

August 18, 2011

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

APPLICATION: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR  
DESIGN CERTIFICATION REVIEW

SUBJECT: SUMMARY OF THE JUNE 22, 2011, MEETING WITH MITSUBISHI  
HEAVY INDUSTRIES, LTD., TO DISCUSS THE UNITED STATES -  
ADVANCED PRESSURIZED WATER REACTOR DESIGN CONTROL  
DOCUMENT SECTION 3.6.2, "PIPE HAZARDS ANALYSES"

On June 22, 2011, a Category 1 closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and Mitsubishi Heavy Industries, Ltd. (MHI) at the office of the NRC, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The meeting notice was issued on June 9, 2011, and was documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML111590105. The notice included the meeting agenda. The purpose of the meeting was to discuss the applicant's pipe hazards analyses, which is addressed in the United States - Advanced Pressurized Water Reactor (US-APWR) Design Control Document, Section 3.6.2, "Pipe Hazards Analyses."

MHI presented its approach for addressing jet pressure oscillation as part of its pipe hazards analyses. MHI's presentation contains proprietary information and therefore is not available to the public. The NRC staff indicated that MHI's approach should be generalized, and applied to any impinged upon structure, including barriers and shields. The NRC staff also identified concerns with various modeling parameters used in MHI's approach. A list of attendees is provided as an enclosure.

Please direct any inquiries to me at 301-415-6256, or via e-mail to [Dennis.Galvin@nrc.gov](mailto:Dennis.Galvin@nrc.gov).

/RA/

Dennis Galvin, Project Manager  
US-APWR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

Enclosure:  
List of Attendees

cc w/encl.: See next page

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

APPLICATION: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR  
DESIGN CERTIFICATION REVIEW

SUBJECT: SUMMARY OF THE JUNE 22, 2011, MEETING WITH MITSUBISHI  
HEAVY INDUSTRIES, LTD., TO DISCUSS THE UNITED STATES -  
ADVANCED PRESSURIZED WATER REACTOR DESIGN CONTROL  
DOCUMENT SECTION 3.6.2, "PIPE HAZARDS ANALYSES"

On June 22, 2011, a Category 1 closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and Mitsubishi Heavy Industries, Ltd. (MHI) at the office of the NRC, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The meeting notice was issued on June 9, 2011, and was documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML111590105. The notice included the meeting agenda. The purpose of the meeting was to discuss the applicant's pipe hazards analyses, which is addressed in the United States - Advanced Pressurized Water Reactor (US-APWR) Design Control Document, Section 3.6.2, "Pipe Hazards Analyses."

MHI presented its approach for addressing jet pressure oscillation as part of its pipe hazards analyses. MHI's presentation contains proprietary information and therefore is not available to the public. The NRC staff indicated that MHI's approach should be generalized, and applied to any impinged upon structure, including barriers and shields. The NRC staff also identified concerns with various modeling parameters used in MHI's approach. A list of attendees is provided as an enclosure.

Please direct any inquiries to me at 301-415-6256, or via e-mail to [Dennis.Galvin@nrc.gov](mailto:Dennis.Galvin@nrc.gov).

/RA/

Dennis Galvin, Project Manager  
US-APWR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

Enclosure:  
List of Attendees

cc w/encl.: See next page

DISTRIBUTION:

PUBLIC	JCiocco, NRO	RidsAcrsAcnwMailCenter
NMIP R/F	RidsOgcMailCenter	RidsNroDnrINmip
D081	YLi, NRO	RidsNroLACSmith
DGalvin, NRO	RidsOpaMailCenter	

ADAMS Accession No.: ML112160423      Pkg.: ML112160417      NRC-001

OFFICE	DNRL/NMIP: PM	DNRL/NMIP: LA	DNRL/NMIP: PM	DNRL/NMIP: PM (signed)
NAME	DGalvin	CSmith	JCiocco	DGalvin
DATE	08/18/11	08/17/11	08/18/11	08/18/11

OFFICIAL RECORD COPY

List of Attendees

Meeting with Mitsubishi Heavy Industries, Ltd. to Discuss the United States - Advanced  
Pressurized Water Reactor Design Control Document, Section 3.6.2, "Pipe Hazards Analyses,"  
Held on June 22, 2011

<b><u>NAME</u></b>	<b><u>AGENCY/AFFILIATION</u></b>
Chad Wilhelm	Bechtel
James Gibson	Dominion Virginia Power
Fred Moody	Mitsubishi Heavy Industries, Ltd.
Junya Kono	Mitsubishi Heavy Industries, Ltd.
Yasushi Nagata	Mitsubishi Heavy Industries, Ltd.
Yoshiyuki Kondo	Mitsubishi Heavy Industries, Ltd.
Con Wilson	Mitsubishi Nuclear Energy Systems - Consultant
Erin Wisler	Mitsubishi Nuclear Energy Systems
Hiroshi Hamamoto	Mitsubishi Nuclear Energy Systems
Joe Tapia	Mitsubishi Nuclear Energy Systems
Ryan Sprengel	Mitsubishi Nuclear Energy Systems
Yosuke Katsura	Mitsubishi Nuclear Energy Systems
Jules Lindau	Penn State /ARL
Steve Hambric	Penn State /ARL
Dennis Galvin	U.S. Nuclear Regulatory Commission
Yueh-Li	U.S. Nuclear Regulatory Commission

Enclosure

cc:

Ms. Michele Boyd  
Legislative Director  
Energy Program  
Public Citizens Critical Mass Energy  
and Environmental Program  
215 Pennsylvania Avenue, SE  
Washington, DC 20003

Atsushi Kumaki  
Mitsubishi Heavy Industries, Ltd.  
APWR Promoting Department  
Wadasaki-cho- 1-1-1, Hyogo-ku  
Kobe 652-8585 JAPAN

Dr. Masanori Onozuka  
Mitsubishi Nuclear Energy Systems, Inc.  
1001 19th Street North, Suite 710  
Arlington, VA 22201-5426

Dr. C. Keith Paulson  
Mitsubishi Nuclear Energy Systems, Inc.  
300 Oxford Drive, Suite 301  
Monroeville, PA 15146

Mr. Tony Robinson  
Vice President  
Project & Commercial Operations  
New Builds - North American  
AREVA NP, Inc.  
3315 Old Forest Road  
Lynchburg, VA 24501

Mr. Robert E. Sweeney  
IBEX ESI  
4641 Montgomery Avenue  
Suite 350  
Bethesda, MD 20814

Mr. Gary Wright, Director  
Division of Nuclear Facility Safety  
Illinois Emergency Management Agency  
1035 Outer Park Drive  
Springfield, IL 62704

DC Mitsubishi - US APWR Mailing List

Email

APH@NEI.org (Adrian Heymer)  
atsushi\_kumaki@mhi.co.jp (Atsushi Kumaki)  
awc@nei.org (Anne W. Cottingham)  
bgattoni@roe.com (William (Bill) Gattoni)  
BrinkmCB@westinghouse.com (Charles Brinkman)  
ck\_paulson@mnes-us.com (C Keith Paulson)  
ckpaulson@aol.com (C.K. Paulson)  
CumminWE@Westinghouse.com (Edward W. Cummins)  
cwaltman@roe.com (C. Waltman)  
david.hinds@ge.com (David Hinds)  
david.lewis@pillsburylaw.com (David Lewis)  
DeLaBarreR@state.gov (R. DeLaBarre)  
Derlinda.Bailey@chguernsey.com (Derinda Bailey)  
donald.woodlan@luminant.com (Donald Woodlan)  
eliza.seedcoalition@gmail.com (Elza Brown)  
erg-xl@cox.net (Eddie R. Grant)  
ewallace@nuscalepower.com (Ed Wallace)  
f.tanaka@mnes-us.com  
gcesare@enercon.com (Guy Cesare)  
james.beard@gene.ge.com (James Beard)  
jerald.head@ge.com (Jerald G. Head)  
jim.riccio@wdc.greenpeace.org (James Riccio)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
jrund@morganlewis.com (Jonathan Rund)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
lon.burnam@house.state.tx.us (Lon Burnam)  
m.goto@mnes-us.com  
Marc.Brooks@dhs.gov (Marc Brooks)  
maria.webb@pillsburylaw.com (Maria Webb)  
mark.beaumont@wsms.com (Mark Beaumont)  
Mark.Crisp@chguernsey.com (Mark Crisp)  
mark.g.giles@dom.com (Mark Giles)  
mark.vannoy@mnes-us.com  
masahiko\_kaneda@mhi.co.jp (Masahiko Kaneda)  
masanori\_onozuka@mnes-us.com (Masanori Onozuka)  
masato.oba@mnes-us.com  
masayuki\_kambara@mhi.co.jp (Masayuki Kambara)  
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)  
mayorsouthern@granbury.org (Mayor David Southern)  
media@nei.org (Scott Peterson)  
mike\_moran@fpl.com (Mike Moran)  
MSF@nei.org (Marvin Fertel)

DC Mitsubishi - US APWR Mailing List  
mutsumi\_ishida@mnes-us.com (Mutsumi Ishida)  
mwetterhahn@winston.com (M. Wetterhahn)  
nan\_sirirat@mnes-us.com (Sirirat Mongkolkam)  
nirsnet@nirs.org (Michael Mariotte)  
Nuclaw@mindspring.com (Robert Temple)  
patriciaL.campbell@ge.com (Patricia L. Campbell)  
paul.gaukler@pillsburylaw.com (Paul Gaukler)  
Paul@beyondnuclear.org (Paul Gunter)  
pbessette@morganlewis.com (Paul Bessette)  
plarimore@talisman-intl.com (Patty Larimore)  
pshastings@duke-energy.com (Peter Hastings)  
RJB@NEI.org (Russell Bell)  
ryan\_sprengel@mnes-us.com (Ryan Sprengel)  
sabinski@suddenlink.net (Steve A. Bennett)  
sandra.sloan@areva.com (Sandra Sloan)  
satoshi\_hanada@mnes-us.com (Satoshi Hanada)  
satoshi\_watanabe@mnes-us.com (Satoshi Watanabe)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
shinji\_kawanago@mnes-us.com (Shinji Kawanago)  
stephan.moen@ge.com (Stephan Moen)  
steven.hucik@ge.com (Steven Hucik)  
strambgb@westinghouse.com (George Stramback)  
Tansel.Selekler@nuclear.energy.gov (Tansel Selekler)  
tgilder1@luminant.com (Tim Gilder)  
tmatthews@morganlewis.com (T. Matthews)  
tom.miller@hq.doe.gov (Tom Miller)  
trsmith@winston.com (Tyson Smith)  
Vanessa.quinn@dhs.gov (Vanessa Quinn)  
vijukrp@westinghouse.com (Ronald P. Vijuk)  
Wanda.K.Marshall@dom.com (Wanda K. Marshall)  
whorin@winston.com (W. Horin)  
yoshiki\_ogata@mhi.co.jp (Yoshiki Ogata)