MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

March 10, 2009

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-09088

Subject: **MHI's Responses to US-APWR DCD RAI 189-2006**

Reference: 1) "Request for Additional Information No.189-2006 Revision 0, SRP Section: 11.03 – Gaseous Waste Management System, Application Section: 11.3" dates February 9,2009.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Request for Additional Information No.189-2006 Revision 0".

Enclosed is the response to the RAI contained within Reference 1.

As indicated in the enclosed materials, the attachment data of this document (Enclosure 3) contains information that MHI considers proprietary, and therefore 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.

This letter includes the non-proprietary document (Enclosure 2), proprietary digital data (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials designated as "Proprietary" in Enclosure 3 be withheld from public 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 this submittal. His contact information is provided below.

Sincerely,

Y. Ogata

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

D081
NRO

Enclosures:

1. Affidavit of Yoshiki Ogata

2. Responses to Request for Additional Information No.189-2006 Revision 0 (non-proprietary)

3. CD1:"Attachment of Responses to RAI's item 11.03-6 and 11.03-7 of NRC Requests"

The files contained in this CD1 are listed in Attachment 1.

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

Contact Information
C. Keith Paulson, Senior Technical Manager
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ENCLOSURE 1

Docket No.52-021
MHI Ref: UAP-HF-09088

MITSUBISHI HEAVY INDUSTRIES, LTD.

AFFIDAVIT

I, Yoshiki Ogata, being duly sworn according to law, depose and 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 "Attachment of Responses to RAI's item 11.03-6 and 11.03-7 of NRC Requests" and have determined that the attachment data contain proprietary information that should be withheld from public disclosure.

3. The information in the data identified as proprietary by MHI has in the past been, and will continue to be, held in confidence by MHI 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 to make these data from a lot of design parameters requires knowledge and know-how about using the GASPARII and PWR-GALE codes.

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

7. Public disclosure of the referenced information would assist competitors of MHI in their design of new nuclear power plants without the costs or risks associated with the design of the subject systems. Therefore, disclosure of the information contained in the referenced document 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 arrangement of the input data of the dose calculation for the US-APWR.

   B. Loss of competitive advantage of the US-APWR created by benefits of the know-how about using the calculation codes.

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 10th day of March, 2009.

Y. Ogata

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

Enclosure 2

UAP-HF-09088, Rev.0

Responses to Request for Additional Information No.189-2006
Revision 0

March 2009
(Non Proprietary)

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: **No. 189-2006 Revision 0**

SRP SECTION: **11.03 – Gaseous Waste Management System**

APPLICATION SECTION: **11.3**

DATE OF RAI ISSUE: **2/9/2009**

QUESTION NO.: 11.03-6

DCD Tier 2 (Rev 1), Section 11.3, Table 11.3-5 presents calculated annual airborne radionuclide releases (Ci/yr) from some input design parameters and values in Section 11.2, Table 11.2-9 used in the PWR-GALE computer code. Staff review indicates insufficient information is provided to independently confirm the calculated annual airborne radionuclide releases for compliance with 10 CFR 20.1302; 10 CFR 20, Appendix B, Table 2, Column 1; 10 CFR 50, Appendix I; 10 CFR 50.34a; and 10 CFR 50, Appendix A, GDC 60. Please address the following items and revise the DCD to include this information.

1. Section 11.2, Table 11.2-9:
   (a) Provide the design parameters and values for the fuel handling building, or justify their exclusion.
   (b) Provide the basis for all values and assumptions used in the PWR-GALE code calculation of annual gaseous radioactive effluent releases. Include value derivations and references (e.g., pointer to applicable FSAR section, RG 1.109 table, etc.).
2. Section 11.3, Table 11.3-5:
   (a) Note 2 for fuel handling area airborne radionuclide releases states, "The fuel handling area is within the reactor building, but is considered separately in the evaluation." Describe how (e.g., methodology and analysis) and where (e.g., FSAR section) the evaluation of airborne radionuclide releases for the fuel handling building is considered.
   (b) Note 3 for auxiliary building airborne radionuclide releases states, "Including the reactor building." Describe how airborne radionuclide releases for the auxiliary building are included with the reactor building.
3. Provide the PWR-GALE code input/output files used to calculate the annual airborne radionuclide releases in Table 11.3-5.

ANSWER:

1.(a)

According to NUREG-0017 Rev.1, the annual airborne radionuclide releases from the fuel handling building are calculated using the following equation.

$$R_{PWRi} = R_N \cdot C_{PWRi} \cdot \eta_i$$

where:

R_{PWRi} = calculated annual airborne radionuclide release rate for a particular PWR for isotope *i* (Ci/yr)

R_N = normalized annual airborne radionuclide release rate for isotope *i* (Ci/yr per μCi/g)

C_{PWRi} = calculated reactor coolant activity for particular PWR for isotope *i* (μCi/g)

η_i = removal efficiency of charcoal or HEPA filter (unitless)

The normalized annual airborne radionuclide release rate for isotope *i*, R_N, is implemented in the PWR-GALE code. The calculated reactor coolant activity for a particular PWR for isotope *i*, C_{PWRi}, is described as the realistic source term in DCD Table 11.1-9.

According to DCD Figure 9.4.3-1, the airborne radionuclides from the Fuel Handling Area are released from the vent stack via the Auxiliary Building HVAC system. This system has no charcoal or HEPA filter. Therefore, in DCD Table 11.2-9, design values of Auxiliary Building charcoal and HEPA filters are described as "None".

1.(b)
The bases of the PWR-GALE code input parameters have been described in the response to Question 11.02-07 of RAI 164.

2.(a)
The US-APWR Reactor Building contains the Fuel Handing Area and other equipment compartments. According to NUREG-0017 Rev.1, the source terms of the Fuel Handing Area and other equipment compartments should be distinguished from each other. The airborne release from other equipment compartments is considered as the release of ventilation air. Therefore, Note 2 of DCD Table 11.3-5 for Fuel Handling Area airborne radionuclide releases states, "The fuel handling area is within the reactor building, but is considered separately in the evaluation."

2.(b)
According to NUREG-0017 Rev.1, Subsection 1.3 for airborne radionuclide releases states, "5. Ventilation exhaust air from the auxiliary, and turbine buildings, and the spent fuel pool area...." NUREG-0017 Rev.1 also defines "Ventilation exhaust air from the auxiliary" to mean "Ventilation exhaust air from the Nuclear island(NI)". In the US-APWR, auxiliary components which contain radioactive material in the NI are installed not only in the auxiliary building, but also in the reactor building. Therefore, the reactor building is included and Note 3 of DCD Table 11.3-5 for auxiliary building airborne radionuclide releases states, "Including the reactor building."

3.
The input and output files of the PWR-GALE code are attached as an Appendix to the response to RAI No.189-2006.

Impact on DCD
There is no impact on the DCD.

Impact on COLA
There is no impact on the COLA.

Impact on PRA
There is no impact on the PRA.

This completes MHI's response to the NRC's question.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: **No. 189-2006 Revision 0**

SRP SECTION: **11.03 – Gaseous Waste Management System**

APPLICATION SECTION: **11.3**

DATE OF RAI ISSUE: **2/9/2009**

QUESTION NO.: 11.03-7

DCD Tier 2 (Rev 1), Section 11.3, Table 11.3-8 presents some input design parameters and values used in the GASPAR II computer code and resulting individual annual population pathway doses (mrem/yr) from gaseous radioactive effluents in Table 11.3-9. Staff review indicates insufficient information is provided to independently confirm the calculated individual annual population pathway doses for compliance with 10 CFR 20.1301; 10 CFR 20.1302; 10 CFR 50.34a; 10 CFR 50.36a; 10 CFR 50, Appendix I; and 10 CFR 50, Appendix A, GDC 60 and GDC 61. Please address the following items and revise the DCD to include this information.

1. Provide the basis for all design parameters and values used in the GASPAR II code calculation. Include value derivations and references (e.g., pointer to FSAR section or table, RG 1.109 table, etc.).

2. Provide the GASPAR II code input/output files used to calculate the gaseous effluent doses in Table 11.3-8.

ANSWER:

1.

The design bases for the input parameters of the GASPAR II code used for the calculation of the individual dose due to release of gaseous radioactive effluents are given below. However, many of the necessary input parameters are site-specific environmental characteristics. As a result, there is no clear reference for some of the parameters. Instead, the values of the parameters are based on reasonable assumptions that may apply to many, but not all, sites. For those parameters in which this is the case, this response indicates that the parameter should be considered in the COL, since site-specific information will be available in the COL to justify and/or modify the assumptions (as mentioned in DCD subsection 11.3.7 COL 11.3(6)).

Midpoint of Plant Life: 30 yr

This value is based on the design life of 60 years (DCD Table 1.3-1) for the US-APWR. The input value in seconds (9.46E+08 s) is determined by multiplying by a conversion factor (30 yr x 365 d/yr x 24 hr/d x 60 min/hr x 60 s/min).

X/Q (at EAB and at offsite food production area): 1.6E-06 s/m^3, 5.0E-06 s/m^3 (respectively)
D/Q (at site boundary) : 4.0E-08 1/m^2

This is the annual average value described in DCD Table 2.0-1. Decay and depletion effects are considered negligible as a conservative assumption.

Distance to site boundary : 800 m

"800 m" is assumed as a condition for evaluation in the DCD. For this assumption, the site specific condition of the plant will be reflected in the COL.

Fraction of the year that leafy vegetables are grown : 1.0
Fraction of the year that milk cows are on pasture: 1.0
Fraction of the maximum individual's vegetable intake that is from his own garden: 0.76
Fraction of milk-cow feed intake that is from pasture while on pasture: 1.0
Average absolute humidity over the growing season: 8.0 g/m^3
Fraction of the year that beef cattle are on pasture: 1.0
Fraction of beef cattle feed intake that is from pasture while the cattle are on pasture: 1.0

All of the above values use the default values of the GASPAR II code. (NUREG/CR-4653 Table 2.3)

Animal considered for milk pathway: Cow

The cow is considered as a condition for evaluation in the DCD. For this assumption, the site specific condition of the plant will be reflected in the COL.

Source terms: DCD Table 11.3-5(sheet 1-3)

The expected annual radioactive release rate is described in DCD Table 11.3-5 (sheet 1-3).

Other parameters: R.G. 1.109

Other parameters are as per R.G.1.109 (that is, dose conversion coefficient: Table B-1,E-6 to 14, consumption rate: Table E-3,E-5, transition time: Table E-15, feed crop for domestic animals and intake of potable water: Table E-3, recommended value for other data: Table E-15).

2.
The input and output files of the GASPARII code are attached as an Appendix to the response to RAI No.189-2006.

Impact on DCD
There is no impact on the DCD.

Impact on COLA
There is no impact on the COLA.

Impact on PRA
There is no impact on the PRA.

This completes MHI's response to the NRC's question.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: **No. 189-2006 Revision 0**

SRP SECTION: **11.03 – Gaseous Waste Management System**

APPLICATION SECTION: **11.3**

DATE OF RAI ISSUE: **2/9/2009**

QUESTION NO.: 11.03-8

DCD Tier 2 (Rev 1), Section 11.3, Table 11.3-4 presents input design parameters and values used to calculate radioactive effluent releases and resulting individual annual population dose (mrem/yr) due to a GWMS charcoal bed leak. Staff review indicates insufficient information is provided to independently confirm the calculated individual annual population dose for compliance with 10 CFR 20.1301; 10 CFR 20.1302; 10 CFR 50.34a; 10 CFR 50.36a; 10 CFR 50, Appendix I; and 10 CFR 50, Appendix A, GDC 60 and GDC 61. Please provide details of the dose calculation for the GWMS charcoal bed leak to include the basis for all design parameters and values (e.g., Xe and Kr holdup time), identify "other parameters" from Table 11.2-9 of Section 11.2, provide value derivations and references (e.g., pointer to FSAR section or table, RG 1.109 table, etc.), and revise the DCD to include this information.

ANSWER:

The release of charcoal bed leak is calculated using the PWR-GALE code. The PWR-GALE code input parameter comparison for normal release and the charcoal bed leak are shown in the table below.

Table A8-1 Input Parameters for the PWR-GALE Code (Sheets 1 of 3)

Design Parameter	Input Value	
	Normal Release	Charcoal Bed Leak
Core thermal power (MWt)	4,451	same as column to the left
Reactor coolant mass (lb)	6.46E+05	
Reactor coolant letdown flow rate (gpm)	180	
CVCS cation demineralizer flow rate (gpm)	7	
Number of SGs	4	
Total main steam flow rate (lb/hr)	2.02E+07	
Seccondary coolant mass in SG (lb)	1.35E+05	
Total SG blowdown flow rate (lb/hr)	1.554E+05	
Blowdown treatment method	0	
Regeneration time of condensate polishing system	N/A	
Fraction of feedwater through the condensate polishing system	0	
Reactor coolant leak rate to the containment for noble gas (1/d)	0.0002	
Decontamination factor for detergent waste	1.0	

Table A8-1 Input Parameters for the PWR-GALE Code (Sheets 2 of 3)

Design Parameter	Input Value	
	Normal Release	Charcoal Bed Leak
Shim Bleed	-	same as column to the left
Shim bleed flow rate (gpd)	2,875	
Decontamination factor for I	5.0E+03	
Decontamination factor for Cs and Rb	2.0E+03	
Decontamination factor for others	1.0E+05	
Collection time (days)	20	
Process and discharge time (days)	2	
Fraction of waste to be discharged	1.0	
Coolant Drain	-	
Coolant drainage flow rate (gpd)	900	
Fraction of reactor coolant activity	0.1	
Decontamination factor for I	5.0E+03	
Decontamination factor for Cs and Rb	2.0E+03	
Decontamination factor for others	1.0E+05	
Collection time (days)	20	
Process and discharge time (days)	2	
Fraction of waste to be discharged	1.0	
Dirty Waste	-	
Dirty drainage flow rate (gpd)	2,023	
Fraction of reactor coolant activity	0.18	
Decontamination factor for I	1.0E+05	
Decontamination factor for Cs and Rb	2.0E+02	
Decontamination factor for Cs and Rb	2.0E+02	
Decontamination factor for others	1.0E+04	
Collection time (days)	5	
Process and discharge time (days)	0	
Fraction of waste to be discharged	1.0	
Blowdown Waste	-	
Fraction of the blowdown stream processed	1.0	
Decontamination factor for I	1.0E+02	
Decontamination factor for Cs and Rb	1.0E+02	
Decontamination factor for others	1.0E+03	
Collection time	N/A	
Process and discharge time	N/A	
Fraction of waste to be discharged	0	
Regenerant Waste	N/A	

Table A8-1 Input Parameters for the PWR-GALE Code (Sheets 3 of 3)

Design Parameter	Input Value	
	Normal Release	Charcoal Bed Leak
Gaseous Waste Management System and HVAC System	-	-
Continuous gas stripping of full letdown flow	None	same as column to the left
Holdup time for Xe (days)	45	0.02
Holdup time for Kr (days)	2.55	0.02
Fill time of decay tanks for gas stripper	N/A	same as column to the left
Gas waste system: High-efficiency particulate air (HEPA) filter	None	
Auxiliary building: Charcoal filter	None	
Auxiliary building: HEPA filter	None	
Containment volume (ft^3)	2.74E+06	
Containment atmosphere internal cleanup rate (ft^3/min)	0	
Removal efficiency of charcoal filter (%)	0	
Removal efficiency of HEPA filter (%)	0	
Containment high volume purge:		
Number of purges per year (in addition to two shutdown purges)	0	
Removal efficiency of charcoal filter (%)	0	
Removal efficiency of HEPA filter (%)	99	
Containment low volume purge rate (ft^3/min)	2,000	
Removal efficiency of charcoal filter (%)	70	
Removal efficiency of HEPA filter (%)	99	
Fraction of iodine released from blowdown tank vent	0	
Fraction of iodine removed from main condenser air ejector release	0	

The basis of the holdup time for Xe and Kr , 0.02day, is Branch Technical Position ESTB 11-5 section B.II. b)1) and section B.II. b)2). 0.02 day (about 30 minutes) is considered for gases to travel through components in the waste gas system via the release point to the nearest exclusion boundary.

The basis of all other parameters except for the holdup time for Xe and Kr has been previously described in the response to Question 11.02-07 of RAI 164.

Impact on DCD
There is no impact on the DCD.

Impact on COLA
There is no impact on the COLA.

Impact on PRA
There is no impact on the PRA.

This completes MHI's response to the NRC's question.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: **No. 189-2006 Revision 0**

SRP SECTION: **11.03 – Gaseous Waste Management System**

APPLICATION SECTION: **11.3**

DATE OF RAI ISSUE: **2/9/2009**

QUESTION NO.: 11.03-9

DCD Tier 2 (Rev 1), Section 11.3.3.2.1, please check the units of "(t)" given for the reactor coolant mass, m, to calculate noble gas activity in the waste surge tank in Eq. 11.3-1, and revise the DCD as needed. The staff believes the proper unit for reactor coolant mass, m, should be in grams (g).

ANSWER:

The units of variable "Ci", the reactor coolant activity of nuclide *i*, is "(μCi/g)". The unit of "m", the reactor coolant mass, is "(t)" which indicates metric tons (10^6 g). Since there are also 10^6 μCi per Ci, the unit conversion factor is 1.0 to convert from "μCi/g" to "Ci/t". This unit conversion is not explicitly shown in Eq.11.3-1 since its value is unity. With this unit conversion factor, the reactor coolant mass, m, can be expressed in metric tons (t).

Therefore, MHI believes that the unit given for the reactor coolant mass, m, in Section 11.3.3.2.1 is correct.

Impact on DCD
There is no impact on the DCD.

Impact on COLA
There is no impact on the COLA.

Impact on PRA
There is no impact on the PRA.

This completes MHI's response to the NRC's question.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: No. 189-2006 Revision 0

SRP SECTION: 11.03 – Gaseous Waste Management System

APPLICATION SECTION: 11.3

DATE OF RAI ISSUE: 2/9/2009

QUESTION NO.: 11.03-10

DCD Tier 2 (Rev 1), Sections 11.3.2 and 11.3.3.1 state, "The vent stack is site-specific and will be included in the design detail." In Section 11.3.3.1, detailed design information for the vent stack is to include the height of release, stack diameter, effluent temperature and flow rate, effluent exit velocity, and size and shape of flow orifices. The vent stack which runs alongside containment is described as the only release point above the top of containment for the GWMS and HVAC systems associated with the reactor, auxiliary, and access buildings. Although information item COL 11.3(3) for vent stack design parameters and release point specific characteristics is presented in Section 11.3.7, there is no explicit statement in Sections 11.3.2 or 11.3.3.1 to direct the COL applicant to take responsibility for information item COL 11.3(3). Please include a statement for the COL applicant to perform information item COL 11.3(3) in the discussion of Sections 11.3.2 or 11.3.3.1.

ANSWER:

The vent design is a COL item, as listed in COL 11.3(3). For clarity, a statement will be added to Section 11.3.2 to explicitly state that the stack is the responsibility of the COL applicant.

Impact on DCD

The last sentence of Section 11.3.2, "The vent stack design is site-specific and will be included in the detail design." will be replaced with, "The COL applicant is responsible to include the site-specific vent stack design in the detail design."

Impact on COLA

There is no impact on the COLA.

Impact on PRA

There is no impact on the PRA.

This completes MHI's response to the NRC's question.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/10/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: **No. 189-2006 Revision 0**

SRP SECTION: **11.03 – Gaseous Waste Management System**

APPLICATION SECTION: **11.3**

DATE OF RAI ISSUE: **2/9/2009**

QUESTION NO.: 11.03-11

DCD Tier 2 (Rev 1), Section 11.3.1.6 states, "The GWMS is designed with permanently installed equipment. The GWMS does not does not include the use of mobile or temporary equipment." In comparison, Section 11.2.1.6 provides a provision with COL information item on a mobile system or temporary equipment for the LWMS also not included in the permanently installed LWMS equipment that may be installed in the auxiliary building at the discretion of facility operation. Given that Section 11.3.2.1 and Table 11.3-11 developed in accordance with RG 1.143 present GWMS design information on codes and standards for flexible hoses and hose connections used in conjunction with a mobile radwaste processing system, please address the following items and revise the DCD to include this information, or justify their exclusion.

1. In Section 11.3.1.6, discuss the provision for a mobile system or temporary equipment for gaseous radioactive waste processing that may be installed at the discretion of facility operation.
2. In Section 11.3.1.6, include an explicit statement to direct the COL applicant to take responsibility for this COL information item.
3. In Section 11.3.7, provide the COL information item for a mobile system or temporary equipment that is not included in the permanently installed GWMS equipment.

ANSWER:

The GWMS does not include the use of mobile or temporary equipment. Unlike the LWMS, there are no connections provided for mobile equipment. Table 11.3-11 was taken from RG 1.143 Table 1 in its entirety. The flexible hoses and hose connections were included for completeness, but these components are not part of the GWMS. Therefore, no information on the mobile or temporary equipment will be added to the DCD.

Impact on DCD

There is no impact on the DCD.

Impact on COLA

There is no impact on the COLA.

Impact on PRA

There is no impact on the PRA.

This completes MHI's response to the NRC's question.

ATTACHMENT 1

FILES CONTAINED IN CD 1

CD 1: "Attachment of Responses to RAI's item 11.03-6 and 11.03-7 of NRC Requests" –Proprietary information

Contents of CD

File Name	Size	Sensitivity level
• GASPARII Input:		
- 20071214_GasperInputDraft_case5.inp (txt format)	6KB	Proprietary
- 20071214_GasperInputDraft_case10.inp (txt format)	6KB	Proprietary
- LADTAP(GAS)_2007.12.13.LIB	0.29MB	Proprietary
• GASPARII output:		
- 20071214_GasperInputDraft_case5.inp.outlist (txt format)	0.15MB	Proprietary
- 20071214_GasperInputDraft_case10.inp.outlist (txt format)	0.15MB	Proprietary
• PWR-GALE input:		
- 99V2GS_INPUT (txt format)	4KB	Proprietary
• PWR-GALE output:		
- 99V2GS_INPUT.outlist (txt format)	11KB	Proprietary