NRC Staff Supplemental Request for Information on GE's Partial Response to ESBWR RAI 15.2-2 (MFN 06-173 dated June 16, 2006)

- 1. DCD Figures 15.2-4(a) and 15.2-7(a) show high narrow power peak of less than a second duration. Energy deposition has not been calculated to assure of acceptable fuel cladding interaction. Please explain why you did not consider fuel energy deposition.
- 2. GE's response to this RAI stated that "this event scenario will be studied in more detail and revisions will be made to the DCD as appropriate." Please provide a supplemental response to document the completion of this study and inform the staff if any changes result.

NRC Staff Supplemental Request for Information on GE's Partial Response to ESBWR RAI 15.3-11 Letter 69 (MFN 07-038 dated January 30, 2007)

- 1. DCD Figure 15.3-4a indicates a sharp rise in total power (although the corresponding simulated power peak is not as pronounced) very much like control rod drop event. Please calculate the total power deposition and the corresponding cladding strain along with the pellet clad mechanical interaction for cladding strain.
- 2. Generator load Rejection with Total Turbine Bypass Failure event results in a very short burst of energy. Please calculate the fuel energy deposition and the pellet cladding mechanical interaction for this transient.