Mr. John Paul Cowan
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing (NA1B)
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 - ISSUANCE OF AMENDMENT CONCERNING EMERGENCY DIESEL GENERATOR LOSS OF POWER START SURVEILLANCE (TAC NO. MA5747)

Dear Mr. Cowan:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 187 to Facility Operating License No. DPR-72 for Crystal River Unit 3. This amendment is in response to a Florida Power Company (FPC) request dated May 17, 1999. in which FPC proposed a change to Technical Specification Section 3.3.8, "Emergency Diesel Generator (EDG) Loss of Power Start (LOPS)," Surveillance Requirement 3.3.8.1 and corresponding Bases section. The surveillance is revised to make a note included in the surveillance consistent with the method of performing the surveillance.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly <u>Federal Register</u> notice.

Sincerely,
Original signed by:

L. Wiens, Senior Project Manager, Section 2 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosures: 1. Amendment No. 187 to DPR-72

2. Safety Evaluation

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cc w/enclosures: See next page

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# UNITED STAT'S NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 13, 1999

Mr. John Paul Cowan
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing (NA1B)
Crystal River Energy Complex
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 - ISSUANCE OF AMENDMENT CONCERNING

EMERGENCY DIESEL GENERATOR LOSS OF POWER START

SURVEILLANCE (TAC NO. MA5747)

Dear Mr. Cowan:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 187 to Facility Operating License No. DPR-72 for Crystal River Unit 3. This amendment is in response to a Florida Power Company (FPC) request dated May 17, 1999. in which FPC proposed a change to Technical Specification Section 3.3.8, "Emergency Diesel Generator (EDG) Loss of Power Start (LOPS)," Surveillance Requirement 3.3.8.1 and corresponding Bases section. The surveillance is revised to make a note included in the surveillance consistent with the method of performing the surveillance.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely.

L. Wiens, Senior Project Manager, Section 2

Project Directorate II

Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosures: 1. Amendment No. 187 to DPR-72

2. Safety Evaluation

cc w/enclosures: See next page



# UNITED STAT IS NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

FLORIDA POWER CORPORATION

CITY OF ALACHUA

CITY OF BUSHNELL

CITY OF GAINESVILLE

CITY OF KISSIMMEE

<u>CITY OF LEESBURG</u> CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION.

CITY OF NEW SMYRNA BEACH

CITY OF OCALA

ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO SEMINOLE ELECTRIC COOPERATIVE, INC.

**CITY OF TALLAHASSEE** 

**DOCKET NO. 50-302** 

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 187 License No. DPR-72

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power Corporation, et al. (the licensees), dated May 17, 1999, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

- E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

### **Technical Specifications**

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 187, are hereby incorporated in the license. Florida Power Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Sheri R. Peterson, Chief, Section 2

Show R Pitus

Project Directorate II

Division of Project Licensing Management

Office of Nuclear Reactor Regulation

Attachment: Changes to Technical Specifications

Date of Issuance: September 13, 1999

## ATTACHMENT TO LICENSE AMENDMENT NO. 187

### TO FACILITY OPERATING LICENSE NO. DPR-72

## **DOCKET NO. 50-302**

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Insert Page	
3.3-21	
B 3.3-71	

## SURVEILLANCE REQUIREMENTS

	FREQUENCY	
SR 3.3.8.1	When EDG LOPS instrumentation is placed in an inoperable status solely for performance of this Surveillance, entry into associated Conditions and Required Actions is not required provided the applicable Condition(s) and Required Actions for the EDG made inoperable by EDG LOPS are entered	
	Perform CHANNEL FUNCTIONAL TEST.	31 days
SR 3.3.8.2	Voltage sensors may be excluded from CHANNEL CALIBRATION.	
	Perform CHANNEL CALIBRATION with setpoint Allowable Value as follows:	18 months
	a. Degraded voltage ≥ 3933 and ≤ 3970 V with a time delay of 5.0 seconds ± 0.5 seconds; and	
	<ul> <li>Sudden loss of voltage from full voltage to 0.0 V with a time delay of 7.8 seconds ± 0.55 seconds at 0.0 V.</li> </ul>	F

#### BASES

# ACTIONS (continued)

### <u>C.1</u>

Condition C is the default Condition should Required Action A.1 or B.1 not be met within the associated Completion Time.

Required Action C.1 ensures that Required Actions for affected diesel generator inoperabilities are initiated. Depending on MODE, the Actions specified in LCO 3.8.1, "AC Sources-Operating," or LCO 3.8.2, are required to be entered immediately.

### SURVEILLANCE REQUIREMENTS

### SR 3.3.8.1

A CHANNEL FUNCTIONAL TEST is performed on each required EDG LOPS channel to ensure the entire channel will perform the intended function. This test ensures functionality of each channel to output relays.

The Frequency of 31 days is considered reasonable based on the reliability of the components and on operating experience.

A Note has been added to allow performance of the SR without taking the ACTIONS for inoperable instrumentation channels although during this time period the relay instrumentation cannot initiate a diesel start. This allowance is based on the assumption that the EDG is maintained inoperable during this functional test and the appropriate actions for the inoperable EDG are entered.

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## UNITED STATE 3 NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 187 TO FACILITY OPERATING LICENSE NO. DPR-72 EMERGENCY DIESEL GENERATOR LOSS OF POWER START INSTRUMENTATION

### FLORIDA POWER CORPORATION

### **CRYSTAL RIVER UNIT 3**

### **DOCKET NO. 50-302**

### 1.0 INTRODUCTION

On May 17, 1999, Florida Power Corporation (FPC), the licensee, submitted a proposed amendment to Section 3.3.8 of the Crystal River Unit 3 (CR-3) Technical Specifications (TSs). The amendment would modify TS Section 3.3.8, "Emergency Diesel Generator (EDG) Loss of Power Start (LOPS)," Surveillance Requirement (SR) 3.3.8.1 and corresponding basis section. The proposed change is to revise a note included with the surveillance and to delete a superseded note associated with the surveillance frequency. The surveillance note is revised to eliminate the option for a delayed entry into the applicable Conditions and Required Actions.

### 2.0 EVALUATION

The staff's evaluation of the licensee's proposed changes to the TS is as follows:

### 2.1 Proposed Change to TS Section SR 3.3.8.1

The licensee proposed to change the CR-3 TS Section SR 3.3.8.1, which currently reads as follows:

SURVEILLANCE	FREQUENCY
-NOTE- When EDG LOPS instrumentation is placed in an inoperable status solely for performance of this Surveillance, entry into associated Conditions and Required Actions may be delayed as follows: (a) up to 4 hours for the degraded voltage Function, and (b) up to 4 hours for the loss of voltage Function, provided the two channels monitoring the Function for the bus are OPERABLE or tripped.  Perform CHANNEL FUNCTIONAL TEST.	31 days OR NOTE Not effective after November 23, 1997. 60 days

The proposed amended TS Section would read:

SURVEILLANCE	FREQUENCY
When EDG LOPS instrumentation is placed in an inoperable status solely for performance of this surveillance, entry into associated Conditions and Required Actions is not required provided the applicable Condition(s) and Required Actions for the EDG made inoperable by EDG LOPS are entered.	
Perform CHANNEL FUNCTIONAL TEST	31 days

The licensee stated that the note, as currently written, is not consistent with the method for performing SR 3.3.8.1. The note currently states that, when EDG LOPS instrumentation is placed in an inoperable status solely for performance of this surveillance, entry into associated Conditions and Required Actions may be delayed for up to 4 hours provided the two channels monitoring the Function for the bus are OPERABLE or tripped. The CR-3 design and testing configuration do not permit application of the current note. Rather, the CR-3 design and testing configuration requires that the Conditions and Required Actions of Section 3.3.8 be entered when performance of the procedure for SR 3.3.8.1 is started. The proposed change will make the note consistent with the method of performing SR 3.3.8.1.

SR 3.3.8.1 is performed concurrently with SR 3.8.1.2 and 3.8.1.3. Each of these surveillances is required every 31 days. Performing these surveillances requires that the EDGs be declared inoperable. During SR 3.3.8.1, the EDGs are made inoperable to prevent an automatic start. Performing 3.3.8.1 requires placing two channels of either the degraded voltage instrumentation or the loss of voltage channels in the trip blocked condition. In this condition the channels are not operable, nor are they tripped. Because the channels cannot be made operable and cannot be tripped as stated in the current note, the note as currently written cannot be applied. Because CR-3 cannot use the relief provided by the note in SR 3.3.8.1, Condition B of Section 3.3.8 is entered when performance of the surveillance is started. The required Action time for Condition B is 1 hour. Because the average time period for performing the channel functional test of SR 3.3.8.1 is approximately 4 hours, Condition C is entered. The resulting condition is that two channels of degraded voltage or loss of voltage instrumentation are not operable. As a result, the associated EDG would have to be declared inoperable and the Conditions and Required Actions of TS Section 3.8.1 would have to be entered if the EDGs had not already been declared inoperable.

The proposed revised note would allow direct entry into TS section 3.8.1 Conditions and Required Actions. Such direct entry will eliminate the administrative burden related to tracking and logging multiple Required Action entries.

Additionally, the licensee proposed to delete the provision in SR 3.3.8.1 Frequency for a 60-day surveillance frequency, and the associated note that the 60-day frequency is not effective after November 23, 1997. Deletion of the note is appropriate since the note is no longer applicable.

The staff evaluated the proposed changes and the licensee's justification for those changes as outlined above. On the basis of its review, the staff finds that the proposed amendment would make the surveillance consistent with the method of testing and is more conservative than the existing requirements and, therefore, is acceptable.

### 2.2 Proposed Changes to TS BASES Section SR 3.3.8.1

The licensee proposed to change the CR-3 TS BASES section SR 3.3.8.1, which currently reads as follows:

A temporary extension of the Frequency has been made to indicate "31 days or 60 days" as the Frequency. This temporary condition applies to a one-time performance of the surveillance on each diesel generator and will not be effective after November 23, 1997. The need for this temporary extension of the frequency became evident during replacement of the radiator on the EDGs. This activity had a minimum duration of 42 days, which was in excess of the 31-day frequency. Performance of the surveillance on one EDG with the other EDG inoperable because of the radiator replacement was considered as not the safest and most prudent course of action. A note has been added to the frequency to indicate that the 60-day frequency is not effective after November 23, 1997.

A note has been added to allow performance of the SR without taking the ACTIONS for an inoperable instrumentation channel although during this time period the relay instrumentation cannot initiate a diesel start. This allowance is based on the assumption that 4 hours is the average time required to perform channel Surveillance. The 4-hour testing allowance does not significantly reduce the availability of the EDG.

The proposed change to this Bases Section SR 3.3.8.1 is as follows:

A note has been added to allow performance of the SR without taking the ACTIONS for inoperable instrumentation channels although during this time period the relay instrumentation cannot initiate a diesel start. This allowance is based on the assumption that the EDG is maintained inoperable during this functional test and the appropriate actions for the inoperable EDG are entered.

The licensee modified the TS Bases to reflect the proposed change to SR 3.3.8.1. The staff finds that the change to the TS Bases Section is consistent with the requested change to revise the note for the surveillance and is acceptable.

### 3.0 STATE CONSULTATION

Based upon a letter dated March 8, 1991, from Mary E. Clark of the State of Florida, Department of Health and Rehabilitative Services, to Deborah A. Miller, Licensing Assistant, U.S. NRC, the State of Florida does not desire notification of issuance of license amendments.

### 4.0 ENVIRONMENTAL CONSIDERATIONS

The amendment changes requirements with respect to installation or use of a facility component located within the restricted areas as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration, and there has been no public comment on such finding (64 FR 38026). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 52.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 5.0 CONCLUSION

Based on the review of the licensee's submittal, the staff finds that the proposed TS change would make the surveillance consistent with the method of performing the testing, and is more conservative than the existing requirement. Therefore, the staff finds the proposed TS change acceptable.

Principal Contributor: A. Pal

Date: September 13, 1999

Mr. John Paul Cowan Florida Power Corporation

CC:

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### CRYSTAL RIVER UNIT NO. 3

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