

CLEAN WATER ACTION NJ AND GRAMMES
COMMENTS

January 3, 2019

Oyster Creek Nuclear Generating Station;
Consideration of Approval of Transfer of License
Conforming Amendment

Docket No. 50-129 & 72-15
NRC 2018-0237

Respectfully Submitted by: Janet Tauro, Clean
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The Oyster Creek Nuclear Generating Station
(OC) ceased operation on September 17, 2018.
Shortly after, Exelon announced a deal to sell OC
and transfer its license to Camden-based Holtec
International. The transfer would include the
\$980,000 decommissioning trust fund generated
through surcharges on ratepayer bills.
Holtec has put together an elaborate limited
liability corporate structure to manage the
decommissioning and has partnered with a

Canadian energy giant that reportedly is currently facing corruption charges in that country.

Clean Water Action and GRAMMES support a prompt, but safe and thorough, decommissioning for OC.

Given the historic difficulties the government has faced in creating a permanent repository for nuclear waste, it is likely that OC's nuclear waste will remain on-site for decades to come, posing a residual threat to the region. The damp, salty coastal environment will pose risks for corrosion of the casks.

In the forthcoming paragraphs, we will reference NRC safety problems cited at the San Onofre Nuclear Generating Station (SONG) since the same contractor, Holtec, and Holtec-manufactured casks also would be used at Oyster Creek. The coastal climate is also similar.

While storage canisters would not be buried in vaults at OC, the experience at SONG points to a failure in an industry that requires 100 percent safety margins. In this context, NRC must doggedly analyze and oversee the entire decommissioning process at OC with expanded on-site staff. The current plan is to have one on-site NRC inspector at OC during decommissioning.

The thin walled casks, HI-STORM 100, that Holtec would use at OC cannot be inspected or repaired once filled with radioactive waste. Dr. Kris Singh, president of Holtec International, was forthcoming at a San Onofre informational hearing in Southern California. Dr. Singh explained that once a canister containing highly radioactive waste cracks, it cannot be repaired. His comments are excerpted below:

Link: http://youtu.be/mUkScn_adc8

*"Southern California Edison's Community Engagement Panel
14 Oct. 2014, San Juan Capistrano, California"*

Kris Singh, Holtec CEO, responds to audience question:

*"Well, in my personal belief, it is not practical to repair a canister if it were damaged, if it had a through wall... first to prevent it, but in the most unlikely circumstance, **if that canister were to develop a leak, let's be realistic; you have to find it, that crack, where it might be, and then find the means to repair it. You will have, in the face of millions of curies of radioactivity that is coming coming out of the canister; we think it's not a path forward.**"*

"However, you can easily isolate that canister in a cask that keeps it cool and basically you have provided a next confinement boundary, you're not relying on the canister. So that is the

*practical way to deal with it and that's the way we advocate for our clients. My personal position is that **a canister that develops a microscopic crack and all it takes is a microscopic crack, you're going to get release.** To precisely locate, [mumbles] location where it will occur is in order and then if you try to repair it remotely by welding, of course remotely you can go with the weld but the problem with that is that **you create a rough surface which becomes a nucleation site for corrosion down the road.** ASME section 3 class one has some very significant requirements for making the repairs of class one structures like the canisters. So, as a pragmatic, technical solution, I don't advocate repairing the canister."*

If a thin-walled cask cracks, millions of radionuclides could be released into the environment and spread across the country with the wind. Cracking and wear is a serious, demonstrated problem at SONG. NRC reports that the (Holtec) canister walls at SONG are already "worn." (November 28, 2018 NRC Inspection Report and Notice of Violation, ML 18332A357.) The NRC admits in their November 28, 2018 inspection report that every (Holtec) canister loaded into the storage holes is damaged due to inadequate clearance between the canister and the diver shell in the storage hole "vault," reports Donna Gilmore, a retired systems analyst and founder of San Onofre Safety, an organization that provides factual government and scientific

information on serious safety issues found at SONG. While a “vault” would not be used at OC, we cite the problem to demonstrate failure to achieve 100 percent safety margins and the need for more vigilant NRC oversight during decommissioning if the Holtec purchase is approved by the agency.

* Safety violations and sloppy contracting work at SONG. A November 28, 2018 letter from Troy W. Pruett, Director, Division of Nuclear Materials Safety for NRC’s Region IV, cited SONG and its dry cask storage contractor (Holtec) for failing to have safety redundancy in place during dry cask loading operations.

Mr. Pruett wrote: “The NRC is concerned about apparent weakness in management oversight of the dry cask storage operations. Your staff did not perform adequate training of individuals responsible for performing downloading operations, provide adequate procedures for downloading operations, or ensure that conditions adverse to quality were entered into the corrective action program. The NRC identified that a casual factor for the misalignment incident involved management weakness in the oversight of dry cask storage operations.”

NRC SPECIAL INSPECTION REPORT 050-00206/2018-005, 050-00361/2018-005, 050-00362/2018-005, 072-00041/2018-001 AND NOTICE OF VIOLATION

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML18332A357>

The incidents highlight NRC safety requirements that were violated at SONG by the operator and contractor (Holtec). This is the exact type of safety issue that NRC cited as improbable in granting Exelon emergency management reductions.

“The NRC staff has conducted an evaluation and concluded, that, aside from the handling, storage, transportation of spent fuel and radioactive materials for a permanently shut down and defueled reactor, no reasonably conceivable potential accident exists that could cause significant offsite damage.” (Docket ID NRC-2018-0288.)

NRC SPECIAL INSPECTION REPORT 050-00206/2018-005, 050-00361/2018-005, 050-00362/2018-005, 072-00041/2018-001 AND NOTICE OF VIOLATION

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML18332A357>

The possibility of Holtec becoming an owner of OC, its nuclear waste, and nuclear materials raises other serious issues:

- * Holtec's efforts to limit liability suggest profit driven management without assuming commensurate risks, undermining their credibility.
- * Holtec's financial calculations of the costs of decommissioning in its Post Shutdown Decommissioning Activities Report appear arbitrary and suspect because they conveniently total the amount Exelon has reported in its Decommissioning Trust Fund, again undermining credibility.
- * Holtec's apparent business plan to corner the nuclear waste market from casking to transportation to consolidating the nation's nuclear waste in "interim" storage in New Mexico would reduce the checks and balances from a process that otherwise would involve several unrelated corporate entities.
- * The history of corruption charges against its proposed partner, SNC Lavalin, raise questions regarding the honesty and integrity the public would expect from such an organization, and thus would require additional oversight of OC's entire decommissioning process. Possession of highly

radioactive materials and waste raises the OC decommissioning to a national security issue.

* Independent contractors will be coming and going from Oyster Creek during the decommissioning process. Will there be independent background checks? Will NRC monitor their work and activities at the plant? In January, 2017, the NRC performed inspections at OC after personnel found a box of uranium containing monitors that had been misplaced, and found under a wooden pallet outside of the designated nuclear Material-Access Area, as reported by the Asbury Park Press.

<https://www.app.com/.../news/.../nuclear-material-misplaced-oyster-creek/96165918/>

Clean Water Action and GRAMMES respectfully ask the NRC to:

* Eliminate any limited liability in the decommissioning process by requiring any and all parent companies to be responsible for any risks in the process.

* Do not reduce Exelon's insurance coverage and emergency preparedness. Reverse NRC's approval in December 2018 of reduced insurance coverage. Require any and all parent companies to expand, rather than, reduce emergency preparedness.

* In evaluating the proposed sale, publicly and transparently determine why SNC Lavalin's claims of reform should be believed and why the company would be a trustworthy partner for such a huge public responsibility.

* Heighten NRC's oversight of Holtec's experimental procedures for not only conducting, but also, expediting, the transfer of spent fuel assemblies from wet to dry cask storage.

* Thoroughly evaluate the canister downloading system Holtec employs that works like a pendulum. Other systems use a precision loading system. Could the imprecise pendulum loading system gouge canister walls? Is there sufficient clearance between the thin-wall canister and steel vertical steel channels inside the overpack to prevent gouging?

We respectfully submit these comments to NRC and thank you for your consideration, as well as the deadline extension.

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Since the organization's founding during the campaign to pass the landmark Clean Water Act in 1972, Clean Water Action has worked to win strong health and environmental protections by bringing issue expertise, solution-oriented thinking, and people power to the table.

Our mission is to protect our environment, health, economic well-being, and community quality of life.

Clean Water Action has over 150,000 members in New Jersey, and over a million nationally.

GRAMMES is a grassroots member organization of Clean Water Action.

Both organizations were part of a coalition that successfully had a contention accepted by NRC during the relicensing process of Oyster Creek in 2007.

Reference Materials

SANDIA NATIONAL LABORATORIES (SNL): Stockman C and Kalinina E, Cooling Times for Storage and Transportation of Spent Nuclear Fuel, Sandia National Laboratories brief presentation for U.S. Department of Energy, SAND2013-1698C, Feb 25, 2013. <https://www.osti.gov/servlets/purl/1145261>

ROBERT ALVAREZ: <https://thebulletin.org/2017/08/pushing-the-storage-horse-with-a-nuclear-waste-cart-the-spent-fuel-pool-problem/>

ROBERT ALVAREZ: <https://thebulletin.org/2016/08/nuclear-power-plant-or-storage-dump-for-hot-radioactive-waste/>

High Burnup Nuclear Fuel Pushing the Safety Envelope

<https://sanonofresafety.files.wordpress.com/2014/01/hbffactsheet2014-01-08.pdf>

Spent Power Reactor Fuel: Pre-Disposal Issues - Environmental

[https://www.eesi.org/files/Robert Alvarez 071618.pdf](https://www.eesi.org/files/Robert_Alvarez_071618.pdf)

http://www.cal-span.org/media/metadata/CCC/CCC_15-10-06/Public/Item%2014a%20Gilmore%20Dry%20Cask%20StorageDGilmore2015Oct6CCC.ppt

Recently Aired NPR story on cask problems at SONG:

<https://www.kpbs.org/news/2019/jan/02/scientific-analysis-suggests-additional-problems-s/>

Spent Power Reactor Fuel: Pre-Disposal Issues - Environmental

https://www.eesi.org/files/Robert_Alvarez_071618.pdf

http://www.cal-span.org/media/metadata/CCC/CCC_15-10-06/Public/Item%2014a%20Gilmore%20Dry%20Cask%20Sto

