UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges
Sheldon J. Wolfe, Chairman
Dr. Paul W. Purdom
Frederick J. Shon

In the Matter of	)	
	)	
Public Service Company of Oklahoma,	)	
Associated Electric Cooperative, Inc.	)	
and	)	
Western Farmers Electric Cooperative	)	Docket Nos.
	)	STN 50-556CP
(Black Fox Units 1 and 2)	)	STN 50-557CP

INTERVENORS' PROPOSED CONTENTIONS FOR THE CONTINUED RADIOLOGICAL AND SAFETY HEARINGS RELATING TO HYDROGEN CONTROL ISSUES

Pursuant to the Board's Orders of October 14, 1981, and November 12, 1981, Intervenors respectfully propose the following contention in light of the Applicant's Amendment No. 18 to the Black Fox Station (BFS) Preliminary Safety Analysis Report (PSAR).

Intervenors submit that the following Contention should be the subject of evidentiary hearings in view of the Applicant's Amendments in response to NRC licensing requirements arising out of, inter alia, the TMI-2 accident. Intervenors also understand that the NRC may impose additional TMI-

D503
S
1/1

related requirements (as identified in NUREG-0660) on NTCP applicants in the near future and this contention is without prejudice to Intervenor's right to challenge the sufficiency of Applicant's response to any such additional requirements.

HYDROGEN CONTROL MEASURES

The Applicant has not demonstrated that the hydrogen control measures intended for use at Black Fox will safely accommodate the equivalent of a 100% fuel-clad metal water reaction as identified by NUREG-0718, II.B.8 and as required by 10 CFR 50.34(e) and 50.35(a). Specifically, there are concerns regarding:

1. The time rate of hydrogen generation within the degraded core.
2. The rate at which the hydrogen would be released to containment.
3. Verification of the hydrogen migration model.
4. Acceptability of the manual initiation control system..
5. Qualification of the ignitors and associated components.
6. Qualification of in-containment safety-related equipment to withstand the conditions associated with repeated hydrogen burns.

7. Qualification of the containment itself to withstand repeated hydrogen burns.

8. Effectiveness of the distributed ignition system (DIS) surveillance testing to assure a fully operable system.

The preliminary nature of the verification program is evidenced by, among other things, the list of ongoing and planned verification tests contained in Table (2)(ix)-1 of Amendment 18. Since the proposed DIS system is still under development, it obviously has not been demonstrated to be fully effective for the control of a large hydrogen release.

Respectfully submitted,

FELDMAN, HALL, FRANDEN & WOODARD

By Nancy L. Woods

Nancy L. Woods
816 Enterprise Building
Tulsa, OK 74103

DATED: November 20, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
Public Service Company of Oklahoma,	)	
Associated Electric Cooperative, Inc.	)	
and	)	
Western Farmers Electric Cooperative	)	Docket Nos.
	)	STN 50-556CP
(Black Fox Units 1 and 2)	)	STN 50-557CP

CERTIFICATE OF SERVICE

I, Nancy L. Woods, one of the attorneys for Citizens Action for Safe Energy ("CASE"), certify that copies of the following pleadings have been served on the persons shown on the attached list by United States Mail, postage prepaid, on this 20th day of November, 1981:

1. Intervenors' Proposed Contentions for the Continued Radiological and Safety Hearings;

2. Intervenors' Reply to Applicants and NRC Staff's Motions to Reopen;

3. Intervenors' Supplement to Motion to Reopen the Radiological and Safety Hearings;

4. Intervenors' Errata.

Nancy L. Woods

Nancy L. Woods

Sheldon J. Wolfe, Esq.
Atomic Safety and Licensing
Board Panel
United States Nuclear
Regulatory Commission
Washington, D.C. 20555

Mr. Frederick J. Shon
Atomic Safety and Licensing
Board Panel
United States Nuclear
Regulatory Commission
Washington, D.C. 20555

Dr. Paul W. Purdom
Director,
Environmental Studies Group
Drexel University
32nd and Chestnut Streets
Philadelphia, Pennsylvania 19104

Docketing and Service Section
Office of the Secretary of the
Commission
United States Nuclear
Regulatory Commission
Washington, D. C. 20555
(20 copies)

Atomic Safety and Licensing
Board Panel
United States Nuclear
Regulatory Commission
Washington, D. C. 20555

Atomic Safety and Licensing
Appeal Board Panel
United States Nuclear
Regulatory Commission
Washington, D. C. 20555

Mr. Clyde Wisner
NRC Region 4
Public Affairs Officer
611 Ryan Plaza Drive
Suie 1000
Arlington, Texas 76011

Andrew T. Dalton, Esq.
Attorney at Law
1437 South Main Street
Room 302
Tulsa, Oklahoma 74119

Mrs. Ilene Younghein
3900 Cashion Place
Oklahoma City, OK 73112

Mrs. Carrie Dickerson
Citizens Action for
Safe Energy
P. O. Box 924
Claremore, Oklahoma 74017

Joseph Gallo, Esq.
Martha E. Gibbs
Isham, Lincoln & Beale
1050 17th Street, N.W.
Washington, D.C. 20036

Michael I. Miller
Isham, Lincoln & Beale
One First National Plaza,
Suite 4200
Chicago, Ill. 60603

Mr. Maynard Human
General Manager
Western Farmers Electric
Cooperative
P. O. Box 429
Anadarko, Oklahoma 73005

Mr. Gerald F. Diddle
Associated Electric
Cooperative, Inc.
P. O. Box 754
Springfield, Missouri 65801

Mr. Lawrence Burrell
Rt. 1, Box 197
Fairview, Oklahoma 73737

Dr. M. J. Robinson
Black & Veatch
P. O. Box 8405
Kansas City, Mo. 64114

Dr. John Zink
Public Service Company of Oklahoma
P. O. Box 201
Tulsa, Oklahoma 74102

Mr. T. N. Ewing
Public Service Company of Oklahoma
P. O. Box 201
Tulsa, Oklahoma 74102

Hon. Michael Bardrick
Assistant Attorney General
State of Oklahoma
State Capitol Building
Oklahoma City, Oklahoma 73105

Mr. Gregory Minor
MHB Technical Associates
1723 Hamiton Ave.
Suite K
San Jose, CA 95125

Samuel J. Chilk
Secretary of the Commission
United States Nuclear
Regulatory Commission
Washington, D.C. 20555

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges
Sheldon J. Wolfe, Chairman
Dr. Paul W. Purdom
Frederick J. Shon

In the Matter of	)	
	)	
Public Service Company of Oklahoma,	)	
Associated Electric Cooperative, Inc.	)	
and	)	
Western Farmers Electric Cooperative	)	Docket Nos.
	)	STN 50-556CP
(Black Fox Units 1 and 2)	)	STN 50-557CP

INTERVENORS' PROPOSED CONTENTIONS FOR THE CONTINUED RADIOLOGICAL AND SAFETY HEARINGS RELATING TO HYDROGEN CONTROL ISSUES

Pursuant to the Board's Orders of October 14, 1981, and November 12, 1981, Intervenors respectfully propose the following contention in light of the Applicant's Amendment No. 18 to the Black Fox Station (BFS) Preliminary Safety Analysis Report (PSAR).

Intervenors submit that the following Contention should be the subject of evidentiary hearings in view of the Applicant's Amendments in response to NRC licensing requirements arising out of, inter alia, the TMI-2 accident. Intervenors also understand that the NRC may impose additional TMI-

related requirements (as identified in NUREG-0660) on NTCP applicants in the near future and this contention is without prejudice to Intervenor's right to challenge the sufficiency of Applicant's response to any such additional requirements.

HYDROGEN CONTROL MEASURES

The Applicant has not demonstrated that the hydrogen control measures intended for use at Black Fox will safely accommodate the equivalent of a 100% fuel-clad metal water reaction as identified by NUREG-0718, II.B.8 and as required by 10 CFR 50.34(e) and 50.35(a). Specifically, there are concerns regarding:

1. The time rate of hydrogen generation within the degraded core.
2. The rate at which the hydrogen would be released to containment.
3. Verification of the hydrogen migration model.
4. Acceptability of the manual initiation control system.
5. Qualification of the ignitors and associated components.
6. Qualification of in-containment safety-related equipment to withstand the conditions associated with repeated hydrogen burns.

7. Qualification of the containment itself to withstand repeated hydrogen burns.

8. Effectiveness of the distributed ignition system (DIS) surveillance testing to assure a fully operable system.

The preliminary nature of the verification program is evidenced by, among other things, the list of ongoing and planned verification tests contained in Table (2)(ix)-1 of Amendment 18. Since the proposed DIS system is still under development, it obviously has not been demonstrated to be fully effective for the control of a large hydrogen release.

Respectfully submitted,

FELDMAN, HALL, FRANDEN & WOODARD

By Nancy L. Woods
Nancy L. Woods
816 Enterprise Building
Tulsa, OK 74103

DATED: November 20, 1981