

## Request for Supplemental Information on ESBWR Chapter 3.9 and 3.11

1. Comment on response to RAI 3.9-157 from MFN 07-190:

Describe Inservice Testing Program activities for Gravity Driven Core Cooling System check valves.

2. Comment on response to RAI 3.9-161 from MFN 07-058:

Address the program for ensuring the functional capability of power-operated valves.

3. Comment on response to RAI 3.9-162 from MFN 07- 058:

DCD needs to specify the COL applicant (not COL holder) for submittal of Inservice Testing Program information.

4. Comment on response to RAI 3.9-168 from MFN 07-021:

Discuss the “exclusions and alternatives” from the ASME OM Code noted in Item (f) of Table 3.9-8 on Page 3.9-85 of the DCD Tier 2, Revision 3, and the bases for those exclusions and alternatives.

5. Comments on response to RAI 3.9-13 form MFN 07-225:

1. The GE response to NRC RAI 3.9-13 indicates that for the computer program ANSYS, environmental effects on fatigue curves are accounted for outside of the program.
  - A. State whether the environmental effects correspond to those endorsed by the staff in DG-1144 and NUREG/CR-6909.
  - B. Provide a description of how the environmental effects are accounted for in the calculation of the cumulative usage factor.
2. The GE response to NRC RAI 3.9-13 indicates that for the computer program EVAST, environmental effects are not included when using fatigue curves from ASME Section III Appendix I, and that environmental effects will be factored into the final output prior to use of the program results.
  - A. Provide clarification and a description of how the environmental effects are accounted for in the calculation of the cumulative usage factor.
  - B. State whether the environmental effects correspond to those endorsed by the staff in DG-1144 and NUREG/CR-6909.

6. Comment on response to RAI 3.11-1, 3.11-2, and 3.11-3 from MFN 07-174:

GE has referenced NEDE-24326-1-P (1983) in its reply to these RAIs. However, GE has not indicated any acceptance from the NRC. Has this report been accepted by the NRC for a generic implementation? If so, were there any restrictions imposed by the NRC for its

implementations? Please provide detailed information. Also, GE should indicate in the DCD that the COL applicant will need to “fully describe” equipment qualification program per SECY-05-197 and regulatory Guide 1.206 in its submittal.

7. Comment on response to RAI 3.11-4 from MFN 07-174:

Ge has stated that records for mechanical equipment qualification will follow 10 CFR 50.49(j), Regulatory Guide (RG) 1.89, and IEEE-323. Please revise the DCD to ensure implementation of this statement. Also, GE should specify that the COL applicant will need to “fully describe” equipment qualification program per SECY-05-197 and RG 1.206.

8. Comment on response to RAI 3.11-5 from MFN 07-174:

Please address potential performance degradation of mechanical equipment under environmental conditions (such as electric motor output).