

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8303250142      DOC. DATE: 83/03/23      NOTARIZED: NO      DOCKET #  
 FACIL: 50-261 H, B, Robinson Plant, Unit 2, Carolina Power and Light      05000261  
 AUTH. NAME      AUTHOR AFFILIATION  
 EURY, L.W.      Carolina Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION  
 VARGA, S.A.      Operating Reactors Branch 1

SUBJECT: Forwards "Supplemental Info for Degraded Grid Voltage Analysis," in response to NRC 830118 request re electrical distribution sys voltages. Util does not plan to complete implementation of emergency bus alarms. *566 rpb*

DISTRIBUTION CODE: A0155      COPIES RECEIVED: LTR 1 ENCL 1      SIZE: 2 + 200  
 TITLE: OR Submittal: Onsite Emergency Power System

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	NRR ORB1 BC 01	7 7		
INTERNAL:	NRR/DL/ORAB 12	1	NRR/DSI/IGSB 09	1
	NRR/DSI/PSB 14	1	<u>REG FILE</u> 04	1
	RGN2	1	RM/DDAMI/MIB 18	1
EXTERNAL:	ACRS 16	6	INPO, J. STARNES	1
	LPDR 03	1	NRC PDR 02	1
	NSIC 05	1	NTIS	1

*Limited Distribution*

TOTAL NUMBER OF COPIES REQUIRED: LTR 24 ENCL 2



SERIAL: LAP-83-62

Carolina Power & Light Company

MAR 23 1983

Director of Nuclear Reactor Regulation  
Attention: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing  
United States Nuclear Regulatory Commission  
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261  
LICENSE NO. DPR-23  
ADEQUACY OF ELECTRICAL DISTRIBUTION  
SYSTEM VOLTAGE

Dear Mr. Varga:

Carolina Power & Light Company (CP&L) has received your letter, dated January 18, 1983, requesting additional information concerning the adequacy of electrical distribution system voltages at the H. B. Robinson Steam Electric Plant Unit No. 2 (HBR2). The enclosed supplemental report, prepared by Ebasco Services Company for CP&L, provides the additional information you requested. Section I of the supplemental report addresses each of your questions.

Carolina Power & Light Company is evaluating the recommendations in this report and is prepared to make the following commitments:

1. The H. B. Robinson Unit No. 2 (HBR2) updated Final Safety Analysis Report (FSAR) will be revised to include the updated drawings discussed in our response to NRC question No. 1 on page 1 of the enclosed report. We will also revise the Updated FSAR to include the method of backfeeding described in our response to NRC question No. 10 on page 19 of the enclosed report. Since this information will be developed in 1983, it will be included in the annual update of the FSAR in 1984.
2. Overvoltage and undervoltage alarms will be installed to monitor the 115kV system voltage. These alarms will annunciate in the HBR2 Control Room. In conjunction with this modification, studies will be performed to determine the alarm setpoints. These studies will also include an in-plant test to verify accelerating times for the pumps described in our response to NRC question No. 4 on page 5 of the enclosed report. The studies will be completed and the modification implemented prior to startup following the next refueling outage, contingent upon parts availability. Information concerning the study results and the modifications will be provided to your staff within 60 days after startup following the next refueling outage.

A015

8303250142 830323  
PDR ADOCK 05000261  
P PDR

Charlotteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

3. Backfeeding Class 1E busses through the main transformer will only be accomplished during cold shutdown. Only Non-Class 1E busses will be backfed during hot shutdown. This will be accomplished through the main transformer and the unit auxiliary transformer. The plant safety related busses will be fed from the emergency diesel generators during hot shutdown. Administrative controls will be implemented prior to backfeeding the main transformer.

Carolina Power & Light Company would also like to bring to your attention that during our review of past correspondence concerning the degraded grid voltage issue, a letter dated February 17, 1977, from CP&L (Mr. E. E. Utley) to NRC (Mr. R. Reid) was identified which proposed the implementation of undervoltage and overvoltage relays and alarm on the emergency busses. Following additional review it was determined that more protection was needed, therefore, undervoltage trip devices were installed in place of the relays and alarms. We have reviewed the basis of the February 17, 1977 letter against more recent degraded grid voltage studies and have determined that the proposed 115kV undervoltage and overvoltage relays and alarms will negate the need for the undervoltage and overvoltage relays and alarms on the emergency busses. Therefore, CP&L does not plan to complete the implementation of the alarms on the emergency busses. (It should be noted that the existing undervoltage trip will remain on the emergency busses.)

If you have any further questions, please contact a member of our Nuclear Licensing staff.

Yours very truly,



L. W. Eury  
Senior Vice President  
Power Supply

DCW/kjr (6367DCW)  
Enclosure

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