

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 4096

FILE: _____

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|--|---------|-----------|----------------------------|---------------------------|--------------|------------------------------------|-----|-------|
| FROM: Carolina Power & Light Company Raleigh, N. C. 27602 E. E. Utley | | | DATE OF DOC 6-13-73 | DATE REC'D 6-25-73 | LTR X | MEMO | RPT | OTHER |
| TO: Mr. Schemel | | | ORIG 3 signed | CC | OTHER | SENT AEC PDR X SENT LOCAL PDR X | | |
| CLASS | UNCLASS | PROP INFO | INPUT | NO CYS REC'D 40 | | DOCKET NO: 50-261 | | |
| | X | | | | | | | |

DESCRIPTION:
Ltr re our 4-12-73 ltr.....furnishing info re their change to Tech Specs, dtd 2-22-73, concerning shutdown margin determinations.....requesting withdrawal of the above stated change to Tech Specs.....

ENCLOSURES:

Do Not Remove
ACKNOWLEDGED

PLANT NAME: H. B. Robinson Unit 2

FOR ACTION/INFORMATION

6-28-73

AB

| | | | |
|-----------|--------------|---------------|-----------|
| BUTLER(L) | SCHWENCER(L) | ZIEMANN(L) | REGAN(E) |
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INTERNAL DISTRIBUTION

| | | | | |
|--------------------|--------------------|---------------|-----------------|----------------|
| ✓ <u>REG FILE</u> | <u>TECH REVIEW</u> | DENTON | <u>LIC ASST</u> | <u>A/T IND</u> |
| ✓ AEC PDR | HENDRIE | GRIMES | BROWN (E) | BRAITMAN |
| ✓ OGC, ROOM P-506A | SCHROEDER | GAMMILL | DIGGS (L) | SALTZMAN |
| ✓ MUNTZING/STAFF | MACCARY | KASTNER | GEARIN (L) | |
| CASE | KNIGHT | BALLARD | GOULBOURNE (L) | <u>PLANS</u> |
| GIAMBUSSO | PAWLICKI | SPANGLER | LEE (L) | MCDONALD |
| BOYD | SHAO | | MAIGRET (L) | DUBE |
| MOORE (L) (BWR) | STELLO | <u>ENVIRO</u> | SERVICE (L) | |
| DEYOUNG (L) (PWR) | HOUSTON | MULLER | SHEPPARD (E) | <u>INFO</u> |
| ✓ SKOVHOLT (L) | NOVAK | DICKER | SMITH (L) | C. MILES |
| P. COLLINS | ROSS | KNIGHTON | TEETS (L) | |
| | IPPOLITO | YOUNGBLOOD | WADE (E) | |
| <u>REG OPR</u> | TEDESCO | REGAN | WILLIAMS (E) | |
| ✓ FILE & REGION(3) | LONG | PROJECT LDR | WILSON (L) | |
| MORRIS | LAINAS | | | |
| STEELE | BENAROYA | HARLESS | | |
| | VOLLMER | | | |

EXTERNAL DISTRIBUTION

| | | |
|---|------------------------------|-------------------------|
| ✓ 1 - LOCAL PDR Hartville, S. C. | (1) (2) (9) - NATIONAL LAB'S | 1-PDR-SAN/LA/NY |
| ✓ 1 - DTIE (ABERNATHY) | 1-R. CARROLL-OC, GT-B227 | 1-GERALD LELLOUCHE |
| ✓ 1 - NSIC (BUCHANAN) | 1-R. CATLIN, E-256-GT | BROOKHAVEN NAT. LAB |
| 1 - ASLB (YORE/SAYRE/ | 1-CONSULTANT'S | 1-AGMED (WALTER KOESTER |
| WOODARD/"H" ST. | NEWMARK/BLUME/AGBABIAN | RM-C-427-GT |
| ✓ 16 - CYS ACRS 10000000 SENT TO LIC ASST. | 1-GERALD ULRIKSON...ORNL | 1-RD..MULLER..F-309 GT |
| S. TEETS ON 6-28-73 | | |

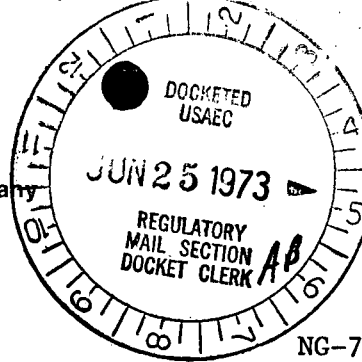
Regulatory

File



Carolina Power & Light Company

June 13, 1973



NG-73-101

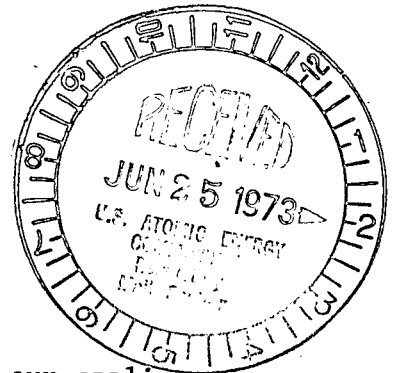
File: NG-5215

Mr. Robert J. Schemel, Chief
Operating Reactors Branch No. 1
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D.C. 20545

50 - 261

Dear Mr. Schemel:

H. B. Robinson Unit No. 2
License DPR-23
Determination of Shutdown Margin



In your letter of April 12, 1973, you stated that our application of February 22, 1973, for a change to the Technical Specifications for H. B. Robinson Unit No. 2 concerning shutdown margin determinations was incomplete. You stated that a more detailed description of the intended measurements, a safety analysis, a change to the relevant bases of the Technical Specifications, an estimate of the increase in accuracy with which safety margin can be estimated from reactivity measurements with the full length rods completely inserted, and a discussion of the reasons for the increase in accuracy would be required before you would seriously consider our application.

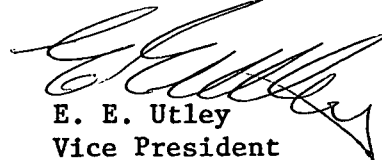
At the time Carolina Power & Light Company submitted the application, we were informed by the AEC staff as well as the reactor vendor that further analysis would not be required for our plant based on review of previous submittals by other utilities, who have similar Technical Specifications in effect. Our desire was to provide a determination of shutdown margin that would be consistent with plants of a similar design.

In order to assess the benefit of performing additional safety analyses to enable this change in measurement procedure, it is necessary to estimate the increase in accuracy that can be gained in the shutdown margin determination. After studying the measurement process that was employed during the initial startup of the plant and is allowed under the present Technical Specifications, it is concluded that the error in rod worth determination would be less than 5% of the total worth, or about 35 ppm difference in the required shutdown boron concentration. Although this quantity is significant during boron dilution to criticality at the

June 13, 1973

end of cycle lifetime, it is less than the normal margin allowed for uncertainties. Thus, the operational impact due to inaccurate measurement techniques is relatively insignificant. Of interest, though, is providing good measurements that can be compared with analytical methods, thus leading to improved methods and techniques in nuclear design. We support this philosophy, but do not feel that the added time and expense involved in the analyses and justifications that you have requested can be justified on this basis alone. Thus, Carolina Power & Light Company requests that we be allowed to withdraw the subject proposed change to the Technical Specifications.

Yours very truly,



E. E. Utley
Vice President
Bulk Power Supply Department

DBW:jb

cc: Mr. B. J. Furr
Mr. C. D. Barham
Mr. D. V. Menscer
Mr. N. B. Bessac
Mr. D. B. Waters