

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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LER SUPPLEMENTAL INFORMATION

BFRO-50- 259 / 8230 RI Technical Specification Involved 3.5.K

Reported Under Technical Specification 6.7.2.a(8) \* Date Due NRC NA

Event Narrative:

Unit 2 was operating at 87 percent and unit 3 was in a turbine maintenance outage; both units were unaffected by this event. Unit 1 was operating at 98 percent power when TVA received notification from General Electric of an error in the Minimum Critical Power Ratio (MCPR) transient analysis for cycle 5. The transient analysis error resulted from the use of incorrect active fuel lengths for the bundle types.

GE first estimated the error would result in an increase of approximately 0.01 (0.8%) in the MCPR operating limit for scram time results where  $\tau$  was determined to be greater than or equal to zero. TVA's immediate corrective action was to administratively limit the CMFCP to 0.984 (1.6% increase in MCPR) until the process computer's data constants could be modified to reflect this new limit, and to submit new technical specifications containing the new limit. Also, the Nuclear Engineer's Log Book was reviewed to determine the highest CMFCP since startup for this cycle. The highest CMFCP, as originally reported, was 0.974 on April 12, 1982.

Since the time of the original LER Report, GE has completed the MCPR transient analysis and informed TVA that the MCPR operating limit actually increased not by 0.01, but by 0.02 (1.6%). Although this is in excess of the limit in the first technical specification revisions submitted by TVA, the 1.6% administrative conservatism taken by TVA compensates for this second nonconservative error. (Continued on attached sheet)

\* Previous Similar Events:

None

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

\*Revision: JRP

Event Narrative (Continued)

TVA's administrative controls were a temporary measure which was to be observed until the process computer data constants could be revised to reflect the values submitted in the technical specification revisions. However, during an unrelated GEXL+15 software change-over the original MCPR limit was inadvertently restored. Since the new software uses a different array for the MCPR limit, the old array was checked to be certain the proper elements had been zeroed. The new array was checked for compliance with technical specifications, which still listed the original limit.

The unit 1 Nuclear Engineer's Log Book was reviewed to find the highest CMFCP since the date of the original report. On September 9, 1982, CMFCP reached 0.988. Although this number was non-conservative to the value of the MCPR limit supplied by GE, this particular limit is only applicable for MCPR where the result of scram timing indicates a  $\tau \geq 0.00$ . Records show that this has not been the case for Browns Ferry unit 1 this cycle. Thus, this MCPR limit has not been applicable. The increased core flow technical specification revision currently under NRC review has the correct MCPR limit. The process computer data constants will be changed to reflect this latest technical specification revision. This is considered to have been a unique and isolated series of events, and no other corrective action is required. There was no adverse effect on public health or safety.