



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. 106  
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 January 20, 1988 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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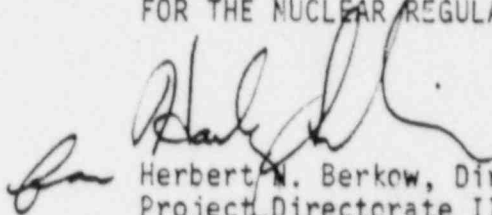
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 106, 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



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects-I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 22, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 106

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 8-1  
3/4 8-2  
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3/4 8-5  
3/4 8-6  
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Insert

3/4 8-1  
3/4 8-2  
3/4 8-2a  
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3/4 8-6a  
3/4 8-6b  
3/4 8-6c

### 3/4.8 ELECTRICAL POWER SYSTEMS

#### 3/4.8.1 A. C. SOURCES

##### OPERATING

##### LIMITING CONDITION FOR OPERATION

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- 3.8.1.1 As a minimum, the following electrical power sources shall be OPERABLE:
- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
  - b. Two separate and independent diesel generators each with:
    1. A separate day fuel tank containing a minimum volume of 400 gallons of fuel,
    2. A separate fuel storage system containing a minimum volume of 20,300 gallons of fuel, and
    3. A separate fuel transfer pump, and
  - c. Two separate battery/charger combinations supplying D.C control power to the 230 kv switchyard breakers.

APPLICABILITY: MODES 1, 2, 3 and 4.

##### ACTION:

- a. With one of the above offsite circuits inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; and 4.8.1.1.2.a.4 within 24 hours, unless the diesel generators are already operating. Restore at least two offsite circuits to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one diesel generator inoperable, demonstrate the operability of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; and 4.8.1.1.2.a.4 within 24 hours. Restore two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

## ELECTRICAL POWER SYSTEMS

### LIMITING CONDITION FOR OPERATION (continued)

#### ACTION: (Continued)

- c. With one offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; and 4.8.1.1.2.a.4 within 8 hours, unless the diesel generator is already operating. Restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. With two of the above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of two diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two off-site circuits to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- e. With two of the above required diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- f. With one of the batteries or chargers supplying D.C. control power to the 230 kv switchyard breakers inoperable, restore the inoperable battery and/or charger to OPERABLE status or supply all D.C. control power to the 230 kv switchyard from a single OPERABLE battery/charger combination within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

## ELECTRICAL POWER SYSTEMS

### LIMITING CONDITION FOR OPERATION (continued)

#### ACTION: (Continued)

- g. With a single battery/charger combination supplying D.C. control power to the redundant 230 kv breaker tripping coils, demonstrate the OPERABILITY of that battery by performing Surveillance Requirement 4.8.1.1.1.c.1 within 8 hours and at least once per 24 hours thereafter. Restore both batteries and chargers to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

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4.8.1.1.1 Each independent circuit between the offsite transmission network and the onsite Class 1E distribution system shall be:

- a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments and indicated power availability.
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring unit power supply from the normal circuit to the alternate circuit.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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2. Verifying the generator capability to reject a load of  $\geq 515$  kw without tripping.
  - \* 3. Simulating a loss of offsite power in conjunction with Reactor Building high pressure and Reactor Building high-high pressure tests signals, and:
    - a) Verifying de-energization of the emergency buses and load shedding from the emergency busses,
    - b) Verifying that the 4160 v. emergency bus tie breakers open,
    - c) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency busses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer, and operates for  $\geq 5$  minutes while its generator is loaded with the emergency loads.
  - \*\*4. Verifying the diesel generator operates for at least 60 minutes. During the first 5 minutes but no greater than 6 minutes of this test the diesel generator shall be loaded to greater than or equal to 3248 kw but less than 3300 kw and during the remaining time of this 60 minute test, the diesel generator shall be loaded to greater than or equal to 2750 kw but less than 3000 kw,
  - \*\*5. Verifying that the auto-connected loads to each diesel generator for the worst case diesel generator operating condition do not exceed 3248 kw, and
  6. Verifying that the automatic load sequence timers are OPERABLE with each load sequence time interval within  $\pm 10\%$ .
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\* This test shall be performed in MODE 3

\*\* These revised requirements shall become effective upon approval of the licensee's final test report and supporting documentation and shall apply only until the end of Cycle VII.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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  $\geq 1.20$ .
  - c) The pilot cell voltage is  $\geq 2.15$  volts under float charge, and
  - d) The overall battery voltage is  $\geq 120$  volts under float charge.
2. At least once per 92 days by verifying that:
  - a) The voltage of each connected cell is  $\geq 2.15$  volts under float charge and has not decreased more than 0.10 volts from the value observed during the base-line tests, and
  - b) The specific gravity, corrected to 77°F, and full electrolyte level of each connected cell is  $\geq 1.20$  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.
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.



## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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.

#### 4.8.1.2.2 At least one diesel generator shall be demonstrated OPERABLE:

- a. At least once per 31 days 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 diesel generator is aligned to provide standby power to the associated emergency buses.
- 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 4.8.1.2.2.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,
  2. Verifying the generator capability to reject a load of  $\geq 515$  kw without tripping.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- \*3. Simulating a loss of offsite power in conjunction with Reactor Building high pressure and Reactor Building high-high pressure tests signals, and;
  - a) Verifying de-energization of the emergency buses and load shedding from the emergency buses,
  - b) Verifying that the 4160 v. emergency bus tie breakers open,
  - c) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the emergency buses with permanently connected loads, energizes the auto-connected emergency loads through the load sequencer, and operates for  $\geq 5$  minutes while its generator is loaded with the emergency loads.
4. Verifying the diesel generator operates for  $\geq 60$  minutes while loaded to  $\geq 3000$  kw,
- \*5. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 3000 kw, and
6. Verifying that the automatic load sequence timers are OPERABLE with each load sequence time interval within  $\pm 10\%$ .

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\* This test shall be performed in MODE 3.