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

CAROLINA POWER AND LIGHT COMPANY

DOCKET NO. 50-261

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 88
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Carolina Power and Light Company (the licensee) dated May 7, 1984, 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 3.B of Facility Operating License No. DPR-23 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 88 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 2, 1985

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 88 FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Revise Appendix A as follows:

Remove Pages	Insert Pages
3.7-3	3.7-3
3.7-4	3.7-4
3.7-5	3.7-5

e. During periods when a diesel generator is being operated for testing purposes, its protective trips listed in Specification 3.7.1.d need not be bypassed after the diesel generator has properly assumed the load on its bus.

3.7.3 Backfeeding the E1 and E2 safety related busses through the main and unit auxiliary transformers will only occur during cold shutdown, unless nuclear safety considerations require it to be done during hot shutdown.

Basis

The electrical system equipment is arranged so that no single contingency can deactivate enough safety features equipment to jeopardize the plant safety. The 480-volt equipment is arranged on 6 buses. The 4160-volt equipment also is supplied from 4 buses.

Multiple outside sources supply station service power to the plant.

The plant auxiliary equipment is arranged electrically so that multiple items receive their power from the two different sources. For example, the charging pumps are supplied from the 480-volt buses No. 2A, E1, and E2; the four containment fans are divided between 480-volt buses No. E1 and E2; and the two residual heat pumps are on separate 480-volt buses No. E1 and E2. Valves are supplied from motor control centers.

One outside source of power is required to give sufficient power to run normal operating equipment. One transmission line can supply all the plant auxiliary power. The 110-4.16 KV start-up transformer can supply all the auxiliary loads.

The bus arrangements specified for operation ensure that power is available to an adequate number of safety features auxiliaries. With additional switching, more equipment could be out of service without infringing on safety.

Two diesel generators have sufficient capacity to start and run at design load all of the engineered safety features equipment. The safety features operated from one diesel generator can adequately cool the core for any Loss-of-Coolant incident, and they also maintain the containment pressure within the design value. The minimum diesel fuel oil inventory at all times is maintained to assure the operation of both diesels carrying design load of all the engineered safety features equipment for at least 48 hours,(1) or minimum safety features equipment (one diesel) for at least 96 hours with fuel oil available from the Unit 2 diesel generator fuel oil storage tank.

Additional supplies of diesel oil are available in the Hartsville area and from port terminals at Charleston, S.C. and Wilmington, N.C., and inland terminals at Columbia, S.C., Charlotte, N.C., Greensboro, N.C., Fayetteville, N.C., and Raleigh, N.C. Ample trucking facilities exist to assure deliveries to the site within eight hours. Diesel fuel is also available from the I-C turbine diesel fuel oil storage tanks (50,000 gallon total capacity) located at the site and connections are provided for fuel oil transferral to the Unit No. 2 diesel fuel oil storage tank. An additional minimum capacity of 6,000 gallons will be available from either the I-C turbine diesel fuel oil storage tank or the diesel generator fuel oil storage tank. Therefore, total onsite diesel fuel storage capacity shall not be less than seven days for minimum safety feature equipment operation.

One battery charger shall be in service so that the batteries will always be at full charge in anticipation of loss-of-A.C. power incident. This ensures that adequate D.C. power will be available for emergency uses.

The plant can be safely shut down without the use of offsite power since all vital loads (safety systems, instruments, etc.) can be supplied from the emergency diesel generators.

The two diesel generators, each capable of supplying safeguards loads, and the start-up transformer provide three separate sources of power immediately available for operation of these loads.

During cold shutdown conditions with degraded grid voltage and the loading on the safety related busses is light, backfeeding through the main and auxiliary transformers can supply sufficient voltages to operate the balance of plant equipment. Additionally, backfeeding can provide power when the diesel generators are out of service or not required for operation during cold shutdown.

During hot shutdown conditions, backfeeding is not a preferred option due to potential damage of safety related equipment caused by overvoltage and undervoltage overheating. However, if nuclear safety considerations warrant, the safety-related busses can be backfed at hot shutdown.

The protective trips for the diesel generators are bypassed in the normal standby condition of the diesel generators to reduce the probability of spurious trips if the diesel generator must provide power in an emergency. The waiving of this requirement during routine running of a diesel generator for test purposes reduces the exposure of the unit to undue risk to damage that might render it inoperable.

References

(1) FSAR Section 8.3.1