


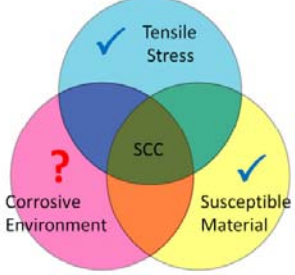
Sign online petition at SanOnofreSafety.org

STOP California from wasting \$400 million on inferior nuclear waste storage canisters that may leak within 30 years and have no method for repair or replacement.

In September, Southern California Edison plans to select inferior storage canisters for tons of San Onofre nuclear waste – **to be stored on California's coastline for up to 300+ years.**

Stress Corrosion Cracking Background Information





2/3 of the requirements for SCC are present in welded stainless steel canisters

- 304 and 316 Stainless steels are susceptible to chloride stress corrosion cracking (SCC)
 - Sensitization from welding increases susceptibility
 - Crevice and pitting corrosion can be precursors to SCC
 - SCC possible with low surface chloride concentrations
- Welded stainless steel canisters have sufficient through wall tensile residual stresses for SCC
- Atmospheric SCC of welded stainless steels has been observed
 - Component failures in 11-33 years
 - Estimated crack growth rates of 0.11 to 0.91 mm/yr

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Please urge the California Public Utilities Commission (CPUC) to delay funding a storage system until Edison can provide a plan to resolve the following issues. *“We should not have to buy these canisters more than once,”* said CPUC Commissioner Michel Florio.

Nuclear Regulatory Commission staff recently reported dry storage aging problems:

- **Thin stainless steel dry storage canisters may fail within 30 years.**
- **No current method to mitigate (repair or replace) defective canisters.**
- **No technology to inspect or monitor these welded canisters before they leak.**
- **Concrete overpacks/casks may crack.**

Edison should allow bidding from vendors that do not have these problems.

- **The inferior welded canisters are only 1/2 to 5/8 of an inch thick**, subject to **stress corrosion cracking (SCC)** from our coastal environment, and are **not inspected inside or out**. The **concrete overpack/cask** used with each canister is **unsealed**, and provides only gamma and neutron protection. They also may crack. Similar concrete/steel storage systems are used in most of the U.S. In California, they are used at Diablo Canyon (San Luis Obispo), Rancho Seco (Sacramento), Humboldt Bay (Humboldt), and San Onofre (Southern California).
- **Thicker casks, used internationally for storage and transport**, such as the German bolted ductile cast iron CASTOR V/19 (**almost 20 inches thick**), do not need concrete overpacks, do not have the stainless steel problems, and can be monitored and inspected. No storage system is perfect, but we can do better than the concrete/steel.

Please sign the online CREDO petition and encourage others to sign. Anyone can sign this petition. If we have enough signatures, CREDO may send the petition to their larger list. **Petition at SanOnofreSafety.org or <https://www.credomobilize.com/p/nuclearwaste>**

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References

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