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Docket No. 50-261

Mr. E. E. Utley, Executive Vice President  
Power Supply and Engineering & Construction  
Carolina Power and Light Company  
Post Office Box 1551  
Raleigh, North Carolina 27602

Dear Mr. Utley:

The Commission has issued the enclosed Amendment No. 75 to Facility Operating License No. DPR-23 for the H. B. Robinson Steam Electric Plant, Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your two applications transmitted by letters dated October 22, 1982 and January 20, 1983.

The amendment revises the Technical Specifications to provide 72 hours to make operable the essential features of the AFW pumps and to clarify that the conditions under which at least one pressurizer safety relief valve must be operable.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

~~ORIGINAL SIGNATURE~~

Glode Requa, Project Manager  
Operating Reactors Branch #1  
Division of Licensing

Enclosures:

- 1. Amendment No. 75 to DPR-23
- 2. Safety Evaluation
- 3. Notice of Issuance

cc w/enclosures:  
See anext page

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F.R. NOTICE  
AMENDMENT

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SURNAME	CParrish	GRequa	GHolihan	DBrinkman	SVarga	GLatinas	H. KARMA
DATE	02/10/83	02/10/83	02/11/83	02/11/83	02/11/83	02/11/83	02/10/83

Mr. E. E. Utley  
Carolina Power and Light Company

cc: G. F. Trowbridge, Esquire  
Shaw, Pittman, Potts and Trowbridge  
1800 M Street, N.W.  
Washington, D. C. 20036

Regional Radiation Representatives  
EPA Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Mr. McCuen Morrell, Chairman  
Darlington County Board of Supervisors  
County Courthouse  
Darlington, South Carolina 29535

State Clearinghouse  
Division of Policy Development  
116 West Jones Street  
Raleigh, North Carolina 27603

Attorney General  
Department of Justice  
Justice Building  
Raleigh, North Carolina 27602

U. S. Nuclear Regulatory Commission  
Resident Inspector's Office  
H. B. Robinson Steam Electric Plant  
Route 5, Box 266-1A  
Hartsville, South Carolina 29550

James P. O'Reilly  
Regional Administrator - Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street - Suite 3100  
Atlanta, Georgia 30303



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. 75  
License No. DPR-23

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Carolina Power and Light Company (the licensee) dated October 22, 1982 and January 20, 1983, comply 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 applications, 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.

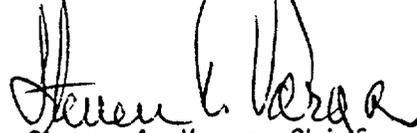
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-23 is hereby amended to read as follows:

(B) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 75, 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: February 25, 1983

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-23

DOCKET NO. 50-261

Revise Appendix A as follows:

Remove Pages

3.1-2

3.4-2

3.4-2a

3.4-3

Insert Pages

3.1-2

3.4-2

3.4-2a

3.4-3

3.1.1.2 Steam Generator

At least two steam generators shall be operable whenever the average primary coolant temperature is above 350°F.

3.1.1.3 Pressurizer (Pzr)

- a. At least one Pzr code safety valve shall be operable whenever the Reactor Head is on the vessel and the RCS is not open for maintenance.
- b. The Pzr, including necessary spray and heater control systems, shall be operable before the reactor is made critical.
- c. Whenever the RCS temperature is above 350°F or the reactor is critical:
  1. All three pressurizer code safety valves shall be operable. Their lift settings shall be maintained between 2485 psig and 2560 psig.
  2. At least 125 kw of pressurizer heaters capable of being powered from an emergency power source shall be operable.
- d. If the requirements of 3.1.1.3.c.2 are not met and at least 125 kw or Pzr heaters capable of being powered from an emergency source cannot be provided within 72 hrs., commence a normal plant shutdown and cooldown to an RCS average temperature of less than or equal to 350°F.

3.4.2 The specific activity of the secondary coolant system shall be  $\leq 0.10 \mu\text{Ci}/\text{gram}$  DOSE EQUIVALENT I-131 under all modes of operation from cold shutdown through power operation. When the specific activity of the secondary coolant system is  $> 0.10 \mu\text{Ci}/\text{gram}$  DOSE EQUIVALENT I-131, be in at least HOT SHUTDOWN within 6 hours and COLD SHUTDOWN within the following 30 hours.

The specific activity of the secondary coolant system shall be determined to be within the limit by performance of the sampling and analysis program of Table 4.1-2.

3.4.3 If, during power operations, any of the specifications in 3.4.1, with the exception of 3.4.1.b and 3.4.1.d as it applies to 3.4.1.b above, cannot be met within 24 hours, the operator shall initiate procedures to put the plant in the hot shutdown condition. If any of these specifications cannot be met within an additional 48 hours, the operator shall cool the reactor below  $350^{\circ}\text{F}$  using normal procedures.

3.4.4 With one auxiliary feedwater pump and/or essential features INOPERABLE, restore that auxiliary feedwater pump and/or essential features to OPERABLE status within 72 hours, or;

a. Submit a special report to the Commission in accordance with Specification 6.9.3.f within 30 days outlining the cause of the inoperability and the action taken to return the pump and/or essential features to OPERABLE status, and;

b. Restore all three auxiliary feedwater pumps and their essential features to operable status within 7 days or be in at least HOT SHUTDOWN within 6 hours.

3.4.5 With two auxiliary feedwater pumps INOPERABLE, restore at least one inoperable auxiliary feedwater pump to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within 6 hours.

3.4.6 In the event that the number of channels of the Auxiliary Feedwater Initiation circuits falls below the limits given in the column entitled Minimum Operable Channels, or Minimum Degree of Redundancy cannot be achieved, operation shall be limited according to the requirements shown in Column 3 of Table 3.4-1. The Auxiliary Feedwater System Automatic Initiation Setting Limits are shown in Table 3.4-2. If the setpoint is less conservative than the value shown in the Allowable Values column to Table 3.4-2, declare the channel inoperable and operation shall be limited according to the requirement shown in Column 3 of Table 3.4-1.

### Basis

A reactor shutdown from power requires removal of core decay heat. Immediate decay heat removal requirements are normally satisfied by the steam bypass to the condenser. Therefore, core decay heat can be continuously dissipated via the steam bypass to the condenser as feedwater in the steam generator is converted to steam by heat absorption. Normally, the capability to return feedwater flow to the steam generators is provided by operation of the turbine cycle feedwater system.

The twelve main steam safety valves have a total combined rated capability of 10,068,845 lbs/hr. The total full power steam flow is 10,068,845 lbs/hr.; therefore, twelve (12) main steam safety valves will be able to relieve the total steam flow if necessary.<sup>(1)</sup> Following a loss of load, which represents the worst transient, steam flows are below the total capacity of the 12 safety valves. Therefore, over-pressurization of the secondary system is not possible.

In the unlikely event of complete loss of turbine-generator and offsite electrical power to the plant, decay heat removal would continue to be assured by the availability of either the steam-driven auxiliary feedwater pump or one of the two motor-driven auxiliary steam generator feedwater pumps operated from the diesel generators and steam discharge to the atmosphere via the main steam safety valves and atmospheric relief valves. One motor-driven auxiliary feedwater pump can supply sufficient feedwater for removal of decay heat from the plant.<sup>(2)</sup> The auxiliary feedwater system essential features are those features that provide auxiliary feedwater flow to two out of three steam generators consistent with auxiliary feedwater pump operability. In order to provide a high degree of reliability all three auxiliary feedwater pumps will be operable prior to exceeding 350°F. The minimum amount of water in the condensate storage tank is the amount needed for at least two-hours operation at hot standby conditions. If the outage is more than two hours, deep well or Lake Robinson water may be used.

An unlimited supply is available from the lake via either leg of the plant Service Water System for an indefinite time period.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-23

CAROLINA POWER AND LIGHT COMPANY

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

DOCKET NO. 50-261

Introduction

By letters dated October 22, 1982 and January 20, 1983 the licensee requested revision to their Technical Specifications to provide 72 hours to make operable essential features of the Auxiliary Feedwater Pumps and to clarify the limiting conditions of operation under which at least one pressurizer safety relief valve must be operable.

Evaluation

The revisions requested and our conclusions are:

A. Auxiliary Feedwater System (AFW) Operability

The Commission's Amendment No. 74 issued on January 6, 1983, provided 72 hours to make operable an inoperable AFW pump. However, the essential features needed to support the operation of that pump in the AFW system were omitted from the 72 hour requirement.

As currently stated, the Technical Specifications would allow 72 hours to repair an inoperable AFW pump, but would require 24 hours to restore an essential feature of that pump (such as a control valve) to operable status. The intent of the specification concerns the operability of the train associated with that pump, and any component or feature in that train should have the same specification.

We have reviewed this request and find that requested change consistent with the definition of Operability as given in Standard Technical Specifications and in the Technical Specification 1.3 of the H. B. Robinson Technical Specifications and therefore conclude that the change is acceptable.

B. Limiting Conditions of Operation (LCO)

At each refueling outage, the three (3) Pressurizer Code Safety Valves (SVs) are all removed for bench testing and setpoint verification. Because of the refueling floor equipment configuration at the start of a refueling outage, the SVs must be removed when the reactor head is still on the vessel. However, as the licensee pointed out, this is not in literal compliance with TS 3.1.1.3.a which states that at least one Pressurizer Code Safety Valve shall be operable whenever the Reactor Head is on the vessel.

This LCO is required to provide a path for pressure relief in the event that all residual heat removal were lost. To correct this LCO the licensee recommended adding the words "...and the RCS is not opened for maintenance," at the end of the LCO sentence whenever the Reactor Head is on the vessel. We have reviewed the requested change and find that it is not the intent of the specification to have one pressurizer safety valve operable when the RCS is inoperable, i.e., opened for maintenance, and therefore conclude that the recommended change is acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Date: February 25, 1983

Principal Contributor:  
G. Requa

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-261CAROLINA POWER AND LIGHT COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 75 to Facility Operating License No. DPR-23 issued to Carolina Power and Light Company (the licensee), which revised Technical Specifications for operation of the H. B. Robinson Steam Electric Plant, Unit No. 2, (the facility) located in Darlington County, South Carolina. The amendment is effective as of the date of issuance.

The amendment revises the Technical Specifications to provide 72 hours to make operable the essential features of the AFW pumps and to clarify that the conditions under which at least one pressurizer safety relief valve must be operable.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

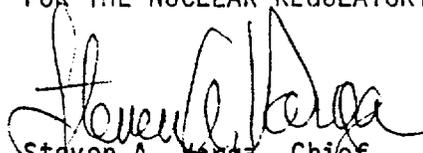
The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

- 2 -

For further details with respect to this action, see (1) the applications for amendment dated October 22, 1982 and January 20, 1983, (2) Amendment No. 75 to License No. DPR-23, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Hartsville Memorial Library, Home and Fifth Avenues, Hartsville, South Carolina 29550. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 25th day of February, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION

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