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CONTROL NO: 11955

FILE: _____

FROM: Carolina Power & Light Co Raleigh, NC EE Utley		DATE OF DOC 11-4-74	DATE REC'D 11-23-74	LTR	TWX	RPT	OTHER FACSIMILE
TO: Mr. Goller		ORIG none signed	CC	OTHER	SENT AEC PDR <u>XX</u> SENT LOCAL PDR <u>XX</u>		
CLASS	UNCLASS XXXXXXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-261		

DESCRIPTION:

Ltr re our 10-2-74 ltr.....furnishing info on review of Appendix K Analysis & Tech Specs for conflicts with present Tech Specs.....

ENCLOSURES:

DO NOT REMOVE

PLANT NAME: HB Robinson #2

FOR ACTION/INFORMATION 11-23-74 ehf

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INTERNAL DISTRIBUTION

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

EXTERNAL DISTRIBUTION

1 - LOCAL PDR <i>Hartsuille, S.C.</i>	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)
1 - Newton Anderson	1 - CONSULTANTS	Rm B-127 GT
16 - ACRS HOLDING <i>SENT TO</i>	1 - NEWMARK/BLUME/AGBABIAN	1 - R. D. MUELLER, Rm E-201
<i>LIC ASST TEETS</i>		GT

CP&L

Carolina Power & Light Company

November 4, 1974

50-261

File: NC-3514 (B)

Serial: NC-74-1316

Mr. Karl R. Goller
Assistant Director for Operating Reactors
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Goller:

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23

REVIEW OF APPENDIX K ANALYSIS AND TECHNICAL SPECIFICATIONS
FOR CONFLICTS WITH PRESENT TECHNICAL SPECIFICATIONS

In accordance with your letter of October 2, 1974, we have conducted an additional review of the ECCS evaluation submitted for the H. B. Robinson Unit No. 2 Plant on October 3, 1974, including proposed Technical Specifications. We have found no discrepancies requiring additional documentation in the Appendix K analysis, but do have a conflict between the proposed Technical Specifications to meet the requirements of the Appendix K analysis and the present Technical Specifications now in force.

This conflict arises from the increase in minimum water volume required to provide a sufficient flow of water from the accumulators during refill and reflood, and thus maintain the peak clad temperature below 2200°F. This water volume, as found on Page 3.6 of the Robinson Appendix K evaluation report, is 825 ft³. The minimum water volume required by the present Technical Specifications is 775 ft³. The total accumulator volume is 1200 ft³ so that the increase in water volume is of the order of 4.2% of the total volume of the tank.

Westinghouse Electric Corporation was asked to study the effects of an increase in accumulator water level on the Interim Acceptance Criteria ECCS evaluation for operating Westinghouse PWR's. The study considered two representative loss of coolant accident transients which served as a basis for assessing the clad temperature changes resulting from increased accumulator water volume for various reflood conditions.

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Mr. Karl R. Goller

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November 4, 1974

The results of this study are summarized in Figure 1 where the parameter ZD_0 represents the downcomer water level for the worst break when the accumulators were empty.

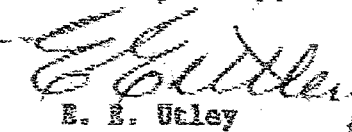
For the Carolina Power & Light Company Plant, the accumulator water volume between IAC and Appendix K analyses increased by 50 cubic feet and, in the IAC analysis, ZD_0 for the worst break was equal to 4.5 ft. Figure 1 shows that a 50 cubic feet increase in accumulator water volume does not result in an ECCS penalty using the IAC model. Therefore, the accumulator water volume should be changed to be consistent with Appendix K Technical Specifications.

Differences in peaking factor limits were also investigated, and the peaking factor limits that will be met at 100% power are shown on the attached Figure 2. Peaking factor limits below 100% power must be calculated on a case by case basis through comparison of the Interim Acceptance Criteria and Appendix K Criteria Technical Specifications.

We are presently operating the Robinson Plant with accumulator water levels consistent with the Interim Acceptance Criteria, as directed by your office, and intend to continue to do so until the AEC indicates their approval of increasing the water volume to the amount consistent with Appendix K analyses, as recommended and justified in this letter. This, we hope, will avoid confusion and possible citations for violations of Technical Specifications, as well as, eliminate excessive modifications to operating procedures and attendant inplant reviews.

We anticipate your review and response to the above information.

Yours very truly,



E. B. Utley
Vice-President
Bull Power Supply

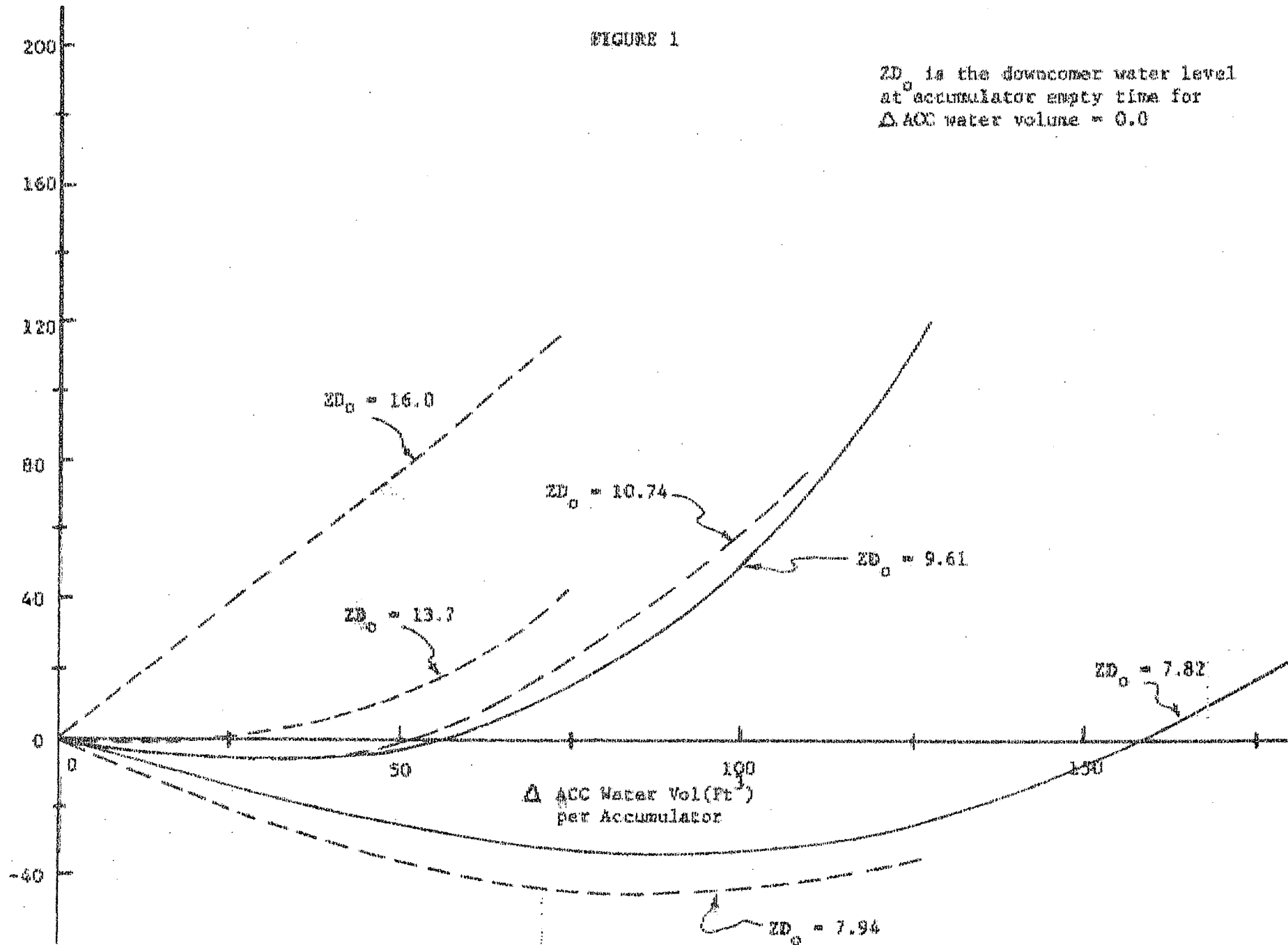
DBW:mvp
Attachments

cc: Messrs. H. B. Bessac
W. B. Howell
J. B. McGirt
D. V. Monser
H. C. Moseley
D. B. Waters

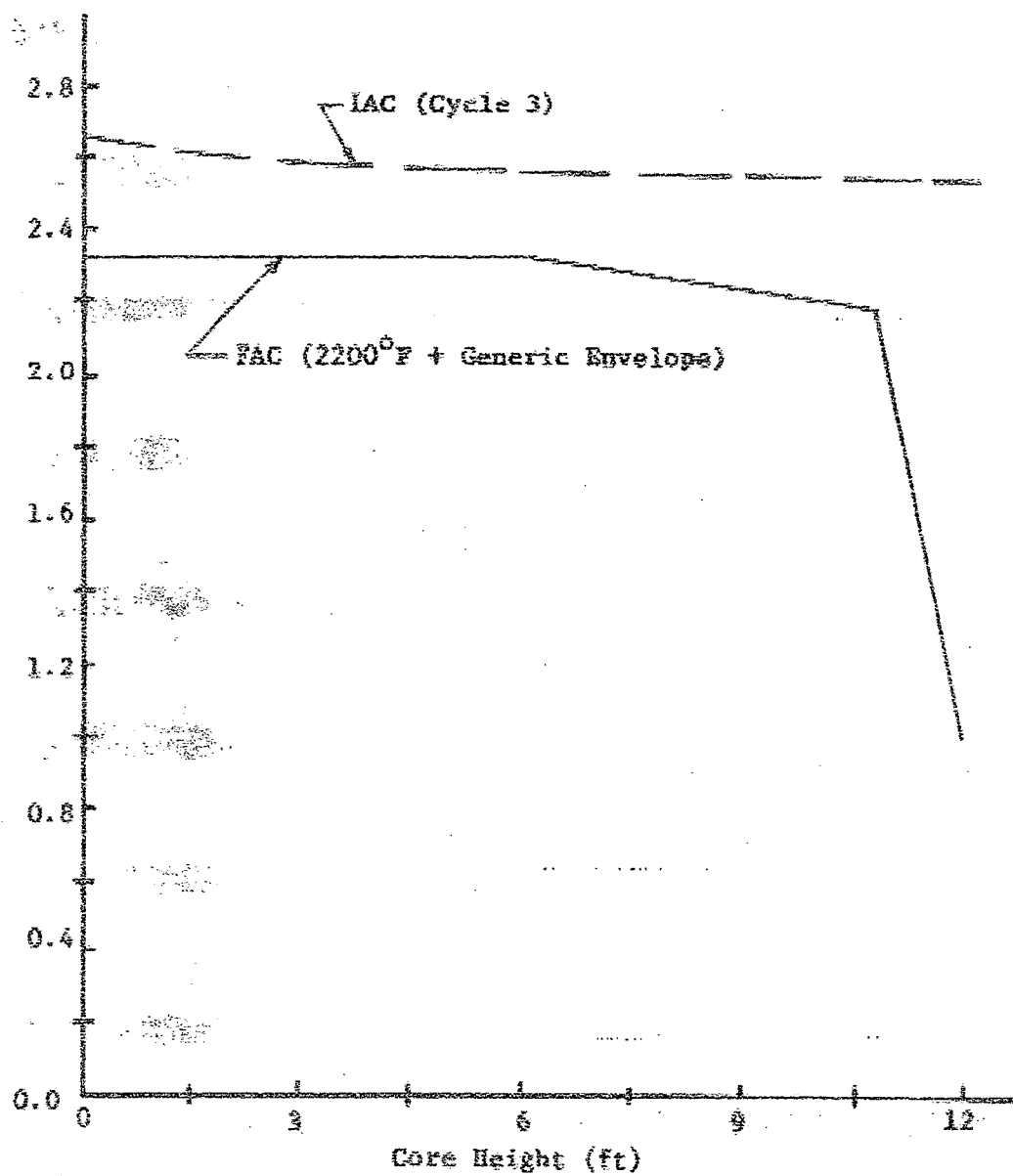
FIGURE 1

ZD_0 is the downcomer water level
at accumulator empty time for
 ΔACC water volume = 0.0

Δ Peak Clad Temp (OF)



CP&L
Cycle 3



Limiting P_Q^T at 100% Power

FIGURE 2