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Mr. William Cavanaugh, III  
 Vice President, Generation  
 and Construction  
 Arkansas Power & Light Company  
 P. O. Box 551  
 Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Confirmatory Order for Arkansas Nuclear One, Unit No. 1 (ANO-1). This Order confirms your commitments, as stated in your letters dated March 24, 27, and April 18, 1980, to implement certain actions within 90 days of the date of this Order.

This Order is required as a result of the experience gained from the Crystal River, Unit No. 3 incident of February 26, 1980, wherein a non-nuclear instrumentation power loss resulted in a series of unexpected events. Your staff and the NRC mutually agreed on the actions provided in the Order. These actions should reduce the probability of a similar future power loss causing unexpected plant responses and allow the plant operator to better cope with losses of instrumentation and control functions. Further actions may be necessary.

A copy of this Order is being filed with the Office of the Federal Register for publication.

Sincerely,

Original signed by  
Darrell G. Eisenhut

Darrell G. Eisenhut, Acting Director  
 Division of Operating Reactors  
 Office of Nuclear Reactor Regulation

Enclosure:  
 Confirmatory Order

cc w/enclosure:  
 See next page

ORB#4:DOR      NRR      OELD      A-AD-DOR  
 MFairtile\*      RPurple\*      KCyr\*      DEisenhut  
 4/17/80      3/28/80      3/27/80      4/18/80

CP 3

GP

\*See previous yellows for concurrences

OFFICE	ORB#4:DOR	ORB#4:DOR	C-ORB#4:DOR	A-AD-ORP:DOR	D:DOR	D:NRR
SURNAME	RIngram*	GVissing	RReid*	WGammill*	ECase	HDenton
DATE	3/28/80	4/17/80	3/28/80	3/28/80	4/21/80	4/21/80

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Docket No. 50-313		RReid	GBennington
		GVising	Gray File +4
		RIngram	WRussell
		ELD-Cyr	TJCarter
Mr. William Cavanaugh, III		AEOD	RCapra
Vice President, Generation		ACRS-16	JLieberman, ELD
and Construction		BJones-4	
Arkansas Power & Light Company			
P. O. Box 551			
Little Rock, Arkansas 72203			

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Confirmatory Order for Arkansas Nuclear One, Unit No. 1 (ANO-1). This Order confirms your commitments, as stated in your letters dated March 24, 27, and April 16, 1980, to implement certain actions within 90 days of the date of this Order.

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Sincerely,

Darrell G. Eisenhut, Acting Director  
 Division of Operating Reactors  
 Office of Nuclear Reactor Regulation

Enclosure:  
 Confirmatory Order

cc w/enclosure:  
 See next page

*ORB#4 - DOR*  
*M. B. Faircl*  
*4/17/80*

OELD  
 KCyr\*  
 3/27/80

A-DOR  
 DEisenhut  
 4/16/80

\*See previous yellows for concurrence

NRR-RPurple\* 3/28/80

OFFICE	ORB#4DOR	ORB#4:DOR	C-ORB#4:DOR	A-AD-ORP:DOR	DD:NRR	D:NRR
SURNAME	RIngram*	GVising	RReid*	WGammill*	ECase	HDenton
DATE	3/28/80	4/17/80	3/28/80	3/28/80	4/ /80	4/ /80

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NSIC	DEisenhut	GVising	WRussell
Docket No. 50-313	RVollmer	RIngram	TJCarter
	WGammill	AOED	MR RCapra
	LShao	ACRS-16	J.Lieberman, OELD
		BJones-4	
		BScharf-10	
		RDiggs	
		CMiles	

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 Vice President, Generation  
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Sincerely,

Harold R. Denton, Director  
 Office of Nuclear Reactor Regulation

Enclosure:  
 Confirmatory Order

cc w/enclosure:  
 See next page

*Handwritten:* 103/28/80

OELD *[Signature]* A-D:DOR  
 KCyr\* *[Signature]* DEisenhut  
 3/27/80 *[Signature]* 3/ /80

\*See previous yellow for concurrence

OFFICE	ORB#4: DOR	ORB#4: DOR *	C-ORB#4: DOR	A-AD-ORP: DOR	DD: NRR	D: NRR
SURNAME	RIngram	GVising/cb	<del>RReid</del>	WGammill	ECase	HDenton
DATE	3/28/80	3/ /80	3/24/80	3/18/80	3/ /80	3/ /80

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	ORB#4 Rdg	DEisenhut	RIngram	
Docket No. 50-313		RVollmer	AEOD	
		WGammill	ACRS (16)	
		LShao	BJones (4)	
		JRMiller	IE (3)	

Mr. William Cavanaugh, III  
 Vice President, Generation  
 and Construction  
 Arkansas Power & Light Company  
 P. O. Box 551  
 Little Rock, Arkansas 72203

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Harold R. Denton, Director  
 Office of Nuclear Reactor Regulation

Enclosure:  
 Confirmatory Order

cc w/enclosure:  
 See next page

ORB#4:DOR  
 M. Fairlie  
 3/28/80

R. Purdie  
 3/28

OELD  
 H. Capra  
 3/27/80

DD:NRR  
 ECase  
 3/ /80

OFFICE	ORB#4:DOR	ORB#4:DOR	C-ORB#4:DOR	A-AD-ORP:DOR	A-D:DOR	D:NRR
SURNAME	RIngram	GVissing/cb by MBF	RReid	WGammill	DEisenhut	HDenton
DATE	3/ /80	3/28/80	3/28/80	3/ /80	3/ /80	3/ /80



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

April 22, 1980

DISTRIBUTION:  
Docket File  
ORB#4 Rdg  
RIngram

Docket No. 50-313

Docketing and Service Section  
Office of the Secretary of the Commission

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

- Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- Notice of Availability of Applicant's Environmental Report.
- Notice of Proposed Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- Notice of Availability of NRC Draft/Final Environmental Statement.
- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
- Notice of Issuance of Facility Operating License(s) or Amendment(s).
- Other: CONFIRMATORY ORDER  
Referenced documents have been provided PDR

Division of Operating Reactors, ORB4  
Office of Nuclear Reactor Regulation

Enclosure:  
As Stated

OFFICE →	ORB#4:DOR RIngram/cb				
SURNAME →					
DATE →	4/22/80				

Dup 8005120061  
G



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

April 22, 1980

Docket No. 50-313

Mr. William Cavanaugh, III  
Vice President, Generation  
and Construction  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

Dear Mr. Cavanaugh:

The Commission has issued the enclosed Confirmatory Order for Arkansas Nuclear One, Unit No. 1 (ANO-1). This Order confirms your commitments, as stated in your letters dated March 24, 27, and April 18, 1980, to implement certain actions within 90 days of the date of this Order.

This Order is required as a result of the experience gained from the Crystal River, Unit No. 3 incident of February 26, 1980, wherein a non-nuclear instrumentation power loss resulted in a series of unexpected events. Your staff and the NRC mutually agreed on the actions provided in the Order. These actions should reduce the probability of a similar future power loss causing unexpected plant responses and allow the plant operator to better cope with losses of instrumentation and control functions. Further actions may be necessary.

A copy of this Order is being filed with the Office of the Federal Register for publication.

Sincerely,

*Darrell G. Eisenhut*  
Darrell G. Eisenhut, Acting Director  
Division of Operating Reactors  
Office of Nuclear Reactor Regulation

Enclosure:  
Confirmatory Order

cc w/enclosure:  
See next page

**Arkansas Power & Light Company**

cc w/enclosure(s):

Phillip K. Lyon, Esq.  
House, Holms & Jewell  
1550 Tower Building  
Little Rock, Arkansas 72201

Mr. David C. Trimble  
Manager, Licensing  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

Mr. James P. O'Hanlon  
General Manager  
Arkansas Nuclear One  
P. O. Box 608  
Russellville, Arkansas 72801

Mr. William Johnson  
U. S. Nuclear Regulatory Commission  
P. O. Box 2090  
Russellville, Arkansas 72801

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 420, 7735 Old Georgetown Road  
Bethesda, Maryland 20014

Troy B. Conner, Jr., Esq.  
Conner, Moore & Corber  
1747 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006

Arkansas Polytechnic College  
Russellville, Arkansas 72801

Honorable Ermil Grant  
Acting County Judge of Pope County  
Pope County Courthouse  
Russellville, Arkansas 72801

Mr. Paul F. Levy, Director  
Arkansas Department of Energy  
3000 Kavanaugh  
Little Rock, Arkansas 72205

Director, Technical Assessment  
Division

Office of Radiation Programs  
(AW-459)

U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460

U. S. Environmental Protection Agency  
Region VI Office  
ATTN: EIS COORDINATOR  
1201 Elm Street  
First International Building  
Dallas, Texas 75270

Director, Bureau of Environmental  
Health Services  
4815 West Markham Street  
Little Rock, Arkansas 72201

The responses to IE Bulletin 79-27 must be submitted in order that NRC can determine whether this license should be modified to protect the health and safety of the public. The Licensee's letter of March 26, 1980 committed to respond to the Bulletin by April 26, 1980.

IV

In view of the importance of this matter I have determined that these commitments be formalized by order and that the public health, safety and interest require that this Order be made immediately effective. Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

- (1) The Licensee within 90 days of this Order will implement all three actions provided in Part II of this Order or in the alternative, place and maintain its facility in a cold shutdown or refueling mode of operation.
- (2) The Licensee shall submit by April 28, 1980 the written responses to IE Bulletin 79-27 to the NRC.

V

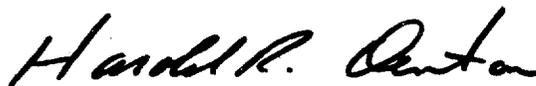
Any person who has an interest affected by this Order may request a hearing within twenty-five days of the date of the Order. Any request for a hearing will not stay the effectiveness of this Order. Any request for a hearing shall be submitted to the Director, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, with a copy to the Executive Legal Director at the above address. If a hearing is requested by a person who has an interest affected by this Order, the Commission will issue an Order designating the time and place of any such hearing.

In the event any person who has an interest affected by this Order requests a hearing as provided above and a hearing is held, the issues to be considered at such a hearing shall be:

- (1) Whether the facts set forth in Parts II and III of this Order provide an adequate basis for the actions ordered, and
- (2) Whether the Licensee should perform the actions required by Part IV of this Order in accordance with the schedule stated therein.

Operation of the facility on terms consistent with this Order is not stayed by the pendency of any proceedings on the Order.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 22nd day of April 1980.



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

April 22, 1980

Docket No. 50-313

Mr. William Cavanaugh, III  
Vice President, Generation  
and Construction  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

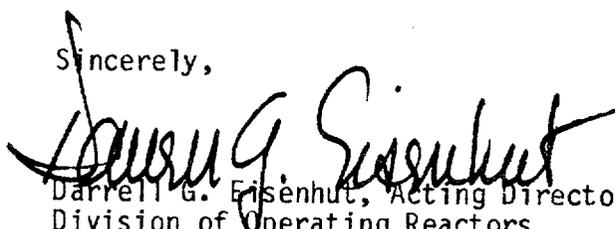
Dear Mr. Cavanaugh:

The Commission has issued the enclosed Confirmatory Order for Arkansas Nuclear One, Unit No. 1 (ANO-1). This Order confirms your commitments, as stated in your letters dated March 24, 27, and April 18, 1980, to implement certain actions within 90 days of the date of this Order.

This Order is required as a result of the experience gained from the Crystal River, Unit No. 3 incident of February 26, 1980, wherein a non-nuclear instrumentation power loss resulted in a series of unexpected events. Your staff and the NRC mutually agreed on the actions provided in the Order. These actions should reduce the probability of a similar future power loss causing unexpected plant responses and allow the plant operator to better cope with losses of instrumentation and control functions. Further actions may be necessary.

A copy of this Order is being filed with the Office of the Federal Register for publication.

Sincerely,

  
Darrell G. Eisenhower, Acting Director  
Division of Operating Reactors  
Office of Nuclear Reactor Regulation

Enclosure:  
Confirmatory Order

cc w/enclosure:  
See next page

**Arkansas Power & Light Company**

cc w/enclosure(s):  
Phillip K. Lyon, Esq.  
House, Holms & Jewell  
1550 Tower Building  
Little Rock, Arkansas 72201

Mr. David C. Trimble  
Manager, Licensing  
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Troy B. Conner, Jr., Esq.  
Conner, Moore & Corber  
1747 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006

Arkansas Polytechnic College  
Russellville, Arkansas 72801

Honorable Ermil Grant  
Acting County Judge of Pope County  
Pope County Courthouse  
Russellville, Arkansas 72801

Mr. Paul F. Levy, Director  
Arkansas Department of Energy  
3000 Kavanaugh  
Little Rock, Arkansas 72205

Director, Technical Assessment  
Division  
Office of Radiation Programs  
(AW-459)  
U. S. Environmental Protection Agency  
Crystal Mall #2  
Arlington, Virginia 20460

U. S. Environmental Protection Agency  
Region VI Office  
ATTN: EIS COORDINATOR  
1201 Elm Street  
First International Building  
Dallas, Texas 75270

Director, Bureau of Environmental  
Health Services  
4815 West Markham Street  
Little Rock, Arkansas 72201

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of  
Arkansas Power and Light Company  
(Arkansas Nuclear One, Unit No. 1)

}  
}  
}

Docket No. 50-313

CONFIRMATORY ORDER

I

The Arkansas Power and Light Company (the Licensee) is the holder of Facility Operating License No. DPR-51 which authorizes the Licensee to operate the Arkansas Nuclear One, Unit No. 1 (the facility) at power levels not in excess of 2568 megawatts thermal (rated power). The facility is a pressurized water reactor located at the Licensee's site in Pope County, Arkansas.

II

Following the incident of February 26, 1980, at the Crystal River facility, the NRC staff held meetings with the Licensee, other operating licensees with Babcock and Wilcox (B&W) reactor systems, and B&W. The meetings were held in Bethesda, Maryland on March 4, 17 and 18, 1980. These meetings resulted in the development of three actions.

1. Actions which will allow the operator to cope with various combinations of loss of instrumentation and control functions. This includes changes in (A) equipment and control systems to give clear indications of functions which are lost or unreliable; (B) procedures and training to assure positive and safe manual response by the operator in the event that competent instruments are unavailable.

2. Determination of the effects of various combinations of loss of instrumentation and control functions by design review analysis and verification by test.
3. Correction of electrical deficiencies which may allow the power operated relief valve and pressurizer spray valve to open on non-nuclear instrumentation power failures, such as, the event which occurred at Crystal River, Unit 3 on February 26, 1980.

The Licensee confirmed by letters dated March 24 and April 18, 1980, that it would implement all three actions at its facility prior to June 21, 1980. The Licensee's letter of April 18, 1980 provided the detailed listing of various combinations of loss of instrumentation which constitutes the commitment in Item 1 and the specific list of tests which constitutes the commitment in Item 2. I have concluded that timely implementation of these three short term actions, at operating B&W system nuclear power plants is necessary to provide continued assurance of public health and safety. The Licensee confirmed by letter dated March 24, 1980 that it would implement all three actions at its facility within 90 days of the date of this Order.

### III

The Office of Inspection and Enforcement (IE) issued Bulletin 79-27 following an event at the Oconee Nuclear Station, Unit No. 3, on November 10, 1979 which was similar to the Crystal River incident. This event was described in Information Notice 79-29, dated November 16, 1979, which was sent to this Licensee. This Licensee was requested by IE Bulletin 79-27, dated November 30, 1979, Loss of Non Class I-E Instrumentation and Control Power Bus During Operation, to review, among other things, busses supplying power to certain instrument and control systems, emergency procedures related to loss of power to such busses and failure to certain power supplies. In accordance with Bulletin 79-27 the Licensee was requested to submit to the Commission the results of its review by February 28, 1980. This Licensee has not met this date.

The responses to IE Bulletin 79-27 must be submitted in order that NRC can determine whether this license should be modified to protect the health and safety of the public. The Licensee's letter of March 26, 1980 committed to respond to the Bulletin by April 26, 1980.

IV

In view of the importance of this matter I have determined that these commitments be formalized by order and that the public health, safety and interest require that this Order be made immediately effective. Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED, EFFECTIVE IMMEDIATELY, THAT:

- (1) The Licensee within 90 days of this Order will implement all three actions provided in Part II of this Order or in the alternative, place and maintain its facility in a cold shutdown or refueling mode of operation.
- (2) The Licensee shall submit by April 28, 1980 the written responses to IE Bulletin 79-27 to the NRC.

V

Any person who has an interest affected by this Order may request a hearing within twenty-five days of the date of the Order. Any request for a hearing will not stay the effectiveness of this Order. Any request for a hearing shall be submitted to the Director, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, with a copy to the Executive Legal Director at the above address. If a hearing is requested by a person who has an interest affected by this Order, the Commission will issue an Order designating the time and place of any such hearing.

In the event any person who has an interest affected by this Order requests a hearing as provided above and a hearing is held, the issues to be considered at such a hearing shall be:

- (1) Whether the facts set forth in Parts II and III of this Order provide an adequate basis for the actions ordered, and
- (2) Whether the Licensee should perform the actions required by Part IV of this Order in accordance with the schedule stated therein.

Operation of the facility on terms consistent with this Order is not stayed by the pendency of any proceedings on the Order.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 22nd day of April 1980.