

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9308100215      DOC. DATE: 93/08/05      NOTARIZED: YES      DOCKET #  
 FACIL: 50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C      05000261  
 AUTH. NAME      AUTHOR AFFILIATION  
 DIETZ, C.R.      Carolina Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION  
                                  Document Control Branch (Document Control Desk)

SUBJECT: Application for amend to License DPR-23, providing  
 clarification of EDG testing requirements as specified in TS  
 4.6.1.1 & 4.6.1.4.

DISTRIBUTION CODE: A001D      COPIES RECEIVED: LTR 1 ENCL 1      SIZE: 11+8  
 TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES	L	T	E	N	C	L	R	RECIPIENT ID CODE/NAME	COPIES	L	T	E	N	C	L	R	
	PD2-1 LA	1								PD2-1 PD	1								
	MOZAFARI, B	2																	
INTERNAL:	NRR/DE/EELB	1								NRR/DRCH/HICB	1								
	NRR/DRPW/OTSB	1								NRR/DSSA/SPLB	1								
	NRR/DSSA/SRXB	1								NUDOCS-ABSTRACT	1								
	OC/LFDCB	1								OGC/HDS2	1								
	<u>REG FILE</u> 01	1																	
EXTERNAL:	NRC PDR	1								NSIC	1								

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTR 15 ENCL 13

R  
I  
D  
S  
/  
A  
D  
S  
/  
A  
D  
D  
S  
  
R  
I  
D  
S  
/  
A  
D  
D  
S

# CP&L

Carolina Power & Light Company

ROBINSON NUCLEAR PLANT

POST OFFICE BOX 790

HARTSVILLE, SOUTH CAROLINA 29551

AUG 05 1993

Serial: RNP/93-1774  
10 CFR 50.90

United States Nuclear Regulatory Commission  
ATTENTION: 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 LICENSE AMENDMENT

Gentlemen:

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 H. B. Robinson Steam Electric Plant, Unit No. 2 (HBR2). The proposed change provides a clarification of Emergency Diesel Generator testing requirements as specified within Technical Specifications 4.6.1.1 and 4.6.1.4.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details, in accordance with 10 CFR 50.91(a), the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides an environmental evaluation which demonstrates that the proposed amendment 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 amendment.

Enclosure 4 provides page change instructions for incorporating the proposed revisions.

Enclosure 5 provides the proposed Technical Specification pages.

In accordance with 10 CFR 50.91(b), CP&L is providing the State of South Carolina with a copy of the proposed license amendment.

100005  
9308100215 930805  
PDR ADDCK 05000261  
P PDR



ADD 1

Letter to U. S. Nuclear Regulatory Commission  
Serial: RNP/93-1774  
Page 2

In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, CP&L requests that the proposed amendments, once approved by the NRC, be issued such that implementation will occur within sixty (60) days of issuance of the amendment.

Please refer any questions regarding this submittal to Mr. J. S. Kozyra at (919) 546-7924.

Very truly yours,



Charles R. Dietz  
Vice President  
Robinson Nuclear Plant

RES:lst

- Enclosures:
1. Basis for Change Request
  2. 10 CFR 50.92 Evaluation
  3. Environmental Considerations
  4. Page Change Instructions
  5. Technical Specification Pages

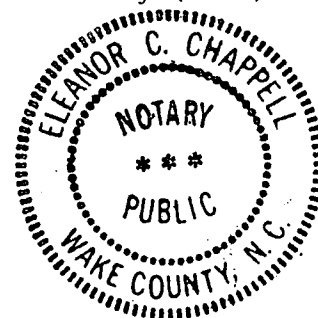
I, C. R. Dietz, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of my information, knowledge and belief; and the sources of my information are officers, employees, contractors, and agents of Carolina Power & Light Company.

*Eleanor C. Chappell*

Notary (Seal)

My commission expires: *2/6/96*

cc: Mr. S. D. Ebnetter  
Ms. B. L. Mozafari  
Mr. W. T. Orders  
Mr. H. G. Shealy (SG)  
Attorney General (SC)



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

BASIS FOR CHANGE REQUEST

Background

Technical Specification 4.6.1.1

The H. B. Robinson Unit No. 2 (HBR2) Technical Specification (TS) 4.6.1.1 has utilized the term "nameplate rating" since the original issuance of the plant Operating License and TS in 1970. Since that time, the application of this TS to monthly EDG surveillance testing has utilized the continuous EDG load rating of 2500 kW as being equivalent to the EDG "nameplate rating." Over the operating history of the unit, this methodology was deemed to be an acceptable test of the EDG to satisfy its intended functions. However, and as described below, the meaning and appropriateness of this terminology have changed significantly.

In 1990, the NRC commenced performance of Electrical Distribution System Functional Inspections (EDSFI). As a result of these EDSFIs, on March 4, 1991, the NRC issued Information Notice (IN 91-13), "Inadequate Testing of Emergency Diesel Generators (EDGs)," which was intended to alert addressees to inadequacies in the testing of emergency diesel generators. Specifically, some EDG testing had not adequately verified the capability of the EDG to carry its maximum expected loads, and other tests had failed to properly verify operation of load shedding logic for the EDG. Also described within IN 91-13 was a station that was cited as having inadequate EDG test procedures, since they did not demonstrate the capability of the EDG to carry accident kW and current loadings.

From September 23 through October 25, 1991, the NRC performed an EDSFI at HBR2. As a result, within NRC Inspection Report No. 50-261/91-21, dated January 10, 1992, Finding 91-21-09, "EDGs Not Tested at Name Plate Rating as Required by TS 4.6.1.1," was identified. This Finding was designated as an unresolved item, and a subsequent request was made by NRC Region II to the NRC's Office of Nuclear Reactor Regulation (NRR) for a position regarding the term "nameplate rating" as found within HBR2 TS 4.6.1.1. In March, 1993, NRR provided NRC Region II with a written position that the term "nameplate rating" is equivalent to 2500 kW at a power factor of 0.8. Subsequent to the issuance of this NRR position, NRC Violation 93-07-01 was issued in May, 1993, by NRC Inspection Report No. 50-261/93-07.

This violation was attributed to a historical interpretation of TS 4.6.1.1 which resulted in a surveillance test acceptance criteria that utilized only the EDG continuous load rating of 2500 kW. This testing methodology had been viewed as satisfying the requirement to test up to the EDG "nameplate rating." This situation was further compounded by the wording of TS 4.6.1.1 and the associated TS Bases which are unclear and ambiguous and fail to establish any specific or measurable EDG loading parameters which would constitute an acceptable EDG performance test. This ambiguity, combined with an evolving position regarding what constitutes an adequate EDG surveillance test, has resulted in the need to amend TS 4.6.1.1 to provide a more specific and appropriate criteria for monthly testing of the EDGs.

Further information regarding the acceptability of the proposed Amendment was identified through review of the following documents:

1. Regulatory Guide 1.108, Revision 1, "Periodic Testing of Diesel Generator Units Used as On-Site Electric Power Systems at Nuclear Power Plants", Section C.2.c.(2), states that periodic testing of diesel generator units during normal plant operation should, "Demonstrate full-load-carrying capability (continuous rating) for an interval of not less than one hour. The test should also verify that the cooling system functions within design limits. This test could be accomplished by synchronizing the generator with the off-site power and assuming a load at the maximum practical rate."
2. IEEE Standard 387-1984, "IEEE Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations", Section 6.5.1, states, "The diesel-generator unit shall be started and loaded, as stated in 6.3.3(1), at intervals of no longer than one (1) month to the capacity recommended by the manufacturer, for a period necessary to normalize all operating temperatures to demonstrate its continued availability for operation."
3. IEEE Standard 749-1983, "IEEE Standard Periodic Testing of Diesel-Generator Units Applied as Standby Power Supplies in Nuclear Power Generating Stations", Section 5.2.1.1(2), states that Availability Tests shall be performed at intervals of thirty-one (31) days or less, and shall require that the EDG, "Demonstrate the full load carrying capability (continuous rating) of a diesel-generator unit. The test should run for a sufficient interval to allow the diesel engine to reach equilibrium temperature for a minimum of one (1) hour thereafter. The load test should be conducted immediately after the start test has brought the diesel-generator unit to the prescribed voltage and frequency."

Based upon review of these documents, it is apparent that the intent of the monthly EDG Availability Test is to verify that the diesel engine and its auxiliary systems are performing within their design limits.

In addition, the proposed TS has been reviewed against and modeled from the Improved Standard TS for Westinghouse plants (NUREG-1431). The criteria and requirements proposed for the revised TS 4.6.1.1 are intended to be consistent with the Improved Standard TSs.

Based upon the information and events described above, the proposed Amendment is considered to be both prudent and appropriate. It is highly desirable to provide more specific and detailed criteria for monthly EDG testing requirements. This will help to ensure proper EDG testing, and supports improved compliance with TS requirements.

#### Technical Specification 4.6.1.4

During review of IN 91-13 by HBR2 personnel, and as part of other on-going diesel generator loading analyses, it was determined that accident loading of the EDGs could potentially exceed the specified continuous load rating of 2500 kW. However, these analyses further demonstrated that the short-term, overload rating of 2750 kW would not be exceeded. Subsequent reviews of EDG surveillance testing established that the EDGs did not have a routine testing procedure for performance of surveillance testing to the potential accident loading. This condition was identified as a concern within the EDSFI Inspection Report (Report No. 50-261/91-21, dated January 10, 1992).

To address this condition, testing procedures were in development for the performance of EDG overload testing. However, during 10 CFR 50.59 reviews of the proposed testing procedure, a concern was identified in that the wording of TS 4.6.1.4 appeared to preclude loading of the EDG above the continuous load rating of 2500 kW. Since there was concern and confusion regarding the meaning and intent of this TS, the proposed revision was developed to specifically identify EDG operational limits. The limits themselves have not been changed or altered, and are consistent with the manufacturer's recommendations for the machines. However, clarification is warranted to ensure clarity, eliminate confusion, and enhance TS compliance.

It should also be noted that the TS Basis states that, "The units have a continuous rating of 2500 kW with a 2-hour overload capability of 2750 kW in any 24-hour period." However, since the Bases do not constitute TS requirements, this information is only of interest in support of the proposed Amendment to TS 4.6.1.4.

The Improved Standard TS for Westinghouse plants (NUREG-1431) were reviewed as part of the development of the proposed revision, and no comparable TS was identified.

### Proposed Change

The proposed Amendment involves two changes which are summarized as follows:

1. Within TS 4.6.1.1, the existing terminology identifies that monthly diesel generator testing shall include an assumption of load by the diesel generator up to the "nameplate rating." The proposed Amendment would replace this wording with more specific and detailed testing criteria which is more consistent with that available within the Improved Standard TS for Westinghouse plants, NUREG-1431.
2. TS 4.6.1.4 would be replaced with more detailed guidance regarding diesel generator load limitations. The revised TS would include limitations for the continuous load rating and the short-term overload rating. The Improved Standard TS does not have a comparable requirement; therefore, this represents a plant-specific clarification.

### Basis

The proposed Amendment will clarify Emergency Diesel Generator surveillance requirements and load limits. The revised information would essentially involve no changes in the way that surveillance testing is being performed but would upgrade the Technical Specifications to be consistent with current interpretations and standards and provide more specific and detailed criteria for surveillance testing and load limits.

### Conclusion

This change will result in the clarification of Emergency Diesel Generator testing requirements.

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

10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

Proposed Change

The proposed Amendment involves two changes which are summarized as follows:

1. Within Technical Specification (TS) 4.6.1.1, the existing terminology identifies that monthly diesel generator testing shall include an assumption of load by the diesel generator up to the "nameplate rating." The proposed Amendment would replace this wording with more specific and detailed testing criteria which is more consistent with that available within the Improved Standard TS for Westinghouse plants, NUREG-1431.
2. TS 4.6.1.4 would be replaced with more detailed guidance regarding diesel generator load limitations. The revised TS would include limitations for the continuous load rating and the short-term overload rating. The Improved Standard TS does not have a comparable requirement; therefore, this represents a plant-specific clarification.



Basis

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

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. These changes merely clarify Emergency Diesel Generator (EDG) surveillance requirements and load limits. The revised information would essentially involve no changes in the way that surveillance testing is being performed but would upgrade the TS to be consistent with current interpretations and standards and provide more specific and detailed criteria for surveillance testing and load limits. These surveillance tests and load limits help to ensure EDG operability and availability and have no impact on the probability or consequences of any accident previously evaluated.
2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The changes affect EDG surveillance testing criteria and load limits. They do not represent any changes in current testing methodologies; they merely update the TS to reflect current interpretations and standards. There will be no change to equipment or modes of operation or testing of equipment. No physical plant changes will result from this amendment. The proposed amendment involves wording only, and this is to reflect current interpretations and standards. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. The proposed amendment does not involve a significant reduction in the margin of safety. The changes proposed only clarify existing EDG surveillance requirements. No requirements would be added or deleted by these changes; they would only result in more specific and detailed criteria. Further, these changes would not result in any changes to current testing procedures and methodologies. They would merely update the TS to current interpretations and standards. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

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

ENVIRONMENTAL CONSIDERATIONS

10 CFR 51.22(c)(9) provides criterion for and identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment to an operating license for a facility requires no environmental assessment if operation of the facility in accordance with the proposed amendment 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 offsite; or (3) result in an increase in individual or cumulative occupational radiation exposure. Carolina Power & Light Company has reviewed this request and determined that the proposed amendment 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 Amendment involves two changes which are summarized as follows:

1. Within TS 4.6.1.1, the existing terminology identifies that monthly diesel generator testing shall include an assumption of load by the diesel generator up to the "nameplate rating." The proposed Amendment would replace this wording with more specific and detailed testing criteria which is more consistent with that available within the Improved Standard TS for Westinghouse plants, NUREG-1431.
2. TS 4.6.1.4 would be replaced with more detailed guidance regarding diesel generator load limitations. The revised TS would include limitations for the continuous load rating and the short-term overload rating. The Improved Standard TS does not have a comparable requirement; therefore, this represents a plant-specific clarification.

Basis

The 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 2, the proposed amendment does not involve a significant hazards consideration.
2. The proposed amendment 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. This change merely clarifies EDG surveillance testing criteria and loading limits. There will be no change to equipment or modes of operation or testing of equipment. No physical plant changes will result from this amendment. The proposed amendment involves wording only, and this is to reflect current interpretations and standards. As such, the change cannot affect the types or amounts of any effluents that may be released off-site.
3. The proposed amendment does not result in an increase in individual or cumulative occupational radiation exposure. The changes proposed only clarify existing EDG surveillance requirements. No requirements would be added or deleted by these changes; they would only result in more specific and detailed criteria. Further, these changes would not result in any changes to current testing procedures and methodologies. They would merely update the TS to current interpretations and standards. Therefore, the amendment has no affect on either individual or cumulative occupational radiation exposure.

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

PAGE CHANGE INSTRUCTIONS

<u>Removed Page</u>	<u>Inserted Page</u>
4.6-1	4.6-1
4.6-2	4.6-2
4.6-2a	- - -