

September 20, 2011

MEMORANDUM TO: Hossein G. Hamzehee, Chief
US-APWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

FROM: Ruth C. Reyes, Project Manager /RA/
US-APWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: THE U.S. NUCLEAR REGULATORY COMMISSION REPORT
FOR THE AUDIT PERFORMED ON JUNE 6 - 9, 2011,
REGARDING THE UNITED STATES - ADVANCED
PRESSURIZED WATER REACTOR DESIGN CERTIFICATION
SECTIONS 6.2 AND 6.3, CONTAINMENT SUMP STRAINER
HEAD LOSS TEST

As part of its review of the United States - Advanced Pressurized Water Reactor Design Certification (DC) application, members of the Containment and Ventilation Branch, members of the Reactor System, Nuclear performance and Code review, of the Division of Safety Systems and Risk Assessment, and members of the Component Integrity, Performance, and Testing Branch of the Division of Engineering; performed an audit on June 6 - 9, 2011, at Alden Research Laboratory in Holden, Massachusetts. The purpose of the audit was to review and evaluate testing methods and implementation for the Mitsubishi Heavy Industries Ltd. DC Section 6.2.2, "Containment Heat Removal Systems," and Section 6.3, "Emergency Core Cooling Systems," as well as related Technical Report MUAP-08001-P, Revision 2, "US-APWR Sump Strainer Performance."

The plan for this audit is documented and can be found in the Agencywide Documents Access and Management System (ADAMS) under accession number ML111450836, dated May 27, 2011. A List of Attendees is provided as Enclosure 1. A List of Documents Made Available to the NRC Staff is provided as Enclosure 2. The results of the audit are documented in Enclosure 3 however, it contains proprietary information and therefore, is not available to the public.

Docket No. 52-021

Enclosures:
As stated

cc w/encls 1 and 2: See next page

CONTACT: Ruth C. Reyes, NRO/DNRL
(301) 415-3249

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US-APWR Projects Branch
Division of New Reactor Licensing
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DATE	09/19/2011	09/20/2011		

OFFICIAL RECORD COPY

Letter to Hossein Hamzehee from Ruth C. Reyes Regarding the Audit Performed On
June 6 - 9, 2011, Regarding The United States - Advanced Pressurized Water Reactor Design
Certification Sections 6.2 And 6.3, Containment Sump Strainer Head Loss Test

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List of Attendees

US-APWR Design Certification Sections 6.2 & 6.3
Containment Sump Strainer Head Loss Test for the
Audit Held on June 6, 2011

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Ruth C Reyes	US Nuclear Regulatory Commission
Eduardo Sastre	US Nuclear Regulatory Commission
Chris VanWert	US Nuclear Regulatory Commission

List of Attendees

US-APWR Design Certification Sections 6.2 & 6.3
Containment Sump Strainer Head Loss Test for the
Audit Held on June 7, 2011

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List of Attendees

US-APWR Design Certification Sections 6.2 & 6.3
Containment Sump Strainer Head Loss Test for the
Audit Held on June 8, 2011

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List of Attendees

US-APWR Design Certification Sections 6.2 & 6.3
Containment Sump Strainer Head Loss Test for the
Audit Held on June 9, 2011

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LIST OF DOCUMENTS MADE AVAILABLE TO THE NRC STAFF

1. "US-APWR Sump Strainer Performance," MUAP-08001 Revision 3, Mitsubishi Heavy Industries, Ltd., dated June 2010 (ML103370586).
2. "US-APWR Sump Debris Chemical Effects Test Plan," MUAP-08006 Revision 1, Mitsubishi Heavy Industries, Ltd., dated November 2008 (ML083390119).
3. "US-APWR Sump Debris Chemical Effects Test Results," MUAP-08011 Revision 0, Mitsubishi Heavy Industries, Ltd., dated November 2008 (ML083390118).
4. "US-APWR Sump Strainer Downstream Effects," MUAP-08013 Revision 1, Mitsubishi Heavy Industries, Ltd., dated January 2011 (ML110350251).
5. "US-APWR Test Plan for ECCS Strainer Performance Testing 2011," AREVA NP Inc. 63-9160802 Revision 0, dated June 2011.
6. "Sump Strainer Test Plan for Fiber Only Bypass Test and Head Loss Test," 4CS-UAP-20110029 Revision 0, Mitsubishi Heavy Industries, Ltd., dated June 2011 (ML11160A107).

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(Revised 08/25/2011)

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