

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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 FACIL: 50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Light    05000261  
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SUBJECT: Provides clarification & corrected info. to request for addl info re adequacy of station electrical distribution voltage sys. Util desires to retain capability to backfeed main transformers when necessary.

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Carolina Power & Light Company

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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  
SUPPLEMENT TO REQUEST FOR ADDITIONAL INFORMATION  
ADEQUACY OF STATION ELECTRICAL DISTRIBUTION VOLTAGE SYSTEM

Dear Mr. Varga:

SUMMARY

Follow-up reviews of the information Carolina Power & Light Company (CP&L) submitted regarding backfeeding of safety-related busses at H. B. Robinson Steam Electric Plant Unit No. 2 (HBR2) indicate that this information may have been misleading. The purpose of this letter is to provide clarification and the corrected information.

BACKGROUND

By letter dated March 9, 1984, CP&L responded to NRC's request for additional information regarding the adequacy of the HBR2 station electrical distribution voltage system. In that letter, CP&L stated the following: "Backfeeding the E1 and E2 safety-related busses through the main and unit auxiliary transformer will only occur during cold shutdown when no other power sources are available, unless nuclear safety considerations require it to be done during hot shutdown."

DISCUSSION

Recent reviews related to backfeeding operations indicate that the phrase, "when no other power sources are available" may be misleading and that CP&L's backfeeding plans should be clarified.

To better understand why this clarification is needed, the following general guidelines are provided:

1. Backfeeding of the safety-related busses would only need to be performed if the unit was offline and the start-up transformer was out of service.

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2. Only the main transformers would actually be backfed since the unit auxiliary transformer would still be feeding in the normal direction.
3. Backfeeding the main transformers is a potential concern only when the busses being fed are heavily loaded, which would generally occur at hot shutdown.
4. In the event that the start-up transformer was out of service and the unit was at hot shutdown, the preferred method for powering the emergency busses would be via the emergency diesels. If, however, these were also out of service and plant conditions dictated that the unit should remain at hot shutdown, then the main transformer would be backfed to provide power to the emergency busses (via the unit auxiliary transformer).

CONCLUSION

As indicated in the above information, CP&L desires to retain the capability to backfeed the main transformers when necessary. Consequently, the sentence in our original submittal should now read as follows: "Backfeeding the main transformers to the E1 and E2 safety-related busses via the auxiliary transformer will only occur during cold shutdown, unless nuclear safety considerations require it to be done during hot shutdown."

I hope this clarification will not cause your staff any inconvenience. If you have any questions regarding this matter, please contact a member of the Nuclear Licensing Unit staff.

Yours very truly,



S. R. Zimmerman  
Manager

Nuclear Licensing Section

CGL/cfr (9824CGL)

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