

May 18, 2010

MEMORANDUM TO: Edwin M. Hackett, Executive Director  
Advisory Committee on Reactor Safeguards  
and Advisory Committee on Nuclear Waste

FROM: Frank M. Akstulewicz, Deputy Director  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR  
DESIGN CERTIFICATION APPLICATION - SAFETY EVALUATION  
REPORT WITH OPEN ITEMS FOR CHAPTER 2, "SITE  
CHARACTERISTICS"

By letter dated December 31, 2007, as supplemented by letter dated March 27, 2008, and April 16, 2008, Mitsubishi Heavy Industries, Ltd. (MHI) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for a standard design certification (DC) of the United States – Advanced Pressurized Water Reactor (US-APWR), pursuant to Title 10 of the *Code of Federal Regulations* Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Subsequent to the original application, MHI has submitted Revisions 1 and 2 of the US-APWR Final Safety Analysis Report (FSAR) by letters dated August 29, 2008, and October 27, 2009, in the Agencywide Documents Access and Management System (ADAMS) under Accession Numbers ML082480524 and ML093070198. The revisions to the FSAR include changes associated with responses to NRC Requests for Additional Information (RAIs) submitted through August 2009.

Based on our review of the application, the staff prepared a Safety Evaluation Report (SER) with Open Items for Chapter 2, "Site Characteristics." Unless otherwise stated in the SER with Open Items, the staff's review was based on Revision 2 of the application and MHI's responses to RAIs. The SER with Open Items is being provided to support the upcoming meeting of the subcommittee of the Advisory Committee on Reactor Safeguards (ACRS) scheduled to be held in June 2010. The ACRS Full Committee meeting will be held at a later date. Issuance of this SER is an important milestone in the NRC staff's review to determine whether MHI's application meets the Commission's regulations.

The staff has reviewed the Memorandum to the Executive Director for Operations dated February 17, 2010, and reviewed our submitted information against the categories which the ACRS requested be used to highlight information for review by the Committee. Our assessment of this chapter is that there are no items that meet the categories for discussion with the Committee.

The staff concludes that the SER with Open Items does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the SER from public disclosure for ten calendar days to allow MHI the opportunity to

E.M. Hackett

- 2 -

verify the staff's conclusion that the SER contains no such exempt information. Therefore, the staff requests that the ACRS withhold the SER with Open Items from public disclosure until the information has been released publicly in ADAMS. The Accession No. for the SER with Open Items is ML101330474

The staff will inform the ACRS immediately if MHI requests that any of the information in the SER with Open Items should be withheld from public disclosure.

If you should have any questions, please contact Mr. Michael S. Magee, the Chapter 2 Project Manager, at (301) 415-6988, or via e-mail at [Michael.Magee@nrc.gov](mailto:Michael.Magee@nrc.gov) or Mr. Jeffrey Ciocco, the Lead Project Manager for the US-APWR DC application at (301) 415-6391, or via e-mail at [Jeff.Ciocco@nrc.gov](mailto:Jeff.Ciocco@nrc.gov).

*/RA/*

Frank M. Akstulewicz, Deputy Director  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

cc: See next page

verify the staff's conclusion that the SER contains no such exempt information. Therefore, the staff requests that the ACRS withhold the SER with Open Items from public disclosure until the information has been released publicly in ADAMS. The Accession No. for the SER with Open Items is ML101330474

The staff will inform the ACRS immediately if MHI requests that any of the information in the SER with Open Items should be withheld from public disclosure.

If you should have any questions, please contact Mr. Michael S. Magee, the Chapter 2 Project Manager, at (301) 415-6988, or via e-mail at [Michael.Magee@nrc.gov](mailto:Michael.Magee@nrc.gov) or Mr. Jeffrey Ciocco, the Lead Project Manager for the US-APWR DC application at (301) 415-6391, or via e-mail at [Jeff.Ciocco@nrc.gov](mailto:Jeff.Ciocco@nrc.gov).

**/RA/**

Frank M. Akstulewicz, Deputy Director  
 Division of New Reactor Licensing  
 Office of New Reactors

Docket No. 52-021

cc: See next page

**DISTRIBUTION:**

PUBLIC	JCiocco, NRO	RidsNroDserRgs1
NMIP R/F	SVrahoretis, OGC	RidsNroDserRgs2
D081	RidsNroDnrlNmip	RidsNroDserRsac
FAkstulewicz, NRO	RidsNroLACSmith	RidsNroDserRheb
MMagee, NRO	RidsOgcMailCenter	RidsAcrsAcnwMailCenter

**ADAMS Accession No.: ML101030829; Pkg: ML101320253; \* via e-mail NRC-001**

<b>OFFICE</b>	DNRL/NMIP: PM	DNRL/NMIP: LA	DNRL/NMIP: PM	DSER/RGS1: BC	DSER/RGS2: BC
<b>NAME</b>	MMagee	CSmith*	JCiocco	RKaras*	CCook*
<b>DATE</b>	05/13/2010	05/12/2010	05/ /2010	05/18/2010	05/18/2010
<b>OFFICE</b>	DSER/RSAC: BC	DSER/RHEB: BC	DNRL/NMIP: BC	OGC	DNRL: DD
<b>NAME</b>	(DBrown for) SSamaddar	RRaione	HHamzehee	SVrahoretis	FAkstulewicz
<b>DATE</b>	05/18/2010	05/17/2010	05/18/2010	05/17/2010	05/18/2010

**OFFICIAL RECORD COPY**

DC Mitsubishi - US APWR Mailing List  
cc:

(Revised 05/12/2010)

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.  
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. Tom Sliva  
7207 IBM Drive  
Charlotte, NC 28262

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

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

## 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)  
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)  
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)  
gcesare@enercon.com (Guy Cesare)  
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  
John.O'Neill@pillsburylaw.com (John O'Neill)  
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)  
Marc.Brooks@dhs.gov (Marc Brooks)  
maria.webb@pillsburylaw.com (Maria Webb)  
mark.beaumont@wsms.com (Mark Beaumont)  
Mark.Crisp@chguernsey.com (Mark Crisp)  
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)

DC Mitsubishi - US APWR Mailing List

nan\_sirirat@mnes-us.com (Sirirat Mongkolkam)  
nirsnet@nirs.org (Michael Mariotte)  
NuLaw@mindspring.com (Robert Temple)  
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)  
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)  
strambgb@westinghouse.com (George Stramback)  
Tansel.Selekler@nuclear.energy.gov (Tansel Seleklek)  
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)