

From: Ken Berg
To: [RulemakingComments Resource](#)
Cc: ["Ray Lutz"](#)
Subject: [External_Sender] FW: [ShutSanOnofre] Comment period is now open on our NRC "HELMS" petition. Please comment!
Date: Tuesday, April 03, 2018 1:37:15 PM
Attachments: [180403holtec.pdf](#)

Dear NRC:

The SONGS fiasco is virtually out of control. The petition seeks to correct an important issue for long-term surface storage and I agree with it.

Ken Berg
22701 Lajares
Mission Viejo, CA
(949) 830 6888

III. The Petition

The petitioners are requesting that the NRC revise part 72 of title 10 of the Code of Federal Regulations (10 CFR) regarding spent nuclear fuel (SNF) stored in independent spent fuel storage installations (ISFSIs) at nuclear power stations. The petitioners are concerned that there is a mismatch between the NRC's 10 CFR part 72 regulations that define requirements for ISFSIs and the current situation, which the petitioners assert is that surface storage of spent nuclear fuel will continue indefinitely. The petitioners observe that 10 CFR part 72 was initially developed at a time when a repository was anticipated to be available in 1998 and, therefore, this PRM would address concerns with a much longer time frame for surface storage. The petitioners make 14 contentions that propose specific revisions to 10 CFR part 72 that would address issues concerning the indefinite surface storage of spent nuclear fuel in dry cask storage systems. In particular, the petitioners request that 10 CFR part 72 be revised to require: a 1,000 year design life goal for spent nuclear storage systems; estimates for the operating costs over the design life; determination of the safety margins over the design life; and time limited aging analyses demonstrating that structures, systems, and components important to safety will continue to perform for the design life. The petition may be found in ADAMS at Accession No. ML18022B207.

Background ...

-----Original Message-----

From: Ken Berg [<mailto:bergk@cox.net>]
Sent: Monday, April 2, 2018 12:09 PM
To: Ken Berg
Subject: FW: [ShutSanOnofre] Comment period is now open on our NRC "HELMS" petition. Please comment!

Ray:

I have no objection to the petition but am concerned that there are other issues to be considered, and that the CPUC Investigation of the SONGS proceedings on May 2 should lead to a rejection of all proposed settlements, allowing time for sober reflection on all of the minutiae of all of the issues by a panel of citizens and authorities having jurisdiction over the SONGS fiasco.

Because:

SCE rates (more than .20 per kwh) are double what I pay in Arizona (less than .10 per kwh).
I want to reduce the rates and protect them from further increase.
SCE, CPUC et al are using ratepayers as a cash-cow to be milked to suit the whims of the authorities.
We should not accept the 2B+ price for MHI and SCE failures.
CEP, ORA and similar ratepayer advocates are not protecting us.
DoE has created a danger by failing their mandate for nuclear wastes affecting residents and should pay all the costs for handling, storage and disposal for SONGS. It's their responsibility.
SCE rights to on site storage are compromised by Navy title to property.
DoE should pay Navy a million dollars a month to encourage DoE to deal with active nuclear materials and apparatus, while securing disposal sites.
Quickly!
To remove dangers to and fears of residents. The lies, cheating, incompetence etc. demonstrated has demolished the credibility of any of the authorities dealing with SONGS. This has become a public issue risking safety, health, security and costs by a bloated and uncaring bureaucracy.
The public has no way to assess the risk, nor the means for eliminating the risk!!!
NRC has said they not concerned with our costs, only safety technology. I claimed that costs and safety are intimately interrelated.
NRC should be pro-active in safety that brings no costs to ratepayers!
Welded pipe cannot provide a safe repository for nuclear wastes.
Many only know of 'spent' fuel ... which is really hot fuel bundles removed from reactors.
One wonders what happens to the rest of the plant. There's a contractor at work at the plant. One wonders what his contract calls for. Does SCE think they can foist off extra risk and cost onto us ratepayers? It appears that they think so little of us, that they can do what they want and that we will accept risks and costs. We need a chance to get their attention. Rejecting the proposed settlements will be a start.

-----Original Message-----

From: Shutsanonofre [<mailto:shutsanonofre-bounces@citizenoversight.org>] On Behalf Of Ray Lutz
Sent: Sunday, April 1, 2018 10:34 PM
To: shutsanonofre@citizenoversight.org
Subject: [ShutSanOnofre] Comment period is now open on our NRC "HELMS" petition. Please comment!

Comment period is now open on our NRC "HELMS" petition. Please comment!

The following link should be clickable. Otherwise, copy and paste into a browser "Location" field.
<https://www.regulations.gov/document?D=NRC-2018-0017-0003>

If you believe the current canisters (with design life of 40-years) are too thin and temporary for long-term use ("indefinite" is the term used by the NRC) then this is the opportunity to promote any alternative you feel is appropriate, even if it is not the two-layer design suggested in the HELMS document. This is a great opportunity to go on the official record. Don't let history pass you by!

--Ray Lutz

Shutsanonofre mailing list
Shutsanonofre@citizenoversight.org
<http://lists.citizenoversight.org/mailman/listinfo/shutsanonofre>

THE ORANGE COUNTY REGISTER

SAVE
A.K.

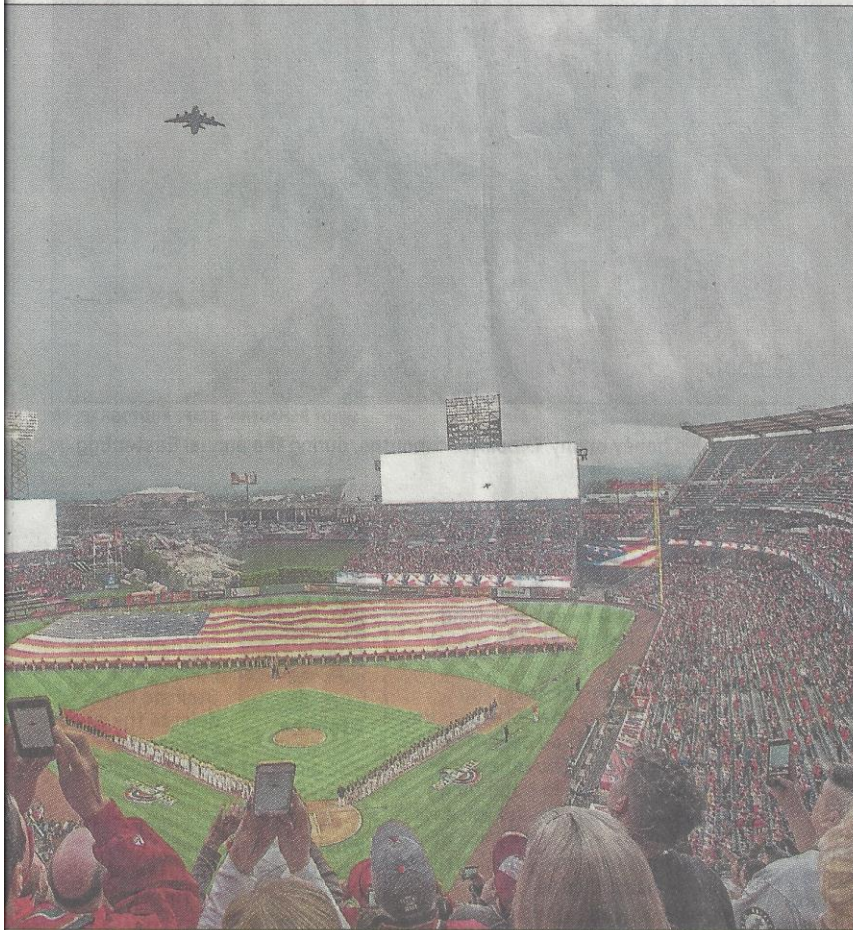
\$1.50 FOUNDED IN 1905 FACEBOOK.COM/OCREGISTER TWITTER.COM/OCREGISTER

ocregister.com

BASEBALL

AND PRESENT

their history and celebrate the season ahead at home opener



Above: An Air Force C-17 flies over as a U.S. flag is unfurled for the national anthem before the Angels' opening

SAN ONOFRE

Canisters may be case of history repeating

Like steam generators in 2010, the redesigned nuclear waste containers weren't approved by regulators

By Teri Sforza

tsforza@scng.com

[@terisforza on Twitter](https://twitter.com/terisforza)

The brand-new steam generators were supposed to give San Onofre Nuclear Generating Station another 20 years of life.

Instead, they sealed its death.

Those \$671 million generators, installed to replace the old ones in 2010, didn't require Nuclear Regulatory Commission scrutiny or approval because they were supposedly the same as the originals. And now a version of the NRC's "like for like" replacement rules has come into play at San Onofre again, this time allowing four nuclear waste canisters with a potentially defective design to be loaded with spent fuel and buried yards from the beach.

Southern California Edison, San Onofre's majority owner, was preparing to load a canister with spent fuel in February when it discovered a loose bolt inside, according to Edison. An investigation revealed a potential flaw in the new design of the canisters, which the manufacturer believed was minor enough to not require NRC scrutiny.

CANISTERS » PAGE 6

Canisters

FROM PAGE 1

WHAT IS THE "LIKE FOR LIKE" REPLACEMENT RULE? » The NRC's 72.48 provision allows licensees or certificate holders to make minor changes to design without prior NRC inspection — as long as they say the change does not significantly impact safety, NRC spokesman David McIntyre said.

WHAT HAPPENED WITH THE STEAM GENERATORS IN 2010?

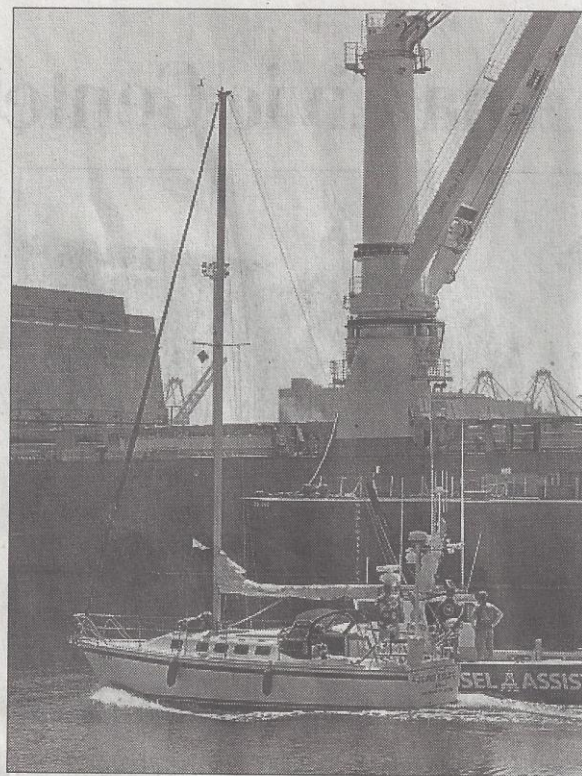
» The replacement generators were essentially identical to their original counterparts, according to their manufacturer and Edison. But that wasn't actually the case.

"On the outside, they may look identical, but on the inside, they're dramatically different," said Arnie Gundersen of Fairewind Associates, shortly after San Onofre's reactors powered down for the final time in 2012. "It's like taking a Model T and slapping a V-8 engine in it."

"Southern California Edison didn't want to admit they were dramatically different, because that would open up a license amendment, and the public would get involved."

The new steam generators shook and vibrated so much that the tubes inside them started breaking. That led to the release of a small amount of radioactive gas, which led to the power-down of both reactors, which led to San Onofre's premature shutdown, which cost \$4.3 billion. Parties are still squabbling over who should bear the brunt of that cost.

SO WHAT HAPPENED WITH THE NUCLEAR WASTE CANISTERS? » Edison is moving tons of waste from the reactors' two spent fuel pools into a Holtec HI-STORM UMAX dry storage system. Experts say dry storage is far safer than wet storage, and Edison aims to transfer it all to the Holtec system by mid-2019.



Boaters watch as one of two ill-fated steam generators is unloaded from a barge in Los Angeles in 2010, destined for San Onofre Nuclear Generating Station.

Holtec's original canister design was approved by the NRC. The small alteration it made was not.

Edison was not informed of the redesign of the waste canisters, Edison officials said.

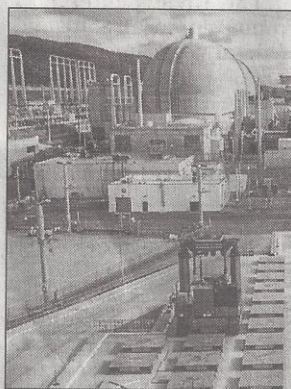
WHAT WAS THE SMALL ALTERATION?

» Holtec revamped the shim design. "Shims," as the Surfrider Foundation explains, "are hollow spacer devices made from aluminum, which are placed inside the spent fuel canister, between the basket (which holds the spent fuel assemblies) and the inner canister wall."

"Their purpose is twofold: to allow a path for the flow of helium throughout the canister to facilitate cooling, and to act as a support structure, securing the basket."

At the bottom of the new shims are four bolts, or pins, which elevate the shim off the bottom of the canister to ensure that helium can flow more evenly.

The original shims had no pins. They were solid metal, with cut-outs at the



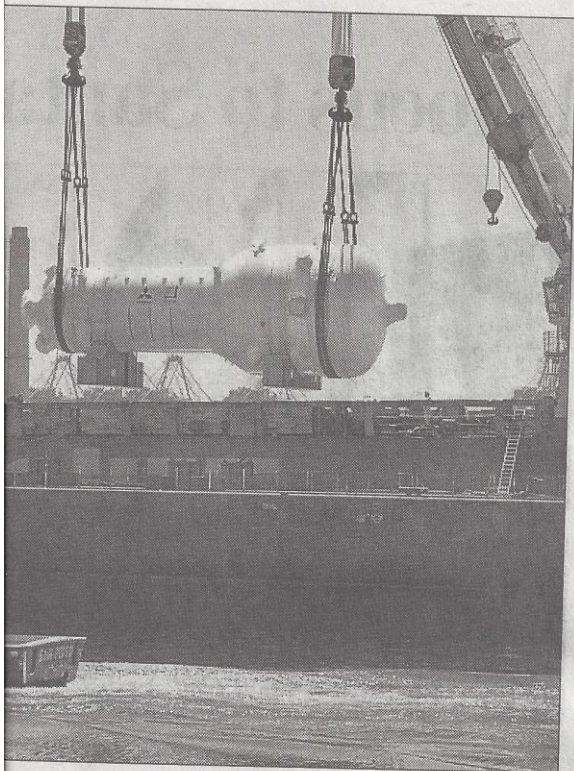
COURTESY

Southern California Edison is the owner of the San Onofre Nuclear Generating Station.

bottoms to facilitate helium flow.

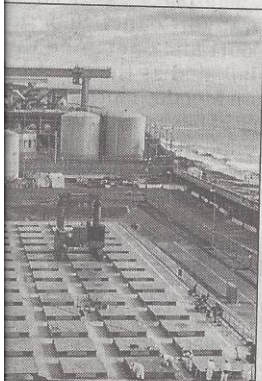
IF EDISON WASN'T TOLD OF THE CHANGE BY HOLTEC, HOW DID IT COME TO LIGHT? » In February, as Edison was preparing to load a canister with spent fuel, it discovered the loose bolt inside, about 4 inches long by a half-inch thick.

At first, workers thought an extra part was inadvertently placed or left inside the canister. The piece was returned to Holtec, which



STAFF FILE PHOTO

aded from a ship to be placed on a barge at the Port of
ng Station.



OF SOUTHERN CALIFORNIA EDISON
majority owner of San
n.

en determined that it was
piece of a stainless steel
n threaded into the bot-
m end of an aluminum
im within the canister.
ltec inspected and found
other bolt inside another
nister.

**WHAT CAUSED THE BOLTS
BREAK LOOSE?** » One of
current theories is that
“laser peening” process
where the canisters are
mbarded with high-en-
y lasers as they spin, to
prove the strength and

durability of the metal —
may be the cause of the
wayward bolts.

“Think of how a paper
clip, if you bend it back
and forth often enough,
will break,” said Dave Lo-
chbaum, director of the Nu-
clear Safety Project for the
nonprofit watchdog Union
of Concerned Scientists.
“As the canister turned so
many times, that may have
applied the load that ulti-
mately broke the pin.”

**WHY DID HOLTEC REDESIGN
THE SHIMS IN THE FIRST
PLACE?** » The company did
not respond to repeated re-
quests for comment, but
NRC spokesman Scott Bur-
nell said “the vendor has in-
dicated it made the change
to improve the ability to
fabricate the design.”

Donna Gilmore, a critic
of Edison and activist at
SanOnofreSafety.org, sus-
pects that the redesign has
to do with the canister’s
heat rating.

“It’s clear from the photo
that the new design allows
more helium flow, which
is part of the cooling sys-
tem,” Gilmore said. “If I

am right, it brings into
question whether the cool-
ing system of the older shim
design provides sufficient
cooling. ... Holtec’s pattern
is to push the safety limits.”

**HAS HOLTEC HAD ANY TROU-
BLE WITH REGULATORS?** »
Holtec has had its critics.

More than a decade ago,
the company was working
on storage casks for the gi-
ant Tennessee Valley Au-
thority, America’s largest
public power provider. A
probe by the U.S. Attorney’s
Office asserted that a sub-
contractor manufacturing
Holtec’s casks — U.S. Tool
& Die — wrote checks total-
ing \$54,212 to the account
of a TVA manager. That
money, the U.S. Attorney’s
Office said, originated with
Holtec.

The TVA manager
pleaded guilty to falsifying
financial statements by not
disclosing those payments.
Holtec said it wasn’t privy
to any of this, and was not
charged.

Nonetheless, in 2010,
Holtec paid a \$2 million
“administrative fee” to the
TVA and became the first
contractor in TVA history
to be debarred. Its contract
was suspended for 60 days,
and it submitted to a year-
long monitoring program,
according to the TVA’s in-
spector general.

**IS THIS, IN THE END, THE
NRC’S RESPONSIBILITY?** »

“The NRC needs to look at
how that change was justi-
fied by Holtec as something
it could do on its own,” said
Lochbaum of the Union of
Concerned Scientists. “It
doesn’t mean Holtec has to
be right, but the decision
needs to have been made
on reasonable grounds. If
it was a change that should
have required NRC ap-
proval, the NRC will take
action.”

WHAT’S NEXT? » Investi-
gations are ongoing. The
NRC’s Burnell and Mc-
Intyre said the agency will
be inspecting Holtec in
May “and will be examin-
ing this change at that time
to determine whether it was
properly implemented un-
der the regulation.”