



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

February 16, 1989

Docket No. 50-368

Mr. T. Gene Campbell  
Vice President, Nuclear  
Operations  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

Dear Mr. Campbell:

SUBJECT: NUCLEAR REACTOR REGULATION RESPONSE TO THE ARKANSAS POWER  
AND LIGHT REQUEST FOR PARTIAL EXEMPTION FROM THE REQUIREMENTS  
OF 10 CFR 50.62 FOR ARKANSAS NUCLEAR ONE, UNIT 2 (TAC NO. 59069)

On November 3, 1988, you submitted a request for a partial exemption from 10 CFR 50.62, "Requirements for Reduction of Risk From Anticipated Transients Without Scram (ATWS) Events for Light-Water-Cooled Nuclear Power Plants" (ATWS Rule), for Arkansas Nuclear One, Unit 2 (ANO-2). You requested that Arkansas Power & Light Company (AP&L) be exempted from installing on ANO-2 an Auxiliary Mitigating System Actuation Circuitry (AMSAC) which is required by the ATWS Rule to be diverse and independent from the existing reactor trip system (RTS). Your request for the exemption has been denied because no new information has been presented to justify reconsideration of the requirements of the ATWS Rule by the Nuclear Regulatory Commission (NRC) staff.

In support of your exemption, you presented four options for meeting the AMSAC requirement which you rejected on the basis of cost-benefit considerations. You therefore concluded that the ANO-2 design needs only the diverse scram system and diverse turbine trip to meet the intent of the requirements set forth in the ATWS Rule. Similar arguments had been presented by the Combustion Engineering Owners Group (CEOG) in meetings with NRC and in topical reports. The CEOG was advised during those meetings to focus future arguments on changes in risk and competing safety interests with other existing systems that might result from installing AMSAC.

The NRC staff has reviewed your request for partial exemption and determined that the cost-benefit and value/impact ratios that formed the bases for your exemption were considered during the preparation and before the issuance of the ATWS Rule. The NRC concluded then that the safety benefits were justified and required the design of AMSAC to be diverse and independent from the existing RTS. In addition, the NRC staff is not persuaded by your arguments to conclude that lower-cost AMSAC alternatives are not feasible. In light of the lack of new information relative to changes in risk, costs/benefits, or competing safety interests that you may have claimed as a result of installing AMSAC, the NRC staff has no other recourse than to deny your request for a partial exemption to the ATWS Rule.

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PDR ADOCK 05000368  
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*[Signature]*

We bring to your attention the fact that the deadline for implementing the ATWS Rule was extended from two refueling outages after July 26, 1984 (as stated in the ATWS Rule) to the third refueling outage after the July 1984 date. This extension was noted in a letter from NRC to AP&L dated March 2, 1987.

Your November 3, 1988, exemption request indicated that the AP&L-proposed ATWS modifications would be installed during the next outage (2R7), the "third refueling outage after the final ATWS Rule." The next refueling for ANO-2 will actually be the fourth outage after the final ATWS Rule. Your failure to take action within the specified time period is presently being reviewed by the staff as a potential violation of 10 CFR 50.62.

You are therefore requested to provide to the NRC, within 30 days of receipt of this letter, a proposed schedule to meet the requirements of paragraphs (c)(1) through (c)(5) of 10 CFR 50.62 for ANO-2. Your schedule should reflect final implementation not later than the next refueling outage. You should also provide an explanation of why the required implementation date was not met.

Your submittal describes the competing risks between the need for a new control system designed to provide emergency feedwater under ATWS conditions and the need to isolate all feedwater to a ruptured steam generator. We expect that the ANO-2 AMSAC will be designed and implemented in a manner that will not degrade the capability of the existing emergency feedwater system. We also expect that the diverse scram system and diverse turbine trip will be designed and implemented with the same considerations.

The NRC has concluded that implementation of the ATWS Rule should be independent of the staff's review of proposed equipment design. This conclusion was most recently conveyed to the Babcock and Wilcox Owners Group in my letter to Mr. L. C. Stalter, dated September 7, 1988, subject "August 17, 1988 B&W/NRC ATWS Meeting." The letter stated that the NRC would evaluate a plant-specific "conceptual" design for ATWS modifications and approve or disapprove the design with comments. A more detailed design description would then be provided to the NRC, but the installation process could begin before NRC issued its safety evaluation. Thus, final NRC approval of all equipment required by the ATWS Rule does not have to precede installation.

Sincerely,

*15/*  
Gary M. Holahan, Acting Director  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

cc: See next page

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SAD* ATHadani 02/03/89	Tech. Ed.* 02/06/89	OGC* 02/13/89	ADR4* LRubenstein 02/15/89	DRSP GHolahan 02/16/89

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02/06/89

*Handwritten signatures and initials, including "OGC" and "ADR4".*

ADR4  
LRubenstein  
02/ /89

(A)D:DRSP  
GHolahan  
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You are therefore requested to provide to the NRC, within 30 days of receipt of this letter, a proposed schedule to meet the requirements of paragraphs (c)(1) through (c)(5) of 10 CFR 50.62 for both ANO-1 and ANO-2. Your schedule should reflect final implementation not later than the next refueling outage for each unit.

Your submittal describes the competing risks between the need for a new control system designed to provide emergency feedwater under ATWS conditions and the need to isolate all feedwater to a ruptured steam generator. We expect that the ANO-2 AMSAC will be designed and implemented in a manner that will not degrade the capability of the existing emergency feedwater system. We also expect that the diverse scram system and diverse turbine trip will be designed and implemented with the same considerations.

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*Handwritten notes:*  
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 of hold  
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You are therefore requested to provide to the NRC, within 30 days of receipt of this letter, a proposed schedule to meet the requirements of paragraphs (c)(1) through (c)(5) of 10 CFR 50.62 for both ANO-1 and ANO-2. Your schedule should reflect final implementation not later than the next refueling outage for each unit.

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SAD *M*  
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Tech. Ed.  
*B. Calvo*  
02/6/89

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02/ /89

Mr. T. Gene Campbell

We would like to bring to your attention that the deadline for implementing the ATWS Rule fixes was extended from two refueling outages after July 26, 1984 (stated in the ATWS Rule) to the third refueling outage after the July, 1984 date. This was noted in an NRC letter to AP&L dated March 2, 1987.

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NRC has advised owners groups that implementation of the ATWS Rule should be independent of the staff's review of proposed equipment design. This was most recently conveyed to the Babcock and Wilcox Owners Group in my letter to L. C. Statler dated September 7, 1988, subject "August 17, 1988 B&W/NRC ATWS Meeting." The letter stated that NRC would initially evaluate a plant specific "conceptual" design package for ATWS fixes for approval or disapproval of proposed designs. A more detailed design package would be provided to the NRC, but the installation process could begin before NRC issued its safety evaluation for the final design of equipment. Thus, final NRC approval of all equipment does not have to precede installation.

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G. Holahan	E. Jordan	B. Grimes	ACRS (10)
PD4 Plant File	<i>J. Lieder</i>	<i>L. Chandler</i>	

PD4/LA <i>NAC</i> PNoonan <i>Fon</i> 01/26/89	PD4/PM <i>CP</i> CPoslusny:sr 01/26/89	PD4/PM <i>CH</i> CHarbuck 01/26/89	PD4/D <i>NAC</i> JCalvo 01/26/89	SICB <i>SN</i> SNewberry 01/26/89
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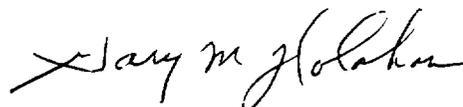
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Mr. T. Gene Campbell  
Arkansas Power & Light Company

Arkansas Nuclear One, Unit 2

cc:

Mr. Dan R. Howard, Manager  
Licensing  
Arkansas Nuclear One  
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Russellville, Arkansas 72801

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Washington Nuclear Operations  
Combustion Engineering, Inc.  
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Rockville, Maryland 20852

Mr. James M. Levine, Executive Director  
Site Nuclear Operations  
Arkansas Nuclear One  
P. O. Box 608  
Russellville, Arkansas 72801

Honorable William Abernathy  
County Judge of Pope County  
Pope County Courthouse  
Russellville, Arkansas 72801

Mr. Nicholas S. Reynolds  
Bishop, Cook, Percell & Reynolds  
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Washington, D.C. 20005-3502

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

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