

July 2, 2009

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

FACILITY: US-APWR STANDARD DESIGN CERTIFICATION REVIEW

SUBJECT: SUMMARY OF THE APRIL 14 - 15, 2009, MEETING REGARDING
PROBABILISTIC RISK ASSESSMENT LEVEL 1 INTERNAL/EXTERNAL,
INSTRUMENTATION AND CONTROL AND SHUTDOWN ISSUES.

On April 14 - 15, 2009, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Mitsubishi Heavy Industries, Ltd. (MHI) at The Legacy Hotel, 1775 Rockville Pike, Rockville, Maryland. The purpose of this meeting was to discuss Probabilistic Risk Assessment (PRA) Level 1 Internal/External, Instrumentation and Control (I & C) and Shutdown issues. Enclosure 1 lists the meeting attendees.

Presentations

The NRC presented a Summary of Issues from the NRC Review of the US-APWR Level 1 PRA for Operation at Power (Enclosure 2, ADAMS ML091200166). Next, MHI made a presentation on the Digital I & C PRA Modeling. There was also a discussion on the intent of specific RAI questions. During MHI's presentation on these subjects, the meeting was closed to allow discussion of proprietary information.

Discussions on specific RAI issues identified by the NRC

The first day, the NRC and MHI discussed issues related to specific RAI questions regarding PRA Level 1 Internal/External, I & C and Shutdown issues. Detailed discussions with MHI included modeling of I & C systems in the PRA, lack of modeling of potential failures, methodology and calculations, failure probabilities, uncertainty and sensitivity in PRA results and PRA insights and assumptions.

The second day, the NRC continued discussions with MHI on PRA Level 1 I & C and Shutdown issues. Also, there were discussions on RAIs regarding PRA Internal Fire and Flooding. MHI mentioned that the fire and flooding responses would be incorporated in the next revision of the DCD. In addition, there were discussions on RAIs regarding shutdown success criteria, gravity injection strategy, steam generator heat removal strategy, equipment availability during shutdown, plans for Level 2 shutdown PRA and plans for gathering insights and assumptions in the DCD. Enclosure 3 is a list of Action Items that was produced during the meeting.

Public Participation

This was a Category 1 meeting and members of the public were given a chance to speak at the end of each break period. However, no members of the public were present at the meeting.

MHI thanked the NRC for the detailed discussion on PRA Level 1 Internal/External, I & C and Shutdown issues. The NRC staff closed the meeting by thanking all for attending and stating that they look forward to the future MHI submittals.

Please direct any inquiries to Paul Kallan at 301-415-2809 or via e-mail at Paul.Kallan@nrc.gov.

Sincerely,

/RA/

Paul Kallan, Project Manager
US-APWR Project Branch
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-021

Enclosures:

1. List of Attendees
2. NRC Meeting Handouts (ML091200166)
3. List of Action Items (ML091590109)

cc w/enclosures: See next page

Public Participation

This was a Category 1 meeting and members of the public were given a chance to speak at the end of each break period. However, no members of the public were present at the meeting.

MHI thanked the NRC for the detailed discussion on PRA Level 1 Internal/External, I & C and Shutdown issues. The NRC staff closed the meeting by thanking all for attending and stating that they look forward to the future MHI submittals.

Please direct any inquiries to Paul Kallan at 301-415-2809 or via e-mail at Paul.Kallan@nrc.gov.

Sincerely,

/RA/

Paul Kallan, Project Manager
US-APWR Project Branch
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-021

Enclosures:

1. List of Attendees
2. NRC Meeting Handouts (ML091200166)
3. List of Action Items (ML091590109)

cc w/enclosures: See next page

DISTRIBUTION:

PUBLIC	RidsNroDnrlNmip	RidsNroDnrl	RBeacom, NRO
NMIP R/F	RidsLACSmith	NSaltos, NRO	PKallan, NRO
D081	RidsOgcMailCenter	TClark, NRO	CBickett, Rgn I
JCiocco, NRO	RidsAcrcAcnwMailCenter	JLai, NRO	LMrowca, NRO

*Concurred via email

Accession No.: ML091590025

OFFICE	DNRL/NMIP: PM	DNRL/NMIP: LA	DNRL/NMIP: PM	DNRL/NMIP: PM
NAME	PKallan	CSmith*	JCiocco	PKallan
DATE	06/17/2009	07/01/2009	06/19/2009	07/02/2009

OFFICIAL RECORD COPY

Public Meeting Attendance Sheet

Name	Organization/Affiliation
Shinji Kawango	MHI
Makoto Takashima	MHI
Hiroshi Shirasaw	MHI
Katsuya Kuroiwa	MHI
Futoshi Tanaka	MHI
Ryan Sprengel	MNES
Gene Hughes	ETRANCO
Carey Bickett	NRC
Lynn Mrowca	NRC
Paul Kallan	NRC
Nicholas Saltos	NRC
Jeff Ciocco	NRC
Theresa Clark	NRC
Royce Beacom	NRC
John Lai	NRC

DC Mitsubishi - US APWR Mailing List
cc:

(Revised 04/01/2009)

Mr. Glenn H. Archinoff
AECL Technologies
481 North Frederick Avenue
Suite 405
Gaithersburg, MD 20877

Mr. Ed Wallace
General Manager - Projects
PBMR Pty LTD
P. O. Box 9396
Centurion 0046
Republic of South Africa

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

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

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.
2300 Wilson Blvd.
Suite 300
Arlington, VA 22201-5426

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

Mr. Tom Sliva
7207 IBM Drive
Charlotte, NC 28262

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

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)
BrinkmCB@westinghouse.com (Charles Brinkman)
chris.maslak@ge.com (Chris Maslak)
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)
donald.woodlan@luminant.com (Donald Woodlan)
erg-xl@cox.net (Eddie R. Grant)
gcesare@enercon.com (Guy Cesare)
greshaja@westinghouse.com (James Gresham)
james.beard@gene.ge.com (James Beard)
jerald.head@ge.com (Jerald G. Head)
jgutierrez@morganlewis.com (Jay M. Gutierrez)
jim.riccio@wdc.greenpeace.org (James Riccio)
jin_chung@mnes-us.com
JJNesrsta@cpsenergy.com (James J. Nesrsta)
John.O'Neill@pillsburylaw.com (John O'Neill)
Joseph_Hegner@dom.com (Joseph Hegner)
kcrogers@aol.com (K. C. Rogers)
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)
Marc.Brooks@dhs.gov (Marc Brooks)
maria.webb@pillsburylaw.com (Maria Webb)
mark.beaumont@wsms.com (Mark Beaumont)
masahiko_kaneda@mhi.co.jp (Masahiko Kaneda)
masanori_onozuka@mnes-us.com (Masanori Onozuka)
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)
mutsumi_ishida@mnes-us.com (Mutsumi Ishida)
mwetterhahn@winston.com (M. Wetterhahn)
nan_sirirat@mnes-us.com (Sirirat Mongkolkam)
nirsnet@nirs.org (Michael Mariotte)

DC Mitsubishi - US APWR Mailing List

patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
plarimore@talisman-intl.com (Patty Larimore)
pshastings@duke-energy.com (Peter Hastings)
RJB@NEI.org (Russell Bell)
RKTemple@cpsenergy.com (R.K. Temple)
Russell.Wells@Areva.com (Russell Wells)
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)
Tansel.Selekler@nuclear.energy.gov (Tansel Seleker)
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)
VictorB@bv.com (Bill Victor)
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)