

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 10209

FILE: _____

FROM: Carolina Power & Light Co Raleigh, N.C. 27602 Mr. E.E. Utley			DATE OF DOC 10-2-74	DATE REC'D 10-3-74	LTR X	TWX	RPT	OTHER
TO: L.M. Muntzing			ORIG 3 signed	CC	OTHER	SENT AEC PDR <u>XXX</u> SENT LOCAL PDR <u>XXX</u>		
CLASS	UNCLASS XXX	PROP INFO	INPUT XXX	NO CYS REC'D 40		DOCKET NO: 50-261		

DESCRIPTION:

Ltr notarized 10-2-74....trans the following
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*Denotes Ltr only

ENCLOSURES:

Amdt to the OL consist of...change request to
the Tech Specs...10CFR50 Appendix K....
conformance w/requirements re ECCS Acceptance
Criteria..... *Rpts file*

ACKNOWLEDGED

PLANT NAME: H.B. Robinson

(40 cys encl rec'd)

FOR ACTION/INFORMATION

10-8-74

JB

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INTERNAL DISTRIBUTION

✓ <u>REG FILE</u> AEC PDR OGC, ROOM P-506A MUNTZING/STAFF * CASE * GIAMBUSSO * BOYD MOORE (L) (BWR) DEYOUNG (L) (PWR) SKOVHOLT (L) ✓ GOLLER (L) <i>(Ltr)</i> P. COLLINS DENISE ✓ REG OPR FILE & REGION (3) MORRIS STEELE	<u>TECH REVIEW</u> SCHROEDER MACCARY KNIGHT PAWLICKI SHAO ✓ STELLO <i>(2)</i> HOUSTON ✓ NOVAK ✓ ROSS IPPOLITO TEDESCO LONG LAINAS BENAROYA VOLIMER	<u>DENTON</u> GRIMES GAMMILL KASTNER BALLARD SPANGLER <u>ENVIRO</u> MULLER DICKER KNIGHTON YOUNGBLOOD REGAN ✓ PROJECT LDR <i>Dittman</i> HARLESS	<u>LIC ASST</u> DIGGS (L) GEARIN (L) ✓ * GOULBOURNE (L) KREUTZER (E) LEE (L) MAIGRET (L) REED (E) SERVICE (L) SHEPPARD (L) SLATER (E) SMITH (L) TEETS (L) WILLIAMS (E) WILSON (L)	<u>A/T IND</u> BRAITMAN SALTZMAN B. HURT <u>PLANS</u> MCDONALD CHAPMAN ✓ * DUBE w/input ✓ * E. COUPE D. THOMPSON (2) KLECKER EISENHUT ✓ <i>Narga</i>
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EXTERNAL DISTRIBUTION

✓ 1 - LOCAL PDR <u>Hartsville, S.C.</u>	1 - NATIONAL LABS	1 - PDR-SAN/LA/NY
✓ 1 - TIC (ABERNATHY) (1)(2)(10)	1 - ASLBP (E/W Bldg, Rm 529)	1 - BROOKHAVEN NAT LAB
✓ 1 - NSIC (BUCHANAN)	1 - W. PENNINGTON, Rm E-201 GT	1 - G. ULRIKSON, ORNL
1 - ASLB	1 - B&M SWINEBROAD, Rm E-201 GT	1 - AGMED (RUTH GUSSMAN) Rm B-127 GT
1 - Newton Anderson	1 - CONSULTANTS	1 - R. D. MUELLER, Rm E-201 GT
✓ 16 - ACRS HOLDING	NEWMARK/BLUME/AGBABIAN	

BN



Carolina Power & Light Company

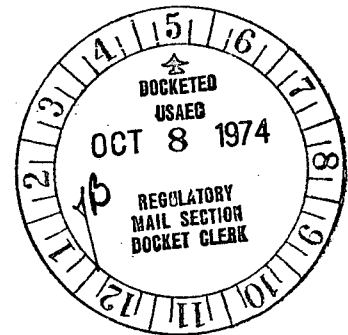
October 2, 1974

Regulatory Docket File

File: NG-3514 (R)

Serial: NG-74-1122

Mr. L. Manning Muntzing
Director of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545



Dear Mr. Muntzing:

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23, DOCKET NO. 50-261
CONFORMANCE WITH 10CFR50.46

In accordance with the Code of Federal Regulations, Title 10, Part 50.46(a), Carolina Power & Light Company submits forty (40) copies of the attached report entitled, "H. B. Robinson Unit No. 2 - Loss of Coolant Accident Analyses - 10CFR50, Appendix K." The report presents analyses demonstrating compliance with the acceptance criteria for emergency core cooling systems (ECCS) published in Appendix K to 10CFR50, and incorporates proposed revisions to Technical Specifications to ensure conformance with the performance limitations resulting from the evaluation of the Robinson ECCS.

The evaluation for small reactor coolant system (RCS) ($<1.0 \text{ ft}^2$) pipe ruptures is contained in Section 1 of the report, and the evaluation for large RCS pipe ruptures ($>1.0 \text{ ft}^2$) is contained in Section 2 of the report. The limiting pipe rupture is the double-ended guillotine rupture of the RCS cold leg piping. The analysis shows a peak clad temperature of 2167°F can be maintained with a total peaking factor less than or equal to 2.32, which is adequate margin to the limit of 2200°F . The conditions relating to maximum cladding oxidation, maximum hydrogen generation, coolable geometry and long-term cooling are all met with adequate margin to the limits.

The analyses have been performed at a core power level of 2300 MWt, which is 100 MWt above the currently authorized power level of 2200 MWt. The Advisory Committee on Reactor Safeguards has reviewed the uprated power level and have recommended approval of the increase, but environmental intervention has delayed AEC granting the higher power operation. Since Carolina Power & Light anticipates a successful resolution of these issues in the near future, it is appropriate to perform the analyses at the higher power level.

10209

The revision to the Technical Specifications in Section 3 propose employment of the Axial Power Distribution Monitoring System (APDMS) to monitor total peaking factor above a power level of 50% rated power and assure the maintenance of the peaking factor below the limit resulting from the ECCS analysis. The methodology of APDMS operation is consistent with that employed during Cycle 2 of H. B. Robinson, where operation of the plant at full rated power was successfully maintained with more restrictive requirements on power distribution control than those resulting from the Appendix K analyses. The limitations apply to operation at 2300 MWt, and are conservative for operation at the currently authorized power level of 2200 MWt.

In addition to the Technical Specification revisions pertinent to the ECCS evaluations, the basis of Section 3.10 has been revised in some areas to conform with the Technical Specification changes already granted by the AEC in Change No. 34. These revisions are indicated by double margin bars on the appropriate areas of the basis. We consider it an oversight that these changes to the basis were not provided with the specification changes, in that they were previously submitted in February, 1974, and thus we provide them now for consistency.

As required by Commission Regulations, this submittal is signed under oath by a duly authorized officer of the Company.

Yours very truly,



E. E. Utley
Vice-President
Bulk Power Supply

DBW:mvp
Attachment

cc: Messrs. N. B. Bessac
W. B. Howell
J. B. McGirt
D. V. Menscer
D. B. Waters

Sworn to and subscribed before me this 2d day of October, 1974.

Margaret M. Cox
Notary Public

My commission expires

July 4, 1975