

REVOKE Coastal Permits: Edison admits Visual Assessment is not an inspection, yet Edison told the Coastal Commissioners (10/16/2019) some canisters were inspected.



SONGS HI-STORM MPC Visual Assessment Report

INTRODUCTION

San Onofre Nuclear Generating Station (SONGS) performed a visual assessment of three multi-purpose canisters (MPCs) from March 21 - 23, 2019. This report includes the following:

- Scope of visual assessments
- Visual assessment techniques utilized
- Visual assessment results
- Conclusion

SONGS QA program requirements were applied to visual assessment activities, see Appendix C.

VISUAL ASSESSMENT SCOPE

The scope of the visual assessment is the accessible surfaces of the MPC shell and baseplate. The three MPCs included in the visual assessment were selected for the following reasons: 1) MPC serial number (S/N) 067 which was involved in the August 3, 2018 event where it was suspended by the divider shell shield ring, 2) MPC S/N 064 which was documented as having made contact with the divider shell on July 22, 2018 during downloading operations, and 3) MPC S/N 072, an MPC loaded at an earlier portion of the fuel transfer campaign, is on a different row than the previous two MPCs. A different row was selected to account for the minimal drainage slope on the HOLTEC ISFSI pad and its potential effect on MPC vertical alignment during downloading operations.

VISUAL ASSESSMENT TECHNIQUES

A robotic crawler with cameras and a borescope with interchangeable tips (general area tip and measurement tip) were deployed in two stages to perform the visual assessment. During the first stage, the robotic crawler and borescope with the general area tip was used to provide general locations of surface irregularities. These surface irregularities were compared to post-fabrication photos and areas of interest were selected for characterization in the second stage. During the second stage, the robotic crawler and borescope with the measurement tip was used to characterize the surface irregularities (width and depth measurements as applicable).

The software used in conjunction with the borescope with measurement tip is able to detect a minimum width and depth of 0.001 inches (1 mil). See Appendix C for details regarding use of the borescopes and software.

Note: This is NOT a formal "inspection" or an activity qualified to ASME Sections III, V, XI or otherwise.

VISUAL ASSESSMENT RESULTS

The information below summarizes the results of the visual assessment.

The following surface irregularities were not found:

- Cracking
- Pitting

The following surface irregularities were found:

- Wear marks
- Water staining
- Carbon steel contamination – exhibited by iron oxide staining
- Fabrication artifacts

REVOKE Coastal Permits: NRC admits it's "impossible" to inspect or repair canisters, yet Edison & NRC told Coastal Commissioners (10/16/2019) they can.

NRC Review Question Response Form

[NRC Senior Inspector Lee Brookhart]

Note 1: Complete a separate form for each inspector question.

Note 2: The item tracking number will be generated when the record is entered into the inspection database.

Question Title: Clarification of ASME Section 3 in Licensing Basis

Tracking Number: 11A AR Number: 0319-53473-3 Date Initiated: 03/21/2019

Holtec Support Required: Yes__ or No __

Question description:

Appendix B Technical Specification 3.3 requires, that the ASME BPVC, 2007, is the governing Code for the MPC. Additionally, Appendix B Table 3-1 tie the canister and FSAR to the requirements of ASME Section III in many areas.

The original FSAR statement for no scratches mirrored the CoC/TS design basis that no scratches would ensure the code adherence to ASME Section III.

Now under 72.48, a design change is needed to deviate to allow scratches. But instead of using ASME BPVC code criteria to inspect the canister and properly disposition the defects which would maintain conformance to the code, the calculation utilizes Archard's wear equation to bound the condition. I just don't see how that meets CoC.

Now I understand, how SCE has argued, it is not a methodology. I think it is more of CoC and Appendix B change, myself. Essentially, the change is adding an alternative to the code to not have to do inspections and repair these new defects. Alternatives to the code can only be done via license amendment. Or maybe per TS Appendix B 3.3.2.

NB-4131 "Material originally accepted on delivery in which defects exceeding limits of NB-2500 are known or discovered during the process of fabrication or installation is unacceptable. The material may be used provided the condition is corrected in accordance with the requirements of NB-2500

ASME Section III NB-2538, "Elimination of Surface Defects" requires that defects are required to be examined by either magnetic particle or liquid penetrant method to ensure that the defect has been removed or reduced to an imperfection of acceptable size."

Instead of doing that (which I understand is impossible) which would maintain code compliance, the 72.48 deviates using a calculational method to bound the defect. The only "method" that should be used to disposition these defects is some method allowed or described in the BPVC code or the licensee would need an alternative to the code to maintain compliance with the regulatory licensing basis.