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DESCRIPTION
LTR. RE. OUR 8-23-76 LTR..... TRANS THE FOLL-
OWING.....ENCLOSURE
REQUEST FOR LICENSE AMENDMENT-REVISION TO TECHNICAL SPECIFICATIONS CONCERNING THE CONTROL OF SECONDARY WATER CHEMISTRY A.....(3 SIGNED CYS. RECEIVED)
(3 PAGES)

ACKNOWLEDGED

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PLANT NAME: H.B. ROBINSON # 2

SAFETY

FOR ACTION/INFORMATION

ENVIRO

SAB 9-29-76

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Carolina Power & Light Company

FILE: NG-3514(R)

SERIAL: NG-76-1291

Director of Nuclear Reactor Regulation
ATTN: Mr. Robert W. Reid, Chief
Operating Reactors Branch No. 4 Mail Section
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

H. B. ROBINSON UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23

REQUEST FOR LICENSE AMENDMENT - REVISION TO TECHNICAL SPECIFICATIONS

Dear Mr. Reid:

Your letter of August 23, 1976, expressed concerns about the control of secondary water chemistry and requested that we submit technical specifications to control secondary water chemistry. We have reviewed your request and submit the following response.

CP&L does not believe that technical specifications establishing limiting conditions for operations should be placed on secondary water chemistry. The safety aspects of steam generator pressure boundary integrity are already controlled by other means. The technical specification requiring continuous monitoring of primary to secondary leakage and the limit of one gallon per minute per steam generator provides limits and requirements for plant shutdown during reactor operation. Eddy current testing to conform to Regulatory Guide 1.83, "Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes," provides further means by which individual tube integrity can be determined during periodic planned outages.

These existing specifications are directed to assuring the integrity of the steam generators without identifying the causes, if any, of their possible degradation. We understand that the purpose of technical specifications is to include the identification of those parameters of design and operation whose violation, by some margin, would or could present an unacceptable safety risk. Thus, the term "limiting conditions for operation" is defined in 10CFR 50.36(c) (2) as "the lowest functional capability or performance levels of equipment required for safe operation of the facility." It is, therefore, appropriate to legally limit the leakage through a primary system boundary, such as the steam generator. But in our judgment, it would not be appropriate to legally limit potential causes of degradation of such boundaries. Technical specifications would be particularly inappropriate to secondary water chemistry parameters whose equilibrium conditions fluctuate during normal plant operation modes, such as power changes, startups and shutdowns. There is no evidence that short-term variations in secondary water chemistry are significant to steam generator tube integrity. Legal limitations on such fluctuations could only result in enforcement problems, lack of operational flexibility, and diminution of the safety significance of technical specifications. Deviations from secondary water quality guidelines are not a safety

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September 24, 1976

problem and are therefore not appropriately the subject of technical specifications; the condition of steam generator tubes on the other hand, is appropriate for such consideration and the present technical specification provides for direct monitoring of the condition of the steam generator tubes in order to assure that continued integrity is maintained.

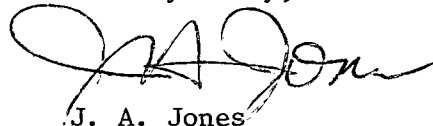
In our opinion, we should avoid proliferation of technical specifications. Since the addition, deletion, or revision of technical specifications involves the formal, time-consuming license amendment process, they should contain only those requirements that are directly relatable to safe operation. Other means should be utilized for providing direction on matters that are indirectly related to the safety of operation. We find many examples of this philosophy at all of the current operating plants, wherein many operating practices, procedures, tests, plans, etc., are covered by means other than the imposition of technical specifications.

Your letter addresses the need for continual monitoring and control of steam side water chemistry in order to ensure against an accumulation of harmful impurities in the steam generators. In order to provide for long-term reliability and continued assurance of tube integrity, a chemistry control program has been in operation at the H. B. Robinson Unit 2 for the past five years. This program defines sampling and monitoring requirements, data recording and maintenance procedures, review of the chemistry data by qualified station personnel and specifies prompt management review of all conditions which may be outside of the operations guidelines. This assures control, records, review, and correction of conditions and would provide audit and inspectability for purposes of surveillance if referenced in the technical specification as a surveillance requirement.

A replacement page necessary to incorporate the above program into the H. B. Robinson Unit 2 Technical Specification is provided as an attachment to this letter. The change is indicated by a vertical line in the margin of the replacement page. This change is all that is required to make the complete secondary water chemistry program an auditable and inspectable facet of the plant operations.

As required by Commission regulations this submittal is signed under oath by a duly authorized officer of the Company.

Yours very truly,



J. A. Jones

Executive Vice President
Engineering, Construction & Operation

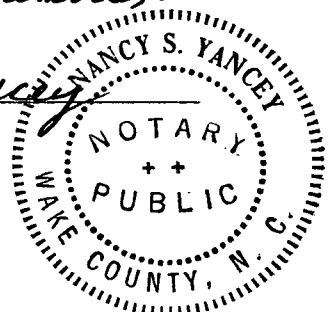
CSB/mjc

Attachment

Sworn to and subscribed before me this *24th* day of *September, 1976*.

Nancy S. Yancey
Notary Public

My Commission Expires: *June 29, 1981*



4.7 SECONDARY STEAM AND POWER CONVERSION SYSTEM

Applicability

Applies to periodic testing of secondary system components and surveillance of secondary coolant.

Objective

To verify the ability of secondary system components to function as required and to prevent system degradation.

Specification

- 4.7.1 The main steam stop valves shall be tested at each refueling interval of each 15 ± 3 months, whichever occurs first. Closure time of five seconds or less shall be verified. The valves are tested under no flow and no load conditions.
- 4.7.2 The steam generators shall be pressure tested at each refueling interval or each 15 ± 3 months, whichever occurs first. Either of the following test conditions may be applied:
- (a) 1900 psi pressure differential across the tube walls with the tube walls at 400°F, or
 - (b) 2300 psi pressure differential across the tube walls with the tube walls at the cold shutdown temperature.
- 4.7.3 The secondary coolant in each steam generator shall be sampled and analyzed five days per week at all times when the temperature of the primary coolant is equal to or exceeds 350°F. The testing procedure shall specify sampling frequency, appropriate acceptance criteria, and review of the data by qualified management personnel.

Basis

The main steam stop valves serve to limit an excessive Reactor Coolant System cooldown rate and resultant reactivity insertion following a main steam break incident. Their ability to close upon signal should be verified at each scheduled refueling shutdown. A closure time of five seconds was selected as being consistent with expected response time for instrumentation as detailed in the steam line break incident analysis.