

November 13, 2000

Mr. Craig G. Anderson
Vice President, Operations ANO
Entergy Operations, Inc.
1448 S. R. 333
Russellville, AR 72801

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 - REQUEST FOR ADDITIONAL
INFORMATION REGARDING PROPOSED MODIFICATION TO TECHNICAL
SPECIFICATIONS ON CONDENSATE STORAGE TANK VOLUMES (TAC
NOS. MA8206 and MA8207)

Dear Mr. Anderson:

By letter dated January 27, 2000 (OCAN010004), you submitted an amendment request to change the requirements associated with the condensate storage tanks within the technical specifications for Arkansas Nuclear One, Units 1 and 2. The staff has several questions regarding the proposed changes. The staff's questions are provided in the enclosed request for additional information (RAI).

The contents of this RAI have been discussed with Mr. Steve Bennett of your staff, and a response by March 1, 2001, was agreed to. If circumstances result in the need to revise the target date, please call at the earliest opportunity.

If there are questions regarding this request, I may be reached at 301-415-1323.

Sincerely,

/RAI

William D. Reckley, Project Manager, Section 1
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosure: As stated

cc: See next page

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ACCESSION NUMBER: ML003768440

OFFICE	PDIV-1/PM	PDIV-1/LA	SRXB:SC	PDIV-1/SC
NAME	WReckley	DJohnson	FAkstulewicz*	RGramm
DATE	11/7/00	11/7/00	10/25/00	11/7/00

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REQUEST FOR ADDITIONAL INFORMATION
ARKANSAS NUCLEAR ONE (ANO), UNITS 1 AND 2
CONDENSATE STORAGE TANK (CST) VOLUME TECHNICAL SPECIFICATIONS (TS)
(TAC NOs. MA8206 AND MA8207)

1. When service water is supplied to the steam generators through the emergency feedwater (EFW) systems, the performance of the steam generators will degrade at a rate that is dependent on the quality of the incoming water. Please describe and provide the results from evaluations that demonstrate that the functions of the EFW systems (i.e, achieving and maintaining safe shutdown conditions) are met if the systems are aligned to the service water systems. Explain how the site-specific water quality of Dardanelle Reservoir and the ANO emergency cooling pond are considered in the evaluation.
2. Please confirm that the sharing of the qualified CST (QCST) will not significantly impair the EFW systems' ability to perform their safety functions for bringing both units to safe shutdown conditions. Describe how the realignment of the Unit 2 EFW system maintains compliance with General Design Criteria 5, "Sharing of Systems, Structures and Components."
3. Please describe the bases for the proposed 32,300 gallons requirement in terms of assumed initiating conditions, setpoints (engineered safety features, alarms, or control system), operator actions, and other factors that ensure the continuous availability of EFW for both units.
4. Please explain, in terms of design and routine surveillances, how you verify that adequate service water flow will be available during the worst case design basis events (assuming EFW is also supplied by the service water system).
5. Please describe the effect of the proposed changes on the station blackout analyses for Unit 1 and Unit 2. Is it necessary for continued compliance with 10 CFR 50.63, "Loss of all alternating current power," to maintain a QCST inventory that would be greater than the proposed TS requirements? If so, would the higher volumes be described in the safety analyses reports (i.e., would the higher volume be identified as a part of the design basis for the CST)?
6. Please describe how your procedures or other programs will translate the "analytical limit" into an actual surveillance requirement. Where will factors such as unusable tank volumes and instrument uncertainties be described and how will they be controlled?
7. Please describe the treatment of each of the CSTs in terms of the maintenance rule. What changes in CST volumes have been or would be considered within the context of the maintenance rule? For example, will variations in CST volumes be considered within the evaluations that will be performed in accordance with 10 CFR 50.65(a)(4)? Will maintaining CST volumes (in the safety and non-safety tanks) be included in operating procedures or other administrative controls? Under what conditions would you expect to operate with volumes less than the current TS volumes and how would operation with the reduced volumes be evaluated?

8. How is the flow path from the service water system to the EFW systems tested or inspected to demonstrate that they are free of blockages or silting? Are the valves needed to realign the source of auxiliary feedwater systems to the service water systems tested to demonstrate that they will be capable of performing their intended function? How often are they tested? Does the proposed TS change require changes in your inservice testing program or otherwise require additional equipment to be tested?
9. Has it been demonstrated that 30 minutes is sufficient time for operators to realign the EFW systems for all of the accidents or anticipated operational occurrences that rely on the systems? If so, describe how.
10. It is our understanding that the ANO licensing bases include consideration of Branch Technical Position (BTP) ASB 10-1 which states that each unit have emergency feedwater pumps with diverse power sources and that other powered components also use the concept of separate and multiple sources of motive energy. Can service water be supplied to the EFW pumps using a diverse motive energy? If not, explain the implications in terms of ANO continuing to abide by the positions outlined in BTP ASB 10-1.

Arkansas Nuclear One

cc:

Executive Vice President
& Chief Operating Officer
Entergy Operations, Inc.
P. O. Box 31995
Jackson, MS 39286-1995

Director, Division of Radiation
Control and Emergency Management
Arkansas Department of Health
4815 West Markham Street, Slot 30
Little Rock, AR 72205-3867

Winston & Strawn
1400 L Street, N.W.
Washington, DC 20005-3502

Manager, Rockville Nuclear Licensing
Framatone Technologies
1700 Rockville Pike, Suite 525
Rockville, MD 20852

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 310
London, AR 72847

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

County Judge of Pope County
Pope County Courthouse
Russellville, AR 72801

Vice President, Operations Support
Entergy Operations, Inc.
P. O. Box 31995
Jackson, MS 39286-1995

Wise, Carter, Child & Caraway
P. O. Box 651
Jackson, MS 39205