

June 10, 2011

Dr. Said Abdel-Khalik, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: HIGH TEMPERATURE GAS-COOLED REACTOR NUCLEAR REGULATORY  
COMMISSION RESEARCH PLAN

Dear Dr. Abdel-Khalik:

Thank you very much for the positive feedback by the Advisory Committee on Reactor Safeguards (ACRS or the Committee) members on the subject provided in your letter dated May 20, 2011. The staff appreciates and agrees with the conclusions and recommendations offered by the Committee.

Regarding your recommendation for the staff to continue to identify the need for additional experimental data, the staff fully intends to follow that strategy as the high-temperature gas-cooled reactor (HTGR) design evolves. As noted by the Committee, given the present state of design information, the current version of the HTGR plan is a good step toward identifying the research needs. As the HTGR design evolves and more information becomes available in the future, the staff plans to update the research plan accordingly by accounting for such information as the selection of a specific HTGR technology, siting, end use of an HTGR plant, and any changes in the constraints of the Energy Policy Act. This is consistent with the Committee recommendation on updating the plan in the future.

Finally, the staff supports the Committee's views on the need for the Committee to examine the integrated U.S. Nuclear Regulatory Commission (NRC)/U.S. Department of Energy (DOE) research program for the HTGR. The Committee's engagement with both NRC and DOE will provide valuable insight as the NRC staff ensures that the most important HTGR safety, design, licensing, and operational issues are effectively addressed through complimentary and well-coordinated research programs. I look forward to continued staff interactions with the Committee in this respect.

Sincerely,

***/RA by Michael Weber for/***

R. W. Borchardt  
Executive Director  
for Operations

cc: Chairman Jaczko  
Commissioner Svinicki  
Commissioner Apostolakis  
Commissioner Magwood  
Commissioner Ostendorff  
SECY

June 10, 2011

Dr. Said Abdel-Khalik, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: HIGH TEMPERATURE GAS-COOLED REACTOR NUCLEAR REGULATORY  
COMMISSION RESEARCH PLAN

Dear Dr. Abdel-Khalik:

Thank you very much for the positive feedback by the Advisory Committee on Reactor Safeguards (ACRS or the Committee) members on the subject provided in your letter dated May 20, 2011. The staff appreciates and agrees with the conclusions and recommendations offered by the Committee.

Regarding your recommendation for the staff to continue to identify the need for additional experimental data, the staff fully intends to follow that strategy as the high-temperature gas-cooled reactor (HTGR) design evolves. As noted by the Committee, given the present state of design information, the current version of the HTGR plan is a good step toward identifying the research needs. As the HTGR design evolves and more information becomes available in the future, the staff plans to update the research plan accordingly by accounting for such information as the selection of a specific HTGR technology, siting, end use of an HTGR plant, and any changes in the constraints of the Energy Policy Act. This is consistent with the Committee recommendation on updating the plan in the future.

Finally, the staff supports the Committee's views on the need for the Committee to examine the integrated U.S. Nuclear Regulatory Commission (NRC)/U.S. Department of Energy (DOE) research program for the HTGR. The Committee's engagement with both NRC and DOE will provide valuable insight as the NRC staff ensures that the most important HTGR safety, design, licensing, and operational issues are effectively addressed through complimentary and well-coordinated research programs. I look forward to continued staff interactions with the Committee in this respect.

Sincerely,  
*/RA by Michael Weber for/*  
R. W. Borchardt  
Executive Director  
for Operations

cc: Chairman Jaczko  
Commissioner Svinicki  
Commissioner Apostolakis  
Commissioner Magwood  
Commissioner Ostendorff  
SECY

**DISTRIBUTION:** G20110376/EDATS:OEDO-2011-0368

PUBLIC RidsEdoMailCenter RidsResMailCenter RidsResOd RidsOgcOd  
RidsAcrcAcnw\_MailCTR RidsSecyMailCenter RidsNroOd RidsNrrOd

**ADAMS Accession No.: ML11530010**

OFFICE	RES/DSA/NARB	Tech Editor	D:RES/DSA	D:RES	EDO
NAME	SBasu/TZaki	JZabel (via e-mail)	KHalveyGibson	BWSheron	RWBorchardt (MWeber for)
DATE	6 /2/11 – 6/6/11	06/01/11	06/07/11	06/08/11	06/10/11

**OFFICIAL RECORD COPY**