

EDITORIAL: Evaluate U.S. reactor risks

Time for a fresh look at benefits and dangers of nuclear power.

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California is home to four operating commercial nuclear power reactors -- two at San Onofre in San Diego County and two more at Diablo Canyon, near San Luis Obispo.

In the wake of radiation releases from reactors in Japan, operators of California's nuclear power plants have rushed to assure local residents their plants are safe and are designed to withstand earthquakes many times larger than what is likely to occur at their locations.

But these are the same assurances that Japanese utilities issued before last week's devastating earthquake and tsunami. The nuclear crisis still unfolding in the wake of that disaster demands that California take a fresh look at both the benefits and the risks of nuclear power.

PG&E, owner and operator of the Diablo Canyon plants, is in the midst of a years-long application to renew licenses for its two units, set to expire in 2024 and 2025, respectively, for another 20 years. In 2008, a year before the application for renewal was submitted to the U.S. Nuclear Regulatory Commission, seismologists discovered a new fault offshore less than a mile from Diablo Canyon. The Shoreline Fault is one of four that surround the 25-year-old power plant.

According to PG&E, the faults are not capable of generating an earthquake larger than 6.5 magnitude. The Diablo Canyon plant is designed to withstand a 7.5-magnitude earthquake.

In addition, the reactors sit on a cliff, 85 feet above sea level. The intake cove where the plant pumps in sea water to cool its reactors is designed to withstand tsunamis of 45 feet, higher than anything predicted for that area.

Unlike Diablo Canyon, the San Onofre plant sits on a beach surrounded by a 30-foot sea wall. Southern California Edison has not yet applied to extend the licenses of its two reactors but is expected to do so next year. Earthquake risks at those plants have been underestimated as well. A 2008 California Energy Commission study assessing nuclear power in the state concluded that new seismological and geologic data indicate indicate San Onofre may experience larger earthquakes than was anticipated when the plant was built.

San Onofre and Diablo Canyon have been reliable workhorses, supplying 20% of California's power and providing crucial juice when hydroelectric generation is low. Despite that, some state

lawmakers last month sent a letter to the U.S. Energy Department's Blue Ribbon Commission on America's Nuclear Future urging California hearings.

As the nation ponders the future of nuclear power, we must give hard and fresh looks at seismic risks.