



ENTERGY

Entergy Operations, Inc.

1448 S.R. 333

Russellville, AR 72801

Tel 501 858-5000

February 10, 1995

1CAN029503

U. S. Nuclear Regulatory Commission
Document Control Desk
Mail Station P1-137
Washington, DC 20555

Subject: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Proposed Arkansas Nuclear One - Unit 1 Technical Specification Bases
Changes

Gentlemen:

Attached are changes revising the Bases associated with the Arkansas Nuclear One - Unit 1 (ANO-1) Technical Specifications (TSs) 3.1, 3.2, 3.3.1, 3.5.2.6 and 4.7. The changes have been identified as required to support the ANO-1 restart following refueling outage 1R12 scheduled for February 14, 1995 through April 12, 1995.

The change to the TS 3.1 Bases adds additional information to clarify the specification and corrects a discrepancy between the Bases for TS 2.1 and TS 3.1. The current TS 3.1 Bases state that the plant is designed to operate with both reactor coolant loops and at least one reactor coolant pump per loop in operation, and maintain DNBR above 1.30 during all normal operations and anticipated transients. The change adds information, consistent with the information included with the Bases associated with TS 2.1, that clarifies that the DNBR of 1.30 is associated with the BAW-2 correlation, and adds information that a DNBR of 1.18 will be maintained for the BWC correlation. The correlation used in the reload report is dependent upon the fuel assembly design used for each cycle.

The change to the TS 3.2 Bases revises a reference to a cycle specific volume and concentration in the borated water storage tank (BWST) that ensures that a quantity of boric acid is available to borate the reactor coolant system to a 1% subcritical margin in the cold condition at the worst time in core life with a stuck control rod and after xenon decay. The cycle specific information has been replaced by a reference to an operable BWST. TS 3.3.1.G specifies the requirements for BWST volume and boric acid concentration. The minimum required level and concentration bounds the requirement for the volume and concentration required to meet the 1% subcritical margin in the condition described in the TS 3.2 Bases.

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Reference 3 has also been revised to refer to the ANO-1 Safety Analysis Report Section 3.1 that describes the reactivity control limits instead of Section 3.3, which describes the tests and inspections associated with the reactor.

The change to the TS 3.3.1 Bases removes cycle specific information describing the minimum required boron concentration in the BWST as specified in TS 3.3.1.G. The current Bases state that the boron concentration is set at a value that will maintain the core at least 1% $\Delta k/k$ subcritical at 70 °F without any control rods in the core. The concentration referenced, 1609 ppm, was specific to only Cycle 1 operation. Subsequent fuel reloads have increased this value. The change deletes the ANO-1 Cycle 1 specific value of 1609 ppm boron from the Bases of TS 3.3.1 and maintains that a concentration of 2270 ppm boron in the BWST assures that the core will be maintained at least 1% $\Delta k/k$ subcritical at 70 °F without control rods in the core.

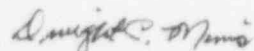
The change to the TS 3.5.2.6 Bases adds additional information to clarify the specification. The reactor power-imbalance envelope defined by the Core Operating Limits Report (COLR) is set by the LOCA analyses or by the loss of forced reactor coolant flow analysis. The development of this envelope is described by BAW-10179P-A which is used in the development of the ANO-1 COLR. The current Bases implies that only the LOCA analyses define the envelope.

The change to the TS 4.7 Bases clarifies that the time for rod insertion from full out to 3/4 inserted required by TS 4.7.1.1 is used to show that the SAR Chapter 14 analysis input of insertion from full out to 2/3 inserted is bounded. The information being added is currently located in ANO-1 SAR Section 3.A.9.1.1 and clarifies the purpose of specified drop times.

As these are changes to the Bases of the Technical Specifications, a "No Significant Hazards Determination" is not required. A review of the changes in accordance with 10 CFR 50.59 has concluded that no unreviewed safety question exists.

We request that these changes be issued with the next scheduled amendment. Should you have any questions regarding these changes, please contact me.

Very truly yours,



Dwight C. Mims
Director, Licensing

DCM/cws

cc: Mr. Leonard J. Callan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One
1448 S. R. 333
Russellville, AR 72801

Mr. George Kalman
NRR Project Manager Region IV/ANO-1 & 2
U. S. Nuclear Regulatory Commission
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852