

October 2, 2012

MEMORANDUM TO: Amy M. Snyder, Acting Chief
Licensing Branch 2
Division of New Reactor Licensing
Office of New Reactors

FROM: Ruth C. Reyes, Project Manager */RA/*
Licensing Branch 2
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: THE U.S. NUCLEAR REGULATORY COMMISSION REPORT FOR
THE AUDIT PERFORMED ON MAY 16-17, 2012, REGARDING THE
UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR
SOFTWARE QUALITY ASSURANCE REVIEW OF VIPRE-01M CODE

As part of its review of the United States - Advanced Pressurized Water Reactor Topical Report MUAP-07009, "Thermal Design Methodology," members of the Reactor System, Nuclear Performance and Code Review Branch, of the Division of Safety Systems and Risk Assessment, of the Office of New Reactors; and members of the Nuclear Performance and Code Review Branch, of the Division of Systems Safety, of the Office of Nuclear Reactor Regulation; performed an audit between May 16 - 17, 2012, at the Mitsubishi Nuclear Energy Systems, Inc. office in Arlington, Virginia. The purpose of the audit was to review Mitsubishi Heavy Industries Ltd. responses to Request for Additional Information Questions 4.3 through 4.6 as documented in UAP-HF-10267, and to review the non-fatal warning/error messages associated with the Chapter 15 VIPRE-01M licensing analyses, the validation of the WRB-1 and WRB-2 Departure from Nucleate Boiling Ratio correlations, and the sensitivity analysis used to support Topical Report MUAP-07009.

The plan for this audit is documented and can be found in the Agencywide Documents Access and Management System (ADAMS) under accession number ML121220440, dated May 9, 2012. A List of Attendees is provided as Enclosure 1. The results of the audit are documented in Enclosure 2 however; it contains proprietary information and therefore, is not available to the public.

Docket No. 52-021

Enclosures:
As stated

cc w/encl 1: See next page

CONTACT: Ruth C. Reyes, NRO/DNRL
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DATE	09/17/2012	09/17/2012	09/18/2012	09/24/2012	10/02/2012	10/02/2012

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List of Attendees

Review of the US-APWR Software Quality Assurance of
VIPRE-01M Code Audit Report for the
Audit Held on May 16, 2012

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Takayuki Suemura	Mitsubishi Heavy Industries, Ltd.
Shigeki Suzuki	Mitsubishi Heavy Industries, Ltd.
Masaya Hoshi	Mitsubishi Nuclear Energy Systems
Kevin Lynn	Mitsubishi Nuclear Energy Systems
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Ryan Sprengel	Mitsubishi Nuclear Energy Systems
Kurt Walter	Mitsubishi Nuclear Energy Systems
Joshua Kaizer	US Nuclear Regulatory Commission
Ruth C Reyes	US Nuclear Regulatory Commission
Jeff Schmidt	US Nuclear Regulatory Commission

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(Revised 10/02/2012)

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