

April 12, 1991

Docket No. 50-313

Mr. Neil S. Carns
Vice President, Operations ANO
Entergy Operations, Inc.
Route 3 Box 137G
Russellville, Arkansas 72801

Dear Mr. Carns:

SUBJECT: TESTING OF REACTOR PROTECTION SYSTEM AND EMERGENCY FEEDWATER
INITIATION AND CONTROL SYSTEM CHANNELS AT ARKANSAS NUCLEAR ONE,
UNIT 1; BASES CHANGE (TAC NO. 79869)

The Commission has incorporated the revision of the Technical Specification (TS) Bases regarding the subject channels, provided by your submittal of February 20, 1991, into the Arkansas Nuclear One, Unit 1 TS. The revision reflects a design change implemented in accordance with 10 CFR 50.59, which eliminates unnecessary testing of the subject channels provided that the frequency has not been discontinued or that activities were not performed that could potentially have affected the operability of one or more of the channels.

The NRC staff has reviewed the changes to the facility and concurs that the bases to TS 4.1, Operational Safety Items, should be changed to eliminate unnecessary testing. The revision to the Bases of TS 4.1 is acceptable to the staff.

Sincerely,

Original Signed By:

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

Enclosure:
Revision to Technical Specification
Bases Page 68

cc w/enclosure:
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T. Quay	C. Grimes (MS13E4)	P. Noonan	T. Alexion
OGC (MS15B18)	E. Jordan (MNBB3701)	S. Newberry (MS8H3)	ACRS(10)(MSP-315)
PD4-1 Plant File	T. Westerman, RIV		

DFC	: PD4-1/LA	: PD4-1/PM	: SICB/BC	: PD4-1/D	:
NAME	: PNoonan	: TAlexion	: SNewberry	: TQuay	:
DATE	: 3/18/91	: 3/27/91	: 4/11/91	: 4/12/91	:

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Sincerely,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

Enclosure:
Revision to Technical Specification
Bases Page 68

cc w/enclosure:
See next page

Mr. Neil S. Carns
Entergy Operations, Inc.

Arkansas Nuclear One, Unit 1

cc:

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FACILITY OPERATING LICENSE NO. DPR-51

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Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by a revision date and contains a vertical line indicating the area of change.

REMOVE PAGE

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Other channels are subject only to "drift" errors induced within the instrumentation itself and, consequently, can tolerate longer intervals between calibrations. Process system instrumentation errors induced by drift can be expected to remain within acceptable tolerances if recalibration is performed once every 18 months.

Substantial calibration shifts within a channel (essentially a channel failure) will be revealed during routine checking and testing procedures.

Thus, minimum calibration frequencies for the nuclear flux (power range) channels, and once every 18 months for the process system channels is considered acceptable.

Testing

On-line testing of reactor protective channel and EFIC channels is required once every 4 weeks on a rotational or staggered basis. The rotation scheme is designed to reduce the probability of an undetected failure existing within the system and to minimize the likelihood of the same systematic test errors being introduced into each redundant channel.

The rotation schedule for the reactor protective channels is as follows:

Channels A, B, C, D	Before Startup if the individual channel rotational frequency has been discontinued or if outage activities could potentially have affected the operability of one or more channel
Channel A	One Week After Startup
Channel B	Two weeks After Startup
Channel C	Three Weeks After Startup
Channel D	Four Weeks After Startup

The reactor protective system instrumentation and EFIC test cycle is continued with one channel's instrumentation tested each week. Upon detection of a failure that prevents trip action, all instrumentation associated with the protective channels will be tested after which the rotational test cycle is started again. If actuation of a safety channel occurs, assurance will be required that actuation was within the limiting safety system setting.

The protective channels coincidence logic and control rod drive trip breakers are trip tested every four weeks. The trip test checks all logic combinations and is to be performed on a rotational basis. The logic and breakers of the four protective channels shall be trip tested prior to startup and their individual channels trip tested on a cyclic basis. Discovery of a failure requires the testing of all channel logic and breakers, after which the trip test cycle is started again.