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826 L. L. FLEMMING, C. A. L. BLOOM, and J. S. WILSON

REGISTRATION

October 4, 1983

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Room 414
1700 North 17th Avenue, Suite 210
Boulder Creek, California 94506-0166

SECRET

Dear Sirs:

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1. 凡在本行開辦之各項業務，均應遵守本行所定之規章，並應隨時注意本行所定之規章，如有違反者，本行將依法究辦。

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October 4, 1983

breakers as described in Section IV.D.3.a of the RTB report on a quarterly basis. Based on the results of this maintenance, which show in some cases a significant decrease in breaker response times, we have continued 30-day interval surveillance testing beyond the four months described in order to closely monitor breaker performance.

On swingshift October 2, 1983, this surveillance was being conducted on the Unit 2 breakers. Our procedure 8018 10-1-13 provides for testing the undervoltage trip device three times in accordance with Section IV.D.3.b of the RTB report with opening contact maximum opening time acceptance criteria of 80 msec and 100 msec. These criteria represent, respectively, criteria developed from baseline testing described in the RTB report and Combustion Engineering (CE) guidelines.

During this surveillance, one breaker, which will be referred to herein as RTB #4, had undervoltage trip device response times (in order) of 91 msec, 106 msec and 68 msec. As these times were significantly scattered and one of them exceeded the CE guidelines, the test was considered to have failed and the trip device scheduled for supervisory review on day shift on October 3. It was concluded that RTB #4 should be removed from service and this was done at about 1100 on October 3. It was replaced with a spare breaker.

Supervisory review of the swing shift surveillance record concluded that two other breakers required further attention. RTB #7 had demonstrated difficulty in responding after several trips with acceptable undervoltage trip response times. It was replaced with a spare breaker. Initially it was thought that this was a surveillance test failure, but review of the maintenance record indicates acceptable results. RTB #6 had initially appeared anomalous to the test technician performing the test who he inadvertently removed an incorrect fuse. However, it subsequently tested satisfactorily when the procedure was followed in the prescribed sequence.

The surveillance procedure was again performed for RTB #5 on October 3 with the result that it initially did not open on undervoltage trip. It was immediately removed from service at about 1420 on October 3, and it was subsequently replaced with a breaker transferred from Unit 3. RTB #5 was then scheduled for data taking and maintenance as described in Section IV.D.3.c of the RTB report.

In all cases during the investigation of RTB #5 on October 3-4, the undervoltage trip device operated successfully with opening times within acceptance limits. Data taken showed trip effort torque to be within the acceptable range however, armature overtravel was found to be slightly out of tolerance and undervoltage trip device pickup voltage was initially measured at 183 volts as compared to a lower acceptance limit of 170 volts.

October 1, 1953

Armature overtravel was corrected and the significance of the having been slightly out of tolerance is being evaluated. Undervoltage trip device pickup voltage was later measured within limits.

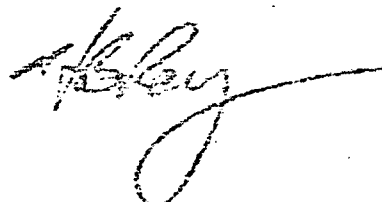
We have commenced a review of all surveillance and maintenance data for the RTB and have not been able, in the time available, to identify clear adverse trend indications for RTB #4 and #6. We do note, however, that they both showed above average reductions in undervoltage trip device response times following maintenance. (As noted above, reduction in this response time has caused us to maintain a 30-day surveillance interval beyond the four months initially planned.) We have not used this change in response time following maintenance as a trend variable on the evaluation of surveillance data performed thus far.

On October 3, we proceeded to perform the surveillance test of Unit 3 breakers before entering Mode 2 on October 4. All breakers tested satisfactorily. Based on the fact that the Unit 2 breakers were nearing the end of their quarterly maintenance interval, the surveillance testing was commenced on October 2, and that they had successfully passed their previous 30-day surveillance, we are implementing the interim measure of shortening the interval from quarterly to every two months. This shortening in the maintenance interval is consistent with CE Bulletin 63-07. We will proceed to bring the Unit 2 reactor trip breakers into this reduced maintenance interval program within the next approximately ten days and will proceed to bring the Unit 3 reactor trip breakers into this reduced maintenance interval program soon thereafter.

In addition, our investigation of the breakers and related data is continuing, with the support and assistance of AEC and other organizations and the vendor, as appropriate, and our conclusions will be included in our 14-day follow-up report and Licensee Event Report No. 83-123 to be submitted prior to October 17, 1953.

If there are any questions regarding the above, please advise us.

Sincerely,



cc: A. E. Chaffee (USNRC Resident Inspector, Units 2 and 3)
J. P. Stewart (USNRC Resident Inspector, Units 2 and 3)