10 CFR 50.90

Progress Energy

Serial: RNP-RA/07-0126

NOV 2 9 2007

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

REQUEST FOR TECHNICAL SPECIFICATIONS
CHANGE TO SECTION 3.6.8 ISOLATION VALVE SEAL WATER SYSTEM

Ladies and Gentlemen:

In accordance with the provisions of the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. (PEC), is submitting a request for an amendment to the Technical Specifications (TS) contained in Appendix A of the Operating License for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

The proposed amendment will revise TS 3.6.8, "Isolation Valve Seal Water (IVSW) System." The proposed change revises Surveillance Requirements (SR) 3.6.8.2 and 3.6.8.6 related to IVSW tank volume and header flow rates.

Attachment I provides an Affirmation as required by 10 CFR 50.30(b).

Attachment II provides a description of the current condition, a description and justification of the proposed changes, a No Significant Hazards Consideration Determination, and an Environmental Impact Consideration.

Attachment III provides a markup of the affected TS pages. Attachment IV provides the retyped TS pages.

In accordance with 10 CFR 50.91(b), Progress Energy Carolinas, Inc., is providing the State of South Carolina with a copy of this license amendment request.

Nuclear Regulatory Commission approval of the proposed license amendment is requested by September 12, 2008. This date is requested based on a desire to implement these changes for Refueling Outage No. 25, which is currently scheduled to begin on September 27, 2008.

Progress Energy Carolinas, Inc.
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville, SC 29550

A001
NRR

If you have any questions concerning this matter, please contact me at (843) 857-1253.

Sincerely,

C. T. Baucom
Manager – Support Services – Nuclear

Attachments:

I. Affirmation
II. Request for Technical Specifications Change Related to the Isolation Valve Seal Water System
III. Markup of Technical Specifications Pages
IV. Retyped Technical Specifications Pages

RAC/rac

c: Ms. S. E. Jenkins, Manager, Infectious and Radioactive Waste Management Section (SC)
Mr. A. Gantt, Chief, Bureau of Radiological Health (SC)
Dr. W. D. Travers, NRC, Region II
Ms. M. G. Vaaler, NRC Project Manager, NRR
NRC Resident Inspector, HBRSEP
Attorney General (SC)

AFFIRMATION

The information contained in letter RNP-RA/07-0126 is true and correct to the best of my information, knowledge, and belief; and the sources of my information are officers, employees, contractors, and agents of Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. I declare under penalty of perjury that the foregoing is true and correct.

Executed On: 11/29/07

E. A. McCartney
Director – Site Operations, HBRSEP, Unit No. 2

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

REQUEST FOR TECHNICAL SPECIFICATIONS
CHANGE RELATED TO THE ISOLATION VALVE SEAL WATER SYSTEM

Description of Current Condition

Technical Specifications (TS) Section 3.6.8 provides the requirements for the Isolation Valve Seal Water (IVSW) System. Surveillance Requirement (SR) 3.6.8.2 states, "Verify the IVSW tank volume is ≥85 gallons." The intent of this surveillance requirement is to ensure the water volume in the tank is ≥85 gallons, however, the word "water" is missing from the statement.
SR 3.6.8.6 provides limits on IVSW System flow rates, which is therefore measuring the leakage rate from the system boundary. The intent of SR 3.6.8.6, in combination with SR 3.6.8.2, is to ensure there is sufficient water volume in the system to compensate for leakage, such that makeup to the system is not required for 24 hours. SR 3.6.8.6 currently provides individual flow rate limits for each of the four headers in the system. A description of the IVSW System is provided in Section 6.8 of the H. B. Robinson Steam Electric Plant, Unit No. 2, Updated Final Safety Analysis Report.

Description and Justification of the Proposed Changes

The proposed change adds the word "water" to SR 3.6.8.2. This is a clarification change and is consistent with the intent of the surveillance and the manner in which the surveillance is performed.

The proposed change revises SR 3.6.8.6 to provide a total flow rate limit from all four headers in place of the individual header limits. The proposed total flow rate limit of ≤124 cc/minute is equal to the sum of the existing header limits specified in SR 3.6.8.6.

The current values for each header were determined based on a design analysis assumption that each valve supplied by that header of the IVSW System leaks at a rate of 50 cc/hour per inch of nominal pipe diameter. The assumed leakage from each valve connected to a header is summed to obtain the acceptance limit for that header flow. Based on the number and size of the valves that were connected to the headers at the time SR 3.6.8.6 was last revised, this resulted in the values shown in SR 3.6.8.6, and a total flow from all four headers of 124 cc/minute (7440 cc/hour).

The design analysis also assumed there was a failure of the largest valve to close completely, resulting in an additional leakage of 1000 cc/hour per inch of nominal pipe diameter for that valve. The largest valve was determined to be a 6 inch valve resulting in an additional assumed leakage flow of 6000 cc/hour. Therefore, the total combined leakage was 7440 + 6000 = 13,440 cc/hour, or 3.55 gallons/hour. This results in the need for 85 gallons water inventory in the tank to provide for 24 hours of leakage before makeup is required. Makeup can then be provided by either of two sources (Primary Water or Service Water) to ensure the system will function for 30 days.

For demonstration that the 24 hour water supply is available, it does not matter if each individual header meets the current specified flow rate; it is only the total from all four headers that is

important. Therefore, the proposed change provides one combined limit. Individual header limits based on an assumed leak rate per valve could become inconsistent with this methodology if valves are added or removed from the header supply. The current surveillance procedures do not have an acceptance criterion for individual valve leakage, only for the total header leakage limit based on the Technical Specifications. The 50 cc/hour per inch was a reasonable input assumption used to estimate total IVSW leakage and hence establish a reasonable required tank volume.

During the 2008 refueling outage, it is planned that three Safety Injection valves (SI-870A, SI-870B, and SI-869) will be removed from IVSW Header A leakage testing, as it has been determined that these three valves should not be subject to 10 CFR 50 Appendix J leakage criteria. That would result in the need to lower the value of 52 cc/minute in SR 3.6.8.6 for Header A to maintain consistency with the 50 cc/hour per inch assumption. Such a reduction would result in an unnecessary limitation, as 52 cc/minute still ensures compliance with the design requirement for a 24 hour water supply.

This license amendment is therefore revising the analytical basis for SR 3.6.8.6. The methodology for establishing the proposed acceptance criterion for SR 3.6.8.6 is based on the assessment that a total leak rate from all four headers of 124 cc/minute will ensure a 24 hour water supply based on a required tank volume of 85 gallons (this still assumes the failure of one valve to close resulting in an additional 6000 cc/hour flow). This replaces the basis methodology that assumed a specific leakage rate per valve, an assumption that is not required to be verified or met on a per valve basis. Surveillance flexibility will be gained, as individual header allowed leakage will increase. However, the design requirement to ensure a 24 hour water supply is not impacted.

No Significant Hazards Consideration Determination

Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. (PEC), is proposing a change to Appendix A, Technical Specifications, of Facility Operating License No. DPR-23, for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The proposed change revises the requirements related to Limiting Condition for Operation (LCO) Section 3.6.8, Isolation Valve Seal Water System. The proposed change adds the word "water" to Surveillance Requirement (SR) 3.6.8.2 and revises SR 3.6.8.6 to provide a total flow rate limit from all four headers in place of the individual header limits.

An evaluation of the proposed change has been performed in accordance with 10 CFR 50.91(a)(1) regarding no significant hazards considerations, using the standards in 10 CFR 50.92(c). A discussion of these standards as they relate to this amendment request follows:

1. The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

   The proposed change is related to the Isolation Valve Seal Water System. This is a post-accident dose mitigating system and has no impact on the probability of an accident occurring. The proposed change to SR 3.6.8.2 is a clarification that does not impact the system design or operation. The proposed change to SR 3.6.8.6 revises the methodology used to establish the system flow limits, but maintains the same total flow limitation and

consistency with the system design requirements. There is no impact on the system's dose mitigation capability.

Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident From Any Previously Evaluated.

The proposed change does not impact the design of the system and does not increase the potential for a failure that would result in an accident of a different kind.

Therefore, operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any previously evaluated.

3. The Proposed Change Does Not Involve a Significant Reduction in the Margin of Safety.

The proposed change does not revise the total leakage limit or the design requirements for the Isolation Valve Seal Water System. There is no impact on the capability of the containment as a fission product barrier.

Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant reduction in the margin of safety.

Based on the above discussion, Carolina Power and Light Company has determined the requested change does not involve a significant hazards consideration.

Environmental Impact Consideration

10 CFR 51.22(c)(9) provides criteria for identification of licensing and regulatory actions for categorical exclusion from performing an environmental assessment. A proposed change for an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed change would not (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increases in the amounts of any effluents that may be released offsite; (3) result in a significant increase in individual or cumulative occupational radiation exposure. Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc., has reviewed this request and determined the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of the amendment. The basis for this determination follows.

Proposed Change

Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. (PEC), is

proposing a change to Appendix A, Technical Specifications (TS), of Facility Operating License No. DPR-23, for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The proposed change revises the requirements related to Limiting Condition for Operation (LCO) Section 3.6.8, Isolation Valve Seal Water System. The proposed change adds the word "water" to Surveillance Requirement (SR) 3.6.8.2 and revises SR 3.6.8.6 to provide a total flow rate limit from all four headers in place of the individual header limits.

Basis

The proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons:

1. As demonstrated in the No Significant Hazards Consideration Determination, the proposed change does not involve a significant hazards consideration.

2. The proposed change maintains the Isolation Valve Seal Water System design bases and does not result in an increased containment leakage rate during accident conditions. The change has no impact on the amount or type of effluents released during normal operation. Therefore, there is no significant change in the types or significant increases in the amounts of any effluents that may be released offsite.

3. The proposed change has no negative impact on the occupational exposure required to perform the specified surveillances. Therefore, the proposed change does not result in a significant increase in individual or cumulative occupational radiation exposures.

United States Nuclear Regulatory Commission
Attachment III to Serial: RNP-RA/07-0126
3 Pages (including cover page)

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

REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE RELATED TO THE ISOLATION VALVE SEAL WATER SYSTEM

MARKUP OF TECHNICAL SPECIFICATIONS PAGES

3.6 CONTAINMENT SYSTEMS

3.6.8 Isolation Valve Seal Water (IVSW) System

LCO 3.6.8 The IVSW System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. IVSW system inoperable.	A.1 Restore IVSW system to OPERABLE status.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.8.1	Verify IVSW tank pressure is ≥ 46.2 psig.	12 hours
SR 3.6.8.2	Verify the IVSW tank water volume is ≥ 85 gallons.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.6.8.3	Verify the opening time of each air operated header injection valve is within limits.	In accordance with the Inservice Testing Program
SR 3.6.8.4	Verify each automatic valve in the IVSW System actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.6.8.5	Verify the IVSW dedicated nitrogen bottles will pressurize the IVSW tank to ≥ 46.2 psig.	18 months
SR 3.6.8.6	Verify total IVSW seal header flow rate is ≤ 124 cc/minute.÷ ~~a. ≤ 52.00 cc/minute for Header A,~~ ~~b. ≤ 16.50 cc/minute for Header B,~~ ~~c. ≤ 32.50 cc/minute for Header C, and~~ ~~d. ≤ 23.00 cc/minute for Header D.~~	18 months

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

REQUEST FOR TECHNICAL SPECIFICATIONS CHANGE RELATED TO THE ISOLATION VALVE SEAL WATER SYSTEM

RETYPED TECHNICAL SPECIFICATIONS PAGES

3.6 CONTAINMENT SYSTEMS

3.6.8 Isolation Valve Seal Water (IVSW) System

LCO 3.6.8 The IVSW System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. IVSW system inoperable.	A.1 Restore IVSW system to OPERABLE status.	72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.8.1	Verify IVSW tank pressure is ≥ 46.2 psig.	12 hours
SR 3.6.8.2	Verify the IVSW tank water volume is ≥ 85 gallons.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.6.8.3	Verify the opening time of each air operated header injection valve is within limits.	In accordance with the Inservice Testing Program
SR 3.6.8.4	Verify each automatic valve in the IVSW System actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.6.8.5	Verify the IVSW dedicated nitrogen bottles will pressurize the IVSW tank to ≥ 46.2 psig.	18 months
SR 3.6.8.6	Verify total IVSW seal header flow rate is ≤ 124 cc/minute.	18 months