### Legislation Background: **EMERGENCY PLANNING AND RESPONSIBILITY ACT (EPRA)**

A BILL REQUIRING the appropriate regulatory agencies (possibly the California Energy Commission, California Emergency Management Agency, California Public Utilities Commission) to analyze and quantify the costs, risks and vulnerabilities to the state, if California found it necessary to expand its emergency planning and evacuation zones for a radiological release from the 10-mile limit of the US Nuclear Regulatory Commission (NRC), to the 50 mile limit the US NRC declared for Americans in Japan after the Fukushima reactor disaster and meltdown.

#### **LESSONS FROM JAPAN:**

The nuclear accident at the Fukushima reactors, following the Tohoku earthquake, brought to light problems and costs inherent in nuclear power disaster planning.

- The utility and government—by failing to imagine the worst case scenario—was ill prepared to handle disaster management after accident (<u>Investigation Committee on the Accidents at Fukushima Nuclear, Interim Report, December 26, 2011)</u>
- The Fukushima reactors were located near sparsely populated fishing villages—which should have made emergency evacuation easier, but did not in ensuing confusion
- There is now a 12 mile "no-go" exclusion zone around the crippled reactors
- U.S. NRC advised Americans to evacuate to 50 miles from the damaged reactors
- Property damage and loss claims from Fukushima now estimated over \$100 billion

Japanese government did not expand evacuation zones, even though high levels of radiation were detected in Tokyo, 155 miles away. Why not heed the NRC's warning?

- The Japanese government cannot afford to have a large "no-go" zone directly in the middle of the nation's northeast region. Too many people and businesses would have to be permanently relocated—including major ports, factories and fishing fleets
- It would likely bear the high costs of scraping up and storing or decontaminating the soil from extensive highly radioactive areas
- NRC spokesman Eliot Brenner defended the U.S. agency's recommendation of a
  wider evacuation at Fukushima. "In an accident of this magnitude, the situation is still
  very much in flux....Were this to have happened on this scale in the United States, that
  (50-mile evacuation) is what we'd be looking at." (USA TODAY 4/1/11)

### **CONCERNS FOR CALIFORNIA:**

There are two operating nuclear reactors in California: PG&E's Diablo Canyon (DCPP) and SCE's San Onofre (SONGS). Both are located on seismically active coastal zones.

- In spite of assurances by the utilities and the NRC that the plants are seismically qualified, both facilities are now subject to state mandated (AB1632) updated, high-tech seismic studies over the next 4 years.
- The US NRC has two evacuation zones: a 10 mile radius from the plant which requires full emergency response and evacuation capability; and a 50 mile zone, which considers possible ingestion of contaminated water and food—but *not* evacuation
- Currently, PG&E and SCE are only required to fund, equip and support local community emergency planning within the 10 mile zone

# The SONGS complex is in the second most populated reactor area in the United States outside of New York City (source: NRC US Census data, 2000).

- 18 million people live within 50 miles of San Onofre—this includes northern San Diego as well as Long Beach, Anaheim, Huntington Beach, Ontario and Riverside
- Any evacuation in this 50 mile zone would require use of the increasingly congested southern California freeway system, and could impact the ports in Long Beach
- Coastal towns feature some of the highest priced real estate in the United States
- Camp Pendleton is within 12 miles of SONGS

## Diablo Canyon has a lower population density, but is within 50 miles of vital agricultural and wine regions as well as the Vandenberg Air Force Base.

- The wine country generates \$1.75 billion total in jobs, tourism, sales and taxes
- Santa Maria Valley agriculture generated \$ 775 million in 2002 and The Salinas Valley generates over \$1.9 billion (2009) in agricultural revenue
- The Vandenberg base is vital to US and international security

### There is no federal plan to deal with expanded nuclear emergency zones or costs:

- EPA, the NRC and the FEMA are disputing which agency--and with what money and legal authority--would oversee cleanup in the event of a large-scale accident at a nuclear power plant that disperses radiation off the reactor site and into the surrounding area (source: InsideEPA, November 2010).
- NRC recently informed these other agencies that it does not plan to take the lead in overseeing such a cleanup and that money in an industry-funded insurance account for nuclear accidents would likely not be available
- The federal Price-Anderson Act caps all claims for losses from an accident at a nuclear power plant at a total of \$12.6 Billion. Fukushima is now over \$100 billion.

#### The state of California has jurisdiction in this issue:

NRC Chairman Jaczko told Congress (3/31/11): "...in any situation it is up to state and local governments...to take the appropriate protective action that could extend beyond" the 10-mile evacuation zone, and <u>Bloomberg News</u> (12/8/11), "Evacuation plans aren't considered during license renewals and are the responsibility of state and local authorities, who would work with plant owners in the event of an emergency..."

The NRC is considering high-level radioactive waste storage remaining on site for up to 300 years as realistic and viable (NRC Draft Report on Waste Confidence, 2011)

## The federal government has abdicated its role to provide coordination and funding for a nuclear emergency in an expanded 50 mile radius, California needs to know:

- How much will it cost to provide emergency training, personnel and equipment?
- How much will it cost to upgrade infrastructure and communications for evacuation?
- Who will provide liability coverage for contaminated land, homes, crops and industries, and what will be the limits? These are the realistic costs of nuclear power operation.
- The Energy Commission, in its draft 2011 Integrated Energy Policy Report recommends: "The CPUC should approve funding for Cal EMA, in cooperation with the affected counties, to evaluate the adequacy of current evacuation and emergency response plans, emergency Planning zones, and training for Diablo Canyon and SONGS, given the Fukushima accident And NRC's recommended 50mile evacuation zone for U.S. citizens in Japan." The legislature can direct the CPUC to take action.

RED = 10 mile radius BLUE = 50 mile radius Glendora Rancho Glendale ala Tas Pasadena Satellite Hybrid Map Bernardno Cucamonga Riato Covina Mentoner Monciair National Forest Los Angeles Ontario Fontana To Santa Merongo Wonica Monica West Redlands Valley Yucapa Culver Cty Covina Walnut Glen Avon Pico Rivera Desert h Rubidoux Cherry Inglewood Springs Chino Hils Mra Loma Valley. Riverside Norco Beaumord Banning Hawthorne Palm avewood Fullerton. Torrance Springs Long Beach Stanton Anaheim Perns San Jacinto Cathedral IdvIwiid-Pire Lomita Hernet Valle Visit City Rancho Cove Westminster. Santa Ana Palos Verdes Winchester gally Irvine Elsinore Huntington Beach Lake Forest Costa Mesa Lakeland Vitage Wildomar Mission Also Vielo Viejo Murrieta Beach Laguna Terrecula Nigue (79) TWO Harbers Ranbow Fallbrook Availon Marine Corps Base Canp Bonsall Hidden Helito Palmi Meadows Vista Oceanside Carsbad Escondido Julian Ramona Enonitas Rancho Santa Fe Solana San Dir go Beach Country Estates Del Mar -Poway Pire Valley El Cajon Carryon San Diego Spring Rancho Valley San Diego National City Google Chula Vista

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