

July 7, 2006

MEMORANDUM TO: William M. Dean, Assistant for Operations  
Office of the Executive Director for Operations

FROM: Mark A. Cunningham, Director /RA/ Sher Bahadur for  
Division of Fuel, Engineering & Radiological Research  
Office of Nuclear Regulatory Research

SUBJECT: PRESENTATION MATERIALS: "CRACK GROWTH RATES  
OF NICKEL ALLOY WELDS IN A PWR ENVIRONMENT,"  
BY BOGDAN ALEXANDREANU, OMESH CHOPRA, AND BILL SHACK

This memorandum conveys the enclosed copy of the materials for a presentation on crack growth rates of nickel alloy welds in a pressurized-water reactor (PWR) environment.<sup>1</sup> Bogdan Alexandreanu and coauthors from Argonne National Laboratory have prepared this presentation for the forthcoming 2006 Pressure Vessel and Piping Conference sponsored by the American Society of Mechanical Engineers (ASME), which will take place on July 23–27, 2006. Details regarding the conference are as follows:

Meeting: 2006 ASME Pressure Vessel and Piping Conference  
Place: Vancouver, British Columbia, Canada  
Dates: July 23–27, 2006  
Authors: Bogdan Alexandreanu, Omesh Chopra, and Bill Shack  
Title: "Crack Growth Rates of Nickel Alloy Welds in a PWR Environment"

The data and conclusions in this presentation were produced under Job Code Number (JCN) Y6388, "Environmentally Assisted Cracking in Light-Water Reactor Materials," administered by the NRC's Office of Nuclear Regulatory Research, Division of Fuel, Engineering & Radiological Research, Materials Engineering Directorate, Corrosion and Metallurgy Branch.

We are providing this package for your information to comply with Management Directive 3.9, "NRC Staff and Contractor Speeches, Papers, and Journal Articles on Regulatory and Technical Subjects," and subsequent guidance from the Office of the Executive Director for Operations. You may freely transmit this package to the Commissioners' Assistants and others who may be interested. This presentation does not contain any information related to policy issues of concern to the NRC.

Enclosure:  
As stated

CONTACT: William H. Cullen, RES/DFERR  
301-415-7510

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<sup>1</sup> The presentation materials may also be found in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession #ML061800238.

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