

February 7, 2014

MEMORANDUM TO: Samuel Lee, Chief  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

FROM: Dennis J. Galvin, Project Manager */RA/*  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: REPORT OF THE NOVEMBER 4 - 8, 2013, AUDIT REGARDING  
THE UNITED STATES - ADVANCED PRESSURIZED WATER  
REACTOR DESIGN CERTIFICATION DOCUMENT SECTIONS  
3.8.1, 3.8.3, 3.8.4, AND 3.8.5

As part of its review of the United States - Advanced Pressurized Water Reactor (US-APWR) Design Certification application between November 4 and 8, 2013, members of the U.S. Nuclear Regulatory Commission (NRC) staff performed an audit at the Mitsubishi Nuclear Energy Systems office in Arlington, Virginia. The purpose of the Design Certification Document (DCD) Section 3.8.3 portion of the audit was to review design reports and calculations for the design of the containment internal structures (CIS). The purpose of the DCD Sections 3.8.1, 3.8.4, and 3.8.5 portion of the audit was to review the design reports for the Reactor Building (R/B) Complex which consists of the Prestressed Concrete Containment Vessel (PCCV), R/B, the East Power Source Building (PS/B), the West PS/B, the Auxiliary Building (A/B), and the Essential Service Water Pipe Chase (ESWPC); the common basemat for the nuclear island; and the related documentation and supporting calculations for the structural design of those structures.

Due to the NRC furlough between October 10 - 16, 2013, the Design DCD Section 3.8.3 audit originally planned for October 21 - 25, 2013, was moved to November 4 - 8, 2013. The audit plan for DCD Section 3.8.3 can be found in the Agencywide Document Access and Management System (ADAMS) under accession number ML13255A051, dated October 8, 2013. The audit plan for DCD Sections 3.8.1, 3.8.4, and 3.8.5 can be found in ADAMS under accession number ML13295A304, dated October 25, 2013. The results of the joint audit have been prepared, entitled "United States - Advanced Pressurized Water Reactor Containment Internal Structures and Structural Analysis and Design Audit Report," and can be found in ADAMS under accession number ML13354C067 and is also provided as Enclosure 1.

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A list of attendees can be found in ADAMS under accession number ML13357A156 and is also provided as Enclosure 2. A list of documents made available to the NRC staff can be found in ADAMS under accession number ML13357A169 and is also provided as Enclosure 3.

Docket No.: 52-021

Enclosures:

As stated

cc w/ enclosures: See next page

A list of attendees can be found in ADAMS under accession number ML13357A156 and is also provided as Enclosure 2. A list of documents made available to the NRC staff can be found in ADAMS under accession number ML13357A169 and is also provided as Enclosure 3.

Docket No.: 52-021

Enclosures:  
As stated

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**ADAMS Accession Nos.:**

**ML13357A173 - Package**

**ML13354B979 – Memorandum**

**ML13354C067 – Audit Report**

**ML13357A156 – List of Attendees**

**ML13357A169 – List of Documents**

**NRC-001**

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