September 11,2006

MEMORANDUM TO: Michael R. Johnson, Assistant for Operations
Office of the Executive Director for Operations

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

SUBJECT: PRESENTATION MATERIALS: "AN OVERVIEW OF THE
RISK-INFORMED PRESSURIZED THERMAL SHOCK RE-EVALUATION
PROJECT" AND "RISK-INFORMED FRACTURE EVALUATION OF
REACTOR VESSELS SUBJECTED TO COOL-DOWN TRANSIENTS
ASSOCIATED WITH NORMAL SHUTDOWN" BY TERRY DICKSON

Enclosed is a copy of materials that Terry Dickson of Oak Ridge National Laboratory (ORNL)
will present at the Organization for Economic Cooperation and Development's (OECD's)
Nuclear Energy Agency Workshop on "Structural Reliability Evaluation and Mechanical
Probabilistic Approaches for Examining Nuclear Power Plant Components." The presentations
will be made during September 25–27, 2006. The presentation may be found in the
Agencywide Documents Access and Management System (ADAMS) as package number
ML062290045.

Meeting: OECD, Nuclear Energy Agency Workshop on "Structural Reliability Evaluation
and Mechanical Probabilistic Approaches for Examining Nuclear Power Plant
Components"
Place: Lyon, France
Dates: September 25–27, 2006

Author: Terry Dickson, ORNL
Titles: "An Overview of the Risk-Informed Pressurized Thermal Shock Re-evaluation
Project" and "Risk-Informed Fracture Evaluation of Reactor Vessels Subjected to
Cooldown"

The data, analyses, and conclusions in these presentations were produced under Job Code
Number (JCN) Y6533, "Heavy Section Steel Technology Program," and JCN Y6656,
"Probabilistic Assessment of Heatup/Cooldown Limits," a research program developed and
managed by the NRC's Office of Nuclear Regulatory Research, Division of Fuel, Engineering
and Radiological Research, Materials Engineering, Component Integrity Branch.

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We are providing this package for your information to comply with Management Directive 3.9 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.

Information to be presented on the pressurized thermal shock (PTS) screening limit in the PTS Rule (10 CFR 50.61) is available in the public domain (SRM-SECY-06-0124 on the PTS rulemaking plan). The recommended PTS reactor vessel failure frequency acceptance criterion of 1×10^{-6} events per year is consistent with the SRM-SECY-06-0124.

Enclosures:
As stated

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