



MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

July 18, 2008

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

Attention: Mr. Jeffery A. Ciocco,

Docket No. 52-021
MHI Ref: UAP-HF-08130

Subject: MHI's Responses to US-APWR DCD RAI No. 13 through 24

- References:**
- 1) "Request for Additional Information No. 13 Revision 0, SRP Section: 02.04 – Hydrology Application Section: 2.4," dated June 23, 2008
 - 2) "Request for Additional Information No. 14 Revision 0, SRP Section: 02.04.01 - Hydrologic Description Application Section: 2.4.15," dated June 23, 2008
 - 3) "Request for Additional Information No. 15 Revision 0, SRP Section: 02.04.04 - Potential Dam Failures Application Section: 2.4.4," dated June 23, 2008
 - 4) "Request for Additional Information No. 16 Revision 0, SRP Section: 02.04.05 - Probable Maximum Surge and Seiche Flooding Application Section: 2.4.5," dated June 23, 2008
 - 5) "Request for Additional Information No. 17 Revision 0, SRP Section: 02.04.06 - Probable Maximum Tsunami Flooding Application Section: 2.4.6," dated June 23, 2008
 - 6) "Request for Additional Information No. 18 Revision 0, SRP Section: 02.04.11 - Low Water Considerations Application Section: 2.4.11," dated June 23, 2008
 - 7) "Request for Additional Information No. 19 Revision 0, SRP Section: 02.04.12 – Groundwater Application Section: 2.4.12," dated June 23, 2008
 - 8) "Request for Additional Information No. 20 Revision 0, SRP Section: 02.04.13 - Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters Application Section: 2.4.13," dated June 23, 2008
 - 9) "Request for Additional Information No. 21 Revision 0, SRP Section: 02.03.03 - Onsite Meteorological Measurements Programs Application Section: 2.3.3," dated June 23, 2008
 - 10) "Request for Additional Information No. 22 Revision 0, SRP Section: 02.03.02 - Local Meteorology Application Section: 2.3.2," dated June 23, 2008
 - 11) "Request for Additional Information No. 23 Revision 0, SRP Section: 02.03.01 - Regional Climatology Application Section: 2.3.1," dated June 23, 2008
 - 12) "Request for Additional Information No. 24 Revision 0, SRP Section: 02.04.14 - Technical Specifications and Emergency Operation Requirements Application Section: 2.4.14," dated June 23, 2008

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear

DOB
NRO

Regulatory Commission ("NRC") documents as list of Enclosures.

Enclosed are the responses to 31 RAIs contained within Reference 1 through 12.

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,



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

Enclosures:

1. "Response to Request for Additional Information No. 13 Revision 0"
2. "Response to Request for Additional Information No. 14 Revision 0"
3. "Response to Request for Additional Information No. 15 Revision 0"
4. "Response to Request for Additional Information No. 16 Revision 0"
5. "Response to Request for Additional Information No. 17 Revision 0"
6. "Response to Request for Additional Information No. 18 Revision 0"
7. "Response to Request for Additional Information No. 19 Revision 0"
8. "Response to Request for Additional Information No. 20 Revision 0"
9. "Response to Request for Additional Information No. 21 Revision 0"
10. "Response to Request for Additional Information No. 22 Revision 0"
11. "Response to Request for Additional Information No. 23 Revision 0"
12. "Response to Request for Additional Information No. 24 Revision 0"

CC: J. A. Ciocco
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Enclosure 1

UAP-HF-08130
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Responses to Request for Additional Information No.13 Revision 0

July 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO.13 REVISION 0
SRP SECTION: 02.04 - HYDROLOGY
APPLICATION SECTION: 02.04
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04-1

Table 2.0-1 (Tier 2) states the maximum rainfall rate (hourly) is 19.4 in./hr. and the maximum rainfall rate (short-term) is 6.3 in./5 min. with an importance factor of 1.2 for category I/II structures. Do the values stated include the importance factor? For example, are category I/II structures designed with a maximum rainfall rate (hourly) of 23.28 in./hr. (1.2*19.4 in./hr.) and 7.56 in./5 min. (1.2*6.3 in./5 min.)?

ANSWER:

The use of an importance factor for rainfall rate is an erroneous entry for these hydrologic parameters in Table 2.0-1. Therefore, the importance factor in Table 2.0-1 is not applicable to that discussion.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Remove "with importance factor of 1.2" from Table 2.0-1 (Sheet 4 of 5), 9th Row, 2nd Column.
- Remove "with importance factor of 1.2" from Table 2.0-1 (Sheet 4 of 5), 10th Row, 2nd Column.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO.13 REVISION 0
SRP SECTION: 02.04 - HYDROLOGY
APPLICATION SECTION: 02.04
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04-2

Section 2.4, "Hydrologic Engineering" provides a design parameter of 19.4 in./hr. for the maximum local intense precipitation. Define local intense precipitation in the context of this design certification document.

ANSWER:

The definition of local intense precipitation in the context of this design certification document is the same as probable maximum precipitation (PMP).

Impact on DCD

The third sentence of the first paragraph in Section 2.4 of the DCD Revision 1 is to incorporate the following change:

- "The local intense precipitation is a measure of the extreme amount of water falling in the immediate vicinity of the site, taken as the one-square-mile probable maximum precipitation (PMP)."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

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MHI Ref: UAP-HF-08130

Enclosure 2

UAP-HF-08130
Docket No. 52-021

Responses to Request for Additional Information No.14 Revision 0

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Docket No. 52-021

RAI NO.: NO.14 REVISION 0
SRP SECTION: 02.04.01 - HYDROLOGIC DESCRIPTION
APPLICATION SECTION: 02.04.15
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.01-1

Section 2.4.15 references SRP 2.4.1 through 2.4.6. Explain why it does not reference all subsections of 2.4 of the SRP; i.e., subsections 2.4.1 through 2.4.14?

ANSWER:

The statement in Subsection 2.4.15 is intended to be a summary of Combined License Information from Section 2.4 text, in this case the third sentence in the first paragraph of Section 2.4. As reflected in DCD Section 2.4, Revision 0, the correct statement is "The COL Applicant is to provide sufficient information as outlined in SRPs 2.4.1 through 2.4.14 (References 2.4-1 through 2.4-14)."

Impact on DCD

There is no impact on the DCD as a direct result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

The COL Applicant discussion in DCD Section 2.4 is to be reformatted in Revision 1 into a dedicated one-sentence paragraph. Because not all subsections are applicable to each site, the reference to all fourteen SRP subsections is being replaced by the statement "to provide sufficient information to verify that hydrologic-related events will not affect the safety-basis for the US-APWR." Therefore, the statement in DCD Revision 1 Subsection 2.4.15 no longer includes references to SRPs.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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**US-APWR Design Certification
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RAI NO.: NO.14 REVISION 0
SRP SECTION: 02.04.01 - HYDROLOGIC DESCRIPTION
APPLICATION SECTION: 02.04.15
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.01-2

The statement in Section 2.4.15 reads as follows:

“The COL Applicant is to provide sufficient information as outlined in SRPs 2.4.1 through 2.4.6 (References 2.4-1 through 2.4-6) and as outlined below to verify that hydrologic related events will not affect the safety-basis for the US-APWR.”

The reader gets the impression that there is an outline that will follow the statement. However, the statement is followed by 2.4.16 which is a list of references. Explain the inconsistency.

ANSWER:

As discussed in RAI 14 Question 02.04.01-1, the discussion in DCD Subsection 2.4.15 is intended to be a summary of Combined License Information from Section 2.4 text, in this case the third sentence in the first paragraph of Section 2.4. The text from Section 2.4 is repeated in Subsection 2.4.15, where “as outlined below” is in reference to the subsequent subsections 2.4.1 through 2.4.14.

Impact on DCD

There is no impact on the DCD as a direct result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

As discussed in RAI 14 Question 02.04.01-1, the COL Applicant discussion in DCD Revision 1 Section 2.4 is to be reformatted into a dedicated one-sentence paragraph. Because not all subsections are applicable to each site, the phrase “as outlined below” is to be removed from DCD Section 2.4. Therefore, the statement in DCD Revision 1 Subsection 2.4.15 no longer includes the phrase “as outlined below”.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

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Enclosure 3

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Responses to Request for Additional Information No.15 Revision 0

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US-APWR Design Certification

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RAI NO.: NO.15 REVISION 0
SRP SECTION: 02.04.04 - POTENTIAL DAM FAILURES
APPLICATION SECTION: 02.04.04
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.04-1

The applicant described the basis for potential dam failure as follows;

“An evaluation is to be provided on hydrological site characteristics that generate any potential hazard to the plant’s safety-related facilities as a result of the seismically induced failure of upstream and downstream water control structures.”

Explain the basis for not including other plausible reasons for a dam failure as described in the SRP Section 2.4.4.

ANSWER:

DCD Revision 0 Subsection 2.4.4 is consistent with Regulatory Guide (RG) 1.206 Paragraph C.I.2.4.4. DCD Revision 0 Subsections 2.4.4.1 through 2.4.4.3 are consistent with RG 1.206 Paragraphs C.I.2.4.4.1 through C.I.2.4.4.3. DCD Revision 0 Subsections 2.4.4.1 through 2.4.4.3 discuss other plausible reasons for a dam failure.

Impact on DCD

There is no direct impact on DCD as a result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

DCD Subsection 2.4.4 is to be reformatted in Revision 1 to summarize the plausible reasons for dam failure. DCD subsections 2.4.4.1 through 2.4.4.3 are to be deleted. As a result, a statement is to be included in DCD Revision 1 Subsection 2.4.4 that references other plausible reasons for dam failures instead of each subsequent subsection.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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RAI NO.: NO.15 REVISION 0
SRP SECTION: 02.04.04 - POTENTIAL DAM FAILURES
APPLICATION SECTION: 02.04.04
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.04-2

Explain why conditions such as sediment deposition and erosion that could cause blockage or loss of function of SSC important to safety are not included as described in SRP 2.4.4.

ANSWER:

DCD Subsection 2.4.4.1 Revision 0 is consistent with RG 1.206 Paragraph C.I.2.4.4.1 and states consideration is to be given to the effects on plant safety of other potential concurrent events. However, to emphasize this consideration, DCD Revision 1 Subsection 2.4.4 is to state the evaluation is to consider the effects on safety-related SSCs during dam failure-induced flood waves, such as sediment deposition or erosion.

Impact on DCD

To clarify the discussion relating to the effects on plant safety of other potential concurrent events, DCD Revision 1 Subsection 2.4.4 is reformatted to summarize the plausible reasons for effects during dam failure-induced flood waves.

The 5th bullet at the end of paragraph in Subsection 2.4.4 of the DCD Revision 1 is to incorporate the following change:

- "Effects on safety-related SSCs during dam failure-induced flood waves, such as sediment deposition and erosion"

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

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Enclosure 4

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Docket No. 52-021

Responses to Request for Additional Information No.16 Revision 0

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Docket No. 52-021

RAI NO.: NO.16 REVISION 0
SRP SECTION: 02.04.05 - PROBABLE MAXIMUM SURGE AND SEICHE
FLOODING
APPLICATION SECTION: 02.04.05
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.05-1

10 CFR Part 100 describes site-related proximity, seismic, and non-seismic evaluation criteria for power reactor applications. The staff's review should include evaluation of pertinent information to determine if these criteria are appropriately used in the postulation of worst-case storm surge and seiching scenarios. this requirement is described in SRP 2.4.5 as Consideration of Other Site-Related Evaluation Criteria. Explain why consideration of other site related evaluation criteria is not included in the FSAR. These conditions include site related proximity, seismic, and non-seismic information that is related to flooding and loss of safety-related water supply as described in SRP 2.4.5.

ANSWER:

DCD Subsection 2.4.5, Revision 0, is consistent with Regulatory Guide (RG) 1.206, Paragraph C.I.2.4.5. DCD Revision 0 Subsections 2.4.5.1 through 2.4.5.5 are consistent with RG 1.206 Paragraphs C.I.2.4.5.1 through C.I.2.4.5.5. Subsection 2.4.5.2 addresses surge and seiche water levels in the vicinity of the site and site region which includes consideration of other site-related evaluation criteria.

Impact on DCD

There is no direct impact on the DCD as a result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

DCD Subsection 2.4.5 is to be reformatted in Revision 1 to summarize considerations for probable maximum surge and seiche flooding. DCD subsections 2.4.5.1 through 2.4.5.5 are to be deleted. As a result, a statement is to be included in DCD Subsection 2.4.5 Revision 1 to consider the effects of seismic and non-seismic information on the postulated design bases, including consideration of other site-related evaluation criteria.

02.04.05-1

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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

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MHI Ref: UAP-HF-08130

Enclosure 5

UAP-HF-08130
Docket No. 52-021

Responses to Request for Additional Information No.17 Revision 0

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RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO.17 REVISION 0
SRP SECTION: 02.04.06 - PROBABLE MAXIMUM TSUNAMI FLOODING
APPLICATION SECTION: 02.04.06
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.06-1

Please verify whether the term "controlling tsunami" referred in section 2.4.6.7 of the FSAR is the same as probable maximum tsunami (PMT).

ANSWER:

The term "controlling tsunami" is used in RG 1.26 Paragraph C.1.2.4.6.7. In the context of RG 1.206, the controlling tsunami is the worst case probable maximum tsunami.

Impact on DCD

There is no direct impact on the DCD as a result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

DCD Subsection 2.4.6 is to be reformatted in Revision 1 to summarize general considerations for probable maximum tsunami hazards. The subsequent subsections 2.4.6.1 through 2.4.6.7 are to be deleted from DCD Chapter 2. At that time, the term "controlling tsunami" will no longer be used in DCD Chapter 2.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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RAI NO.: NO.17 REVISION 0
SRP SECTION: 02.04.06 - PROBABLE MAXIMUM TSUNAMI FLOODING
APPLICATION SECTION: 02.04.06
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.06-2

Explain why hydrostatic and hydrodynamic forces, water borne projectiles, and effects of sediment deposition and erosion are not included as they relate to safety-related SSC as described in SRP 2.4.6.

ANSWER:

DCD Revision 0 Subsection 2.4.6 is consistent with Regulatory Guide (RG) 1.206 Paragraph C.I.2.4.6. Further, DCD Revision 0 Section 2.4 states "to provide sufficient information as outlined in SRPs 2.4.1 through 2.4.14". These discussions capture the scope of SRP 2.4.6 for site-specific considerations as they relate to safety-related SSCs.

Impact on DCD

There is no direct impact on the DCD as a result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

DCD Section 2.4 is to be reformatted in Revision 1 to require the COL Applicant to provide sufficient information to verify that hydrologic-related events will not affect the safety-basis for the US-APWR.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

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Enclosure 6

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Docket No. 52-021

Responses to Request for Additional Information No.18 Revision 0

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**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO.18 REVISION 0
SRP SECTION: 02.04.11 - LOW WATER CONSIDERATIONS
APPLICATION SECTION: 02.04.11
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.11-1

Explain the term average used to refer to the UHS cooling water volume. Does this mean there will be times that the water volume could be below average or is this a firm capacity that has to be available at any given time?

ANSWER:

The term "average" is an erroneous entry in this subsection of the DCD. Thus the term "average" is not applicable or appropriate for the discussion on cooling water volume requirements.

Impact on DCD

The 1st sentence of the 1st paragraph in Subsection 2.4.11 of the DCD Revision 1 is to incorporate the following change:

- Remove "average"

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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

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MHI Ref: UAP-HF-08130

Enclosure 7

UAP-HF-08130
Docket No. 52-021

Responses to Request for Additional Information No.19 Revision 0

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO.19 REVISION 0
SRP SECTION: 02.04.12 - GROUNDWATER
APPLICATION SECTION: 02.04.12
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.12-1

Describe the monitoring and safeguards requirements that need to be implemented as presented in section 2.4.12.4 of the FSAR in relation to the design and operational requirements of 10 CFR 20.1406 and discussed in RG 4.21.

ANSWER:

As described in DCD Subsection 2.4.12.4, a discussion is to be provided for plans, procedures, safeguards, and monitoring programs to be used to protect present and projected ground water users. As identified in Section 2.4, the COL Applicant is to provide sufficient information as outlined in SRPs, including SRP 2.4.12. SRP 2.4.12 does not currently reference RG 4.21, which was issued in June 2008. Therefore, DCD Section 2.4.12 will add a reference to RG 4.21 for design and operational requirements to minimize contamination and radioactive waste generation.

Impact on DCD

A statement is to be added to DCD Revision 2 Subsection 2.4.12 that site-specific monitoring and safeguards requirements are to be implemented to the design and operational requirements discussed in RG 4.21.

DCD Chapter 2 Revision 2 is to incorporate the following changes:

- Add to the end of the first sentence of the first paragraph in Subsection 2.4.12 "..., including monitoring and safeguards requirements to be implemented to the design and operational requirements discussed in RG 4.21."
- Add after Subsection 2.4.15, COL 2.4(1): "**2.4.16 References**"
- Add below new Subsection 2.4.16: "2.4-1 Minimization of Contamination and Radioactive Waste Generation: Life-Cycle Planning. Regulatory Guide 4.21, Rev. 0, U.S. Nuclear Regulatory Commission, Washington, DC, June 2008."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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

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Enclosure 8

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Docket No. 52-021

Responses to Request for Additional Information No.20 Revision 0

July 2008

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Docket No. 52-021

RAI NO.: NO.20 REVISION 0
SRP SECTION: 02.04.13 - ACCIDENTAL RELEASES OF RADIOACTIVE
LIQUID EFFLUENTS IN GROUND AND SURFACE WATERS
APPLICATION SECTION: 02.04.13
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.13-1

Explain why the seismic and non-seismic failure scenarios are not included as part of the consideration of other site-related evaluation criteria as stated in SRP 2.4.13.

ANSWER:

The description is site-specific for any emergency protective measures designed to minimize the impact of adverse hydrology-related events on safety-related facilities. A COL Applicant action item is stated in DCD Section 2.4 that requires the COL Applicant to provide sufficient information to verify that hydrologic-related events will not affect the safety-basis for the US-APWR. This action item applies to all "Hydrologic Engineering" subsections, including accidental releases of radioactive liquid effluents in ground and surface waters as discussed in DCD Subsection 2.4.13.

Impact on DCD

DCD Revision 1 Subsection 2.4.13 is to emphasize the information is not part of the standard plant design.

The first sentence in the paragraph of Subsection 2.4.13 of the DCD Revision 1 is to incorporate the following change:

- "A description is to be provided on the ability ..." to "The site is evaluated for the ability ..."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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

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Enclosure 9

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Responses to Request for Additional Information No.21 Revision 0

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RAI NO.: NO.21 REVISION 0
SRP SECTION: 02.03.03 - ONSITE METEOROLOGICAL MEASUREMENTS
PROGRAMS
APPLICATION SECTION: 02.03.03
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.03-1

DCD Section 2.3.3 lists the information needed to sufficiently describe the pre-operational and operational programs for meteorological measurements at a proposed site for the U.S. APWR design. The information is consistent with NUREG-0800, Section 2.3.3; however, the staff requests this information be removed and incorporated by reference to prevent changes in NUREG-0800 from affecting the accuracy of the DCD.

ANSWER:

It is agreed to remove from Subsection 2.3.3 the list of information to be provided to sufficiently describe the pre-operational and operational programs for meteorological measurements at a proposed site. A statement of reference to RG 1.23 exists for guidance on acceptable onsite meteorological programs.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- In Subsection 2.3.3, replace the first paragraph in its entirety with the following: "The site-specific pre-operational and operational programs for meteorological measurements are to be provided, which may include offsite satellite facilities. RG 1.23 (Reference 2.3-1) contains guidance on acceptable onsite meteorological programs, and any deviations from RG 1.23 guidance are to be identified and justified on a site-specific basis."
- In Subsection 2.3.3, delete paragraphs 3 through 6 in their entirety.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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Docket No. 52-021

RAI NO.: NO.21 REVISION 0
SRP SECTION: 02.03.03 - ONSITE METEOROLOGICAL MEASUREMENTS
PROGRAMS
APPLICATION SECTION: 02.03.03
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.03-2

DCD Section 2.3.6 lists the COL applicant action items. Please include an action item that requires a COL applicant to provide a description of the pre-operational and operational programs for meteorological measurements consistent with DCD Section 2.3.3.

ANSWER:

A COL Applicant action item is stated in DCD Section 2.3 that requires a COL Applicant to verify their selected site meteorology. This action item applies to other "Meteorology" subsections, including the onsite meteorological measurements program discussed in DCD Subsection 2.3.3. This COL Applicant action item is included in Subsection 2.3.6 as COL 2.3(1). Therefore, the COL Applicant is to provide program information consistent with DCD Subsection 2.3.3 as part of providing meteorology information consistent with Section 2.3.

Impact on DCD

There is no impact on DCD.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

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Enclosure 10

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Responses to Request for Additional Information No.22 Revision 0

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Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO.22 REVISION 0
SRP SECTION: 02.03.02 - LOCAL METEOROLOGY
APPLICATION SECTION: 02.03.02
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.02-1

DCD Section 2.3.2 lists the information needed to sufficiently describe the local meteorology of a proposed site for the U.S. APWR design. the information is consistent with NUREG-0800, Section 2.3.2; however, the staff requests this information be removed and incorporated by reference to prevent changes in NUREG-0800 from affecting the accuracy of the DCD.

ANSWER:

It is agreed to remove the list of information to be provided to sufficiently describe the local meteorology of a proposed site, and to incorporate a statement of reference to SRP 2.3.2.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Delete Subsections 2.3.2.1, 2.3.2.2, and 2.3.2.3 in their entirety.
- In Subsection 2.3.2, add the following paragraph: "Site-specific information on local meteorology is based on long-term data from nearby reasonably representative locations and shorter-term onsite data as discussed in SRP 2.3.2 (Reference 2.3-7)."
- Add the following to the end of Subsection 2.3.7: "2.3-7 Local Meteorology. NUREG-0800, SRP 2.3.2, Rev. 3, U.S. Nuclear Regulatory Commission, Washington, DC, March 2007."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO.22 REVISION 0
SRP SECTION: 02.03.02 - LOCAL METEOROLOGY
APPLICATION SECTION: 02.03.02
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.02-2

DCD Section 2.3.6 lists the COL applicant action items. Please include an action item that requires a COL applicant to provide local meteorology information consistent with DCD Section 2.3.2.

ANSWER:

A COL applicant action item is stated in DCD Section 2.3 that requires a COL Applicant to verify their selected site meteorology. This action item applies to other "Meteorology" subsections, including the local meteorology information in DCD Subsection 2.3.2. This COL Applicant action item is included in Subsection 2.3.6 as COL 2.3(1). Therefore, the COL Applicant is to provide local meteorology information consistent with DCD Subsection 2.3.2 as part of providing meteorology information consistent with Section 2.3.

Impact on DCD

There is no impact on DCD.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

Docket No. 52-021
MHI Ref: UAP-HF-08130

\Enclosure 11

UAP-HF-08130
Docket No. 52-021

Responses to Request for Additional Information No.23 Revision 0

July 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-1

Please correct the typo (i.e., snowpak) in DCD Table 2.0-1.

ANSWER:

It is agreed this is a typographical error.

Impact on DCD

The 3rd row, 1st column in Table 2.0-1 (Sheet 1 of 5) of DCD Revision 1 is to incorporate the following change:

- Replace "snowpak" with "snowpack"

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-2

Please revise the description of the extreme wind speed in DCD Table 2.0-1 to state that the 3-second gust is based on a 100-year return period and include the recommended importance factor of 1.15.

ANSWER:

It is agreed the basis for extreme wind speed (other than tornado) is the 3-second gust based on a 100-year return period, and the importance factor is 1.15 for seismic category I and II structures.

Impact on DCD

The 10th row, 2nd column in Table 2.0-1 of DCD Revision 1 is to incorporate the following change:

- Add at end of current text "... based on 100-year return period, with importance factor of 1.15 for seismic category I/II structures"

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-3

Please include a reference to DCD Section 3.3 in DCD Section 2.3.1 for the 100-year, 3-second gust wind speed because this section provides the technical basis for the site parameter value.

ANSWER:

It is agreed DCD Section 3.3 provides the technical basis for the 100-year, 3-second gust wind speed.

Impact on DCD

The paragraph in Subsection 2.3.1 of the DCD Revision 1 is to incorporate the following change:

- Add as the third sentence of the paragraph "The extreme wind speed as stated in Table 2.0-1 corresponds to the criteria described in Subsection 3.3.1.1."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-4

Regulatory Guide 1.76 presents the tornado site parameters that should be considered for a nuclear power plant design. Please explain why the following tornado site parameters were not included in DCD Table 2.0-1.

- a. Maximum Rotational Speed
 - b. Maximum Translational Speed
 - c. Radius of Maximum Rotational Speed
 - d. Rate of Pressure Drop
-

ANSWER:

The tornado a) maximum rotational speed, b) maximum translational speed, c) radius of maximum rotational speed, and d) rate of pressure drop are provided in DCD Subsection 3.3.2.1.

Impact on DCD

A statement is to be added in Subsection 2.3.1 of DCD Revision 1 to refer to Subsection 3.3.2.1 for the tornado site parameters. Refer to RAI 23, question 02.03.01-5, for the sentence to be added in DCD Revision 1 Subsection 2.3.1.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

02.03.01-4

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-5

Please include a reference to DCD Section 3.3.2.1 in DCD Section 2.3.1 for the tornado design parameters because this section provides the technical basis for the site parameter values.

ANSWER:

It is agreed to include a reference to DCD Subsection 3.3.2.1 in DCD Subsection 2.3.1.

Impact on DCD

The paragraph in Subsection 2.3.1 of the DCD Revision 1 is to incorporate the following change:

- Add as the second sentence of the paragraph: "Refer to Subsection 3.3.2.1 for a complete summary of design basis tornado parameters, including maximum wind speed, maximum rotational speed, maximum translational speed, radius of maximum rotational wind from center of tornado, atmospheric drop, and rate of pressure change."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-6

NUREG-0800, Section 2.3.1, states that the following should be included as site parameters for use in establishing heat loads for the design of normal plant heat sink systems, post-accident containment heat removal systems, and plant heating, ventilating, and air conditioning systems.

- a. 2% Annual Exceedance Maximum Dry Bulb and Coincident Wet Bulb, Non-Coincident Wet Bulb, and Minimum Dry Bulb.
- b. 1% Annual Exceedance Maximum Dry Bulb and Coincident Wet Bulb, Non-Coincident Wet Bulb, and Minimum Dry Bulb.
- c. 100-year Exceedance Maximum Dry Bulb and Coincident Wet Bulb, Non-Coincident Wet Bulb, and Minimum Dry Bulb.

Please explain or justify why these suggested site parameters were not included in DCD Table 2.0-1.

ANSWER:

It is agreed that ambient temperature and humidity statistics are to be provided in DCD Table 2.0-1, as discussed in SRP 2.3.1. US-APWR calculations utilize ambient temperature and humidity statistics at 5% exceedance. A 2% exceedance is not used as input. The 100-year maximum and minimum dry bulb temperature values are identical to the 0% maximum and minimum values, and therefore are not repeated as 100-year values in Table 2.0-1.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Add the following as 11th & 12th row in Table 2.0-1

02.03.01-6

Ambient design air temperature (5% exceedance maximum)	Secondary HVAC	95°F dry bulb, 77°F coincident wet bulb, 79°F non-coincident wet bulb
	Normal Plant Heat Sink	92°F dry bulb, 75°F coincident wet bulb, 76°F non-coincident wet bulb

- Add the following as 13th row in Table 2.0-1

Ambient design air temperature (1% exceedance maximum)	100°F dry bulb, 77°F coincident wet bulb; 81°F non-coincident wet bulb
---	--

- Add the following as 15th row in Table 2.0-1

Ambient design air temperature (5% exceedance minimum)	-5°F dry bulb
---	---------------

- Add the following as 16th row in Table 2.0-1

Ambient design air temperature (1% exceedance minimum)	-10°F dry bulb
---	----------------

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-7

Please explain why no site parameters for the meteorological conditions resulting in the maximum evaporative and drift loss of water from the ultimate heat sink, the meteorological conditions resulting in minimum water cooling, and the potential for water freezing in the ultimate heat sink water storage facility were included in DCD Table 2.0-1. Any temperatures provided should include a technical basis and shown to be representative of a number of potential COL sites.

ANSWER:

As stated in DCD Revision 0 Subsection 9.2.5.2, the COL Applicant will determine the type of ultimate heat sink (UHS) based on specific site conditions and meteorological data. This is consistent with SRP 2.3.1 Section I.6., which states meteorological conditions identified as design and operating bases for CP, OL, and COL applications include the UHS meteorological conditions resulting in the maximum evaporation and drift loss of water, minimum water cooling, and, if applicable, the potential for water freezing in the UHS water storage facility.

Impact on DCD

The paragraph in Subsection 2.3.1 of the DCD Revision 1 is to incorporate the following change:

- Add as the fourth sentence of the paragraph: "Ultimate heat sink (UHS) meteorological conditions are dependent on the site-specific climatology and selection of UHS type, as discussed in Subsection 9.2.5."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-8

DCD Section 2.3.1 lists the information needed to sufficiently describe the regional meteorology of a proposed site for the U.S. APWR design. The information is consistent with NUREG-0800, Section 2.3.1; however, the staff requests this information be removed and incorporated by reference to prevent changes in NUREG-0800 from affecting the accuracy of the DCD.

ANSWER:

It is agreed to remove the list of information to be provided to sufficiently describe the regional meteorology of a proposed site, and to incorporate a statement of reference to SRP 2.3.1.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Delete Subsections 2.3.1.1 and 2.3.1.2 in their entirety.
- In Subsection 2.3.1, add the following as the first sentence of the paragraph: "Site-specific information is provided for regional climatology, including general climate conditions and frequency of severe weather phenomena as discussed in SRP 2.3.1 (Reference 2.3-6)."
- Add the following to the end of Subsection 2.3.7: "2.3-6 Regional Meteorology. NUREG-0800, SRP 2.3.1, Rev. 3, U.S. Nuclear Regulatory Commission, Washington, DC, March 2007."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
Mitsubishi Heavy Industries
Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-9

DCD Section 2.3.6 lists the COL applicant action items. Please include an action item that requires a COL applicant to provide regional meteorology information consistent with DCD Section 2.3.1.

ANSWER:

A COL Applicant action item is stated in DCD Revision 0 Section 2.3 that requires a COL Applicant to verify their selected site meteorology. This action item applies to other "Meteorology" subsections including regional climatology information in DCD Subsection 2.3.1. This COL Applicant action item is included in Subsection 2.3.6 as COL 2.3(1). Therefore, the COL Applicant is to provide regional meteorology information consistent with DCD Subsection 2.3.1 as part of providing meteorology information consistent with Section 2.3.

Impact on DCD

There is no impact on DCD.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-10

Please provide a technical basis for the snow load site parameters listed in DCD Table 2.0-1 and justify that the values are representative of a reasonable number of potential sites in DCD Section 2.3.1.

ANSWER:

As stated in Section 2.0, site parameters are selected to bound an estimated 75% to 80% of the US landmass (that is, continental US exclusive of Alaska), including all sites under current consideration. The selection of the 100-year snowpack maximum snow weight of 50 psf allows for a portion of the weight of 48-hour probable maximum winter precipitation (PMWP) as contributing to the roof live load of 75 psf for the design of seismic category I buildings. Therefore, the 100-year snowpack maximum snow weight is increased to 75 psf to account for the 48-hour PMWP and roof drainage system, which are evaluated on a site-specific basis by the COL Application.

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Change the third row, first column of Table 2.0-1 (Sheet 1 of 5): "100-year snowpack maximum snow weight (roof)" to "Roof Snow Load (100-year snowpack maximum snow weight including contributing portion of 48-hour probable maximum winter precipitation [PMWP])"
- Change the third row, second column of Table 2.0-1 (Sheet 1 of 5): "50 lb/ft²" to "75 lb/ft²"

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-11

Taking into consideration the potentially large probable maximum winter precipitation (PMWP) estimates from the currently available National Oceanic and Atmospheric Administration (NOAA) Hydrometeorological reports, especially in the Southeast U.S., please describe any aspects of the roof and/or drainage design that would prevent the accumulation of the PMWP on top of any safety related structures. The response should address the possibility that all primary roof drains could be clogged due to a previous snowfall. The PMWP may fall as all liquid or a portion as frozen precipitation; please consider both scenarios.

ANSWER:

As stated in SRP Section I.6; the site parameters for the 100-year snowpack maximum snow weight and 48-hour PMWP are provided by the DC application. The design and operating bases for the site-specific climatology are provided by the COL Application.

Relating to the roof design that would prevent the accumulation of PMWP on top of any seismic category I buildings, DCD Subsection 3.4.1.2 discusses the roof drainage design features that exist to limit the effects of PMP. To state that the roof drainage system includes allowances for the PMWP, DCD Revision 1 Subsection 3.4.1.2 is to be revised as "... a drainage system capable of handling the PMP, including allowances for primary roof drainage issues caused by probable maximum winter precipitation."

Impact on DCD

The second sentence in the second paragraph of Subsection 3.4.1.2 in DCD Revision 1 is to incorporate the following change:

- Revise "... a drainage system capable of handling the PMP." to "... a drainage system capable of handling the PMP, including allowances for the primary roof drainage issues caused by probable maximum winter precipitation."

02.03.01-12

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
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RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-12

Please provide a technical basis for the ambient design temperature site parameters listed in DCD Table 2.0-1 and justify that the values are representative of a reasonable number of potential sites in DCD Section 2.3.1.

ANSWER:

The site parameters listed in DCD Table 2.0-1 for ambient design air temperature with exceedance values of zero, one, and five percent, are based on the EPRI Advanced Light Water Reactor Utility Requirements Document (URD) and US-APWR potential sites. These values are considered to bound approximately 75% to 80% of the continental United States (excluding Alaska).

Impact on DCD

DCD Chapter 2 Revision 1 is to incorporate the following changes:

- Add the following as the fifth sentence in Subsection 2.3.1: Exceedance values of zero, one, and five percent, are based on the EPRI Advanced Light Water Reactor Utility Requirements Document (Reference 2.3-8) and US-APWR potential sites. These values are considered to bound approximately 75% to 80% of the continental US (excluding Alaska)."
- Add the following to the end of Subsection 2.3.7: "2.3-8 Advanced Light Water Reactor Utility Requirements Document. Rev. 8, Electric Power Research Institute, Palo Alto, CA, March 1999."

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-13

For each of the U.S. APWR regional climatology site parameters, as presented in DCD Table 2.0-1, please list the structures, systems, and components (SSCs) that make use of this information and the corresponding DCD sections where the SSCs are discussed.

ANSWER:

Clarifications to the NRC's RAI No. 23, question 13, from MHI has led the NRC to determine that the response to this RAI is no longer necessary.

Impact on DCD

There is no impact on DCD.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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**US-APWR Design Certification
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Docket No. 52-021**

RAI NO.: NO. 23 REVISION 0
SRP SECTION: 02.03.01 - REGIONAL CLIMATOLOGY
APPLICATION SECTION: 02.03.01
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.03.01-14

Please specify if the site parameters, as presented in DCD Table 2.0-1, are Tier 1 or Tier 2 information.

ANSWER:

Clarifications to the NRC's RAI No. 23, question 14, from MHI has led the NRC to determine that the response to this RAI is no longer necessary.

Impact on DCD

There is no impact on DCD.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

This completes MHI's responses to the NRC's questions.

Docket No. 52-021
MHI Ref: UAP-HF-08130

Enclosure 12

UAP-HF-08130
Docket No. 52-021

Responses to Request for Additional Information No.24 Revision 0

July 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

7/18/2008

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO.24 REVISION 0
SRP SECTION: 02.04.14 TECHNICAL SPECIFICATIONS AND EMERGENCY
OPERATIONS REQUIREMENTS
APPLICATION SECTION: 02.04.14
DATE OF RAI ISSUE: 6/23/2008

QUESTION NO. : 02.04.14-1

Section 2.4.14 of the FSAR states "A description is to be provided for any emergency protective measures designed to minimize the impact of adverse hydrology-related events on safety-related facilities."

Explain why the impact of seismic and non-seismic information is not clearly stated as the condition for postulated technical specifications as stated in SRP 2.4.14.

ANSWER:

DCD Subsection 2.4.14, Revision 0, is consistent with Regulatory Guide (RG) 1.206, Paragraph C.I.2.4.14. As stated in Section 2.4, the COL Applicant is to provide sufficient information as outlined in SRPs 2.4.1 through 2.4.14 and "as outlined below", including Subsection 2.4.14. Therefore, the potential impact of seismic and non-seismic information on the postulated technical specifications and emergency operations are to be addressed by the COL Applicant in compliance with SRP 2.4.14.

Impact on DCD

There is no direct impact on the DCD as a result of the above RAI. However, MHI will revise the DCD in the following manner for clarity:

DCD Subsection 2.4.14 is to be reformatted to summarize technical specification and emergency operation requirements. A COL Applicant action item is stated in DCD Section 2.4 to provide sufficient information to verify that hydrologic-related events will not affect the safety-basis for the US-APWR. The action item applies to other "Hydrologic Engineering" subsections including technical specification and emergency operation requirements in DCD Subsection 2.4.14. As a result, a statement is included in the reformatted DCD Subsection 2.4.14 to evaluate the potential effects of seismic and non-seismic information on the postulated technical specifications and emergency operations.

Impact on COLA

There is no impact on COLA.

Impact on PRA

There is no impact on PRA.

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