

ARKANSAS POWER & LIGHT COMPANY
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February 12, 1980

WILLIAM CAVANAUGH III
Vice President
Generation & Construction

1-010-16

Director of Nuclear Reactor Regulation
ATTN: Mr. R. W. Reid, Chief
Operating Reactor Branch #4
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Arkar as Nuclear One-Unit 1
Docket No. 50-313
License No. DPR-51
Proposed Technical Specifications
(File: 1511.1, 1510)

Gentlemen:

In response to your request for additional information required to complete your review of our submittals dated April 24, May 16, June 6 and June 8, 1979, concerning our requests for amendments and Technical Specification changes to Arkansas Nuclear One-Unit 1 (ANO-1) as a result of IE Bulletin 79-05A, IEB 79-05B and the Order of May 17, 1979, the following is provided:

- Item 1.a. Our submittal of June 8, 1979, which proposed limiting conditions for operations (LCO's) and surveillance Technical Specifications (TS) for the emergency feedwater (EFW) trains, has been revised to include a surveillance requirement for the EFW flow instrumentation. This TS will require calibration and testing on a 18 months (or refueling) schedule. Testing of this instrumentation requires that relatively cold feedwater be supplied to the steam generator. This requires that the tests be done with the plant in a cold condition to prevent thermal shock to the steam generator tubes and thermal cycles to the EFW nozzles.
- Item 1.b. Our submittal of June 8, 1979 has also been revised to require that the valves in the EFW trains that are verified in their correct position monthly and the motor-operated valves in the EFW trains that are cycled quarterly be checked or cycled, as appropriate, on a staggered basis.

Item 1.c. As agreed during our meeting with the staff on January 18, 1980, we have revised our submittal of June 8, 1979 to include an LCO and Surveillance Testing for our control-grade EFW automatic actuation system.

The revised June 8, 1979 submittal referenced in 1.a, 1.b, and 1.c is included as Attachment 1.

Item 2. The turbine driven EFW pump is designed to provide a diverse system for RCS heat removal through the steam generators. This diverse system was not intended, and has not been required, to cool the plant down to the RHR cut in temperature and, therefore, was not designed with this capability as a requirement. This capability would require more steam pressure than would be available at the RHR cut in temperature to turn the turbine. Further, the turbine driven EFW pump will be the only feedwater pump available only when the station is in a complete loss of AC power situation. This event is highly improbable and, if it occurred, would last for only the short duration required to restore power. The turbine driven pump has been shown to be sufficient to hold the plant in a hot shutdown condition. Therefore, we request that you remove your requirement for us to demonstrate that our turbine driven EFW pump has the capability to cool the plant to the RHR cut in temperature or provide a TS that requires additional appropriate action during a cooldown when only the turbine driven EFW pump is available.

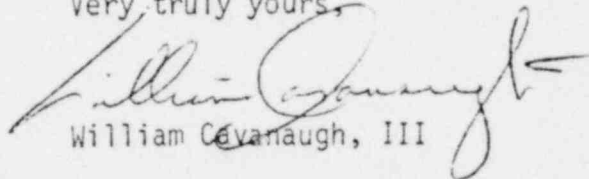
Item 3. Our submittal of June 6, 1979, which proposed an LCO TS regarding the operability of the reactor trip circuitry upon loss of main feedwater or a turbine trip has been revised as requested. These revisions are submitted as Attachment 2.

Item 3.a. Reactor trip upon loss of main feedwater should be bypassed up to 10% reactor power to allow sufficient margin for bringing the main feedwater pumps into use. This cannot be initiated until reactor power is greater than 5%. Further, power level instrumentation calibration is designed to provide accurate indication above 20%. Below this power level, instrumentation error may be as great as 3 or 4%. We, therefore, feel that bypass of this trip function is necessary and justified between 5 and 10% reactor power.

Reactor trip upon turbine trip should be similarly bypassed up to 20% reactor power to allow sufficient margin for bringing the turbine on line. This procedure cannot be initiated prior to approximately 15% reactor power. The instrumentation errors discussed above also apply here and we, therefore, feel that a lower bypass limit (than 20%) would unduly restrict normal start-up.

- Item 4. Attachment 3 is a proposed TS change which includes the revised temperature/pressure limits of Appendix G which are to be applied during emergency conditions. The ANO-1 Operating Procedures presently contain four conditions following a small break LOCA or HPI actuation, one of which must be met prior to over-riding HPI components. This revised temperature/pressure limit will also become one of these four conditions.
- Item 5. ANO-1 TS do not limit the number of acceptable scrams. Therefore, no associated TS change request is submitted. Design transients are discussed in Chapter 4 of the ANO-1 FSAR and are listed in Table 4-8. Prior to the addition of these scram functions (reactor trip on main turbine trip or on trip of both main feedwater pumps), a safety evaluation was performed which determined that the number of transient cycles expected for these trips would still be bounded by design.
- Item 6. Attachment 4 is a proposed TS change which will require submittal of a Special Report within 14 days if the electromatic relief valve is not operational and/or isolated for more than 24 hours when RCS pressure is above the low pressure trip setpoint.
- Item 7. Revised Bases sections are provided with each of the above proposed changes.

Very truly yours,



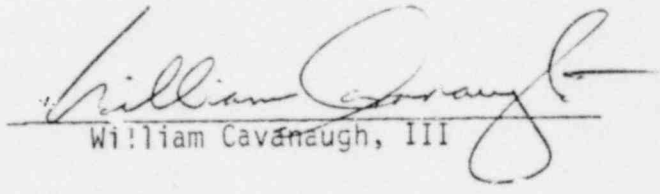
William Cavanaugh, III

WC:ERG:nak

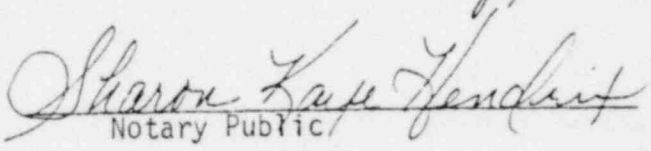
Attachments

STATE OF ARKANSAS)
) SS
COUNTY OF PULASKI)

William Cavanaugh, III, being duly sworn, states that he is Vice President, Generation & Construction, for Arkansas Power & Light Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this Supplementary Information; that he has reviewed or caused to have reviewed all of the statements contained in such information, and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.


William Cavanaugh, III

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 12th day of February, 1980.


Notary Public

My Commission Expires:

My Commission Expires 9/1/81