

Carolina Power & Light Company

May 4, 1976

File: NG-3513 (R)

Serial: NG-76-652

Mr. Norman C. Moseley, Director
U. S. Nuclear Regulatory Commission
Region II, Suite 818
230 Peachtree Street, N.W.
Atlanta, Georgia 30303

Dear Mr. Moseley:

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET 50-261
LICENSE DPR-29
RESPONSE TO IE BULLETIN 76-05

In response to your Bulletin 76-05 regarding Westinghouse BFD relay failure, we wish to report the actions to mitigate the recurrence of the relay failure which occurred at H. B. Robinson.

Subsequent to the relay failures, procurement of sufficient replacement relays with newer coil style (1259C71G19) was initiated. Measurements were made of the drop-out times of all normally energized relays performing reactor trip or safeguards initiation functions. As a result of these measurements, one additional relay was replaced. Its drop-out time exceeded the vendor design value by three milliseconds. Temperature measurements were performed inside the relay cabinets and at the coil surfaces and the information was forwarded to Westinghouse for their evaluation. The maximum coil temperature recorded during these measurements was 202°F. Additionally, equalizing battery charges, performed before relay replacement, were restricted to that frequency required by plant Technical Specifications with a duration administratively limited to twenty-four hours.

Prior to receipt of the new relays, an equalizing battery charge was performed as described above. Subsequent to the charge, drop-out times were again measured. This second measurement revealed no apparent change to the operating characteristics of the relays as a result of the battery charge.

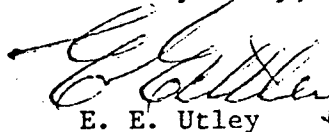
In anticipation of a replacement of all BFD relays, approximately two hundred units were ordered. Since the normally energized application was of a more immediate concern, these relays were replaced first. By March 15, 1976, all normally energized BFD relays in the Reactor Protection and Reactor Safeguards Systems were replaced by relays with the new coil style (1259C71G19).

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Disassembly and inspection of an older style normally deenergized BFD relay revealed no unusual deterioration or discoloration. These results notwithstanding, it was intended to replace these relays with the newer style coil as well. However, due to the potential for spurious trips associated with relay replacement during power operation and considering the present condition of these relays, this installation has been rescheduled for the next refueling outage.

It is believed that the replacement of the older style coil with the more reliable coil described in the Westinghouse service letter is adequate to effectively resolve the relay problem. Therefore, no additional action regarding IE Bulletin 76-05 is considered necessary at this time.

Yours very truly,



E. E. Utley
Vice President
Bulk Power Supply

CSB:jwk

cc: Messrs. W. G. McDonald
E. Volgenan