Docket No. 50-261

AUG 23 1973

Carolina Power & Light Company
ATTN: E. E. Utley, Vice President
Bulk Power Supply Department
336 Fayetteville Street
Raleigh, North Carolina 27602

Gentlemen:

Change No. 22
License No. DPR-23

By letter dated April 2, 1973, you submitted an application for changes to the Technical Specifications appended to License No. DPR-23, as amended, for Unit No. 2 at the H. B. Robinson Steam Electric Plant. The proposed changes to the Technical Specifications would: (a) clarify the requirements for availability of the boric acid tanks, (b) authorize redundant valves in the isolation seal water system to be out of service for 24 hours, and (c) delete the description of the sensitivity of leak detection techniques in the basis for the primary coolant leakage specifications. As discussed with your staff, we have revised the proposed change to meet our regulatory requirements. We have designated our action as Change No. 22.

Change No. 22 allows a single boric acid tank to be out of service indefinitely provided that the contents of the other tank are within specification. Adequate support for this action is evident on page 3.2-4 of the Technical Specifications, where it is stated that the refueling water storage tank provides a redundant source of borated water. Further, Change No. 22 authorizes redundant valves in the isolation seal water system to be taken out of service for 24 hours provided that the alternate valves are tested immediately prior to that action. In addition, certain editorial changes have been made as requested by you or as discussed with your staff.

Deletion of the sensitivities of the leak detection techniques is not included in Change No. 22. Before that change can be made, it will be necessary for you to place in the docket information which shows that Regulatory positions 3 and 5 in Regulatory Guide 1.45 are satisfied. Specifically, it will be necessary for you to show how adequate sensitivities for the various leak detection techniques are derived. Further,

if changes in the leak detection sensitivities are contemplated, please submit answers to the questions in Attachment B. These questions are related to the condition of sensitized stainless steel in the reactor coolant pressure boundary. Answers previously submitted may be incorporated by reference. If you wish to pursue this change, please provide the additional information by October 15, 1973, or provide a schedule for submitting it.

We conclude that Change No. 22 does not present a significant hazard consideration and that there is reasonable assurance that the health and safety of the public will not be endangered. Pursuant to 10 CFR, Part 50, Section 50.59, the Technical Specifications appended to License No. DPR-23 are changed as shown in Attachment A.

Sincerely,

Original signed by
Donald J. Skovholt

Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

Enclosures:
1. Attachment A - Change No. 22
2. Attachment B - Request for Additional Information

cc w/enclosures:
George F. Trowbridge, Esquire
Shaw, Pittman, Potts, Trowbridge
and Madden
910 - 17th Street, N. W.
Washington, D. C. 20006

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DATE ▶	8/17/73	8/22/73	8/24/73	8/23/73		

ATTACHMENT A

CHANGE NO. 22 TO THE TECHNICAL SPECIFICATIONS

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

1. In the last line of the first paragraph in Technical Specification 3.1.2.4.b, change "3.1.2.3.a" to read "3.1.2.4.a".

2. Delete Technical Specification 3.2.3.c and change the number of Technical Specification 3.2.3.d to 3.2.3.c.

3. In the Basis for Technical Specification 3.2, make the following changes:

   a. On page 3.2-3 in the first paragraph of the Basis, delete "30,000 gallons of water in the primary water storage tank is sufficient to make up to the reactor coolant system when cooling down to the cold shutdown condition."

   b. On page 3.2-4 in the third sentence of the first paragraph, delete "or boric acid tanks."

   c. On page 3.2-4 after the first paragraph, insert the following new paragraph:

      When borating to the cold shutdown condition using boric acid from the boric acid tanks, make up water must be supplied to compensate for shrinkage of the primary coolant. Sufficient water for this purpose must be maintained in the primary water storage tank and the refueling water storage tank as required in 3.2.2.f and 3.3.1.1.a.

4. In Technical Specification 3.3.6, make the following changes:

   a. Designate the paragraph as "3.3.6.1".

   b. Add the following:

      3.3.6.2 During power operation, one of the two redundant actuation valves associated with the automatic headers may be inoperable for a period not to exceed 24 hours provided the other redundant valve is promptly demonstrated to be

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operable. If the system does not meet the requirements of 3.3.6.1 within 24 hours, the reactor shall be placed in the hot shutdown condition utilizing normal operating procedures. If the requirements of 3.3.6.1 are not satisfied within an additional 48 hours, the reactor shall be placed in the cold shutdown condition utilizing normal operating procedures.

5. On page 3.4-3 of the Basis for Technical Specification 3.4, change "m^3/sec" in the equation for X/Q to read "sec/m^3" and add "DCF = Dose Conversion Factor" after the line beginning "0.1 = equivalent . . ."

6. On page 3.7-2 in the Basis for Technical Specification 3.7, change "48-volt" in the second sentence to read "480-volt".

7. In Technical Specification 6.6.3.f, change "7 and 20 years" to read "3 years and 20 years."

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ATTACHMENT B

REQUEST FOR ADDITIONAL INFORMATION

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-261

1. Identify all known sensitized stainless steel components of and within the reactor coolant pressure boundary*, including portions of piping. Include furnace-sensitized components affected by substantial field stress relieving but not the heat affected zones caused by field welds. State location, type of material, and sensitization process.

2. Specify the maximum stress levels (calculated or measured, if known) these components receive in service. Indicate whether the calculations or measurements of stress level were based on the "as-built" condition, including effects of "as-installed" piping hangers and restraints. Summarize the results of any field measurements of piping displacement that have been performed, including the system conditions for which the measurements were made.

3. Specify the normal external operating environment of the components listed above. Discuss the probability of external surface contact with corrodents.

   Indicate the normal water chemistry that has been maintained within the reactor coolant system during both operating and shutdown conditions, including the range of values for materials whose concentrations have varied appreciably. Include measured values of oxygen and halide concentrations.

4. For each component listed, indicate whether the internal surface is normally in contact with flowing water, stagnant water, or steam, and indicate whether the configuration and operating conditions are such that a possibility exists of entrapment of gases within the sensitized portion. Also discuss whether possible corrodents could have come into contact with the internal surfaces during cleaning or other preoperational exposure of these surfaces.

5. Specify the nondestructive tests that have been performed internally and externally on each component listed since its installation. Indicate the acceptance criteria established for each type of test, the sensitivity in terms of flaw detection, and the results of these tests.

6. Indicate whether any destructive metallurgical examinations have been performed on sensitized material removed from the reactor coolant pressure boundary, or samples thereof, and the results of such tests.

* A definition of reactor coolant pressure boundary is enclosed.

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7. Discuss the operating performance of leak detection systems during plant operation to date. Indicate the current sensitivity of each system.

8. For each component listed, indicate the degree of accessibility which presently exists for the performance of nondestructive tests and inspections.

9. Describe the plans you have developed for surveillance and nondestructive tests of the sensitized stainless steel components of and within the reactor coolant pressure boundary, including a proposed timetable. In this connection, the recent experience with furnace-sensitized stainless steel components indicates that unless a considerable amount of evidence attests to the current integrity of such components or unless valid technical reasons would preclude performing nondestructive tests, the performance of a program of nondestructive testing of a sizeable sample of such components may be appropriate at an early date. These examinations should include dye penetrant testing and either ultrasonic testing or radiography.

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Definition of

Reactor Coolant Pressure Boundary

Reactor coolant pressure boundary[1/] means all those pressure containing components of boiling and pressurized water-cooled nuclear power reactors, such as pressure vessels, piping, pumps, and valves, which are:

(1) part of the reactor coolant system or

(2) connected to reactor coolant system, up to and including any and all of the following:

(a) the outermost containment isolation valve in system piping which penetrates primary reactor containment,

(b) the second of two valves normally closed during normal reactor operation in system piping which does not penetrate primary reactor containment,

(c) the reactor coolant system safety and relief valves.

For nuclear power reactors of the direct cycle boiling water type, the reactor coolant system extends to and includes the outermost containment isolation valve in the main steam and feedwater piping.

1/ Components which are connected to the reactor coolant system and are part of the reactor coolant pressure boundary may be excluded from these requirements provided:

(a) For postulated failure of the component during normal reactor operation, the reactor can be shut down and cooled down in an orderly manner assuming makeup is provided by the reactor coolant makeup system only.

(b) The component is or can be isolated from the reactor coolant system by two valves (both closed, both open, or one closed and the other open). Each open valve must be capable of automatic actuation and its closure time must be such that for postulated failure of the component during normal reactor operation and assuming the other valve is open, the reactor can be shut down and cooled down in an orderly manner assuming makeup is provided by the reactor coolant makeup system only.