

# REQUEST FOR ADDITIONAL INFORMATION 698-5490 REVISION 2

2/28/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 07.01 - Instrumentation and Controls - Introduction

Application Section: 7.1.3

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

07.01-26

In response to RAI 229-2022, question 07.01-15, MHI stated that continuous self-diagnostic features can eliminate most of the manual surveillance testing required for technical specification compliance. Manual testing and manual calibration verification are specifically provided for functions with no self-diagnostics features. The applicant addressed that the coverage of self-diagnostics and manual testing is described in TRs, MUAP-07004, and MUAP-07005. But, these TRs did not describe the Technical Specification (TS) surveillance requirements for the self-diagnostic features.

The staff requests MHI to provide the TS surveillance requirements for the self-diagnostic features themselves in accordance with SRP BTP 7-17 as guidelines. In BTP 7-17, automatic test features which are credited with performing surveillance test functions should be verified during periodic surveillance testing consistent with the technical specifications and plant procedures. Also, 10 CFR Part 50 Appendix B, Criterion XII, "Control of Measuring and Test Equipment," requires in part that measures be established to assure that measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy with necessary limits. As delineated in RG 1.118, periodic testing consists of functional tests and checks, calibration verification, and time response.

Reference: MHI's Responses to US-APWR DCD RAI No. 229-2022... ; MHI Ref: UAP-HF-09196; dated April 28, 2009; ML091250290.