

REQUEST FOR ADDITIONAL INFORMATION RELATED TO
NEDE-33766P, "GEH SIMPLIFIED STABILITY SOLUTION (GS3)"

LICENSING TOPICAL REPORT

GENERAL ELECTRIC HITACHI

By letter dated September 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13254A137), GE-Hitachi Nuclear Energy Americas LLC (GEH) submitted a licensing topical report (LTR) for GEH Simplified Stability Solution (GS3). The proposed LTR is a methodology for boiling water reactor (BWR) stability. The staff requests additional information on the following items:

1. Provide any changes to the submitted LTR by topic. Include the revised envelope in Table 9-1, mixed core procedures, a definition of legacy fuel, removal of "BWR/3" in Table 9-5, and inclusion of [] in Section 9.4 of the cycle-specific application.
2. Provide a chart of example calculations for cycle-specific GS3 application of GE/GNF fuel in the US BWR fleet. Include BWR type, cycle, fuel, initial minimum critical power ratio (MCPR), final MCPR, and margin to safety limit MCPR. For each plant provide the worst case scenarios when the hot channel is assumed to operate at the anticipated operational occurrence operating limit MCPR (OLMCPR) limit and at the GS3 OLMCPR limit.
3. Provide results of a GS3 sensitivity study for [] for a representative plant. Provide the best estimate and worst case initial condition scenarios.
4. Provide an analysis of a sample transition from GE14 to GNF2 fuel over three cycles for a representative plant. Provide radial peaking factors for the two transition cycles identifying the fuel types and amount of each fuel that is present.
5. Provide results of a sensitivity analysis for the impact of lower power range monitor failures on GS3 results.