

**Florida  
Power**  
CORPORATION

October 3, 1983  
3F-1083-01

Regional Administrator, Region II  
Attention: R. C. Lewis, Director  
Division of Project and Resident Programs  
U.S. Nuclear Regulatory Commission  
101 Marietta Street, N.W., Suite 2900  
Atlanta, GA 30303

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Licensee Event Report No. 83-023

Gentlemen:

Florida Power Corporation (FPC) offers the following responses to your letter of August 17, 1983, concerning fire damper discrepancies at Crystal River Unit 3 (CR-3).

Item 1: Provision of sufficient justification to assure that no additional design and construction deviations exist on the fire protection systems and features provided for the safety-related areas of the plant.

Response 1: Since January 1, 1971, thirty-seven (37) separate audits/inspections of the CR-3 fire protection systems and features have been performed. Sixteen (16) of these inspections were performed by the Nuclear Energy Property Insurance Association (NEPIA); nine (9) inspections were performed by the NRC; five (5) inspections by an outside fire protection consultant, Professional Loss Control (PLC); and seven (7) inspections by American Nuclear Insurers (ANI). These inspections/audits did not reveal any generic design deviations in the CR-3 fire protection systems and features. A chronology of CR-3 fire inspections/audits is provided in Attachment 1. Summaries of the NRC and PLC inspection/audit reports are provided in Attachment 2.

8310070307 831003  
PDR ADCK 05000302  
S PDR

General Office 3201 Thirty-fourth Street South • P.O. Box 14042, St. Petersburg, Florida 33733 • 813-866-5157

OFFICIAL COPY

10 22



During construction, Gilbert Associates drawings were sent to NEPIA for review and approval. No generic deviations in the CR-3 fire protection systems and features were identified by this design review. In addition NUS Corporation performed two reviews of the CR-3 fire protection systems and features (1976 and 1977) and identified no generic deviations in the CR-3 fire protection systems and features.

As a result of the discrepancy identified on June 13, 1983, FPC personnel have conducted an investigation and walkdown which resulted in the additional discrepancies described in LEK No. 83-023.

New fire protection systems and features are being designed by qualified fire protection engineers as a result of 10 CFR Part 50 Appendix R modifications to protect safe shut down systems. The new fire protection systems and features will add to or completely replace existing systems, thus lessening the probability that any generic design deviations exist at CR-3.

Proposals are being reviewed in-house to commission a new Fire Protection Program Review by a consultant independent of the one who performed the original review to assure FPC that no generic design or installation deviations exist in the CR-3 fire protection systems and features and to comply with the applicable provisions of Appendix R.

Item 2: Performance of sufficient quality assurance audits of your architectural and engineering organizations to assure that adequate design control is provided in the area of fire protection.

Response 2: Gilbert Associates was the original plant design agent and has been the primary engineering firm used for the design of backfit modifications, including any related to fire protection. The only design work related to fire protection not performed by GAI are as follows:

- a) NUS: During preparation of FPC's response to the July 27, 1979 Fire Safety Evaluation Report (SER), NUS designed some fire stops. This basically took approved methods and applied them to plant specific areas. NUS also designed the Lube Oil Collection System for Reactor Coolant Pump Motors completed during Refuel IV.



- b) Professional Loss Control (PLC): During SER response preparation PLC provided locations for fire detectors. GAI performed engineering to implement PLC recommendation.
- c) Stone & Webster: Presently working on several Appendix R tests.

FPC internal engineering organizations have not performed design changes to fire protection systems without the assistance of Gilbert Associates. A recent fire protection audit by FPC Quality Programs has identified a weakness in the FPC overall Design Control Program with respect to design changes not classified as safety-related. Interim corrective actions have been taken to assure these design changes consider fire protection adequately. There is no indication that this item has caused any condition that could be a concern from a fire protection perspective. The Fire Protection Program Review identified in response 1 above will assure no adverse conditions exist.

The Florida Power Corporation Quality Programs includes requirements for a yearly vendor evaluation to assure their overall corporate quality program meets the requirements of 10CFR50 Appendix B and other FPC regulatory commitments on design. In addition, an annual audit is performed of the CR-3 specific design control program to assure that an effective design control process is in place. This audit is essentially based on ANSI-N45.2.11-1974. Although these audits have not specifically addressed fire protection, fire protection is a design criteria identified to be considered. The process is designed to assure the requirements for design control are established. The audit assesses the effectiveness of the process. Fire protection criteria are part of the design process just as seismic, environmental, etc. No major findings which could have significantly degraded the program have been made.

In addition, an audit was performed in early September to verify the consideration of fire protection criteria in designs and to evaluate the design process as applied to the design and modifications of fire systems. Fire systems are classified non-safety related and are not subject to a full 10CFR50 Appendix B program. A design control process does exist however that ensures appropriate review of these design drawings.

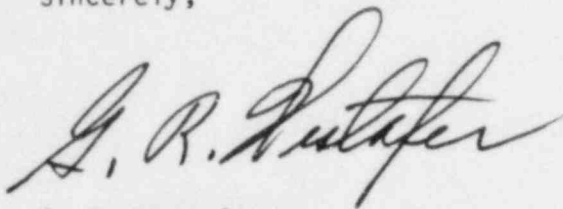


R. C. Lewis  
October 3, 1983  
Page 4

Based on the above work already performed, FPC believes that the Fire Protection Program at CR-3 is adequate. Continued design verification will be ensured by the new Fire Protection Program Review and quality assurance audits.

If you have any questions or would desire to meet with us, please contact this office.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. R. Westafer". The signature is fluid and stylized, with the first letters of each word being capitalized and prominent.

G. R. Westafer  
Manager, Nuclear Operations Licensing and Fuel Management

Westafer(W01)C5-1

Attachments



## ATTACHMENT 1

## CHRONOLOGY OF CR-3 FIRE INSPECTIONS

ANI	NEPIA	NRC	PLC
	Feb. 18, 1971		
	Sept. 22, 1971		
	Dec. 10, 1971		
	Dec. 14-15, 1972		
	Apr. 30 - May 1, 1973		
	Aug. 16, 27, 28, 1973		
	Dec. 19-20, 1973		
	Apr. 3-5, 1974		
	Aug. 1-2, 1974		
	Nov. 18-19, 1974		
	Mar. 25-26, 1975		
	June 26, 1975		
	Sept. 29-30, 1975	Sept. 29 - Oct. 1, 1975	
	Dec. 1, 1975		
	Mar. 15, 17, 1976		
	June 23-24, 1976		
		July 20-22 & Aug. 2-5, 1977	
		Dec. 5-9, 1977 & Jan. 11-12, 1978	
		Apr. 3-6, 1978	
			April 17-21, 1978
		Oct. 2-6, 1978	
		Nov. 28 - Dec. 1, 1978	
		Mar. 27-28, 1979	
			Apr. 9-13, 1979
May 24-26, 1979			
Mar. 17-20, 1980			
			May 26-28, 1980
Nov. 17-20, 1980			
		Dec. 2-5, 1980	
			Mar. 2-4, 1981
May 4-7, 1981			
Nov. 16-20, 1981		Nov. 17-20, 1981	
			June 14-16, 1981
Aug. 9-12, 1982			
May 3-5, 1983			



## ATTACHMENT 2

### PROFESSIONAL LOSS CONTROL (PLC) FIRE AUDIT SUMMARIES

1. "April 1978" - PLC - Annual Fire Protection Inspection

Section 2.1 Inspection of Plant Facilities

..."an inspection of plant safety related areas was conducted. The emphasis of this inspection was an assessment of the effectiveness of the plant's Fire Protection Program to control fire hazards and maintain fire protection equipment in these areas."

2. April 1979 - Annual Fire Audit

The plant audit included general inspections of installed fire suppression, fire detection and alarm systems.

3. May 1980 - Triennial Audit

1.0 Introduction

"The inspection consisted of a review of the plant Safety Evaluation Report, review of procedures relating to fire protection, review of fire brigade organization and training, and an on-site inspection of all plant facilities."

4. March 1981 - Annual Fire Audit

The inspection consisted of a review of the plant Fire Hazards Analysis and comparison to APCS BTP 9.5-1 Appendix A, review of procedures related to fire protection, review of fire brigade organization and training, and on-site inspection of plant facilities.

5. "June 1982" - Fire Protection Audit

Section 3.3 Fire Protection Systems and Equipment

"The plant audit included general inspection of the installed water supply and distribution system, fire detection and alarm systems, and fire suppression system."



Attachment 2 (Cont'd)

NRC FIRE INSPECTION REPORT/AUDIT SUMMARIES

1. September 29 - October 1, 1975 (Report No. 75-14): This special inspection was made to inspect the fire prevention and fire protection type activities relating to construction, testing and start-up and early plans for these activities during operation of the plant.

During a walk-through inspection of the plant, attention was directed to the fire protection equipment.

No substantive deficiencies were identified in this inspection of the fire prevention and fire protection activities.

2. July 20-22 and August 2-5, 1977 (Report No. 77-13): The plant was toured to inspect safety-related areas; examine portions of the fire system; and observe activities related to fire protection.
3. December 5-9, 1977 and January 11-12, 1978 (Report No. 77-24): Inspection included a discussion with licensee personnel regarding the FPC response to the NRC BTP on Fire Protection.
4. April 3-6, 1978 (Report No. 78-08): The inspector reviewed certain Administrative Procedures, Surveillance Procedures, Maintenance Procedures, held discussions with the licensee, and toured certain portions of the plant to determine the status of the fire prevention and protection system. No items of noncompliance or deviations were observed.

The inspector toured various areas of the plant to observe the following:

- a. Plant cleanliness
- b. Fuel inspection in the Fuel Storage Building
- c. Operating activities in the Reactor Building
- d. Fire detection and fire protection systems in various portions of the plant which included the control room, cable spreading room and auxiliary building.

No items of noncompliance or deviations were found.

5. October 2-6, 1978 (Report No. 78-24): The inspectors conducted a preliminary fire protection survey of the plant in preparation for the NRC Fire Team Site Visit in November 1978.

"The inspector reviewed the results of the latest fire insurance inspection which was conducted on April 17-21, 1978."

"The inspector toured various areas of the facility to observe... fire protection/prevention systems and conditions."

6. November 28 - December 1, 1978: NRC Fire Team Site Visit to review the fire protection program. Revised their list of questions as a result of their visit. Performed extensive review of site physical fire protection features.



Attachment 2 (Cont'd)

7. March 27-28, 1979 (NRC Fire Team Site Visit): Reviewed some areas of the plant in detail and discussed the draft of the SER for CR-3.
8. December 2-5, 1980 (Report No. 80-40): The plant was toured to:
  - A. Review the progress and action on the fire protection commitments made to the NRC.
  - B. Assure that the fire protection systems required by Technical Specification were in service.
  - C. Evaluate the effectiveness of the implementation of the fire protection administrative control procedures.
9. November 17-20, 1981 (Report No. 81-25): A tour of the plant was made by the inspector to review the fire protection modifications of the detection system and reactor building standpipe and to review the general fire protection features provided for the plant.