

May 25, 2005

MEMORANDUM TO: Sunil Weerakkody, Section Chief  
Fire Protection Engineering and Special Projects  
Plant Systems Branch  
Division of Systems Safety and Analysis  
Office of Nuclear Reactor Regulation

FROM: Mark H. Salley, Team Leader */RA/*  
Fire Research Team  
Probabilistic Risk Analysis Branch  
Division of Risk Analysis & Applications  
Office of Nuclear Regulatory Research

SUBJECT: TRANSMITTAL OF THESIS "AN EXAMINATION OF THE METHODS AND  
DATA USED TO DETERMINE FUNCTIONALITY OF ELECTRICAL CABLES  
WHEN EXPOSED TO ELEVATED TEMPERATURES AS A RESULT OF A FIRE  
IN A NUCLEAR POWER PLANT."

The purpose of this memorandum is to respond to your April 29, 2005 request to have the thesis entitled "An Examination of the Methods and Data Used to Determine Functionality of Electrical Cables When Exposed to Elevated Temperatures as a Result of a Fire in a Nuclear Power Plant" made publicly available. While this work is greater than 5-years old, it still provides a good introduction to the subject matter. This document investigates the functionality of critical electrical cables when exposed to an unwanted fire in a commercial nuclear power plant and should provide a useful educational tool for licensees and others who may need a better understanding of how cables perform when subjected to high-temperatures. The report can be accessed in ADAMS at ML051430552. If you require any additional information, please contact me at (x-2840).

Attachment: As stated

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