

February 25, 1987

DLC 016

Docket No. 50-302	Distribution Copies:	Docket File	JPartlow
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			EJordan
			ETomlinson
			ACRS

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

Dear Mr. Wilgus:

The Commission has issued the enclosed Amendment No. 96 to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 28, 1985, as supplemented October 15, 1986, and November 4, 1986.

This amendment reduces the frequency of diesel generator fast starts from ambient conditions as recommended in Generic Letter (GL) 84-15.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's bi-weekly Federal Register notice.

Sincerely,

/s/

Brenda Mozafari, Project Manager
 PWR Project Directorate #6
 Division of PWR Licensing-B

Shay 2/25/87
[Signature]

Enclosures:

1. Amendment No. 96 to DPR-72
2. Safety Evaluation

cc w/enclosures:
 See next page

W. P. [Signature]
Date 2/23/87

PBD-6 RIngram 2/13/87	PD#6 BMozafari/jm 2/13/87	<i>[Signature]</i> PBD#6 HSilver 2/17/87	<i>raw</i> PBD#6 RWeller 2/17/87	PEICSB ETomlinson 2/17/87	<i>[Signature]</i> PBD-6 GEdison 2/17/87	<i>[Signature]</i> PBD-6 JStolz 2/17/87	<i>[Signature]</i> OGC KBachmann 2/17/87
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2/18/87

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 PDR

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

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Clearinghouse
Office of Planning and Budget
Executive Office of the Governor
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Florida Power Corporation
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

FLORIDA POWER CORPORATION
CITY OF ALACHUA
CITY OF BUSHNELL
CITY OF GAINESVILLE
CITY OF KISSIMMEE
CITY OF LEESBURG
CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH
CITY OF OCALA
ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO
SEBRING UTILITIES COMMISSION
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. 96
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 October 28, 1985, as supplemented October 15, 1986, and November 4, 1986, 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.

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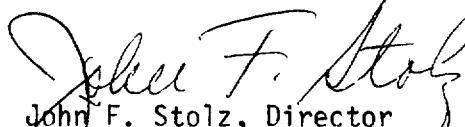
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 96, 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.

FOR THE NUCLEAR REGULATORY COMMISSION


John F. Stolz, Director
PWR Project Directorate #6
Division of PWR Licensing-B

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 25, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 96

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. The corresponding overleaf pages are also provided to maintain document completeness.

Remove

3/4 8-4

B3/4 8-1

Insert

3/4 8-4

B3/4 8-1

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS

- c. Demonstrated OPERABLE by determining that each battery supplying DC control power to the 230kv switchyard breakers is OPERABLE;
1. At least once per 7 days by verifying that:
 - a) The electrolyte level of each pilot cell is between the minimum and maximum level indication marks,
 - b) The pilot cell specific gravity, corrected to 77°F, and full electrolyte level is ≥ 1.20 .
 - c) The pilot cell voltage is ≥ 2.15 volts, and
 - d) The overall battery voltage is ≥ 120 volts.
 2. At least once per 92 days by verifying that:
 - a) The voltage of each connected cell is ≥ 2.15 volts under float charge and has not decreased more than 0.10 volts from the value observed during the baseline tests, and
 - b) The specific gravity, corrected to 77°F, and full electrolyte level of each connected cell is ≥ 1.20 and has not decreased more than 0.01 from the value observed during the previous tests, and
 - c) The electrolyte level of each connected cell is between the minimum and maximum level indication marks.
 3. At least once per 18 months by verifying that:
 - a) The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
 - b) The cell-to-cell and terminal connections are clean, tight and coated with anti-corrosion materials,
 - c) The battery charger will supply at least 95 amperes at 125 volts for at least 2 hours.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4. At least once per 18 months, by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 1 hour when the battery is subjected to a battery service test.
5. At least once per 60 months, by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed subsequent to the satisfactory completion of the required battery service test.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE.

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
 1. Verifying the fuel level in the day fuel tank,
 2. Verifying the fuel level in the fuel storage tank,
 3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the day tank,
 4. Verifying the diesel starts from ambient condition and can be accelerated to at least 900 rpm,
 5. Verifying the generator is synchronized, loaded to greater than or equal to 1500 kw, and operates for greater than or equal to 60 minutes, and
 6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
- b. At least once each 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of ASTM D975-68 when checked for viscosity, water and sediment.
- c. At least once per 184 days in lieu of surveillance 4.8.1.1.2.a.4 by verifying the diesel starts from ambient condition and accelerates to at least 900 rpm in less than or equal to 10 seconds.
- d. At least once per 18 months, by:
 1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,

3/4.8 ELECTRICAL POWER SYSTEMS

BASES

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criterion 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the safety analyses and are based upon maintaining at least one of each of the onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source.

For the purposes of the diesel generator start testing, "ambient condition" means the diesel engine coolant and oil are being continuously circulated and maintained at a temperature consistent with the manufacturer's recommendations.

All preplanned diesel generator starts may be preceded by prelube and or other warmup procedures recommended by the manufacturer. Additionally, except for the 18-month diesel start, all preplanned diesel generator runs may be gradually loaded, reloaded and unloaded as recommended by the manufacturer. The purpose of following these manufacturer's recommendations is to minimize the mechanical and thermal stress and wear on the diesel engine.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown and refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the facility status.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 96 TO FACILITY OPERATING LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL.

CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

INTRODUCTION

By letter dated October 28, 1985, as supplemented October 15, 1986 and November 4, 1986, Florida Power Corporation (FPC or the licensee) requested amendment to the Technical Specifications (TSs) appended to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). The proposed amendment would reduce the frequency of diesel generator fast starts from ambient conditions as recommended by Generic Letter (GL) 84-15. On October 15, 1986, the licensee incorrectly clarified this request to require non-prelubed starts every 184 days. This was corrected by the November 4, 1986, submittal to indicate that the 184-day test may be performed with prelubing.

EVALUATION

The licensee's requested changes to the TSs involve the diesel generator surveillance requirements 4.8.1.1.2.a and the "Bases" for Section 3/4.8, "Electrical Power Systems" of the CR-3 TSs. For the diesel generator surveillance requirements, the licensee has proposed that diesel generator "fast starts" (start and accelerate to synchronous speed in 10 seconds or less) be limited to once every 184 days and that all other starts for the purpose of this surveillance (4.8.1.1.2.a) be preceded by an engine prelude and/or other warmup procedures as recommended by the diesel generator vendor. The licensee's proposed TS change modifies Section 4.8.1.1.2.a.4 to delete the requirement to reach 900 RPM or greater in 10 seconds or less and adds a new Section (4.8.1.1.2.c) which includes the requirement to conduct a "fast start" once per 184 days.

The licensee has also proposed two revisions to the "Bases" Section of the TSs. Ambient condition is defined as that in which diesel generator engine coolant and lube oil are being continuously circulated and maintained at a temperature recommended by the diesel generator vendor.

The second change to the Bases is the addition of a description of how the diesel generators will be loaded during surveillance testing. For all surveillance tests, the licensee proposes to apply load and to unload the diesel generators in a manner recommended by the diesel generator vendor. In general, this means that loading of the diesel generators will take place over an extended period of time, in accordance with vendor recommendations. The single exception to the above loading scenario is the 18-month surveillance test to demonstrate capability of the diesel generators to automatically start and pick up safety loads on a loss of off-site power.

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We have reviewed the licensee's proposed changes to the surveillance requirements of TSs 4.8.1.1.2.a and 4.8.1.1.2.c and find the changes consistent with current NRC recommendations regarding cold fast starts. Also the changes in the Bases for Section 3/4.8 include a definition of "ambient condition" and a methodology for diesel generator loading, both deemed consistent with the NRC's position on reducing thermal stresses on diesel generators. Therefore, we find these changes acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in surveillance requirements. We have 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. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 25, 1987

Principal Contributor:
E. Tomlinson

DCR 016

January 21, 1987

MEMORANDUM FOR: Sholly Coordinator

FROM: John F. Stolz, Director
PWR Project Directorate #6, PWR-B

SUBJECT: REQUEST FOR PUBLICATION IN BIWEEKLY FR NOTICE - NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

Florida Power Corporation, et al., Docket No. 50-302, Crystal River Unit No. 3 Nuclear Generating Plant, Citrus County, Florida

Date of application for amendment: June 18, 1986, as amended July 23, 1986

Brief description of amendment: This amendment increased the high pressure trip setpoint from 2300 psig to 2355 psig and added anticipatory reactor trips on turbine trip and trip of both main feedwater pumps.

Date of issuance: January 21, 1987

Effective date: January 21, 1987

Amendment No.: 95

Facility Operating License No. DPR-72. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: October 22, 1986 (51 FR 37509)

Since the date of the initial notice, the licensee submitted clarifying information dated October 24, 1986. This information did not change the original application in any way and, therefore, did not warrant renoticing.

The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated January 21, 1987

No significant hazards consideration comments received: No.

Local Public Document Room Location: Crystal River Public Library, 668 N.W. First Avenue, Crystal River, Florida 32629

/s/

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John F. Stolz, Director
PWR Project Directorate #6, PWR-B

PWR#6: RIngram 1/10/87
PWR#6: HSilver;eh 1/12/87

BRM
PWR#6: BMozafari 1/13/87

JoforRW
PWR#6: RWeller 1/13/87

AEE
PWR#6: GEdison 1/13/87

AEE
PWR#6: JStolz 1/13/87

OGG
M. Kasman
1/13/87