



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

April 15, 2016

MEMORANDUM TO: John W. Lubinski, Director  
Division of Engineering  
Office of Nuclear Reactor Regulation

FROM: Brian E. Thomas, Director */RA/*  
Division of Engineering  
Office of Nuclear Regulatory Research

SUBJECT: NOTIFICATION OF IMPENDING PUBLICATION OF TECHNICAL  
LETTER REPORT ENTITLED, "EXPERIMENTAL PLAN FOR  
PRIMARY WATER STRESS CORROSION CRACK INITIATION  
TESTING"

REFERENCES: Memorandum from Eric J. Leeds to Brian W. Sheron, "User Need  
Request for Flaw Evaluation, Repair and Mitigation Techniques for  
Primary Water Stress Corrosion Cracking," February 24, 2014,  
ML13326B083.

Memorandum from Brian W. Sheron to Eric J. Leeds, "Response  
to User Need Request for Flaw Evaluation, Repair and Mitigation  
Techniques for Primary Water Stress Corrosion Cracking,"  
June 09, 2014, ML14147A115.

The NRC and the Electric Power Research Institute (EPRI) are conducting a cooperative research project under a memorandum of understanding (MOU) on primary water stress corrosion cracking (PWSCC) initiation of select nickel-based alloys to support user need request NRR-2014-003 "Flaw Evaluation, Repair and Mitigation Techniques for Primary Water Stress Corrosion Cracking." The objectives of the project are to obtain PWSCC crack initiation data on Alloys 600/182 to support the xLPR PWSCC crack initiation models verification effort and to confirm possible factors of improvement attributed to the use of PWSCC resistant Alloys 690/52/152.

The Pacific Northwest National Laboratory (PNNL) developed the enclosed technical letter report, "Experimental Plan for Primary Water Stress Corrosion Crack Initiation Testing," that the NRC and EPRI are using to guide the testing performed under the MOU. The testing plan was reviewed by NRC staff, EPRI staff and a select group of recognized experts representing domestic and international research organizations. All comments have been incorporated or otherwise addressed. Since the testing plan was developed cooperatively under the MOU, EPRI has published a similar report with the same title as part of its work with the Materials Reliability Program (MRP) as report number MRP-404.

Enclosure:  
As stated

CONTACT: Eric Focht, RES/DE/CMB  
(301) 415-2094

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