

August 26, 1985

Docket No. 50-302

DISTRIBUTION

Mr. Walter S. Wilgus
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing
& Fuel Management
P. O. Box 14042; M.A.C. H-3
St. Petersburg, Florida 33733

Docket File

NRC PDR
L PDR
ORB#4 Rdg
HThompson
OELD
EJordan
JPartlow
ACRS-10

RIngram
HSilver
BMozaferi
Gray File
EBrach
Hornstein
WPaulson
GEdison

Dear Mr. Wilgus:

We have reviewed your response of November 4, 1983 to Generic Letter 83-28 with respect to the preventive maintenance program for reactor trip breaker/maintenance and trending for Crystal River Unit 3. In order to complete our review, the additional information identified in the enclosure is required.

Please provide your responses to the enclosed request for additional information within 30 days of receipt of this letter.

Sincerely,

*ORIGINAL SIGNED BY

JOHN F. STOLZ*

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosure: Request for
Additional Information

cc w/enclosure:
See next page

ORB#4:DL
HSilver;cr
8/28/85

For
ORB#4:DL
JStolz
8/27/85

8509030124 850826
PDR ADOCK 05000302
P PDR

CRYSTAL RIVER UNIT 3
REQUEST FOR ADDITIONAL INFORMATION
GL 83-28, ITEMS 4.2.1 AND 4.2.2, TASK A6814

INTRODUCTION

Florida Power Corporation, the licensee for Crystal River Unit 3, submitted their response to Generic Letter 83-28 on November 4, 1983. That response has been reviewed with respect to Items 4.2.1 and 4.2.2 of the Generic Letter. The licensee submitted their preventative maintenance procedure PM-118. The purpose of this procedure is stated "to provide instructions for inspecting, cleaning, and testing of control rod drive (CRD) system AC and DC breakers on a six month basis." The following additional information is required to evaluate compliance with Items 4.2.1 and 4.2.2.

1. Item 4.2.1 - Periodic Maintenance Program for Reactor Trip Breakers.

1.1 Criteria for Evaluating Compliance with Item 4.2.1

Crystal River Unit 3 Reactor Trip Systems utilize General Electric AK-2A circuit breakers. The primary criteria for an acceptable maintenance program for this breaker are contained in Maintenance Instruction GEI-50299EI*, "Power Circuit Breakers, Types AK-2/2A-15, AK-2/3/2A/3A-25, AKU-2/3/2A/3A-25," and Service Advice 9.3S and 9.20, by General Electric. The NRC Staff, Equipment Qualification Branch, has reviewed these items and endorsed the maintenance program they describe. More specifically, the criteria used to evaluate compliance include those items in the General Electric instructions and advisories that relate to the safety function of the breaker, supplemented by those measures that must be taken to accumulate data for trending. The acceptable maintenance activity interval is six months.

1.2 Issues Relating to Item 4.2.1

The licensee response states that preventative maintenance on the Reactor Trip Breakers will be identified to achieve reliable breaker operability without unnecessary maintenance efforts. Data from all AC and DC Reactor Trip Breakers (RTBs) will be collected to include breaker response times, as-found and as-left trip bar torque values, and as-found and as-left undervoltage pickup voltage setpoints.

The Crystal River Unit 3 periodic maintenance program for the reactor trip breakers should include, on a six month basis:

1. Verification of breaker physical condition, including wiring insulation and termination, all retaining rings, pole bases, arc quencher, stationary and movable contacts, and tightness of nuts and bolts;
2. Verification of the optimum freedom of the armature as specified in General Electric Service Advice 175-9.3S, item #S1;
3. Verification of proper trip response time as specified in Service Advice 175-9.3S, item #S6;
4. Lubrication of trip shaft and latch roller bearings with Mobil 28 lubricant;
5. Examination and cleaning of breaker enclosure;
6. Functional test of the breaker prior to returning it to service.

The licensee is to confirm that the periodic maintenance program includes these six items at the specified interval or commit to their inclusion and provide a date by which they will be included.

2. Item 4.2.2 - Trending of Reactor Trip Breaker Parameters to Forecast Degradation of Operability.

2.1 Criteria for Evaluating Compliance with Items 4.2.2

Four parameters have been identified as trendable and are included in the criteria for evaluation. These are (1) undervoltage trip attachment dropout voltage, (2) trip torque, (3) breaker response time for undervoltage trip, and (4) breaker insulation resistance.

2.2 Issues Relating to Item 4.2.2

The licensee submittal states that the licensee "is participating in the B&W Owners Group Reactor Trip Breaker (RTB) Reliability Program. The RTB Reliability Program will compile and analyze maintenance and surveillance data for the General Electric AK-2 RTBs." The licensee stated also that they will collect data that includes breaker response time, trip bar torques values and undervoltage pickup voltage set points. The licensee and other utility members of B&W Owners Group will send the data to B&W which will compile the data and issue periodic reports to each of these utilities to compare its breaker performance with "the norm defined by the data base."

The licensee is to commit to inclusion of trip torque, breaker response time and dropout voltage for undervoltage trip and breaker insulation resistance as trending parameters. The licensee should also identify the internal organization which will perform trend analysis, how often the analysis will be performed and how the information derived from the analysis will be used to affect periodic maintenance.

Mr. W. S. Wilgus
Florida Power Corporation

Crystal River Unit No. 3 Nuclear
Generating Plant

cc:

Mr. R. W. Neiser
Senior Vice President
and General Counsel
Florida Power Corporation
P. O. Box 14042
St. Petersburg, Florida 33733

Bureau of Intergovernmental Relations
660 Apalachee Parkway
Tallahassee, Florida 32304

Mr. Wilbur Langely, Chairman
Board of County Commissioners
Citrus County
Inverness, Florida 36250

Nuclear Plant Manager
Florida Power Corporation
P. O. Box 219
Crystal River, Florida 32629

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220, 7910 Woodmont Avenue
Bethesda, Maryland 20814

Resident Inspector
U.S. Nuclear Regulatory Commission
Route #3, Box 717
Crystal River, Florida 32629

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Mr. Uray Clark, Administrator
Radiological Health Services
Department of Health and
Rehabilitative Services
1323 Winewood Blvd.
Tallahassee, Florida 32301

Administrator
Department of Environmental Regulation
Power Plant Siting Section
State of Florida
2600 Blair Stone Road
Tallahassee, Florida 32301

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304