

REQUEST FOR ADDITIONAL INFORMATION 702-5518 REVISION 0

2/28/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 07.06 - Interlock Systems Important to Safety

Application Section: 07.06

QUESTIONS for Instrumentation, Controls and Electrical Engineering 2 (ESBWR/ABWR Projects)
(ICE2)

07.06-25

US-APWR, DCD Tier-2, Section 7.6, lists seven interlocks important to safety. It is not clear if there are non-safety related interlocks that are important to safety. MHI is requested to address in the DCD whether there are non-safety related interlocks that are important to safety. If there are, the staff requests MHI to identify and explain these interlocks to ensure their conformance to applicable regulations including their isolation from the safety systems and to assure that their malfunctions would not impact the safety function.

07.06-26

US-APWR, DCD Tier-2, Section 7.6.1, states that "The PSMS provides the interlock systems important to safety for the plant, with the exception of electro-mechanical interlocks within the electrical distribution system" without providing further information on the electro-mechanical interlocks and why these interlocks are not included in Section 7.6 of the DCD. MHI is requested to provide information on the electro-mechanical interlocks (or a pointer to another document) and explain why these interlocks are excluded from Section 7.6 of the DCD. In addition, the exception of the electro-mechanical interlocks has been identified only once and conflicts with other statements in Section 7.6 of the DCD. For example, Section 7.6.2.5 states that "All interlocks important to safety are implemented in the PSMS"; Section 7.6.3 states that "All the interlocks important to safety provide protection for plant mechanical systems or protection to prevent plant accident conditions. All the interlocks are implemented by the PSMS." MHI is requested to describe the DCD statements with regard to implementation of the interlocks important to safety in a consistent manner.