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Docket: NRC-2020-0021

Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Transfer of Control of Licenses and Approval of Conforming License Amendments

Comment On: NRC-2020-0021-0002

Indian Point Nuclear Generating Unit Nos. 1, 2, and 3; Consideration of Approval of Transfer of Control of Licenses and Conforming Amendments

Document: NRC-2020-0021-DRAFT-0246

Comment on FR Doc # 2020-03258

Submitter Information

Name: Barbara Warren RN, MS

General Comment

See attached file(s)

Submitted on behalf of Citizens' Environmental Coalition

Attachments

Final NRC Letter re License Transfer for Holtec at IP



Main Office: 422 Oakland Valley Rd. Cuddebackville, NY 12729
Phone 845-754-7951 • E-mail: warrenba@msn.com

March 17, 2020

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Submitted via www.regulations.gov

RE: NRC Proceeding NRC-2020-0021:

**Indian Point Nuclear Generating Unit Nos. 1, 2, and 3;
Transfer of Control of Licenses and Approval of Conforming License
Amendments**

Citizens' Environmental Coalition has participated in nuclear issues for years, especially related to the West Valley Nuclear Waste Site in Western NY, a former nuclear reprocessing site. As a result of our research related to the San Onofre nuclear plant, we believe Holtec International is particularly unsuited to undertake the responsibility for Decommissioning a nuclear reactor.

NRC is aware of serious and egregious violations by Holtec, Intl. and those violations should provide sufficient justifications to disapprove the transfer of Licenses to Holtec Intl. The violations are also well-documented. Below we provide our viewpoint on key matters which point to Holtec's inability to be successful at Indian Point. NRC should not approve a license transfer to Holtec Intl.

I Recent Past Incidents involving Holtec Intl.

The first major problem is that Holtec International failed to inspect its dry storage system after manufacture, as required by NRC, prior to delivery to the San Onofre nuclear plant. As a consequence loose pins were discovered in the bottom of the canisters. Loose components could cause damage to fuel assemblies during transport as a result of shocks and vibration. Despite this Holtec was not required to remove the loose components and repackage the fuel assemblies into new dry storage containers. As a result any future impacts of this "failure to correct" may occur when transport to a consolidated interim storage facility occurs.

The second problem was highly significant because of the potential for significant radiation exposure of workers. In summary, this is referred to as a Potential Load Drop Incident involving Spent Nuclear Fuel. We have attached a single page describing this incident, brought to light by reporting by a whistleblower. Below we list multiple bullets reflecting the egregious performance of Holtec Intl.

- Holtec had a Full service Turnkey contract with Southern California Edison for delivery of dry storage casks and management of nuclear waste. “The contract was structured such that Holtec was to work to Holtec-developed procedures, training and processes.”¹ Thus Holtec was the principal entity developing procedures and training and carrying out tasks associated with nuclear waste.
- An engineering design change (addition of a shield ring) that reduced the diameter of the opening available for insertion of the canister into the storage vault.
- Workers were trained with simulator canisters that had 0.75 inches more space than the actual canisters used that had the shield ring. Written training materials also did not reflect the actual model that workers would be dealing with.
- Failure to report Aug. 3, 2018 Potential Load Drop Incident to NRC
- Previously for seven months of 2018, based on interviews conducted by NRC, contacts between the canister and vault components occurred, causing damage without an assessment and without entry into a corrective action program. This was a Severity Level IV violation. Neither Holtec nor SCE prepared condition reports for the misalignments. Nor was information shared with others working at the site, thus contributing to the Aug. 3rd event.
- Workers did not receive adequate training, nor were they operating under adequately trained supervisors of Holtec or SCE.
- Workers performing the insertion had no visibility of the assigned task. As a result they did not know the canister was suspended in air until high radiation emissions alerted them to the problem.
- NRC issued multiple Severity Level IV violations. See Enclosure for more details.

Unfortunately, NRC focused almost completely on Southern California Edison and not Holtec, which was, by contract, in charge of management of spent nuclear fuel. A thorough review of the engineering design should have been initiated, but was not. In addition the extent of damage to all the canisters already loaded should have been

¹ Summary of the Root Cause and Apparent Cause Evaluation of August 2018 Download Event at SONGS, prepared by SCE Oct. 2018, p. 3

examined. This dry storage system would be relied on for decades, yet these already loaded dry storage systems are already damaged and may experience more severe corrosive damage in the future, possibly leading to radiation leaks. Design changes for the canisters, and or the loading system could have ensured that no damage was inflicted in the loading process in the future.

Simultaneous to the egregious conduct at San Onofre, Holtec Intl. was applying for a license for a Consolidated Interim Storage facility for SNF in New Mexico. Such a facility has never been permitted before and it poses many unique hazards that will be difficult to overcome. Damaged canisters are just one of the difficulties, which could shorten the lifetime of the canisters.

II Past Performance provides clear indications of future performance.

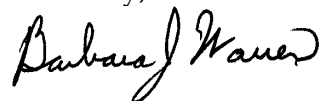
Holtec International's past performance has demonstrated gross incompetence, deliberating ignoring applicable NRC regulations and its own responsibilities, and endangering the well-being of its workers. All of this relates to work that Holtec has been engaged in for many years.

However, Decommissioning is an entirely new undertaking for Holtec. It has never been involved in decommissioning and this activity is somewhat unique for each nuclear reactor. In addition the stakes at Indian Point are much higher, given the potential for multiple interacting risks that are currently unanalyzed—earthquakes, a 42" high pressure gas pipeline and 2 other gas pipelines, and a SNF fuel pool that is densely packed--- in addition to the high population density at this location.

The information related to Holtec's performance at San Onofre signals that Holtec is unable to operate in compliance with the law and applicable regulations as well in accordance with common sense related to the welfare of its workers. Therefore we strongly recommend that NRC not allow License Transfers to Holtec at Indian Point.

Thank you for your attention. For questions or clarifications, I can be contacted via email at warrenba@msn.com or 845-754-7951.

Sincerely,



Barbara J. Warren, RN, MS

Executive Director

Citizens' Environmental Coalition

Enclosure attached.

**Factsheet: This was sent to the NRC Regional Office and US Senators in California,
Jan. 31, 2019.**

**San Onofre Potential Load Drop Incident with Spent Nuclear Fuel
Prepared by Barbara Warren**

The incident in question was the potential drop of a canister loaded with Spent Nuclear Fuel on August 3, 2018. It was reported to the public by a whistleblower at a public meeting. Since that time NRC has held a public information session and on January 24th, 2019 NRC held a Pre-Decisional Enforcement Conference with Southern California Edison (SCE) only. The meeting on January 24th had 400 people registered for the webinar. We don't know how many attended the meeting in person. This was a lengthy meeting yet the key issue was only briefly mentioned as an aside—the engineering design change. Instead the majority of the meeting focused on the operational improvements Southern California Edison has made to their procedures. Holtec Intl. was not in attendance and their role and their subsequent analysis was only briefly summarized.

I The root of the misalignment problem is an Engineering Design problem related to an added component, the Shield Ring, which was apparently never adequately evaluated.

At the meeting the mention of this engineering design problem lasted only a couple of minutes—skipping to other topics quickly. The shield ring was a late amendment to the UMAX storage containment.

It is critical here to note that years earlier the San Onofre Nuclear plant attempted to replace steam generators in both units that were not “like for like” replacements. The design had been substantially changed and instead of going through the normal review process, San Onofre officials claimed the new generators were essentially the same as the originals. Obviously we are not going to review the entire history of this very serious error and fraud. However, the fact that a second engineering design problem has reared its head at the same reactor facility is very disturbing.

However, even more disconcerting is the fact that NRC is treating this entire episode as an operational problem involving only SCE, the utility. We have struggled to find and review relevant documents. We could not locate the HI-Storm UMAX System FSAR, Rev. 4, dated Aug. 14, 2017, referenced in the NRC special inspection report. However, we did find the HI-Storm UMAX System FSAR, Rev. 5, dated June 27, 2018. Notably the procedure in this document for downloading starts with using the same procedure as for the HI-STORM FW which does not have a shield ring. It describes the entire procedure, but fails to even mention the shield ring in the UMAX system and the major constraints related to clearance of only 0.25 inches for the entire circumference of the canister. The date of this document was in the summer of 2018, preceding the potential load drop by only a few months. This engineering change, the addition of the shield ring, carried over to deficient worker training when workers were trained on simulator canisters that had 0.75 inches more clearance space than the actual canisters which had only 0.25 inches of clearance. The size of the actual clearance allowance compared to the

enormous size of the canister should have alerted everyone involved to the difficulties associated with transfer operations. This is not a highly technical issue. Common sense was needed.

Recommendation: The Final FSAR should be withdrawn and a full engineering review should take place.

II A Root Cause Evaluation was prepared by Holtec Intl., but that analysis has been labeled proprietary and it therefore is not being made available to the public. The public has a right to adequate information about the root of the problem, as well as to the adequacy of corrective measures. The summary of Holtec's evaluation is insufficient.

The summary of the root cause evaluation shows that the root cause was failure to implement the necessary level of oversight for the level of complexity and risks associated with downloading. However, Contributing Cause #2 finds fault with the design review process because it failed to identify and address unintended consequences. We call that a fundamental engineering design problem, which requires further action.

NRC's review of Holtec's root cause evaluation and SCE's apparent cause evaluation identified multiple operational issues: inadequate training, inadequate procedures, poor utilization of corrective action program and insufficient oversight.

Even if proprietary issues exist, the scope of the analysis and the findings of the root cause analysis should be made available so the public can play its legitimate role in our democracy. Unfortunately, Holtec's Responsibility around the Design Change and the adequacy of NRC's review are not being examined at all.

III Current NRC Investigation and Enforcement is entirely directed at SCE and operational issues, including supervision because SCE is the licensee. Even Holtec's role as the Subcontractor for the ISIFI has not been adequately examined.

The NRC Special Inspection Report prepared based on the Sept. 10-14th, 2018 inspection interviewed staff about the incident which included subcontractor staff of Holtec. A previous misalignment incident occurred on July 22nd, 2018, and was documented by subcontractor staff. Neither the licensee, SCE, nor the subcontractors prepared condition reports for the misalignments and contacts of the canister with the vault for corrective action. Interviews with staff revealed that key information about alignment difficulties was not being shared with others, so that those involved on Aug. 3rd were not prepared. For seven months of 2018, contacts between the canister and vault components occurred, causing damage without an assessment and without entry into a corrective action program. This was a Severity Level IV violation. During downloading of a canister, redundant drop protection must be maintained—this failure on August 3rd was never even analyzed in the FSAR, Final Safety Analysis report, for the system. The loss of redundancy was an unanalyzed condition.

NRC determined that personnel involved in these critical operations were not adequately trained for their position and certified as having adequate proficiency. Workers were also not under supervision of adequately trained and certified personnel. This was also a Severity IV violation.

Too few workers were involved in the downloading and visibility associated with “threading the needle” or inserting the canister in the vault was impossible. Even the fact that the canister had not been inserted fully was not observed. It was only the high radiation readings that called attention to the fact that the load had not been downloaded. Supervisory personnel were 150 feet away for radiation protection. The NRC inspection noted that neither the licensee nor the contractor provided adequate supervisory oversight during the Aug. 3rd incident. Written procedures were not adequate, a Severity Level IV violation.

There are multiple violations associated with the employees of SCE and Holtec subcontractors. NRC has not differentiated between the two groups at all in its inspection report. In the Jan. 24th webinar, SCE described the addition of large numbers of workers for specific duties including supervision and oversight. We were not provided with the exact numbers of workers however, and this issue should be clarified.

We understand that SCE is the licensee. However, the use of subcontractors by large companies for potentially dangerous operations is a well understood strategy to escape some of the responsibility and liability. This situation is unique because Holtec manufactured and sold the equipment to SCE and was contracted as a turnkey subcontractor for fuel management at the ISFSI. Holtec knows the system design and as a full service contractor should have provided the most complete training and written materials for its workers. Here is a summary of the contract with Holtec.

“ On Dec. 3, 2014, SCE signed a client-assisted, turnkey, contract with Holtec International for the construction of an expanded Independent Spent Fuel Storage Installation (ISFSI), supply of Multipurpose Canisters (MPCs-fuel storage containers), and movement of spent fuel from the spent fuel pool to the ISFSI. Holtec is a Certificate of Compliance holder for both the MPCs and the ISFSIs and has an approved 10 CFR72 Quality Assurance Program. The contract was structured such that Holtec was to work to Holtec-developed procedures, training and processes.”²

IV The Damage to the canister caused by the shield ring, scratching and gouging the canister as it is loaded, is not being disclosed to the public. First NRC has not made the Scratch analysis of the canisters available to the public. Second, NRC is allowing this damage to be unexamined and only entered into an aging management program.

At the January 24th meeting, SCE reported that they performed some sort of scratch analysis on the damage to the canisters already loaded in vaults. Not clearly explained was how such an analysis was performed, if the canisters were not actually examined. How could it be determined that the outcome of the gouging/scratching was insignificant, if the canisters were not inspected? The analysis has been labeled proprietary and thus NRC has not made it available to the public. Finally NRC in the absence of solid information about the extent of damage is allowing the canister damage to merely be entered into an aging management program. It is not clear that the canisters will ever be examined as there is no facility on-site that would enable workers to view

² Summary of the Root Cause and Apparent Cause Evaluation of August 2018 Download Event at SONGS, prepared by SCE Oct. 2018, p. 3

the exterior of the canisters without obtaining excessive radiation exposure. This problem could be solved by building a small room with radiation-shielded walls and shielded windows to enclose the canister, so it could be fully viewed on all sides. Instruments could be added to measure the gouging and scratching.

Stainless steel canisters at San Onofre are in an ideal environment for corrosion of steel canisters to be initiated and to proceed more rapidly than at other locations around the country. Failing to examine the scratching and gouging damage now deprives the nation of important information about the rapidity of corrosion in a salt air environment on these canisters.

These canisters have cost millions of dollars and 29 have already been damaged due to gross negligence. Why would NRC allow another 44 to also be damaged, because the corrective measures identified do not really solve the problem? The public is ultimately being billed and if these partial measures prove inadequate the bill will dramatically escalate. Most costly would be a situation where the canisters must be replaced because of the damage prior to transport elsewhere.

V NRC by focusing solely on operational and management issues at SCE is failing to understand the importance of this engineering design problem and ensuring that it is properly addressed. This impacts the safety of the San Onofre facility and the ultimate costs of solving the problem. Even more far reaching-- this UMAX system is what Holtec, Intl. plans to use for a Consolidated Interim Storage facility in New Mexico, which is currently undergoing NRC review.

The only reasonable path forward is to fully analyze the engineering design problem to determine whether the shield ring should be removed altogether; this design change was clearly not adequately reviewed. The use of an automatic system for loading would possibly be capable of perfectly aligning the canister rigidly to avoid gouging or scratching. Some other solution may be needed. Only thorough analysis and correction of engineering design problems associated with the UMAX system are appropriate given all the facts learned at San Onofre and for any future operations using the UMAX system by Holtec elsewhere in the country.