

November 10, 2010

Mr. Jerald G. Head, Senior Vice President,
Regulatory Affairs
GE Hitachi Nuclear Energy
3901 Castle Hayne Road MC A-18
Wilmington, NC 28401

SUBJECT: GENERAL ELECTRIC/HITACHI NUCLEAR ENERGY CORPORATION
RESPONSE TO U.S. NUCLEAR REGULATORY COMMISSION INSPECTION
REPORT [05200010/2010-201] AND NOTICE OF VIOLATION

Dear Mr. Head:

Thank you for your October 26, 2010, letter in response to the Notice of Violation (NOV) that was discussed in the subject Nuclear Regulatory Commission (NRC) inspection report (IR).

We have reviewed your letter and found that it is generally responsive to the findings described in the NOV. However, certain aspects of your response to NOV 05200010/2010-201 need to be addressed in further detail. Based on the information provided in your letter, as well as the discussions held with you on November 3, 4, and 8, 2010, we understand that to address the issues identified in the IR the aircraft impact assessment (AIA) is being revised to identify when the Reactor Building vertical chases are exposed to fire and overpressure resulting from the aircraft impact initial deflagration; to better describe the modeling methods applied and to add new model plots illustrating the boundary conditions used for each model; to include a post-analysis assessment of mesh refinement sensitivity; to include a justification for the preliminary impact scenarios selected and not selected, to include an assessment of reactor building crane components becoming dislodged and potentially impacting the drywell head; and to address non-local effects from an aircraft impact. You also intend to identify in your design fire barrier design features credited in the AIA.

However, the staff requires further clarifying information on the following:

1. Determining fire-damage footprints including the overpressure effects in the Reactor Building vertical chase: Your initial response did not address certain technical issues relative to the staff's initial concern. Please include in your response applicable information to provide a clearer understanding of the use of the fire damage rule sets as it applies to the Reactor Building vertical chases, including related interfacing boundaries; applicable description of any additional impact scenarios (including any new impact analyses, structural damage analyses, and/or fire damage analyses) needed to account for the entire perimeter of the Reactor Building; and descriptions of any updates to fire damage assessment drawings and related systems assessment needed to accurately reflect the final scenarios and assessment. This should include any changes to size, shape, and/or locations of physical damage and fire damage footprints.
2. Providing a technical justification for the preliminary impact scenarios selected and those preliminary impact scenarios not selected for the final structural analyses using the NRC specified loading and the material properties given in NEI 07-13, Revision 7: Your initial

response provided a description of the corrective actions, however it did not include sufficient technical-related information to allow the staff to understand the conclusion reached in your response. Please include in your response applicable quantitative and analytical information used to determine the impact scenarios selected for the preliminary and final structural analyses.

The staff may review the implementation of your corrective action during a future NRC inspection to determine that full compliance has been achieved and will be maintained.

Please provide a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Chief, Quality and Vendor Branch 2, Division of Construction Inspection and Operational Programs, Office of New Reactors, within 30 days of the date of this letter. This reply should be clearly marked as a "Reply to a Notice of Violation" and should address the information requested above. Where good cause is shown, the NRC will consider extending the response time.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC'S Agencywide Documents Access and Management System, which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or Safeguards Information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request that such material be withheld, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If Safeguards Information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements."

Please contact Mr. Robert Prato at (301) 415-6035 or via electronic mail at Robert.Prato@nrc.gov, if you have any questions or need assistance regarding this matter.

Sincerely,

/RA/

Richard A. Rasmussen, Chief
Quality and Vendor Branch 2
Division of Construction Inspection
and Operational Programs
Office of New Reactors

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Docket No.: 05200010

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