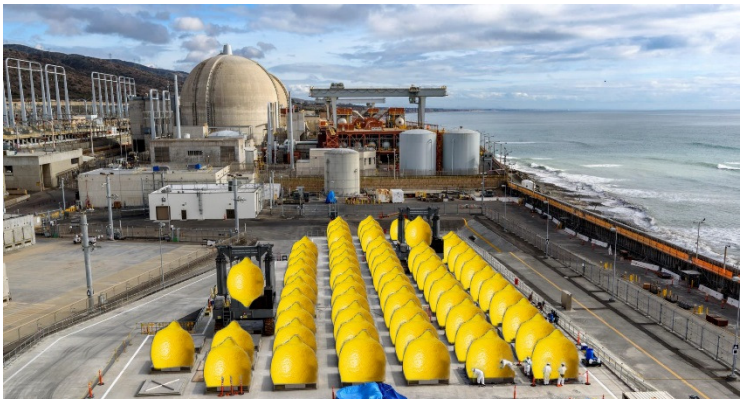
The San Onofre nuclear waste system is a LEMON and must be replaced

The San Onofre beachside nuclear waste storage system is defective and must be replaced with thick-wall transportable casks. This is the only option to prevent a nuclear disaster in Southern California and beyond.

We urgently petition our state and federal elected officials and commissioners to take immediate action to require Southern California Edison:



San Onofre nuclear waste thin-wall canister storage system is a lemon. Thin-wall canisters must be replaced with thick-wall transportable casks.

- **STEP ONE: Stop** loading highly radioactive fuel waste into the defective Holtec storage system. **Recall** thin-wall storage systems.
- **STEP TWO: Repackage** San Onofre nuclear waste into thick-wall transportable storage casks designed to be inspected, maintained, repaired and monitored to **prevent** major radioactive releases and explosions.
- **STEP THREE: Move** the new thick-wall casks to higher ground, away from coastal and flood hazards. **Store** the thick-wall casks in reinforced buildings for environmental and security protection.

Note: The waste must be repackaged before it can be moved. NRC Transport Regulation *10 CFR § 71.85* requires nuclear fuel waste and its containment be intact for transport. However, both the Holtec thin-wall canister system and the older thin-wall Areva NUHOMS thin-wall canister system are not designed to be inspected.

Even microscopic cracks can cause canister failure

- **The over $4 billion in the San Onofre Decommissioning Trust Fund should be frozen.**
- **State and federal San Onofre permits and licenses should be revoked.**

The Holtec system is a lemon – it cannot be fixed.

- The Nuclear Regulatory Commission (NRC) admits the design of the Holtec loading system causes damage to the walls of all canisters as they are downloaded into steel lined storage holes. The Holtec downloading system lacks precision, causing unavoidable scraping or gouging the entire length of canister walls. This damage initiates stress corrosion cracking. The NRC has, so far, refused to recall this defective system.
- Holtec canister vendor President Kris Singh admits a through-wall crack will release millions of curies of radionuclides and it's not practical to try to repair cracks, even if you could find them and a way to repair them. Singh video: *https://youtu.be/euaFZt0YPi4*
- The bad engineering design cannot be remedied with training and procedures. Thin-wall canisters (only 5/8" thick) are vulnerable to cracking. Technology doesn't exist to inspect and repair cracks in canisters.
- There is no plan in place to stop or contain cracking, radiation-leaking, potentially exploding canisters.

Each canister contains roughly a Chernobyl nuclear disaster of radiation, per SoCal Edison.

The thin-wall nuclear fuel waste storage systems pose a clear and imminent danger to the health and lives of the citizens, and pose potential financial and ecological disaster for the state of California and beyond.

Recommendation: Thin-wall canister systems should be recalled immediately. Nuclear fuel waste should be repackaged into proven thick-wall transportable casks (10" to 19.75" thick) that can be inspected, repaired, maintained, and monitored in a manner to prevent radioactive releases and hydrogen gas explosions.

Go to SanOnofreSafety.org to sign petition to replace unsafe canisters with thick-wall casks.

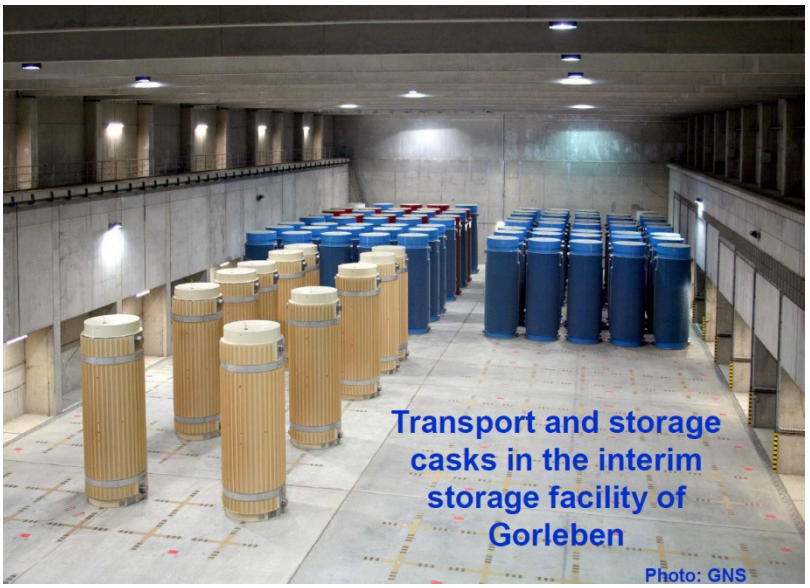
Reasons to buy thick nuclear waste dry storage casks

Safety Features	Thin Canisters	Thick Casks
1. Thick walls	1/2" to 5/8"	up to 20"
2. Won't crack		√
3. Ability to repair		√
4. Ability to inspect exterior		√
5. Early warning monitor		√
6. ASME canister or cask quality certification		√
7. Defense in depth (redundant systems)		√
8. Stored in concrete building		√
9. Licensed in U.S.	*	*
10. Market leader	U.S.	World

- **Most countries store thick-wall casks in buildings for additional environmental and security protection.**

U.S. nuclear fuel waste storage facilities store nuclear fuel waste containers outdoors, exposing them to environmental corrosion and cracking, such as coastal corrosion.

The NRC refuses to require storage in protective buildings.



- **Thick-wall casks at Fukushima survived the 2011 tsunami and 9.1 magnitude earthquake.**

U.S. thin-wall canisters with partial cracks have no earthquake seismic rating.

All thin-wall canisters must be replaced with thick-wall casks that can be inspected inside and out, and that can be repaired, maintained and monitored in a manner to prevent radioactive releases and hydrogen gas explosions.

Go to SanOnofreSafety.org to sign petition to replace unsafe canisters with thick-wall casks.