

Serial: RNP-RA/10-0117

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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 CHANGES TO SECTION 3.8.3, DIESEL FUEL OIL AND STARTING AIR, AND SECTION 3.8.5, DC SOURCES - SHUTDOWN

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 3.8.3, "Diesel Fuel Oil and Starting Air," and TS 3.8.5, "DC Sources – Shutdown." The proposed change to TS 3.8.3 revises a non-conservative air receiver tank pressure to a value consistent with vendor recommendations. The proposed change to TS 3.8.5 corrects an editorial error related to TS formatting.

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 change, 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. Attachment V provides a retyped version of the proposed Bases change to Section 3.8.3. The Bases change provides amplifying information related to the TS change.

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.

The proposed change corrects a non-conservative TS requirement and therefore timely Nuclear Regulatory Commission approval of the proposed license amendment is requested. In the interim, station procedures have been revised to ensure the more conservative requirements are met.

If you have any questions concerning this matter, please contact Curt Castell at (843) 857-1626.

Sincerely,



Chris Kamilaris
Manager – Support Services – Nuclear

Attachments:

- I. Affirmation
- II. Request for Technical Specifications Changes related to Section 3.8.3, “Diesel Fuel Oil and Starting Air,” and Section 3.8.5, “DC Sources – Shutdown
- III. Markup of Technical Specifications Pages
- IV. Retyped Technical Specifications Pages
- V. Retyped Technical Specifications Bases 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)
Mr. L. A. Reyes, NRC, Region II
Ms. B. Mozafari, NRC Project Manager, NRR
NRC Resident Inspector, HBRSEP
Attorney General (SC)

AFFIRMATION

The information contained in letter RNP-RA/10-0117 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: JANUARY 20TH, 2011

Chris Kamilaris
Chris Kamilaris
Manager – Support Services – Nuclear

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Description of Current Condition

Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.8.3, "Diesel Fuel Oil and Starting Air," provides the operability requirements, allowed conditions, required actions, completion times, and surveillance requirements for two supporting functions for the Emergency Diesel Generators (EDG). One of the supporting functions is the EDG starting air subsystem. Surveillance Requirement (SR) 3.8.3.3 states that the DG air start receiver pressure must be ≥ 210 psig for the EDG to be operable. However, Condition D allows for a period of 48 hours before the EDG would have to be declared inoperable if the air start receiver pressure is < 210 psig, but ≥ 100 psig. This 48-hour allowance for operability is based on the conclusion that although the EDG would no longer be capable of eight start attempts with the receiver pressure < 210 psig, the 100 psig would provide sufficient capacity for at least one start attempt, and hence there would be a high probability of the EDG starting.

Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.8.5, "DC Sources - Shutdown," provides the operability requirements, allowed conditions, required actions, completion times, and surveillance requirements for the DC Electrical Power System. Condition 3.8.5.A, "One or more required DC electrical power subsystems inoperable," has a specified Required Action of "A.1.1 – Declare affected required feature(s) inoperable," followed by allowed alternate Actions A.2.1 through A.2.4.

Description and Justification of the Proposed Change

The proposed change to TS 3.8.3 revises the minimum air start receiver pressure as specified in Condition D from 100 psig to 150 psig. The current value of 100 psig is non-conservative with the EDG vendor (Fairbanks Morse) recommendation of a minimum air pressure of 150 psig to ensure a reliable start. The proposed TS change will make the TS requirement consistent with the vendor recommendation. TS 3.8.3 requires that the EDG starting air receiver pressure be maintained greater than or equal to 210 psig, as verified monthly per SR 3.8.3.3. This higher pressure ensures a minimum of eight start attempts. The purpose of the lower specified pressure (100 psig being changed to 150 psig) is to allow for an extension of 48 hours prior to having to declare the EDG inoperable, based on the assessment that the minimum pressure will be sufficient for a reliable start for one attempt. The proposed change supports the intent of this TS LCO.

The proposed change to TS 3.8.5 corrects an editorial error related to TS number formatting.

No Significant Hazards Consideration Determination

Carolina Power and Light Company, also known as Progress Energy Carolinas, Inc. (PEC), is proposing changes 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 changes will revise TS 3.8.3, "Diesel Fuel Oil and Starting Air," and TS 3.8.5, "DC Sources – Shutdown." The proposed change to TS 3.8.3 revises the minimum air start receiver pressure as specified in Condition D from 100 psig to 150 psig. The current value of 100 psig is non-conservative with the EDG vendor (Fairbanks Morse) recommendation of a minimum air pressure of 150 psig to ensure a reliable start. The proposed TS change will make the TS requirement consistent with the vendor recommendation. The proposed change to TS 3.8.5 corrects an editorial error related to TS number formatting.

An evaluation of the proposed changes 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 to TS 3.8.3 revises a non-conservative value in the current TS for EDG air start pressure. The proposed value is consistent with vendor recommendations and will ensure that the intent of the TS requirement is met. Therefore, the proposed change will provide improved assurance that the EDGs will be able to meet their safety function.

The proposed change to TS 3.8.5 is an editorial correction and there will be no actual changes to plant design or operation.

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.

As described above, the proposed change to TS 3.8.3 provides improved assurance that the EDGs will be able to meet their safety function. No new failure modes are introduced. Therefore, no new accident initiators or precursors are introduced by the proposed change.

The proposed change to TS 3.8.5 is an editorial correction and there will be no actual changes to plant design or operation.

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.

As described above, the proposed change to TS 3.8.3 provides improved assurance that the EDGs will be able to meet their safety function of mitigating events that involve a loss of offsite power. Therefore, the proposed change will preserve any margin of safety.

The proposed change to TS 3.8.5 is an editorial correction and there will be no actual changes to plant design or operation.

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 that 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 (PEC), 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 changes 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 changes will revise TS 3.8.3, "Diesel Fuel Oil and Starting Air," and TS 3.8.5, "DC Sources – Shutdown." The proposed change to TS 3.8.3 revises the minimum air start receiver pressure as specified in Condition D from 100 psig to 150 psig. The current value of 100 psig is non-conservative with the EDG vendor (Fairbanks Morse) recommendation of a minimum air pressure of 150 psig to ensure a reliable start. The proposed TS change will make the TS requirement consistent with the vendor recommendation. The proposed change to TS 3.8.5 corrects an editorial error related to TS number formatting.

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. As demonstrated in the No Significant Hazards Consideration Determination, the proposed change does not result in a significant increase in the consequences of an accident previously evaluated and does not result in the possibility of a new or different kind of accident. The proposed change is unrelated and hence has no impact on plant effluents from normal operation. Therefore, the proposed change does not result in a significant change in the types or significant increases in the amounts of any effluents that may be released offsite.
3. The proposed change does not alter any parameters that impact the individual and cumulative radiation exposure for HBRSEP, Unit No. 2. 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/10-0117
3 Pages (including cover page)

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**REQUEST FOR TECHNICAL SPECIFICATIONS CHANGES TO
SECTION 3.8.3, DIESEL FUEL OIL AND STARTING AIR,
AND SECTION 3.8.5, DC SOURCES - SHUTDOWN**

MARKUP OF TECHNICAL SPECIFICATIONS PAGES

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One or more DGs with new fuel oil properties not within limits.	C.1 Restore stored fuel oil properties to within limits.	30 days
D. One or more DGs with starting air receiver pressure < 210 psig and ≥ 400 <u>150</u> psig.	D.1 Restore starting air receiver pressure to ≥ 210 psig.	48 hours
<p>E. Required Action and associated Completion Time not met.</p> <p><u>OR</u></p> <p>Common stored DGs diesel fuel oil or starting air subsystem for each DG not within limits for reasons other than Condition A, B, C, or D.</p>	E.1 Declare associated DG(s) inoperable.	Immediately

3.8 ELECTRICAL POWER SYSTEMS

3.8.5 DC Sources - Shutdown

LCO 3.8.5 DC electrical power subsystem shall be OPERABLE to support the DC electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems - Shutdown."

APPLICABILITY: MODES 5 and 6, and
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One or more required DC electrical power subsystems inoperable.</p>	<p>A.1.4 Declare affected required feature(s) inoperable.</p> <p><u>OR</u></p>	<p>Immediately</p>
	<p>A.2.1 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p>	<p>Immediately</p>
	<p>A.2.2 Suspend movement of irradiated fuel assemblies.</p> <p><u>AND</u></p>	<p>Immediately</p> <p>(continued)</p>

United States Nuclear Regulatory Commission
Attachment IV to Serial: RNP-RA/10-0117
3 Pages (including cover page)

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**REQUEST FOR TECHNICAL SPECIFICATIONS CHANGES TO
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AND SECTION 3.8.5, DC SOURCES - SHUTDOWN**

RETYPE TECHNICAL SPECIFICATIONS PAGES

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One or more DGs with new fuel oil properties not within limits.	C.1 Restore stored fuel oil properties to within limits.	30 days
D. One or more DGs with starting air receiver pressure < 210 psig and ≥ 150 psig.	D.1 Restore starting air receiver pressure to ≥ 210 psig.	48 hours
<p>E. Required Action and associated Completion Time not met.</p> <p><u>OR</u></p> <p>Common stored DGs diesel fuel oil or starting air subsystem for each DG not within limits for reasons other than Condition A, B, C, or D.</p>	E.1 Declare associated DG(s) inoperable.	Immediately

3.8 ELECTRICAL POWER SYSTEMS

3.8.5 DC Sources - Shutdown

LCO 3.8.5 DC electrical power subsystem shall be OPERABLE to support the DC electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems - Shutdown."

APPLICABILITY: MODES 5 and 6, and
During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required DC electrical power subsystems inoperable.	A.1 Declare affected required feature(s) inoperable.	Immediately
	<u>OR</u>	
	A.2.1 Suspend CORE ALTERATIONS.	Immediately
	<u>AND</u>	
	A.2.2 Suspend movement of irradiated fuel assemblies.	Immediately
	<u>AND</u>	
		(continued)

United States Nuclear Regulatory Commission
Attachment V to Serial: RNP-RA/10-0117
2 Pages (including cover page)

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**REQUEST FOR TECHNICAL SPECIFICATIONS CHANGES TO
SECTION 3.8.3, DIESEL FUEL OIL AND STARTING AIR,
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RETYPE TECHNICAL SPECIFICATIONS BASES PAGES

BASES

ACTIONS

C.1 (continued)

may involve feed and bleed procedures, filtering, or combinations of these procedures. Even if a DG start and load was required during this time interval and the fuel oil properties were outside limits, there is a high likelihood that the DG would still be capable of performing its intended function.

D.1

With starting air receiver pressure < 210 psig, sufficient capacity for eight successive DG start attempts does not exist. However, as long as the receiver pressure is ≥ 150 psig, there is adequate capacity for at least one start attempt, and the DG can be considered OPERABLE while the air receiver pressure is restored to the required limit. A period of 48 hours is considered sufficient to complete restoration to the required pressure prior to declaring the DG inoperable. This period is acceptable based on the remaining air start capacity, the fact that most DG starts are accomplished on the first attempt, and the low probability of an event during this brief period.

E.1

With a Required Action and associated Completion Time not met, or one or more DG's fuel oil, or starting air subsystem not within limits for reasons other than addressed by Conditions A through D, the associated DGs may be incapable of performing its intended function and must be immediately declared inoperable.

SURVEILLANCE
REQUIREMENTS

SR 3.8.3.1

This SR provides verification that there is an adequate inventory of fuel oil in the storage tanks to support one DG's operation for 7 days at full load. The 7 day period is sufficient time to place the unit in a safe shutdown condition and to bring in replenishment fuel from an offsite location.

(continued)