drumbeat of criticism of nuclear power, Pacific Gas and Electric Co., Diablo's owner, and the commission. Representatives of the chambers of commerce in San Luis Obispo, Atascadero and Pismo Beach spoke in favor of license renewal, noting the sizable boost the plant gives to the local economy and tax base and the safe operating history of the plant.

Ed Valentine, superintendent of the San Luis Coastal Unified School District, said property taxes from the nuclear plant provide some \$11 million annually — or 15 percent of the cash-strapped district's budget.

However, numerous speakers said they are nervous about a newly discovered fault just offshore of the plant — the Shoreline Fault. It magnifies concerns they already had about another fault, the Hosgri, which is further offshore.

Several elected officials, agencies and groups have asked the NRC to postpone processing the renewal application until PG&E can conduct detailed three-dimensional mapping of the faults, a process that is expected to take three years. The agency will make a ruling on the delay request by the end of the month.

For critics of nuclear power, the earthquake danger is enough reason to deny license renewal. "Include new seismic information as you consider another 20 years and just say no," said Jane Swanson, an activist with the anti-nuclear San Luis Obispo Mothers for Peace.

The county Board of Supervisors will consider asking for a delay in license renewal when it meets next week. However, in a four-page letter to NRC Chairman Gregory Jaczko dated Feb. 26, PG&E objected to any delay, saying the utility is entitled to a timely review of its application.

The idea of conducting the seismic mapping enjoys popular support. Several speakers Wednesday said the seismic studies and relicensing could proceed concurrently without delaying the application.

Both NRC and PG&E seismologists say the plant could safely withstand any earthquake the two faults could generate. Diablo Canyon is designed to withstand a 7.5-magnitude quake. By comparison, the devastating earthquake in Haiti was 7.0-magnitude, and the recent earthquake in Chile was 8.8-magnitude.

Some county residents are also concerned about the impact of the plant's cooling system on the ocean environment. Diablo Canyon recovers steam from its electrical generators using a controversial method called once-through cooling.

Every day, more than 2 billion gallons of seawater are circulated through the plant's cooling system, raising the temperature of the water by 20 degrees and killing countless fish and crab larvae.

Once-through cooling has fallen into disfavor in recent years with state and federal regulators. Diablo Canyon has until 2022 to either replace its once-through cooling system or get an exemption from state water officials.

The issue of storing highly radioactive spent reactor fuel at the plant is another public concern surrounding license renewal. PG&E has built a dry cask storage facility at the plant where radioactive fuel can be stored long-term.

Efforts to reprocess the nation's spent fuel into new fuel or build a centralized storage facility in Nevada have failed. This means the waste will be stored at the plant for the foreseeable future.

Public comments on environmental issues associated with license renewal can be submitted until April 12. An environmental analysis of renewal is expected in mid-October, with another round of public meetings scheduled for December.