

April 5, 2011

MEMORANDUM TO: Michael Cheek, Acting Director  
Division of Risk Assessment  
Office of Nuclear Reactor Regulation

FROM: Richard P. Correia, Director */RA/*  
Division of Risk Analysis  
Office of Nuclear Regulatory Research

SUBJECT: DEVELOPMENT OF METRIC MONITORING  
METHODOLOGIES: TASK 21 OF USER NEED NRR-2008-003

The purpose of this memorandum is to transmit the enclosed letter report in response to Task 21 of User Need NRR-2008-003, "Development of Metric Monitoring Methodologies." Our respective staffs worked together during the development of this report, and have coordinated their findings and insights.

The enclosed letter report presents the analysis of all fire events reported between 1985 and 2010, as well as a study of the fire protection inspection findings reported since 2000, starting with the initial implementation of the triennial and annual/quarterly procedures using the Reactor Oversight Process. Our analysis indicates that there is not a statistically significant trend for the findings made during the quarterly fire protection inspections during the stated period; or findings made during the triennial fire protection inspections during the stated period. However, the analysis indicates a statistically significant downwards trend for the fire events reported via 10 CFR 50.72/73 between 1985 and 2010. RES will continue to compile data for time periods predating 1985 in order to evaluate any possible trends which arise. Because this is the third semi-annual report and trends may be interpreted in different ways, we plan to continue the analysis before drawing any formal conclusions in a future semi-annual report.

During the last user-need meeting on March 4, 2010, RES agreed to expand Task 21 to include information regarding trending of licensees' long-term compensatory measures. RES has contacted the Electric Power and Research Institute (EPRI) and added this task to the current Memorandum of Understanding (MOU) with EPRI. There is still too little data or change in information in order to interpret the trending of these long term compensatory measures. It is expected that the number of long-term compensatory measures will increase in the next couple of periods due to the stations implementing compensatory actions in the May, 2010 time frame. These compensatory measures are believed to be in response to the ongoing Hot Short, Multiple Spurious Operations resolution as documented in Regulatory Guide 1.189 Revision 2.

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M. Cheek

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The staff intends to continue this review of internal information and use the MOU with EPRI to continue to collect information from industry. The next update of this report is planned to occur in six months.

Enclosure:  
As stated

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