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December 19, 1996

2CAN129611

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Station P1-137  
Washington, DC 20555

Subject: Arkansas Nuclear One - Unit 2  
Docket No. 50-368  
License No. NPF-6  
Technical Specification Change Request Concerning an Addition  
to the Core Operating Limits Report References

Gentlemen:

Attached for your review and approval is a proposed Arkansas Nuclear One Unit 2 (ANO-2) Technical Specification amendment request which provides an additional NRC-approved methodology in the list of references in specification 6.9.5. In order to support the reload for cycle 13, reference to the technical manual for the Combustion Engineering Nuclear Transient Simulation (CENTS) code is being added to specification 6.9.5.1.

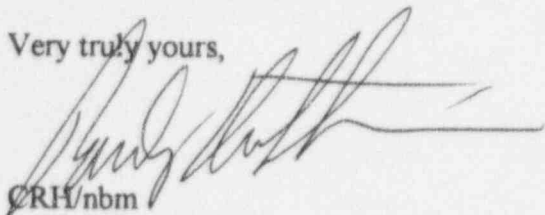
The proposed change has been evaluated in accordance with 10CFR50.91(a)(1) using criteria in 10CFR50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in the attached submittal.

Entergy Operations requests that the effective date for this change be within 30 days of issuance. Although this request is neither exigent nor emergency, your prompt review is requested prior to the next ANO-2 refueling outage (2R12) which is currently scheduled to begin April 25, 1997.

Adol  
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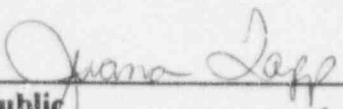
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PDR

Very truly yours,

  
CRH/nbm  
Attachments

To the best of my knowledge and belief, the statements contained in this submittal are true.

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for Johnson  
County and the State of Arkansas, this 19 day of December, 1996.

  
Notary Public  
My Commission Expires 11-8-2000



cc: Mr. Leonard J. Callan  
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U. S. Nuclear Regulatory Commission  
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ATTACHMENT

TO

2CAN129611

PROPOSED TECHNICAL SPECIFICATION

AND

RESPECTIVE SAFETY ANALYSES

IN THE MATTER OF AMENDING

LICENSE NO. NPF-6

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT TWO

DOCKET NO. 50-368

## **DESCRIPTION OF PROPOSED CHANGES**

Technical specification 6.9.5.1 lists the analytical methods used to determine the core operating limits addressed by the individual technical specifications. Reference to the technical manual for the CENTS code (CENPD 282-P-A) is being added to specification 6.9.5.1. Also, a referenced technical specification listed in specification 6.9.5.1.9 is being revised to be consistent with current titles, and the remaining specifications of 6.9.5.1 are being renumbered.

## **BACKGROUND**

Generic Letter 88-16 requires the listing in technical specifications the NRC-approved methodologies used to determine limits that are placed in the Core Operating Limits Report (COLR). Entergy Operations has determined that the CENTS code is needed to support the reload for cycle 13 and therefore, needs to be added as a COLR reference.

## **DISCUSSION OF CHANGE**

Each reload-related accident analysis addressed in the ANO-2 Safety Analysis Report is considered in the reload report for each cycle. This is performed with respect to changes for any cycle-specific parameters in order to ensure that thermal performance during hypothetical transients is acceptable. For core reloads, the margins of safety for fuel system design, nuclear design, and thermal-hydraulic design are addressed in the reload report. The applicable limits and setpoints are determined to be within allowable limits and requirements for acceptable operation for a particular cycle. Each reload cycle is evaluated under the provisions of 10CFR50.59.

CESEC, a digital simulation of a Combustion Engineering Nuclear Steam Supply System, has been used for determining core operating limits such as shutdown margin, moderator temperature coefficient, control element assembly position and insertion limits, and departure from nucleate boiling margin. In order to adopt improved methodologies, it has become desirable to also utilize CENTS for the determination of these limits. The CENTS code has been approved by the NRC for use in calculations of transient behavior in a safety evaluation dated March 17, 1994. CENPD 282-P-A, "Technical Manual for the CENTS Code," is the topical report for the CENTS code. The CENTS code will gradually replace the CESEC code in the ANO-2 safety analyses and therefore, is included in the list of approved methodologies in specification 6.9.5.1. As the need arises to re-evaluate the ANO-2 safety analyses which currently utilize CESEC, CENTS will be used in these future analysis efforts. One of the features of the CENTS code is the ability to generate reactor coolant pump coastdown data. This feature will be used instead of the COAST code (CENPD-98-A, April 1973) to generate the ANO-2 four pump coastdown data. This data will be verified to be conservative with respect to plant data.

By letter dated November 24, 1996 (2CAN119610), Entergy Operations submitted a technical specification change request to add a reference to a more recent small break loss of coolant accident methodology (SBLOCA) to the same technical specification page that this change request affects. Should this change be approved subsequent to the SBLOCA reference change request, an additional page is included in this submittal which incorporates the previous amendment request.

#### **DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION**

An evaluation of the proposed change has been performed in accordance with 10CFR50.91(a)(1) regarding no significant hazards considerations using the standards in 10CFR50.92(c). A discussion of these standards as they relate to this amendment request follows:

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

The proposed change to add the technical manual for the Combustion Engineering Nuclear Transient Simulation (CENTS) code to the Core Operating Limits Report (COLR) references is administrative in nature. The CENTS code has been reviewed and approved by the NRC. The physical design or operation of the plant is not impacted by this proposed change. The proposed change does not adversely impact transient analysis assumptions or results. The COLR-related safety analyses will continue to be performed utilizing NRC-approved methodologies, and specific reload changes will be evaluated under the provisions of 10CFR50.59. Therefore, this change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

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

The proposed change to reference the NRC-approved CENTS code is administrative in nature. No physical alterations of plant configuration, changes to plant operating procedures, or operating parameters are proposed. No new equipment is being introduced, and no equipment is being operated in a manner inconsistent with its design. The COLR-related safety analyses will continue to be performed utilizing NRC-approved methodologies. A 10CFR50.59 safety review will continue to be performed to evaluate specific reload changes. Therefore, this change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

The proposed change to reference the CENTS code is administrative in nature. Existing technical specification operability and surveillance requirements are not reduced by the proposed change. The cycle-specific COLR limits for future reloads will continue to be developed based on NRC-approved methodologies. Technical specifications will continue to require that the core be operated within these limits and specify appropriate actions to be taken if the limits are violated. The COLR-related safety analyses will continue to be performed utilizing NRC-approved methodologies, and specific reload changes will be evaluated per 10CFR50.59. Therefore, this change does not involve a significant 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 not involve a significant hazards consideration.