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SUBJECT: Application for amend to license DPR-23, removing
requirements for chemical & vol control sys from Section 3.2
of TS consistent w/improved TS "STS-Westinghouse Plants."

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**Carolina Power & Light Company**

Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

RNP File No: 13510HA

Serial: RNP-RA/95-0200

NOV 27 1995

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
CHEMICAL AND VOLUME CONTROL SYSTEM

Gentlemen:

In accordance with 10 CFR 50.90, we are submitting a request for a change to the Technical Specifications (TS) for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

TS Section 3.2 applies to the operational status of the Chemical and Volume Control System (CVCS). This TS section provides requirements for boric acid injection flow paths, Charging Pumps, Boric Acid Transfer Pumps (BATPs), Boric Acid Storage Tanks (BASTs), heat tracing, and Primary Water Storage Tank (PWST) contents.

The proposed change removes the requirements for the CVCS from Section 3.2 of the TS consistent with the improved "Standard Technical Specifications - Westinghouse Plants" (i.e., NUREG - 1431, Revision 1). The CVCS requirements will be relocated to a licensee-controlled document. The relocated CVCS requirements will be controlled through the 10 CFR 50.59 evaluation process. Following approval of this proposed relocation, we plan to change boric acid concentration using the 10 CFR 50.59 evaluation process.

Enclosure 1 provides an affidavit as required by 10 CFR 50.30(b).

Enclosure 2 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 3 details, in accordance with 10 CFR 50.91(a), the basis for our conclusion that the proposed changes do not involve a significant hazards consideration.

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Enclosure 4 provides an environmental evaluation that demonstrates the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental assessment needs to be prepared in connection with the issuance of the change to the TS.

Enclosure 5 provides page change instructions for incorporating the proposed changes.

Enclosure 6 provides the proposed TS pages.

In accordance with 10 CFR 50.91(b), we are providing the State of South Carolina with a copy of the proposed change to the TS.

In order to allow time for procedure revision and orderly incorporation into copies of the TS, we request that the proposed changes, once approved by the NRC, be issued such that implementation will occur within 60 days of issuance of the amendment.

Please refer any questions regarding this submittal to me at (803) 857-1802.

Very truly yours,



R. M. Krich

Manager - Regulatory Affairs

JSK/klb

Enclosures:

1. Affidavit
2. Basis for Change Request
3. 10 CFR 50.92 Evaluation
4. Environmental Considerations
5. Page Change Instructions
6. Technical Specifications Pages

c: Mr. Max K. Batavia, Chief, Bureau of Radiological Health (SC)
Mr. S. D. Ebnetter, Regional Administrator, USNRC, Region II
Ms. B. L. Mozafari, USNRC Project Manager, HBRSEP
Mr. W. T. Orders, USNRC Senior Resident Inspector, HBRSEP
Attorney General (SC)

Affidavit

State of South Carolina
County of Darlington

C. S. Hinnant, having been first duly sworn, did depose and say that the information contained in letter RNP-RA/95-0200 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.

C. S. Hinnant

Sworn to and subscribed before me

this 27th day of November 1995

(Seal) Albert Garrison
Notary Public for South Carolina

My commission expires: March 22, 2005

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BASIS FOR CHANGE REQUEST

Proposed Change

The proposed change removes the requirements of the Chemical and Volume Control System (CVCS) from Technical Specifications (TS) Section 3.2 for charging pumps, boric acid injection flow paths, Boric Acid Transfer Pumps (BATPs), Boric Acid Storage Tanks (BASTs), heat tracing and Primary Water Storage Tank (PWST) contents. The CVCS requirements will be relocated to a licensee-controlled document.

Basis

The CVCS contains three positive displacement reciprocating charging pumps supplied with borated water from the Volume Control Tank (VCT). Letdown from the Reactor Coolant System (RCS) is routed through demineralizers, a filter and into the VCT. The contents of the VCT are normally pumped back into the RCS by one of the three charging pumps to the RCS loop 1 cold leg and the three Reactor Coolant Pump (RCP) seal injection ports. Alternate letdown and charging paths may be employed if required. Charging pump speed is controlled to maintain the desired pressurizer level. The CVCS also contains two BASTs and two BATPs which may be aligned to provide borated water to the VCT or directly to the charging pumps. This portion of the system provides for make up due to RCS leakage and adjustment of RCS boron concentration for reactivity control. The BASTs contain a highly concentrated boric acid solution which is supplied to the blender and mixed with primary water to the desired boron concentration. The BASTs, BATPs, and piping containing the highly concentrated boric acid solution are temperature controlled and insulated to maintain the solution in a liquid state. The system contains piping and valves which allow the charging pumps to also be supplied from the Refueling Water Storage Tank (RWST). The CVCS also contains tanks and equipment for processing of RCS effluent for disposal or release. The CVCS components function to regulate RCS chemistry, maintain RCS inventory, and provide RCP seal cooling.

In evaluating the proposed change, the four criteria provided in 10 CFR 50.36(c)(2)(ii) for determining which operating restrictions should be included in the TS were applied. The NRC has encouraged licensees to update their TS to be consistent with improved vendor-specific Standard Technical Specifications (STS) issued by the NRC. In accordance with the Supplementary Information published in the Federal Register accompanying the Final Rule change to 10 CFR 50.36, dated July 19, 1995 (60 FR 36953), Limiting Conditions for Operation (LCO) that do not meet any of the criteria may be proposed for removal from the TS and relocation to licensee-controlled documents. The following provides a discussion of

the current CVCS requirements relative to the four criteria provided in 10 CFR 50.36(c)(2)(ii), and a comparison with NUREG-1431, Revision 1, the improved "Standard Technical Specifications Westinghouse Plants." The proposed amendment is consistent with the criteria of 10 CFR 50.36(c)(2)(ii) and improved STS.

Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This criterion is intended to control those instruments specifically installed to detect excessive RCS leakage. While the CVCS instrumentation is used in conjunction with other indications to monitor the RCS leak rate on a routine frequency, there are no CVCS instruments that function specifically to detect excessive RCS leakage. The improved STS place requirements for RCS leakage detection instrumentation on containment sump monitoring, containment atmosphere radioactivity monitoring, and containment air cooler condensate flow rate monitoring. Similar instrumentation is addressed in the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 TS Section 3.1.5 basis. The CVCS instrumentation is not within the scope of Criterion 1 of 10 CFR 50.36(c)(2)(ii) or the improved STS.

Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Examination of the HBRSEP, Unit No. 2 Updated Final Safety Analysis Report (UFSAR) Chapter 15, Accident Analysis, finds that no CVCS process variable, design feature, or operating restriction is included as an initial condition of a design basis accident or transient analysis. The improved STS do not define any requirement for the CVCS relative to normal charging. The improved STS bases describe the charging pumps as a subsystem of the Emergency Core Cooling System (ECCS) which is aligned with the RWST during the injection phase of a Loss of Coolant Accident (LOCA). The HBRSEP, Unit No. 2 design for ECCS does not include the use of the charging pumps. The CVCS is involved in the mitigation of the Anticipated Transient Without Scram (ATWS) accident scenario. However, ATWS falls outside of the design basis accident requirements and is not relevant to Criterion 2 of 10 CFR 50.36(c)(2)(ii) as discussed in the 10 CFR 50.62 rulemaking.

Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Examination of the HBRSEP, Unit No. 2 UFSAR Chapter 15, Accident Analysis, finds that no CVCS structure, system, or component functions or actuates to mitigate a design basis accident or transient. Valves at the CVCS to RCS interface perform a containment isolation

function. TS Section 3.2 does not address the containment isolation aspect of the CVCS. The improved STS also do not define any requirement for the CVCS relative to normal charging. The improved STS bases describe the charging pumps as a subsystem of the ECCS which is aligned with the RWST during the injection phase of a LOCA. HBRSEP, Unit No.2 design for ECCS does not include the use of the charging pumps. CVCS is involved in the mitigation of the ATWS accident scenario. However, ATWS falls outside of the design basis accident requirements and is not relevant to Criterion 3 of 10 CFR 50.36(c)(2)(ii) as discussed in the basis for the 10 CFR 50.62 rulemaking.

Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The CVCS components at HBRSEP, Unit No. 2 are not credited in the mitigation of any accident sequence and are not automatically loaded onto an emergency power source in any analyzed accident. The HBRSEP, Unit No. 2 Individual Plant Examination (IPE) that was submitted to the NRC by letter dated August 31, 1992, found that the RCP seal injection function was risk significant for core damage. However, subsequent probabilistic studies demonstrate that the CVCS is not significant to the public health and safety since the CVCS contribution to the Large Early Release Frequency (LERF) is $2.04\text{E-}09/\text{year}$ which represents approximately 0.04 percent of the total LERF of $4.55\text{E-}06/\text{year}$ for HBRSEP, Unit No. 2. Operating experience has not made the use of the CVCS necessary for the mitigation of events significant to the public health and safety. Therefore, the CVCS is not within the scope of Criterion 4 of 10 CFR 50.36(c)(2)(ii).

Conclusion

The requested change to relocate TS Section 3.2, CVCS, to a licensee-controlled document is consistent with 10 CFR 50.36(c)(2)(ii) in that the CVCS does not meet any of the criteria for inclusion in the TS.

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10 CFR 50.92 EVALUATION

We have concluded that the requested change to the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 Technical Specifications regarding the Chemical and Volume Control System (CVCS) does not involve a significant hazards consideration. In support of this determination, an evaluation of each of the three (3) standards set forth in 10 CFR 50.92 is provided below.

Proposed Change

The proposed amendment removes the requirements of the CVCS from Technical Specifications Section 3.2 for charging pumps, boric acid injection flow paths, boric acid transfer pumps, boric acid storage tanks, heat tracing and primary water storage tank contents. The CVCS requirements removed will be relocated to a licensee-controlled document. The proposed change is consistent with NUREG - 1431, Revision 1, the improved "Standard Technical Specifications - Westinghouse Plants."

Basis

This proposed change does not involve a significant hazards consideration for the following reasons.

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change removes the Chemical and Volume Control System (CVCS) requirements from the Technical Specifications (TS) and relocates these requirement to a licensee-controlled document. As such, the proposed change only affects plant documentation and does not change the operating requirements or the plant physical or operating configuration. The CVCS requirements will be controlled by the plant approved process for the licensee-controlled document using the 10 CFR 50.59 evaluation process. The proposed change relocating the CVCS requirements from the TS to licensee control will not affect the probability of an accident previously evaluated because the operating restrictions will remain in effect and any change to the operating restrictions will be performed in accordance with 10 CFR 50.59.

Examination of the H. B. Robinson Steam Electric Plant, Unit No.2 Updated Final Safety Analysis Report (UFSAR) Chapter 15, Accident Analysis, finds that no CVCS structure, system, or component functions or actuates to mitigate a design basis accident or transient. Valves at the CVCS to Reactor Coolant System (RCS) interface perform a containment isolation function. However, the TS Section 3.2 does not address the containment isolation aspect of the CVCS. As such, the proposed change to remove the CVCS requirements from the TS will not affect the 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 accident previously evaluated.

The proposed change removes the CVCS requirements from the TS and relocates the requirements to a licensee-controlled document. As such, the proposed change only affects plant documentation and does not change the operating requirements or the plant physical or operating configuration. The CVCS requirements will be controlled by the plant approved process for the licensee-controlled document using the 10 CFR 50.59 evaluation process. The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated because any future change to these operating restrictions will be performed in accordance with 10 CFR 50.59.

3. The proposed change does not involve a significant reduction in the margin of safety.

The proposed change removes the CVCS requirements from the TS based on the criteria of 10 CFR 50.36(c)(2)(ii). The CVCS requirements will be relocated to a licensee-controlled document. As such, the proposed change only affects plant documentation and does not change operating requirements or the plant physical or operating configuration. The CVCS requirements will be controlled by the plant approved process for the licensee-controlled document using the 10 CFR 50.59 evaluation process. The proposed change will not result in any reduction in the margin of safety because any future change to the CVCS operating restrictions will be performed in accordance with 10 CFR 50.59. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Conclusion

Based on the above significant hazards evaluation, we have concluded that the proposed change does not involve a significant hazards consideration.

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ENVIRONMENTAL CONSIDERATIONS

10 CFR 51.22(c)(9) provides criteria for identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed change to 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 increase in the amounts of any effluents that may be released off-site; (3) result in an increase in individual or cumulative occupational radiation exposure. We have reviewed this request and determined that 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

The proposed change removes the requirements of the Chemical and Volume Control System (CVCS) from Technical Specifications (TS) Section 3.2 for charging pumps, boric acid injection flow paths, boric acid transfer pumps, boric acid storage tanks, heat tracing and primary water storage tank contents and relocates these requirements to a licensee-controlled document.

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 Enclosure 3, the proposed change does not involve a significant hazards consideration.
2. The proposed change does not result in a significant change in the types or significant increase in the amounts of any effluents that may be released off-site.

The proposed change removes the CVCS requirements from the TS based on the criteria provided in 10 CFR 50.36(c)(2)(ii) and relocates these requirements to a licensee-controlled document. As such, the proposed change only affects plant documentation and does not change the operating requirements or plant physical or operating configuration. Therefore, the proposed change will not result in a significant change in the types or significant increase in the amounts of any effluent that may be released off-site.

3. The proposed change does not result in an increase in individual or cumulative occupational radiation exposure.

The proposed amendment removes the CVCS requirements from the TS based on the criteria contained in 10 CFR 50.36(c)(2)(ii). The CVCS requirements will be relocated to a licensee-controlled document. As such, the proposed change only affects plant documentation and does not change the operating requirements or the plant physical or operating configuration and does not result in an increase in individual or cumulative occupational exposure.

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TECHNICAL SPECIFICATIONS PAGES