



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

November 30, 1990

Docket Nos. 50-313
and 50-368

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

Dear Mr. Carns:

SUBJECT: LONG-TERM HYDROGEN MONITORING CAPABILITIES AND RELIEF REQUEST FOR
ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 (TAC NOS. 75992 AND 75993)

On January 9, 1990, Arkansas Power and Light Company submitted a letter to the NRC concerning the above subject. The letter included a proposed long-term solution to a design deficiency related to the single-failure criteria for the Arkansas Nuclear One, Unit 2 (ANO-2) Hydrogen Analyzers. In addition, it included a request for relief for ANO-1 and ANO-2 from the NUREG-0737 requirement to have the hydrogen analyzers operable within 30 minutes following a loss-of-coolant accident (LOCA).

The staff has reviewed your submittal and has documented its findings in the enclosed Safety Evaluation (SE). Based on our evaluation, we have determined that the proposed solution to the ANO-2 Hydrogen Analyzer single failure problem based on a completed design change is acceptable.

The request for relief from the NUREG-0737 requirement has been found to be unacceptable and is hereby being denied. The staff feels strongly that the requirement to detect hydrogen concentration in containment within 30 minutes after a LOCA is critical to timely and proper determination of plant condition and effective operator actions to mitigate the accident. Your submittal does not provide adequate basis for long-term relaxation of this requirement.

We recommend that you consider options to assure that both plants meet this NUREG-0737 item in the near term. As indicated in your submittal, ANO-1 can meet the 30 minute criterion as designed; however, for ANO-2, you might pursue a system design change, or as an alternative, operating the system continuously.

000173
9012130239 901130
PDR ADOCK 05000313
PDC

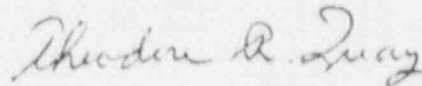
QFD1
'11

Neil S. Carns

- 2 -

We request that you provide within 60 days a response to this letter which addresses the actions you plan to take to meet the 30 minute criterion no later than the completion of the next refueling outage for ANO-2, otherwise provide justification for an alternative schedule in your response.

Sincerely,



Theodore R. Quay, Director
Project Directorate IV-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

We request that you provide within 60 days a response to this letter which addresses the actions you plan to take to meet the 30 minute criterion no later than the completion of the next refueling outage for ANO-2, otherwise provide justification for an alternative schedule in your response.

Sincerely,

Theodore R. Quay

Theodore R. Quay, Director
Project Directorate IV-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

DISTRIBUTION

- Docket File
- NRC PDR
- Local PDR
- PD4-1 Reading
- M. Virgilio MS 13E4
- T. Quay
- L. Berry
- S. Peterson
- OGC MS15B18
- E. Jordan MNBB 3701
- ACRS (10) MS P-315
- PD4-1 Plant File
- R. Mullikin, Region IV

OFF	: PD4-1/LA	: PD4-1/PM	: PD4-1/PD	: SPLB	: PD4-1/D
NAME	: LBerry <i>LB</i>	: SPeterson:lh <i>SP</i>	: TAlexton <i>TA</i>	: MCracken <i>MC</i>	: TQuay <i>TQ</i>
DATE	: 11/29/90	: 11/26/90	: 11/26/90	: 11/28/90	: 11/29/90

OFFICIAL RECORD COPY

Document Name: ANO 1/2 HYDRO TACS 75922/3

Mr. Neil S. Carns
Entergy Operations, Inc.

Arkansas Nuclear One, Units 1 & 2

cc:

Mr. Donald C. Hintz
Executive Vice President
and Chief Operating Officer
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286

Mr. Jerry Yelverton
Director Nuclear Operations
Arkansas Nuclear One
Route 3 Box 137G
Russellville, Arkansas 72801

Mr. Nicholas S. Reynolds
Winston & Strawn
1400 L Street, N.W.
Washington, D.C. 20005-3502

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
1 Nuclear Plant Road
Russellville, Arkansas 72801

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Office of Executive Director
for Operations
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Honorable Joe W. Phillips
County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

Ms. Greta Dicus, Director
Division of Environmental Health
Protection
Arkansas Department of Health
4815 West Markam Street
Little Rock, Arkansas 72201

Mr. Gerald Muench
Vice President Operations Support
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286

Mr. Robert B. McGehee
Wise, Carter, Child & Caraway
P. O. Box 651
Jackson, Mississippi 39205

Mr. Charles B. Brinkman, Manager
Washington Nuclear Operations
Combustion Engineering, Inc.
12300 Twinbrook Parkway, Suite 330
Rockville, Maryland 20852

Mr. Tom W. Nickels
Arkansas Nuclear One
Route 3, Box 137G
Russellville, Arkansas 72801

Admiral Kinnaird R. McKee, USN (Ret)
Post Office Box 41
Oxford, Maryland 21654