San Clemente Green
Citizens for a Sustainable Future

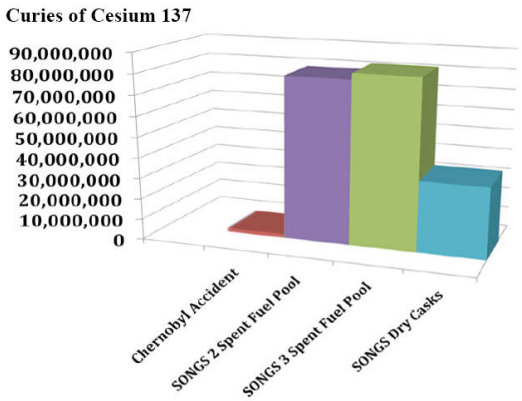
San Onofre Nuclear Waste Recommendations

Edison needs to fill their credibility gap with actions – not words

A long history of putting profit before safety eventually led to the closure of the San Onofre Nuclear Generating Station (SONGS). Trying to cut corners actually cost Southern California Edison a lot more in the long run. They are now under congressional investigation to determine if they knowingly put the public at risk by installing new steam generators that were problematic since the initial design phase. Donna Gilmore of SanOnofreSafety.org reminds us that, **"The NRC concluded Edison was at fault in the management of the steam generator design. How can we trust them to manage the waste?"** After the radiation leak occurred, Edison pushed hard against public opposition to experimentally restart a defective nuclear reactor without even fixing it first. Now they promise "to complete the safe decommissioning of SONGS as expeditiously and cost efficiently as possible". Are we to believe they are going to act in the public's best interest or does this promise only apply to their shareholders? **Their actions will speak much louder than words.**

Did you know that we are storing 89 times the amount of radioactive materials than what was released in the Chernobyl accident?

(Source: Robert Alvarez report, June 25, 2013)



Our first priority

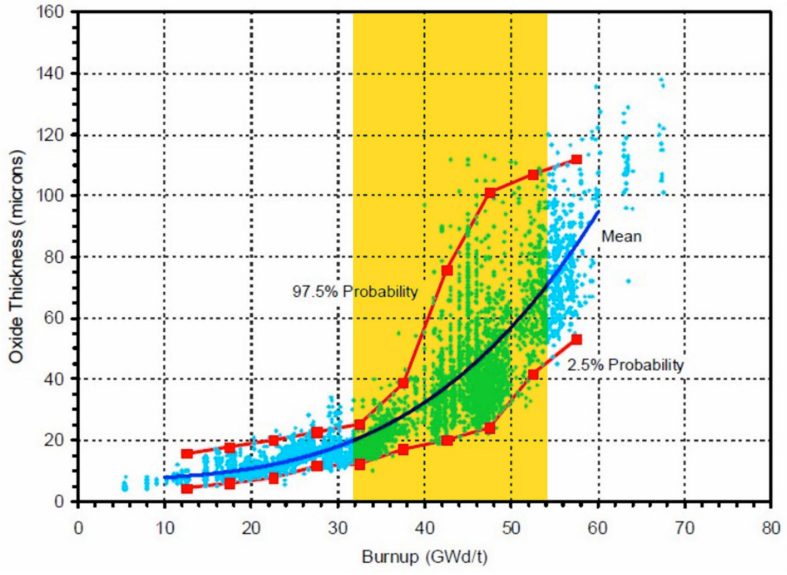
Secure the nuclear waste on site before the next big, inevitable earthquake takes place. According to the USGS, it is nearly certain the much anticipated earthquake will exceed design limitations at SONGS and that it will likely take place before nuclear waste can be shipped elsewhere.

Our biggest concern

A decade ago, San Onofre was allowed to use High Burnup Fuel so that costly refueling could occur less frequently. High burnup fuel is over twice as radioactive and takes much longer to cool in the spent fuel pools. There is no approved method to safely store high burnup fuel in dry casks for more than 20 years and no approved transportation containers. In less than 10 years some of those dry casks will have reached their approved safe lifespan. **If the fuel has deteriorated to the point of becoming too dangerous to transport then it may have to remain on site indefinitely in that unstable condition.**

Most waste at SONGS falls into the danger zone

The bulk of nuclear waste at San Onofre is likely to experience damaged fuel containment within 20 years of dry cask storage, some of which has less than ten years to go.



Blue dots represent damage to storage due to high burnup fuel exposure. Yellow represents the bulk of waste stored at San Onofre.

Graph provided by the Nuclear Waste Technical Review Board

Recommendations for Safety over Profits

- **Edison's Community Engagement Panel should schedule their first decommissioning workshop to include independent nuclear scientists** who can recommend best practices for spent fuel storage. Our decommissioning money should not be spent until after this is done. The NRC cited Edison for steam generator project mismanagement. This reinforces the need for independent nuclear scientists.
- **Edison should treat all spent fuel assemblies as damaged. This means telling them to "can" it.** This adds a layer of protection to dry cask storage by "canning" spent fuel assemblies in individual containers prior to loading into canisters. Waste must be stored with the expectation the fuel cladding will become damaged by heat and radiation over time.
- **Reduce the number of spent fuel assemblies** from 24 assembly units per cask instead of seeking to increase it to 32 units for the sole purpose of saving money.
- **Add instrumentation capabilities** to monitor spent fuel pools and dry cask storage. Edison is currently asking the NRC for an exemption, so they don't need to meet the new post Fukushima requirement of being able to remotely monitor water levels in the spent fuel pool. Also, no ability currently exists to monitor waste inside dry cask storage.
- **Adequately cool fuel assemblies before moving to dry cask storage.** Then reduce overcrowding in spent fuel pools as soon as possible.
- **Provide on-site capabilities to handle a leaking cask** should there be a breach in containment.
- **Reinforce structures** that protect all forms of radioactive waste and develop unmanned systems to respond to any radiological emergency in case the plant is not accessible.
- **Make public announcements before the release** of tons of pollutants into the ocean which is currently allowed as part of the decontamination process.
- **Provide public access to real-time radiation monitoring data.**
- **Establish better ways to safely store and transport nuclear waste**, especially high burnup fuel, to an acceptable remote location as soon as it is available and safe to do so.

ALWAYS CHOOSE SAFETY OVER PROFITS

Known Faults Exceed Design Basis for 7.0 Earthquake
8.4 Million People live in a 50 Mile Radiaus

Sign petition: http://www.credomobilize.com/p/can-it

Additional information and references: **SanOnofreSafety.org**

Contact: Gary@SanClementeGreen.org