Supplemental RAI Request for Chapter 5 and 6
(5.2-18, 5.4-22, 5.4-25, 5.4-29, 5.4-32, 5.4-41, 5.4-42,
and 6.3-18 through 6.3-25)

5.2-18 GE's response to RAI 5.2-18 (MFN 06-178) stated that:

TRACG04 is the version used for the overpressure protection analysis. DCD Section 5.2.7 will be revised in the next update to include the appropriate reference as noted below:

5.2-9 General Electric Company, "TRACG Application for Anticipated Operational Occurrences (AOO) Transient Analysis" NEDE-32906P, Revision 1, April 2003."

This reference was only approved for operating reactors. Please justify the use of this reference or provide appropriate reference applicable to ESBWR.

5.4-22 The following are in reference to GE's response to RAI 5.4-22 (MFN 06-265).

(A) Please include the isolation condenser system (ICS) design parameters in the process diagram.

(B) In the standby mode, temperature in the condensate return line (node 3) appears to be high. Please explain this high temperature.

5.4-25 GE's response to 5.4-25 (MFN 06-249) stated that GDC-29 is not applicable for ICS. However, DCD Rev.2 section 5.4.6 indicates GDC 29 as one of the criterion. Delete GDC 29 from the acceptance criteria in section 5.4.6 of the DCD.

5.4-29 Provide the information in GE's response to 5.4-25 (MFN 06-249) in the DCD Tier 2. Also, include the schematic of the isolation condenser.

5.4-32 GE's response to 5.4-32 (MFN 06-249) states the purpose and actuation logic but it does not describe how the nitrogen rotary motor operated valve (NMOV) and the pneumatic piston-operated valve (NO) valves operate. Since these valves are not the standard valves, provide a detailed description of the valve operation.

5.4-41 and 6.3-18 through 6.3-25 (MFN 06-249, MFN 06-241)

Your response to several ITAAC related RAIs stated that "There are ongoing discussions with the industry and the NRC as to the content that is required in Tier 1. When such requirements are settled upon, each system in Tier 1 may go through a thorough review to satisfy the agreed upon requirements." Please provide revised responses to these RAIs to address the original questions. There may be additional RAIs with similar responses. Those responses should also be supplemented.

5.4-42 GE's response to 5.4-42 (MFN 06-249) states that time delay for level 2 automatic start-up of the ICS (30 secs) is included in Chapter 15. This is an important operational parameter for ICS. Please add this detail to Section 5.4.6. Also, DCD, Tier 2, Section 7.4.4.3 discusses the time delay, however the duration of the delay is not specified. Please add this detail to Section 7.4.4.3.