Docket No. 50-368

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

Dear Mr. Yelverton:

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT 2 - EXIGENT TECHNICAL SPECIFICATION CHANGE CONCERNING THE INCORE DETECTION SYSTEM

The Commission has forwarded the enclosed "Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing," to the Office of the Federal Register for publication.

This notice relates to your September 24, 1993, application to modify the operability requirements specified by Technical Specification 3.3.2 for the incore detection system by reducing the minimum number of required incore detectors and detector locations from the currently specified 75 percent to a proposed 50 percent for the remainder of the current operating cycle.

Sincerely,

ORIGINAL SIGNED BY ROBY B. BEVAN FOR:

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

Enclosure:

DISTRIBUTION:

Notice

Docket File

NRC & Local PDRs

PDIV-1 Reading

J. Roe

E. Adensam

W. Beckner

P. Noonan

R. Bevan OGC

cc w/enclosure: See next page

T. Alexion

ACRS (10)

D. Hagan

OC/LFDCB

OPA

A. B. Beach, RIV

OFC	LA:PD4/1)H	PM:PD4-1	D:PD4-1
NAME	PNoonan	TAlexion:pk	WBeckner
DATE	928/93	7 /28/93	9 /18/93
COPY	YES (NO	YES/NO	YES/NO

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Sincerely,

ORIGINAL SIGNED BY ROBY B. BEVAN FOR:

Thomas W. Alexion, Project Manager Project Directorate IV-1

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 28, 1993

Docket No. 50-368

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

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Sincerely,

Thomas W. Alexion, Project Manager

Project Directorate IV-1

Lokey B Borran

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Enclosure: Notice

cc w/enclosure: See next page Mr. Jerry W. Yelverton Entergy Operations, Inc.

cc:

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

Mr. James. J. Fisicaro
Director, Licensing
Entergy Operations, Inc.
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 Licensing Representative B&W Nuclear Technologies 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 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

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

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

Arkansas Nuclear One, Unit 2

Mr. John R. McGaha 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 ABB Combustion Engineering Nuclear Power 12300 Twinbrook Parkway, Suite 330 Rockville, Maryland 20852

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

Mr. Michael B. Sellman General Manager, Plant Operations Entergy Operations, Inc. Route 3, Box 137G Russellville, Arkansas 72801

UNITED STATES NUCLEAR REGULATORY COMMISSION ENTERGY OPERATIONS. INC.

DOCKET NO. 50-368

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-6, issued to Entergy Operations, Inc. (the licensee), for operation of Arkansas Nuclear One, Unit No. 2 (ANO-2), located in Pope County, Arkansas.

The proposed amendment would modify the operability requirements specified by Technical Specification (TS) 3.3.3.2 for the incore detection system by reducing the minimum number of required incore detectors and detector locations from the currently specified 75 percent to a proposed 50 percent for the remainder of the current operating cycle.

The licensee's statement of exigent circumstances is as follows:

This situation could not have been avoided. The detector failure rate during the current cycle could not have been predicted because 1) only 6 detectors failed during the previous cycle of operation with the existing core detectors (all 6 detectors have been returned to service during the current cycle and are currently operable), 2) the previous batch of incores had only 13 detectors failed after 2 cycles of operations, and 3) the batch of incores prior to that had only 10 detectors failed after 2 cycles of operation. The incore detector failure mechanism has not been identified at this time, although an evaluation of the incore detector failure indications is still in progress. Due to a recent increase in the incore detector failure rate, failure to act quickly to reduce the incore detector requirements for ANO-2 could lead to a plant shutdown. Any 10 detector failures would exceed the TS 3.3.3.2a limit on the percentage of operable detectors. Furthermore, should three selected

detectors fail (i.e., those occurring in strings that already have 2 failed detectors), the TS 3.3.3.2b limit on the percentage of operable string locations would be exceeded. It is impossible to predict when, or if, additional detector failures will occur. The time between failures has varied considerably, but based on the failure history, ANO believes that there is insufficient time to allow for the normal 30 day public comment period. Therefore, given the need to act quickly and the determination that this change does not represent a significant hazard, we request that this change request be considered under exigent circumstances, as described in 10CFR50.91(a)(6).

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Criterion 1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The ANO-2 incore detection system is not required for plant safety since it does not initiate any direct safety-related function during anticipated operational occurrences or postulated accidents. The primary function of the incore detectors is to verify that the core power distribution is consistent with the assumptions in the safety analysis. Although the requirements for the number and distribution

of operable incore detectors is relaxed, sufficient measurements will be required to adequately verify compliance with power distribution Technical Specification (TS) limits. Penalty factors will be applied to the Core Operating Limits Supervisory System (COLSS) and Core Protection Calculators (CPCs) to account for the increased uncertainties of values measured by the incore detectors with the number of operable detectors below the current TS requirements. This will ensure that all current TS and fuel design limits are protected and the core power distribution assumptions in the Safety Analysis Report (SAR) analyses remain valid. Therefore, this condition does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Criterion 2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

This condition does not represent a change in the configuration or operation of the plant. The current TS limits on power distribution as verified by the incore detectors will still be met. Reducing the minimum number of operable incore detectors does not introduce any new failure modes. Therefore, this condition does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Criterion 3 - Does not Involve a Significant Reduction in the Margin of Safety.

The ANO-2 incore detection system is not required for plant safety since it does not initiate any direct safety-related function during anticipated operational occurrences or postulated accidents. Sufficient measurements will be required to adequately verify compliance with power distribution TS limits. Use of increased measurement uncertainty factors are [sic] required commensurate with a reduction in the minimum number of incore detector locations. The increased measurement uncertainty factors assure that power distribution calculations based on the incore detection system will continue to be conservative and that the existing Limiting Conditions for Operation specified for Axial Shape Index, Azimuthal Power Tilt, Radial Peaking Factors, Local Power Density, and Departure from Nucleate Boiling Ratio will not be exceeded. Therefore, this condition does not result in a reduction in the margin of safety.

Therefore, based upon the reasoning presented above and the previous discussion of the amendment request, Entergy Operations has determined that the requested change does <u>not</u> involve a significant hazards consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are

satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments

received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By November 3. 1993, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the

proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner

must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory

Commission, Washington, DC 20555, Attention: Docketing and Services
Branch, or may be delivered to the Commission's Public Document Room, the
Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above
date. Where petitions are filed during the last 10 days of the notice
period, it is requested that the petitioner promptly so inform the
Commission by a toll-free telephone call to Western Union at 1-(800) 2485100 (in Missouri 1-(800) 342-6700). The Western Union operator should be
given Datagram Identification Number N1023 and the following message
addressed to Project Directorate IV-1: petitioner's name and telephone
number, date petition was mailed, plant name, and publication date and page
number of this FEDERAL REGISTER notice. A copy of the petition should also
be sent to the Office of the General Counsel, U.S. Nuclear Regulatory
Commission, Washington, DC 20555, and to Nicholas S. Reynolds, Esquire,
Winston and Strawn, 1400 L Street, N.W., Washington, D.C. 20005-3502,
attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated September 24, 1993, which is available for public inspection at the Commission's Public Document Room, the Gelman Building,

2120 L Street, NW., Washington, DC 20555, and at the local public document room, located at Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801.

Dated at Rockville, Maryland, this 28th day of September 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

Roby B. Bevan, Project Manager

Project Directorate

Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation