

Docket Optical System - Docket number 11-IEP-1J "California Nuclear Power Plant Issues"

From: Bart Ziegler <bziegler@toxco.net>
To: <docket@energy.state.ca.us>
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Subject: Docket number 11-IEP-1J "California Nuclear Power Plant Issues"

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August 1, 2011

TO: California Energy Commission
 RE: Docket number 11-IEP-1J "California Nuclear Power Plant Issues"

DOCKET	
11-IEP-1J	
DATE	AUG 01 2011
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Dear Members of the California Energy Commission:

My concern is living here near Del Mar, a scant 30 miles from the San Onofre Nuclear Generating Station.

There are plenty of similarities between Fukushima Japan and our crisis-in-the-making here in Southern California in the area surrounding the San Onofre Nuclear Generating Station.

As an environmental toxicologist, my colleagues and I strongly urge the members of the Commission to pressure the Nuclear Regulatory Commission and the management of Southern California Edison to consider meaningful and responsible response for ten questions others have shared with me about significant risk San Onofre Nuclear Generating Station presents to the southern California:

1. Given the geographical scale of the radioactive fallout observed after the reactor meltdown at Chernobyl, and the three reactor meltdowns at TEPCO's Fukushima Daiichi plant, why did the NRC suggest a 50 mile exclusion zone in Japan but still maintain only a 10 mile U.S. evacuation/exclusion zone around our nuclear power plants? Is the NRC worried about alarming the public about the true nature of nuclear power plant disasters?
2. Given the very high radioactive contamination readings 78 kilometers (48.4 miles) from the site of the Fukushima Daiichi reactor meltdowns, what should Southern Californian's do to protect themselves in the event of a catastrophic nuclear accident and fallout of this size at San Onofre?
3. Based on the USGS anticipation of a major earthquake of magnitude 7.0 or greater to occur on the Southern San Andreas Fault system any day within the next 30 years, it is possible that a nuclear disaster at San Onofre could be triggered by that quake. What is the first line of defense for the 7.4 million men, women, and children who live within a 50 mile radius around San Onofre? Is evacuation by car considered by the NRC as a viable line of defense for those same 7.4 million people? An automobile stuck in gridlock is one of the worst and least defensible places to be during a nuclear disaster.
4. Japanese officials stated that the nation of Japan was spared a far greater catastrophe due to the prevailing winds blowing most of their radioactive fallout out to sea. That would be the opposite case at San Onofre. Where would evacuees go because all land mass is downwind of the western shoreline site of the power plant, and prevailing westerly winds blow constantly across the areas that people would try to evacuate toward? Emergency plans call for evacuation to Orange County but that falls far within a 50 mile radius of San Onofre.

4. Extensive structural damage to office buildings, schools, hospitals, factories, homes, roadways, bridges, and public utilities occurred after the recent major earthquakes at Chengdu Province China in 2008, Chile in 2010, Haiti in 2010, Christchurch New Zealand in 2011, Los Angeles in 1974, 1987, and 1994, and Mexicali 174 miles from San Onofre in 2010. If "Shelter-in-Place" is the primary defense strategy suggested by FEMA and CEMA for 7.4 million men women and children within 50 miles of San Onofre in the event of a catastrophic nuclear accident or terrorist attack at the plant, how are we supposed to seal off buildings (with duct tape) if the windows, walls and roofs are damaged by the quake? We would be trapped like victims of a massive extermination. The NRC estimated in a 1987 report to Congress that up to 68,000 casualties could occur at San Onofre in the event of a nuclear disaster there, but population around the power plant has swelled since that report.

5. What would the economic impacts be to California if the 50 mile zone around San Onofre was made uninhabitable by radioactive fallout? California is the 8th largest economy in the world with an economic output of \$1.847 trillion in 2008.

6. What would be the impact to property values of all the properties both public and private in LA, Orange, Riverside, San Bernardino, and San Diego Counties that fall within a 50 mile exclusion zone that = 1,963.5 square miles (1,125,637 acres). This is the size of the highly radioactive zone in Fukushima. Using a rough estimate average of \$100,000 dollars per acre = \$1.125 trillion dollars in lost property value. That does not include the lost businesses, the lost building structures, \$Billions in public infrastructure rendered useless, the agricultural zones that can no longer produce food, the associated lost man-hours of work of those who develop cancer. The rough estimated cost figures are unimaginably large.

7. The Price Anderson Act limits San Onofre's nuclear disaster liability to \$111.9 million dollars per reactor. (That's million not billion)

As of 2011 the maximum amount of the Price Anderson Fund is approximately \$12.2 billion if all of the reactor companies were required to pay their full obligation to the fund. This fund is not paid into unless an accident occurs. Any claims above the \$12.2 billion would be covered by a Congressional mandate to retroactively increase nuclear utility liability or would be covered by the federal government. This means that the public would pay for their own disaster mitigation which would be magnitudes greater than the Price Anderson Fund if San Onofre had a disaster the size of Fukushima. How could the public handle that financial burden if their jobs, lives, and the economy in California were destroyed by the nuclear accident? It is important to note that Fukushima's fallout is detectable on the West Coast 5,000 miles from the destroyed Japanese reactors so the effects of San Onofre fallout could travel as far as the East Coast of the U.S.

8. In late March 2011 I purchased a Geiger counter and found detectable radiation in the milk in my refrigerator. The gallon bottle was half empty because my 2 year old and 4 year old had been drinking the milk. I was unknowingly feeding my kids radioactive food and yet the EPA was doing nothing to warn me! I was told early on by Government officials on TV that no Fukushima radiation would travel to the U.S. When the radiation did show up I was told that it was not dangerous and was actually at safe levels according to the EPA and NRC. When the levels showed a sharp rise the EPA decided to raise the level of radiation considered safe. Other medical experts state that there is no safe level of radiation since exposure is cumulative and leads to cancer. Independent reports state that deadly "hot particles" of uranium and plutonium fuel from Fukushima have been detected in the Seattle area. Shortly thereafter the EPA discontinued its radioactive fallout monitoring in the U.S. yet the nuclear disaster in Japan is still on going. As a result of this wrong information or intentional mis-information, I DO NOT TRUST the NRC or the EPA with protecting my health. Why should I believe them when they tell me that San Onofre is safe? Safe for who? Using what risk assessment models, what assumptions, and what shifting safety standards?

9. How can the nuclear plant at San Onofre be safe if there is no defense against widespread radioactive fallout, and no viable evacuation plan for the communities around San Onofre? I have never been told by anyone in the government what I need to do to protect myself in the event of a nuclear disaster at San Onofre. When we did have nuclear fallout approaching the U.S. from Japan the NRC and EPA were silent for weeks! Where were the public health warnings?

10. Why is the NRC protecting the nuclear industry instead of protecting the public from the dangers of nuclear

power plants? Is the fact that the NRC promotes the U.S. nuclear industry in both foreign and domestic markets a conflict of interest for a regulatory agency charged with the responsibility of protecting the public from the nuclear industry?

10. Why are we as a society taking such an unimaginable risk with an essentially unregulated nuclear industry in exchange for only 7.5% of our electricity supply when we have other options?

The logical action is to shut down San Onofre quickly, then move the U.S. energy policy in a direction of cleaner energy technologies and better conservation practices. Maintaining the status quo simply invites a nuclear disaster at San Onofre, which would clearly be the end of Southern California as we know it. Because the same is happening in Japan, currently, Germany and others have embarked on a cleaner energy path, which likely most all voters in southern California support.

Sincerely,

Bart Ziegler, PhD