

**Florida
Power**

CORPORATION
Crystal River Unit 3
Docket No. 80302

March 6, 1995
3F0395-11

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Subject: Report on Test of Mecatiss Fire Barrier Material in Morestel France,
December 1994

Reference: A. FPC to NRC letter, 3F0195-03, dated January 6, 1995

Dear Sir:

The purpose of this letter is to forward the report of Florida Power Corporation's (FPC) test of a fire barrier material manufactured by Mecatiss, Inc. of France, as previously described in Reference A. These tests demonstrated that the Mecatiss fire barrier materials applied over typical Crystal River Unit 3 (CR-3) Thermo-Lag installations result in barrier configurations that successfully pass one and three hour fire resistance tests. This report details the test results that were discussed with the Staff on February 28, 1995. During this meeting, FPC presented our integrated approach to the resolution of the Thermo-Lag fire barrier issue and received very helpful comments from the Staff. We anticipate that continuing dialog of this nature will foster our mutual objective of resolving this issue.

FPC will conduct domestic tests of the Mecatiss products. We request that the NRC review this test report and provide feedback on test item configuration and instrumentation, test parameters measurement, and test documentation. FPC is particularly interested in any issues the NRC identifies which could interfere with NRC acceptance of the results of subsequent tests. Attached is an outline of the additional testing that will be performed and a tentative test schedule.

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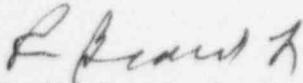
U. S. Nuclear Regulatory Commission
3F0395-11
Page 2 of 4

With the completion of additional tests representative of CR-3 fire barrier configurations, and acceptance of test results by the Staff, FPC will install Mecatiss products at CR-3 for compliance with 10 CFR 50, Appendix R. Your preliminary feedback is requested by March 31, 1995 to facilitate our test schedule, and allow us to proceed with timely resolution of Thermo-Lag fire barrier issues at CR-3.

FPC is pleased to invite the Staff to witness any and all aspects of our test preparation, and the performance of actual tests. Additional test details, and a time line establishing the important test program milestones, will be provided in the near future for your information.

Please contact W. L. Rossfeld at (904) 563-4374 if you have any questions concerning this request.

Sincerely,



P. M. Beard, Jr.
Senior Vice President
Nuclear Operations

PMB/SCP:FF

Attachment

xc: Regional Administrator, Region II
NRR Project Manager
Senior Resident Inspector

Attachment 1

Draft Outline of Proposed Florida Power Corporation Tests
of Mecatiss Fire Barrier Materials

Test Location:

Underwriters Laboratory, Chicago Illinois,

or

Omega Point Lab, San Antonio, Texas

Fire Barrier configuration for fire endurance tests:

The specific fire barrier configurations to be tested have not been chosen at this time. We are assessing the barrier configurations for which no safety and cost beneficial alternatives exist except upgrade. We are determining which of those may be used to bound similar, but less extreme configurations. For example, since previous industry tests have shown that joint failure is the principal failure mechanism for boxed configurations, we will choose a boxed configuration with the widest unsupported spans for testing. It is anticipated that some test specimens will be configurations which are attached to walls or floors or both, and some tests of common cable tray configurations will be performed. For the configurations mentioned above, we expect all specimens will be typical CR-3 Thermo-Lag barrier construction, overlaid with Mecatiss products in both 1 hour and 3 hour ratings. We also anticipate some tests of aluminum conduits with only Mecatiss barriers.

Fire endurance test criteria:

Testing will conform to the criteria set forth in Generic Letter 86-10, Supplement 1.

Fire barrier configurations for ampacity derating tests:

1. 24" wide by 4" high ladder back cable tray protected by a nominal 1/2" Thermo-Lag 330 fire barrier typical of a CR-3 installation overlaid with a typical 1 hour Mecatiss fire barrier.
2. 24" wide by 4" high ladder back cable tray protected by a nominal 1" Thermo-Lag 330 fire barrier typical of a CR-3 installation overlaid with a typical 3 hour installation of Mecatiss fire barrier.

Ampacity derating test criteria:

Testing will be performed in accordance with the latest draft of IEEE P848 available at the time, if the approved standard has not been issued. (Recent communication with the IEEE sub-committee indicates that final voting and publication of the approved standard is expected shortly.)

Test Assembly Construction:

The test items will be constructed at CR-3 with FPC personnel assembling the hardware and thermocouples, qualified FPC Thermo-Lag installers applying the Thermo-Lag barriers, and qualified Mecatiss personnel installing the Mecatiss products. Quality Control of the test assembly construction will be provided by FPC QC technicians in accordance with the FPC Fire Protection Quality Assurance Program.

Installation of all products, hardware, and thermocouples will be witnessed by the testing laboratory.

Test Schedule:

Begin construction of test items	March 13, 1995
Begin installation of Thermo-Lag materials	March 20, 1995
Begin installation of Mecatiss materials	April 24, 1995
Perform tests of completed test items	May 8 - 12, 1995