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TOKYO, JAPAN

September 21, 2011

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

Attention: Mr. Jeffrey A. Ciocco

Docket No.52-021
MHI Ref: UAP-HF-11318

Subject: Technical Report MUAP-10023 "Initial Type Test Result of Class 1E Gas Turbine Generator System" Revision 3

References: (1) Letter (MHI Ref: UAP-HF-11050) from Y. Ogata (MHI) to U.S. NRC, "Technical Report MUAP-10023 "Initial Type Test Result of Class 1E Gas Turbine Generator System" Revision 1 dated March 1, 2011
(2) Letter (MHI Ref: UAP-HF-11179) from Y. Ogata (MHI) to U.S. NRC, "Transmittal of the Technical Report "Transmittal of the Technical Reports "Seismic Design Bases of the US-APWR Standard Plant" (MUAP-10001)" dated June 10, 2011
(3) Letter (MHI Ref: UAP-HF-11026) from Y. Ogata (MHI) to U.S. NRC, "Transmittal of the Technical Reports "Seismic Design Bases of the US-APWR Standard Plant" (MUAP-10001) and "Soil-Structure Interaction Analyses and Results for the US-APWR Standard Plant" (MUAP-10006)" dated February 8, 2011

With this letter, Mitsubishi Heavy Industries, LTD. (MHI) transmits to the U.S. Nuclear Regulatory Commission (NRC) the revision 3 of the technical report entitled "Initial Type Test Result of Class 1E Gas Turbine Generator System" (Reference 1). The revision 2 was issued including the summary of initial type test and seismic test results. Since MHI found an editorial error before the submission of revision 2 to the NRC, the revision 2 was not transmitted to the NRC. Therefore, the revision 3 of the technical report which includes the summary of initial type test and seismic test results and editorial corrections is transmitted with this letter. In the revision 3, revision bars were added to show the revised parts of both revision 2 and 3.

The seismic test was performed for the Gas Turbine Generator (GTG) and Gearbox Assembly, Generator Bearing Lubrication Oil System, Lube Oil Cooler Fan Assembly and Engine Control Panel based on the seismic requirements in US-APWR DCD Revision 3. The response spectra used for this seismic test is larger than that defined in US-APWR DCD Revision 3. This is because it was known at the time of the seismic test that the response spectra will be revised. After the DCD Revision 3 submittal, the a revision of the technical report, "MUAP-10001 Seismic Design Bases of the US-APWR Standard Plant" (Reference 2) was submitted, and in the near future the technical report "MUAP-10006 Soil-structure Interaction Analysis and Results for US-APWR Standard Plant" (Reference 3) will also be revised. Based on the revisions to those two technical reports, the GTG seismic test results will be re-evaluated and revised Technical Report will be issued. The submittal date of the revision to the NRC will be separately provided.

Other components (e.g., the Generator and Air Receiver Assembly) that were not included in the seismic test will be qualified by analysis, and manufactured in accordance with the seismic requirements. Due to the above expected revision to the seismic requirements, the analysis of those components is not included in Revision 2 to this technical report; but will be

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included in Revision 3.

As indicated in the enclosed materials, this technical report contains information that MHI, Kawasaki Heavy Industries, LTD. (KHI), and Engine Systems, Inc. (ESI) consider proprietary, and therefore should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) as trade secrets and commercial or financial information which is privileged or confidential. Accordingly, the technical report is being submitted in two versions, in separate compact discs. One version (in CD 1) contains the complete proprietary version of the technical report. A non-proprietary version of the technical report is enclosed in CD 2. In the non-proprietary version, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[ ]". In accordance with the NRC submittal procedures, this letter includes an Affidavit that identifies the reasons why the proprietary version of the technical report should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).

Please contact Dr. C. Keith Paulson, Senior Technical Manager, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of the submittals. His contact information is below.

Sincerely,

Yoshiki Ogata,
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, LTD

Enclosures

1 - Affidavit of Yoshiki Ogata

2 - CD 1:"Initial Type Test Result of Class 1E Gas Turbine Generator System"
(MUAP-10023-P, Rev.3) – Version that contains proprietary information

3 - CD 2:"Initial Type Test Result of Class 1E Gas Turbine Generator System"
(MUAP-10023-NP, Rev.3) – Version that does not contain proprietary information

The files contained in each CD are listed in Attachments 1 and 2 hereto.

CC: J. A. Ciocco
C. K. Paulson

Contact Information
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ENCLOSURE 1

Docket No. 52-021
MHI Ref: UAP-HF-11318

MITSUBISHI HEAVY INDUSTRIES, LTD.

AFFIDAVIT

I, Yoshiki Ogata, state as follows:

1. I am General Manager, APWR Promoting Department, of Mitsubishi Heavy Industries, LTD. ("MHI"), and have been delegated the function of reviewing MHI's US-APWR documentation to determine whether it contains information that should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) as trade secrets and commercial or financial information which is privileged or confidential.

2. In accordance with my responsibilities, I have reviewed the enclosed document entitled "Initial Type Test Result of Class 1E Gas Turbine Generator System" dated September 2011, and have determined that portions of the document contain proprietary information that should be withheld from public disclosure. Those pages containing proprietary information are identified with the label "Proprietary" on the top of the page and proprietary information has been bracketed with an open and closed bracket as shown here "[ ]". The first page of the document indicates that all information identified as "Proprietary" should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).

3. The information identified as proprietary in the enclosed document has in the past been, and will continue to be, held in confidence by MHI, Kawasaki Heavy Industries, LTD. (KHI), and Engine Systems, Inc. (ESI) and its disclosure outside the company is limited to regulatory bodies, customers and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and is always subject to suitable measures to protect it from unauthorized use or disclosure.

4. The basis for holding the referenced information confidential is that it describes the unique design of the gas turbine generator system, developed by MHI, KHI, and ESI and not used in the exact form by any of MHI's, KHI's, and ESI's competitors. This information was developed at significant cost to MHI, KHI, and ESI, since it required the performance of Research and Development, detailed design for its software and hardware extending over several years.

5. The referenced information is being furnished to the Nuclear Regulatory Commission ("NRC") in confidence and solely for the purpose of supporting the NRC staff.

6. The referenced information is not available in public sources and could not be gathered readily from other publicly available information. Other than through the provisions in paragraph 3 above, MHI knows of no way the information could be lawfully acquired by organizations or individuals outside of MHI, KHI, and ESI.

7. Public disclosure of the referenced information would assist competitors of MHI in their design of new nuclear power plants without incurring the costs or risks associated with the design of the subject systems. Therefore, disclosure of the information contained in

the referenced technical report would have the following negative impacts on the competitive position of MHI in the U.S. nuclear plant market:

A. Loss of competitive advantage due to the costs associated with development of the class 1E gas turbine generator . Providing public access to such information permits competitors to duplicate or mimic the technology without incurring the associated costs.

B. Loss of competitive advantage of the US-APWR created by benefits of enhanced plant safety, and reduced operation and maintenance costs associated with the class 1E gas turbine generator.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information and belief.

Executed on this 21st day of September, 2011.

Y. Ogata

Yoshiki Ogata,
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, LTD.

ATTACHMENT 1

FILES CONTAINED IN CD 1

CD 1: "Initial Type Test Result of Class 1E Gas Turbine Generator System" (MUAP-10023-P, Rev.3) - Version that contains proprietary information

Contents of CD

File Name	Size	Sensitivity Level
001 Initial Type Test Result of Class 1E GTG System-P_R3_1.pdf	49.2MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_2.pdf	43.0MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_3.pdf	40.7MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_4.pdf	43.0MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_5.pdf	42.1MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_6.pdf	43.4MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_7.pdf	39.3MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_8.pdf	22.5MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_9.pdf	38.3MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_10.pdf	36.8MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_11.pdf	35.1MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_12.pdf	33.9MB	Proprietary
001 Initial Type Test Result of Class 1E GTG System-P_R3_13.pdf	24.3MB	Proprietary

ATTACHMENT 2

FILES CONTAINED IN CD 2

CD 2: **"Initial Type Test Result of Class 1E Gas Turbine Generator System" (MUAP-10023-NP, Rev.3) - Version that does not contain proprietary information**

Contents of CD

File Name	Size	Sensitivity Level
001 Initial Type Test Result of Class 1E GTG System-NP_R3_1.pdf	34.9MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_2.pdf	43.5MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_3.pdf	39.0MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_4.pdf	44.8MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_5.pdf	42.1MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_6.pdf	43.4MB	Non-Proprietary
001 Initial Type Test Result of Class 1E GTG System-NP_R3_7.pdf	27.3MB	Non-Proprietary