

October 27, 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 OCTOBER 19, 20 and 25,
2010, REGARDING THE UNITED STATES - ADVANCED
PRESSURIZED WATER REACTOR SOFTWARE QUALITY
ASSURANCE REVIEW OF M-RELAP-5 AND VIPRE-01M
CODES

As part of its review of the United States - Advanced Pressurized Water Reactor Topical Reports MUAP-07009, "Thermal Design Methodology," and MUAP-07013, "Small Break LOCA Methodology," members of the Reactor System, Nuclear Performance and Code Review Branch, of the Division of Safety Systems and Risk Assessment, and members of the Nuclear Performance and Code Review Branch, of the Division of Safety Systems, in the Office of Nuclear Reactor Regulation; performed an audit on October 19, 20 and 25, 2010, at the Mitsubishi Heavy Industries, Ltd. (MHI) offices in Arlington, Virginia. The purpose of the audit was to review the MHI vendor's software quality assurance program for computer codes used for safety analysis, in particular, M-RELAP5 and VIPRE-01M.

The plan for this audit is documented and can be found in the Agencywide Documents Access and Management System under accession number ML102730163, dated October 7, 2010. 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. A List of Documents Made Available to the NRC Staff is included in the audit report.

Docket No. 52-021

Enclosures:
As stated

cc w/encls: See next page

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

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US-APWR Projects Branch
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OFFICIAL RECORD COPY

Letter to Hossein Hamzehee from Ruth C. Reyes Regarding the Audit Performed On
October 19, 20, and 25, 2010, Regarding The United States - Advanced Pressurized
Water Reactor Design Certification Software Quality Assurance Review Of M-Relap-5 And
Vipre-01m Codes

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Computer Codes M-RELAP5 and VIPRE-01M
For the audit held on October 19, 2010

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(Revised 09/12/2011)

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