



Plans to Revise the US-APWR DCD

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DCD Revision Plan



- MHI is planning to submit a revision to the US-APWR DCD prior to the Reference-COLA submittal in September 2008
- The revision will mainly include:
 1. Incorporation of customer preference items appropriate for the DCD, such as Technical Specifications
 2. Progress of the detailed engineering design
 3. Incorporation of NRC comments and responses to NRC questions (including editorial changes)
 4. Incorporation of recently submitted technical reports by references and/or summaries

Scope of Revision (1/4)



- **Incorporation of customer preference items**
 - ✓ **Risk-Informed Technical Specifications (RITS) Initiative 4b/5b in Chapter 16:**
 - **Initiative 4b: components applied for Initiative 4b will be increased (currently, 9 LCOs included)**
LCO: Limiting Condition for Operation
 - **Initiative 5b: will be incorporated into the Technical Specifications**
 - **No additional PRA (Chapter 19) included for RITS**
Note) PRA model for RITS will be developed separately (to be discussed at the US-APWR DCWG meeting on April 22)
 - ✓ **Elimination of Steam Converter in Chapter 10**

Additional Information

-PRA for Technical Specification-



DCD:

- PRA model already developed and submitted.
- No additional PRA (Chapter 19) will be included.

COLA:

- PRA will include site-specific related assessment based on the PRA of the DCD.

Post-COL:

- PRA will be further developed and updated in accordance with the ASME Category 2 requirements for the customer's RITS to incorporate as-built information and plant operation procedures.
- The PRA for the RITS will be developed separately.

Scope of Revision (2/4)



➤ Progress of the detailed engineering design

✓ Adjustment of the plant arrangement:

1. Relocation of the battery room from the Reactor Building to the Power Source Building due to re-evaluation of the battery capacity necessary for the required electrical loads
2. Relocation of the TSC (Technical Support Center) from the Auxiliary Building to the Access Building
3. Relocation of the remote shutdown console to a more protected area

✓ Impact on the DCD:

- => Revision of drawings and descriptions
- => Minor revision of the fire hazard analysis
- => No change of the fire and flooding scenarios in the risk evaluation. But, moderate updates of the analysis results

Scope of Revision (3/4)



- **Incorporation of NRC comments and responses to NRC questions**
 - ✓ **Chapter 2:**
 - **Revise to identify, without additional description, the limiting site-specific parameters and the site-specific information to be included in the COLA**
 - **Specify site parameter values as exact values and not approximate or mean values**
 - ✓ **Chapter 3:**
 - **Eliminate the discussion and potential use of seismic experience data by a COL applicant**
 - ✓ **Chapter 8:**
 - **Add a description of grid stability to the safety analyses**

Scope of Revision (4/4)



- **Incorporation of recently submitted technical reports by references and/or summaries**
 - ✓ **Power Source Building (PS/B) structure into Chapter 3**
 - ✓ **Sump strainer description and related information into Chapter 6**
 - ✓ **Sub-compartment analyses into Chapter 6**

DCD Sections to be Revised



Section	Items	Reasons
Tier 1	Building Architectural Layout	Plant Arrangement Change
1.2	General Arrangement	Plant Arrangement Change
2	Expression of Site Parameter	NRC Comments
3.8	Description for PS/B Structure	Incorporating Technical Report
3.10	Description for Seismic Experience Data	NRC Comments
6.3	Description for Sump Strainer, Sub-compartment Analyses	Incorporating Technical Report
7.5	Layout of TSC	Plant Arrangement Change
8.2	Description of grid stability	NRC Comments
8.3	Class 1E Electrical Equipment Layout	Plant Arrangement Change
Appendix 9A	Fire Hazard Analysis	Plant Arrangement Change
10.4	Elimination of Steam Converter	Customer's Preference
11.5	Location of Radiation Monitors	Plant Arrangement Change
12.3	Radiation Zone Map	Plant Arrangement Change
13, Technical Report	Physical Security Assessment	Plant Arrangement Change
Appendix 15A	x/Q	Plant Arrangement Change
16	RITS Initiative 4b/5b	Customer's Preference
19.1.5.2, 19.1.5.3	Internal Fires / Flooding Risk Evaluation	Plant Arrangement Change

No Substantive Impact on the NRC Review Schedule



- The DCD revisions do not involve any changes to the safety analysis or assumptions and are considered to be insignificant.
- The DCD revision will be submitted in August, 2008.
- DCD revision will not impact the NRC's review schedule of the DCD.
- The revised portions of the DCD will be clearly identified.

Conclusions



- **MHI plans to revise the DCD in August 2008.**
- **The revision will be used for the Reference-COL Application to be submitted in September 2008.**
- **Because the scope of the revisions is insignificant, these revisions should not impact the anticipated improvements of the NRC's review schedule.**