

## Followup RAI questions regarding ESBWR DCD Chapters 9 and 10

The staff has determined that supplementary information is required to complete its review of ESBWR design control document (DCD) Tier 2, Section 9.2, 9.5 and 10.3. Please provide supplementary RAI responses for the following RAIs:

Reference: GE response to RAI letter 62 MFN -06-417 dated December 1, 2006

### RAI 9.2-8

The radiation monitoring and sampling provisions provided in DCD Tier 2, Table 11.5-5 for the PSWS are not consistent with Table 2 of SRP Section 11.5, Revision 3, which indicates provisions of continuous radiation monitoring/sampling for the service water system. In addition, the response states that the COL holder will also provide provisions for sampling the cooling tower blowdown. Please, provide reference the specific COL Action Item.

### RAI 9.2-9

The response stated that "the type of water (e.g., fresh or sea water) and the results of a water quality analysis for a future plant referencing the design certification will determine the material selection for all piping and pump parts wetted by raw PSWS water." It further states that the DCD was revised to state that "Provisions to preclude long-term corrosion and fouling of PSWS are provided." A COL action item should be added to address this commitment.

### RAI 9.2-11

The response is acceptable, but cannot be considered "resolved" until the staff sees the DCD revision (a DCD markup was not provided with the RAI response)

### RAI 9.2-13

The response states that intersystem leakage in to RCCWS is monitored through four methods. Clarify the third and fourth method. It is not clear whether the third method, using the chemical contamination, is adopted or not for the ESBWR design. It is not clear which one is the fourth method and whether it is used by the ESBWR design.

Reference: GE response to RAI letter 65 MFN - 06-469 dated December 1, 2006

### RAI 9.5-33

In response to RAI 8.1-6, GE states that "The standby diesel generators may be utilized to supply power to house load (PIP) buses during times the grid is under heavy loads and requires maximum generation"

Confirm that any use of the diesel generator for peaking service will not challenge the 7 day fuel oil supply reserves for PIP or RTNSS diesel operation.

GE response to RAI letter 36 MFN - 06-219 dated July 19, 2006

RAI 10.3-1

In its response to RAI 10.3-1, the applicant stated that the portion of the main steam piping inside the containment, including the inboard MSIVs, the containment penetrations, outboard MSIVs and piping up to the seismic restraints is classified as seismic Category I. The applicant also stated that the TMSS piping portion of the main steam piping (i.e. downstream of the seismic restraint) is a non-safety system, located in a non-safety building that is designed to seismic Category II, and is analyzed to demonstrate structural integrity under safe shutdown earthquake (SSE) loading conditions. The staff finds this acceptable.

However, the applicant also stated that ASME authorized nuclear inspector (ANI) and ASME Code stamping is not required for these portions of the system. In its response to RAI 3.2-1 GE agreed to include ANI and ASME Code stamping for all ASME Class 1, 2, and 3. The SBPB staff finds this acceptable. The staff requests GE to revise the response to RAI 10.3-1 and the DCD to acknowledge the commitment made by the applicant in response to RAI 3.2-1.