



Carolina Power & Light Company

SERIAL: LAP-83-444

JAN 10 1984

Director of Nuclear Reactor Regulation
Attention: Mr. D. B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-324
LICENSE NO. DPR-62
REQUEST FOR LICENSE AMENDMENT
CORE SPRAY SYSTEM SURVEILLANCE INTERVAL EXTENSION

Dear Mr. Vassallo:

Summary

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications (TS) for the Brunswick Steam Electric Plant, Unit No. 2. The proposed TS change requests postponement of one full flow test of the core spray pumps until the primary containment suppression chamber is restored to its operational condition.

Discussion

Carolina Power & Light Company is presently planning to shutdown the Brunswick Steam Electric Plant, Unit No. 2 during the month of March 1984 for a 30 week outage (plus six weeks for contingencies) to refuel, perform maintenance work and modify the Mark I torus. During this outage, CP&L also plans to off-load the entire reactor core in order to perform an inservice inspection of the reactor vessel and remove the cladding on the feedwater spargers. In conjunction with the Mark I torus modifications, the suppression chamber will be drained and, therefore, it will not be possible to perform the full-flow surveillance test of the Core Spray System (CSS) wherein water is recirculated into the suppression pool.

Technical Specification 4.5.3.1.c.1 states: Each CSS subsystem shall be demonstrated OPERABLE:

c. At least once per 92 days by:

1. Verifying that each CSS pump can start from the control room and develops a flow of at least 4625 gpm on recirculation flow against a system head corresponding to a reactor vessel pressure of ≥ 113 psig.

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This requirement will last be performed on approximately March 9, 1984. Due to the modifications being made to the suppression pool the maximum permissible interval between full flow tests will be exceeded. Carolina Power & Light is, therefore, requesting a one time exemption to the maximum surveillance interval during the upcoming refueling outage (Reload 5) until within 48 hours after restoration of the suppression chamber to operable status, but in any case no later than November 15, 1984. Based on the present outage schedule, CP&L plans to restore the suppression chamber to operable status and perform Surveillance Requirement 4.5.3.1.c.1 by approximately August 15, 1984. This will extend the surveillance interval from the present maximum of 115 days to approximately 159 days. The November 15, 1983 date allows for contingencies in the completion of modification to the suppression pool making the total allowable surveillance interval 251 days.

A similar request was made by CP&L on February 8, 1983 (LAP-83-17, E. E. Utley to D. B. Vassallo) for the Brunswick Unit 1 modification of the Mark I torus. This request was subsequently approved by the NRC on March 15, 1983 (NRC letter, S. D. McKay to E. E. Utley).

Significant Hazards Analysis

Carolina Power & Light Company has reviewed this request and determined that extending the surveillance interval, for a full flow test of the CSS, from 92 days to a total allowable surveillance interval of 251 days does not constitute a significant reduction in the verification of operability or the availability of this system for the following reasons:

1. For the majority of the outage (approximately 20 weeks) the fuel will not be in the vessel, therefore, removing the need for the CSS System.
2. Normally, in the refueling condition (OPERATIONAL CONDITION 5), the CSS is not required to be operable, (and thus to have surveillance testing performed), if all of the following conditions are met: (1) the reactor vessel head is removed, (2) the refueling cavity is flooded, and (3) the spent fuel pool gates are removed.

The CSS will be available for operation, if needed, during the relatively short interval when operability is required due to plant conditions.

3. The CSS consists of two independent subsystems, each with 100% capacity, thus providing redundant safety system subsystems.
4. Surveillance is being performed every 12 hours to verify that the CSS has an operable water source (TS 4.5.3.1.a).

Surveillance is performed every 31 days to verify that the CSS is filled with water (TS 4.5.3.1.b.1).

Surveillance is performed every 31 days to verify that all valves in the CSS flow path are properly aligned (TS 4.5.3.1.b.2).

Mr. D. B. Vassallo

-3-

Surveillance is performed every 92 days to verify the operability of the core spray header differential pressure instrumentation (TS 4.5.3.1.c.2).

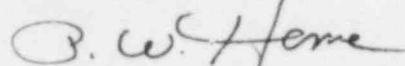
5. A review of previous CSS operability testing shows that the system is extremely reliable, as no failures have been identified since 1978.

The proposed change pertaining to specification 4.5.3.1.c.1 represents a relaxation in the surveillance requirements. However, CP&L believes that adequate precautions have been taken to ensure the availability of other means of cooling for the reactor core. Therefore, the results of this change, while reducing the safety margins, are clearly within the acceptable criteria. Thus, this proposed change is similar to an example of "no significant hazards" in the guidance provided by the Commission (48 FR 14870), namely a change which "may reduce in some way a safety margin but where the results of the change are clearly within all acceptable criteria with respect to the system as specified in the Standard Review Plan."

Administrative Information

The proposed Brunswick-2 TS page is provided in Enclosure 1 (CP&L reference 83TSB34). CP&L has evaluated this request in accordance with the provisions of 10 CFR 170.22 and has determined that a Class III license amendment fee is required. A check for \$4,000.00 is enclosed in payment of the license amendment fee.

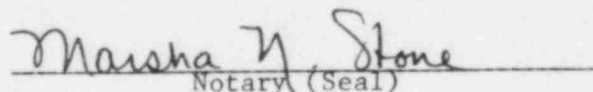
Yours very truly,



P. W. Howe
Vice President
Brunswick Nuclear Project

PPC/kjr (7984PPC)

P. W. Howe, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.


Notary (Seal)

My commission expires: 3-22-87

cc: Mr. Dayne H. Brown
Radiation Protection Branch
Division of Facility Services
Department of Human Resources

Mr. D. O. Myers (NRC-BSEP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. S. D. MacKay (NRC)
Mr. M. Grotenhuis (NRC)