



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

NRC PDD

December 7, 1979

Docket No. 50-368

MEMORANDUM FOR: Sam E. Bryan, Assistant Director for Field Coordination,
Division of Reactor Operations Inspection, Office of
Inspection & Enforcement

FROM: William P. Gammill, Acting Assistant Director for
Operating Reactor Projects, Division of Operating Reactors,
Office of Nuclear Reactor Regulation

SUBJECT: ANO-2 CPC MODIFICATIONS TO ACCOMMODATE T_{HOT} ANOMALY

We have completed our review of the licensee's evaluation concerning the modification to the hot leg temperature measuring instrumentation to accommodate the anomalous hot leg temperature indications. We agree with the licensee's conclusions that the modification does not constitute an unreviewed safety question as defined in 10 CFR 50.59. However, we are continuing our review of the anomalous condition. By letter dated November 20, 1979, enclosed, we requested the development of certain action criteria in the start up and operating program. We plan to review the licensee's response and follow the start up operations.

W. P. Gammill

William P. Gammill, Acting Assistant
Director for Operating Reactor Projects
Division of Operating Reactors

Enclosure:
11/20/79 NRC ltr.
to ANO-2

cc:
DEisenhut JRMiller
RVollmer GVissing
WRussell RReid
TJCarter RIngram
BGrimes
LShao

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UNITED STATES
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WASHINGTON, D. C. 20555

Enclosure

Docket No. 50-368

Mr. William Cavanaugh, III
Vice President, Generation
and Construction
Arkansas Power & Light Company
P. O. Box 551
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

During our meeting of October 4, 1979, regarding the hot leg temperature indication anomaly at Arkansas Nuclear One, Unit No. 2, you could not determine a firm cause for the anomaly. Inspections were to be made of the reactor vessel internals and we understand the inspections have been completed. We request your report on the results of those inspections.

We also understand that your evaluation under 10 CFR Part 50.59 relating to the modifications to the hot leg temperature system has now been completed. We will review your evaluation to determine if further reviews are necessary before startup of ANO-2.

We consider this anomaly a condition of operation which is not fully understood. Therefore, we request particular attention to this in your startup and surveillance of operation. In particular, we consider it important to monitor the temperature difference between temperature detectors in each hot leg during power ascension and to compare those differences with the experiences during the initial startup testing at the different power levels up to the 50 percent power level. Beyond the 50 percent power level, the temperature differences should be monitored and compared with the expected temperature differences for the particular power levels. You should develop criteria of acceptance and action as it relates to continued power increase, continued operation and reporting to the NRC.

Further, continued surveillance of the temperature anomaly should be provided throughout the first cycle of operation. The surveillance should have criteria for acceptance and action as it relates to continued operation and reporting to the NRC.

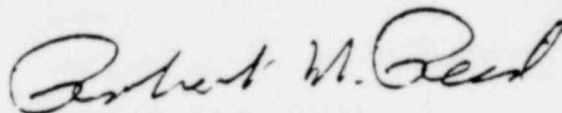
Since much of the above relates to your startup testing, we request a summary of your startup testing program which would describe the above considerations and the action criteria relating to the verification of proper reassembly of the reactor and vessel. Also we request your proposed criteria for continued operation, power increase and reporting to the NRC as it relates to the anomaly.

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Your inspection results and startup testing program and action criteria relating to the hot leg temperature anomaly should be submitted in sufficient time to allow completion of our review prior to ascending above the 50 percent power level.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert W. Reid". The signature is fluid and cursive, with the first name "Robert" being more prominent than the last name "Reid".

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

cc: See next page

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