

Inspection support to Region I, September 26 – 28, 2011

**1. Operability Evaluation**

- a. Informed the licensee that the two operability evaluations for the control building electrical tunnel and other five structures, including containment enclosure building are not complete.
- b. Licensee later stated that they are aware of it and plan to update the two operability evaluations within two weeks.

**2. Test Plan**

- a. Licensee has hired a consulting company, MPR of Alexandria, VA to prepare a testing plan for the ASR.
- b. MPR has prepared a plan that is more like a recommendations rather than a firm procedure.
- c. MPR recommended plan is similar to the plan prepared by Kevin Folliard for the Federal Highway Administration (FHA), the plan recommended by the Institute of Structural Engineers of United Kingdom.
- d. The licensee is following a part of the recommendations in the MPR document, including tensile testing and accelerated long term degradation tests. However, some of the tests, insitu pullout and stiffness damage tests (SDT) are not included in the current version of the test schedule prepared by the licensee.
- e. Briefed the Region 1 personnel about the need of insitu pullout and STD test.
- f. Region 1 personnel agreed to discuss the need of additional tests with the licensee during their meetings with licensee's managers.

**3. Walkdowns and Insitu Monitoring**

- a. MPR engineers are performing walkdowns of the different structures of the plant to identify and record ASR locations since June 2011 and plan to continue it until December 2011.
- b. MPR also marking ASR affected areas and using a grid system to monitor the crack widths over the long term.
- c. MPR walkdown and monitoring plan is similar to the one recommended in FHA document
- d. Reviewed a sample of the walkdown data and sketches prepared by the MPR and found them satisfactory.
- e. Expressed concern to the licensee that the structures aging management program has not been updated or enhanced to include walkdowns being performed or planned in future.

**4. Seismic Analysis**

- a. Licensee has engaged another firm, SGH, to perform seismic analysis of the containment enclosure building.
- b. Reviewed the preliminary results from this analysis and found it was preliminary and incomplete
- c. SGH has not properly modeled the structural boundary conditions. Licensee was aware of it and was planning to meet with SGH personnel during the week of October 3-7. In addition, the finite element model appears to have some errors. This was pointed to the licensee.

**5. Schedule**

The licensee plans to complete an evaluation of the ASR and submit it to DLR in response to an RAI by March 2012.

The evaluation will not include the results of long term accelerated degradation tests because these results will not be available until the end of 2012.