



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 3, 1994

Docket No. 50-313

Mr. Jerry W. Yelverton
Vice President, Operations ANO
Entergy Operations, Inc.
Route 3 Box 137G
Russellville, Arkansas 72801

Dear Mr. Yelverton:

SUBJECT: MANUAL USE OF THE ELECTROMATIC RELIEF VALVE (TAC NOS. M86946 AND M88782)

On February 8, 1994, Mr. J. Vandergrift and other members of your staff met with NRC staff to discuss manual actuation of the electromatic relief valve (ERV) at Arkansas Nuclear One, Unit 1 (ANO-1). The meeting was prompted by an event at ANO-1 on June 13, 1993, during which operators manually opened the ERV to prevent a high pressure induced reactor trip. On reviewing the June 1993 event, NRC staff raised the concern that manual actuation of the ERV may be contrary to the post-TMI action plan (NUREG-0737) which included actions to minimize use of the ERV. Minimized use of the ERV was desired to reduce the likelihood of malfunctions that could lead to a TMI-type loss-of-coolant accident (LOCA).

Your February presentation included a probabilistic evaluation which concluded that the probability of core damage was essentially the same from potential malfunctions developing from pressure transients that terminated in reactor trips or pressure transients that were neutralized by manual actuation of the ERV. The staff reviewed the probabilistic evaluation that was submitted during the meeting and other issues that were discussed. Our safety evaluation is enclosed.

The evaluation concludes that ERV manual actuations at ANO-1 as described, do not constitute a significant risk to the public and do not negate the bases of the staff's September 26, 1983, NUREG-0737 safety evaluation. However, your presentation did not conclusively support the position that pre-trip manual actuation reduces risk. The staff believes that while pre-trip ERV use does not pose a significant risk at ANO-1, routine ERV use is a safety concern. Frequent ERV use is indicative that plant problems that result in ERV challenges are not being corrected.

In concluding this matter, we first would like to commend your decision to temporarily refrain from using the ERV while this issue was being evaluated.

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Mr. Jerry W. Yelverton

- 2 -

The staff believes that the way to minimize ERV usage is to eliminate the causes that lead to transients requiring ERV usage. The staff recognizes Entergy's efforts to improve main feedwater pump performance which had been a major contributor to transients leading to ERV actuation. This concludes our work that was tracked by TAC Nos. M86946 and M88782.

Sincerely,

ORIGINAL SIGNED BY:

George Kalman, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Enclosure:
Safety Evaluation

cc w/enclosure:
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OFC	LA/PD4-1 <i>JK</i>	PM/PD4-1	D/PD4-1 <i>WDB</i>
NAME	PNoonan	GKalman/vw	WBeckner
DATE	6/3/94	6/3/94	6/3/94
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Mr. Jerry W. Yelverton

- 2 -

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Sincerely,



George Kalman, Senior Project Manager
Project Directorate IV-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Enclosure:
Safety Evaluation

cc w/enclosure:
See next page

Mr. Jerry W. Yelverton
Entergy Operations, Inc.

Arkansas Nuclear One, Unit 1

cc:

Mr. Harry W. Keiser, Executive Vice
President & Chief Operating Officer
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286

Mr. Jerrold G. Dewease
Vice President, Operations Support
Entergy Operations, Inc.
P. O. Box 31995
Jackson, Mississippi 39286

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

Mr. Robert B. McGehee
Wise, Carter, Child & Caraway
P. O. Box 651
Jackson, Mississippi 39286

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

Admiral Kinnaird R. McKee, USN (Ret)
214 South Morris Street
Oxford, Maryland 21654

Mr. Robert B. Borsum
Licensing Representative
B&W Nuclear Technologies
1700 Rockville Pike, Suite 525
Rockville, Maryland 20852

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

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Honorable C. Doug Lunningham
County Judge of Pope County
Pope County Courthouse
Russellville, Arkansas 72801

Ms. Græta Dicus, Director
Division of Radiation Control
and Emergency Management
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72205-3867