

From: [Dorah Shuey](#)
To: [RulemakingComments Resource](#)
Subject: [External_Sender] Comments for NRC Docket ID NRC-2015-0067 Re: Holtec International HI-STORM UMAX Canister Storage System, Certificate of Compliance No. 1040, Amendment No. 1
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Thank you for the opportunity to recommend **denial** of Amendment No. 1 for the Certificate of Compliance for the HI-STORM UMAX Canister Storage System manufactured by Holtec International. My comments are attached.

Sincerely,

Dorah Rosen Shuey

To: NRC Docket ID NRC-2015-0067

From: Dorah Rosen Shuey
582 Swanton Rd.
Davenport CA 95017

Re: Holtec International HI-STORM UMAX Canister Storage System, Certificate of Compliance No. 1040, Amendment No. 1

I have done research on SONGS for Committee to Bridge the Gap and am currently assisting Donna Gilmore of San Onofre Safety in her position as an intervenor in a California Public Utilities Commission hearing concerning SONGS.

I urge the NRC staff and commissioners to deny approval of Amendment No. 1 to the HI-STORM UMAX Canister Storage System because Holtec International has not proven to a reasonable level that its "seismically enhanced version of the HI-STORM UMAX Canister Storage System, identified as the "Most Severe Earthquake (MSE) version" is actually safe for "areas with higher seismic demands than those analyzed previously". Holtec is understandably eager to break into this niche but the "seismically enhanced" model of its product is not yet ready for market.

The three sets of issues for rejecting approval are:

1. **CONCRETE ISSUES:** The NRC is grappling with the management of aging concrete in SNF installations. The issue is obviously of greater concern in higher seismic activity areas because of the potential for stress and cracking during earth movement, including at levels too low to cause much overt damage. It is certainly conceivable that concrete integrity could be breached without noticeable signs, since the system is at least partially underground. Environmental and climate effects must be taken into account as they can magnify the problems caused by settling and earth movement.
2. **SEISMIC ACTIVITY:** The 2015 seismic study by the USGS of California's seismic risk revealed that there is a greater chance of high magnitude earthquakes than realized even a few years ago. New techniques, equipment and assessment of data have shown that, to quote from the UCERF3 synopsis itself:

[C]ompared to the previous forecast (UCERF2), the likelihood of moderate-sized earthquakes (magnitude 6.5 to 7.5) is lower, whereas that of larger events is higher. This is because of the inclusion of multifault ruptures, where earthquakes are no longer confined to separate, individual faults, but can occasionally rupture multiple faults simultaneously. The public-safety implications of this and other model improvements depend on several factors, including site

location and type of structure (for example, family dwelling compared to a long-span bridge). Building codes, earthquake insurance products, emergency plans, and other risk-mitigation efforts will be updated accordingly.

Aside from the UCERF3 study of California, there are higher seismic risks nationwide due to the continuation of hydraulic fracturing and other intensive extractive methods.

To be in line with the current state of science, the NRC must update its requirements for approving Amendment No. 1 to the HI-STORM UMAX Certificate of Compliance.

Until the NRC promulgates regulations and safeguards to provide updated requirements that take the new results into account, it would go against the legislative mandate that created the NRC to approve Amendment No. 1.

3. LACK OF INSPECTION METHODOLOGY AND EQUIPMENT: Especially given the underground or bermed placement of the HI-STORM UMAX Canister Storage System, it would be irresponsible to approve Amendment No. 1 when there is no technology in place for inspecting the canisters or the majority of the concrete structure for problems. Some damage may need to be caught before it visible to the human eye so there is an added need for a reliable testable inspection system.

To belabor the obvious, a mechanism for inspecting the canisters and structure for problems (including corrosion) before any radiation leakage occurs must be in place prior to approving a Certificate of Compliance amendment.

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Thank you for the opportunity to comment on the Certificate of Compliance Amendment No. 1. I hope that the NRC staff and commission will realize that further steps must be taken before Holtec is allowed to market its product to customers in zones of high seismicity.