

October 4, 2005

MEMORANDUM TO: John N. Hannon, Chief
Plant Systems Branch
Division of Systems Safety and Analysis
Office of Nuclear Reactor Regulations

FROM: Michele G. Evans, Chief **/RA/**
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SUBJECT: TRANSMITTAL OF INTEGRATED CHEMICAL EFFECTS TEST
PROJECT: TEST #2 DATA REPORT AND APPENDICES

The attached subject Integrated Chemical Effects Test (ICET) test #2 data report is provided to support regulatory activities associated with GL2004-02. This data report provides the experimental results associated with ICET test #2. Results include a description of the test observations and process control parameters. The report also describes the results of post-test analysis on the sample coupons, fiberglass insulation samples, water chemistry, and precipitated solids. The attached appendices contain a more comprehensive set of the analyses conducted on these products.

Similar data reports will be provided for subsequent ICET tests 3-5. All test information will also be summarized in a NUREG/CR summary report that will be prepared once testing has been completed and the individual test data reports have been provided. It is intended that the attached report and appendices be placed on the GSI-191 website and used to inform the public about current findings related to the ICET project.

Attachments:

1. Integrated Chemical Effects Test Project: Test #2 Data Report
2. Preface to Appendices
3. SEM/EDS Data for Test-2 Day-15 High-Volume Filter
4. SEM/EDS Data for Test-2 Day-30 Corrosion Product
5. SEM/EDS Data for Unused and Test-2 Day-30 Aluminum Coupons
6. SEM/EDS Data for Unused and Test-2 Day-30 Copper Coupons
7. SEM/EDS Data for Unused and Test-2 Day-30 Galvanized Steel Coupons
8. SEM/EDS Data for Unused and Test-2 Day-30 Steel Coupons
9. ESEM and SEM/EDS Data for Test-2 Day-16 Fiberglass in High- and Low-Flow Zones
10. ESEM and SEM/EDS Data for Test-2 Day-30 Fiberglass in High- and Low-Flow Zones
11. ESEM and SEM/EDS Data for Test-2 Day-30 Drain Collar Fiberglass
12. ESEM and SEM/EDS Data for Test-2 Day-30 Birdcage Fiberglass
13. SEM/EDS Data for T2D30 Sediment

14. TEM Data for Test-2 Day-4 Solution Samples
15. TEM Data for Test-2 Day-17 Solution Samples
16. TEM Data for Test-2 Day-30 Filter Samples
17. Test-2 Total Organic Carbon (TOC) Concentration
18. UV Absorbance Spectrum—Day-30 Solution Sample
19. XRD and XRF Data for Test-2 Day-30 Sediment and Fiberglass in Birdcage
20. ESEM and SEM/EDS Data for Test2 Day4 Filtrate and Fiberglass Samples
21. ICET Test 2: Pre-Test, Test, and Post-Test Project Instructions

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