

ACCESSION NBR: 8211290151 DOC. DATE: 82/11/22 NOTAR ID: NO DOCKET #
 FACIL: 50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Light 05000261
 AUTH. NAME AUTHOR AFFILIATION
 ZIMMERMZN, S.R. Carolina Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 VARGA, S.A. Operating Reactors Branch 1

SUBJECT: Forwards revised page for 810831 response to NRC 810521
 safety evaluation on environ qualification of safety-related
 electrical equipment. Revision deletes statement in
 Section 3.8, per 821027 telcon w/NRC.

DISTRIBUTION CODE: A048S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2
 TITLE: OR/Licensing Submittal: Equipment Qualification

NOTES:

| | RECIPIENT ID CODE/NAME | | COPIES LTTR ENCL | | RECIPIENT ID CODE/NAME | | COPIES LTTR ENCL |
|-----------|---------------------------|----|---------------------|---|---------------------------|----|---------------------|
| | NRR ORB1 BC | 12 | 1 | 0 | REQUA, G | 01 | 1 1 |
| INTERNAL: | ELD/HDS1 | 12 | 1 | 1 | GC | 13 | 1 1 |
| | IE FILE | 09 | 1 | 1 | NRR CALVO, J | | 1 1 |
| | NRR/DE/EQB | 07 | 2 | 2 | NRR/DL DIR | 14 | 1 1 |
| | NRR/DL/ORAB | 06 | 1 | 1 | NRR/DSI/AEB | | 1 1 |
| | NRR/DST/GIB | | 1 | 1 | <u>REG FILE</u> | 04 | 1 1 |
| | RGN2 | | 1 | 1 | | | |
| EXTERNAL: | ACRS | 15 | 8 | 8 | LPDR | 03 | 1 1 |
| | NRC PDR | 02 | 1 | 1 | NSIC | 05 | 1 1 |
| | NTIS | 31 | 1 | 1 | | | |

TOTAL NUMBER OF COPIES REQUIRED: LTTR 26 ENCL 25

NSL



Carolina Power & Light Company

NOV 22 1982

Office of Nuclear Reactor Regulation
ATTN: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
United States Nuclear Regulatory Commission
Washington, D.C. 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23

ENVIRONMENTAL QUALIFICATION
OF SAFETY RELATED
ELECTRICAL EQUIPMENT

Dear Mr. Varga:

With a letter dated August 31, 1981, Carolina Power & Light Company (CP&L) forwarded a response to your letter of May 21, 1981, which provided the Safety Evaluation Report (SER) for the Environmental Qualification of Safety-Related Electrical Equipment at H. B. Robinson Unit 2 (HBR2). During a conference call on Wednesday, October 27, 1982, CP&L staff members agreed to delete a statement made in section 3.8 of the response, as requested by a member of your staff.

We request that you replace the affected page with the attached revised page. Revisions are noted with vertical lines in the right hand margin.

If you have any further questions regarding this matter, please contact a member of my staff.

Yours very truly,

S. R. Zimmerman
Manager
Licensing & Permits

SRZ/pgp (5703C6T4)
Attachment

cc: Mr. J. P. O'Reilly (NRC-RII)
Mr. G. Requa (NRC)
Mr. Steve Weise (NRC-HBR)

8211290151 821122
PDR ADOCK 05000261
P PDR

A048

work sheets are summarized and listed in Table 1.3.3 of the above mentioned report. For review purposes, response submitted figures and tables are included in this section to aid in evaluation of our radiation assignments.

When operating time for equipment/instrumentation was less than one (1) hour, a minimum of one (1) hour was picked for establishing dosage reduction based on the nomogram entitled 30 Day Dose Connection Factor vs. Time Required to Remain Functional (HRS). This should establish sufficient margin and encompass existing test data.

For items located close to sump water flooding levels an additional radiation dosage was assigned based on actual operating time. As stated in Table 1.3.3 Notes (8) & (9), data used can be found in NUREG-0588, Appendix D, Table D-8, Containment Sump Gamma Dose Rates and Integrated Dose Versus Time.

Beta radiation was considered using Appendix D, Table D-6, Beta Dose Rates and Integrated Doses at the Containment Center Versus Time in Air. Based on the time of operation, equipment location, shield wall absorption, compartment wall absorption, insulation thickness, instrumentation housing absorption, motor case shielding, et. al., beta contribution is significantly less than the total gamma dose experienced by the listed equipment.

The above is the basis, assumptions, and basic analysis of the option chosen to justify the choice of lower service conditions than the generalized screening radiation service value stated in the SER and presented at the NRC 79-01B meeting held in Bethesda, Maryland on July 7-10, 1981. Sample calculations as included in our 90-day, Revision 3 response to IE Bulletin 79-01B are repeated as Appendix C of this report.

4.0 Qualification of Equipment

The H. B. Robinson #2 SER for Environmental Qualification of Safety-Related Electrical Equipment, dated May 21, 1981, separated master list hardware submitted by 90-day responses Revision 0, Revision 1, Revision 2 and Revision 3 into three (3) categories: first, equipment requiring immediate corrective action (Appendix A); second, equipment requiring additional qualification information and/or corrective action (Appendix B); third, equipment considered acceptable (Appendix C). Descriptive NRC evaluation within each category was addressed in SER sections 4.1, 4.2, and 4.3 respectively. The following response to each category evaluation will collect data previously reported within the varied CP&L 90-day responses and relay current status of on-going programs to support our interpretation of the listed equipment qualification status.