


MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

October 17, 2012

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Ms. Kerri Kavanagh

Docket No. 52-021
MHI Ref: UAP-HF-12277

Subject: Amended Reply to Notice of Violation No.05200021/2012-201

- Reference:**
- 1) "NRC INSPECTION REPORT NO.05200021/2012-201 AND NOTICE OF VIOLATION" dated July 23, 2012. (ML12198A093)
 - 2) Letter MHI Ref: UAP-HF-12235 from Y. Ogata to U.S. NRC, "Reply to Notice of Violation No.05200021/2012-201", dated August 22, 2012. (ML12241A265)
 - 3) "MITSUBISHI HEAVY INDUSTRIES' RESPONSE TO THE U.S. NUCLEAR REGULATORY COMMISSION INSPECTION REPORT 0500021/2012-201 AND NOTICE OF VIOLATION" dated September 17, 2012. (ML12255A233)

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the amended responses to Notice of Violation No.05200021/2012-201 (Reference 1).

MHI previously responded to Notice of Violation No.05200021/2012-201 in Reference 2. However, in Reference 3, the NRC requested that MHI amend the response to NOV-B regarding the maintenance activity performed during the qualification and testing of the Class 1E GTG. Enclosed is the amended response to NOV-B that addresses the NRC's request in Reference 3. The responses to the other parts of the NOV are unchanged from Reference 2.

Please contact Mr. Joseph Tapia, General Manager of Licensing Department, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of the submittal. His contact information is below.

Sincerely,



Yoshiaki Ogata,
Director - APWR Promoting Department
Mitsubishi Heavy Industries, LTD.

JEDI
MRO

Enclosures:

1. MHI Revised Action Plan to Notice of Violation (NOV) for GTG Qualification Test at ESI

**CC: J. A. Ciocco
J. Tapia**

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Enclosure 1

UAP-HF-12277
Docket No. 52-021

US-APWR
MHI Revised Action Plan to Notice of Violation (NOV)
for GTG Qualification Test at ESI

October 2012

MHI Revised Action Plan to Notice of Violation (NOV)
for GTG Qualification Test at ESI

NOV-B (NRC Identification No. 05200021/2012-201-02)

1. Content of NOV

Criterion XI, "Test Control" of Appendix B to 10 CFR Part 50 states, in part, that, "a test program shall be established to assure that all testing required to demonstrate that structures, systems, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents."

MHI MUAP-07024-P, "Qualification and Test Plan of Class 1E Gas Turbine Generator System," Revision 2, dated on October 10, 2010, Section 4, "Principal Design Criteria," describes the scheduled maintenance activities as requirements for two design conditions of the GTGs.

Contrary to the above, as of June 8, 2012, MHI, which has the overall responsibility for the test program, failed to include scheduled maintenances in the test procedure as required by the two design conditions of the GTG. Specifically, MHI failed to send ESI the adequate fuel nozzle cleaning procedure prior to the start and load acceptance test, and approved the test procedure 8001517-FTP without including the scheduled maintenance.

2. Reason for the violation, or, if contested, the basis for disputing the violation or severity level

ESI did not include the cleaning requirement in the test procedure. ESI believed that this would be performed by the Kawasaki Heavy Industries (KHI) representative, the GTG supplier, as required by the KHI Instruction. MHI reviewed the test procedure without considering the scheduled maintenance activities and failed to evaluate the impact of the maintenance activity.

3. Corrective action steps that have been taken and the result achieved, and the corrective steps that will be taken to avoid further violations

- (1) ESI issued Corrective Action number 2012-15 to document, track and address this issue.
- (2) All ESI engineering personnel involved with test procedure reviews have been retrained to assure that when test procedures are reviewed they address all testing

and maintenance requirements. Testing procedures will continue to be reviewed in accordance with the Design Verification checklist, which includes consideration of maintenance requirements.

- (3) ESI included the fuel nozzle cleaning record in the Qualification Test report for the Emergency Gas Turbine Generator (8001517-FRT).
- (4) In future testing performed by ESI, in accordance with the MHI Quality Assurance Manual (UES-20080022 Rev.5), MHI will confirm by engineering review that all the maintenance requirements to be performed during testing are contained in the Factory Test Procedure. In addition MHI QA will confirm that the maintenance requirements are performed.
- (5) MHI's Design Control Standard Document (5AE61-31) will be revised in order to include the requirement for the evaluation, during any documentation or review process on qualification tests, of whether the contents are consistent with maintenance activities.
- (6) MHI will include the fuel nozzle cleaning in the US-APWR DCD Technical Specifications as described in the response to RAI 962-6578 which was submitted to the NRC by MHI letter UAP-HF-12279 dated October 15, 2012.

4. Date when full compliance will be achieved

Full completion will be achieved by the end of November 2012.