

October 20, 1982

DESIGNATED ORIGINAL

Certified By

*CB*

*DS 07*

Barbara A. Finamore  
Ellyn R. Weiss  
Natural Resources Defense Council, Inc.  
1725 Eye Street, N.W., Suite 600  
Washington, D.C. 20006

In the Matter of  
UNITED STATES DEPARTMENT OF ENERGY  
PROJECT MANAGEMENT CORPORATION  
TENNESSEE VALLEY AUTHORITY  
(Clinch River Breeder Reactor Plant)  
Docket No. 50-537

Dear Ms. Finamore and Ms. Weiss:

Enclosed are copies of the signed and notarized affidavits of the NRC Staff who participated in answering "NRC Staff's Answers to Natural Resources Defense Council, Inc. and Sierra Club Twenty-seventh Set of Interrogatories to Staff" filed on October 1, 1982.

Sincerely,

Daniel T. Swanson  
Counsel for NRC Staff

Enclosures: As stated

cc: Service List with enclosure

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

UNITED STATES DEPARTMENT OF ENERGY )  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )

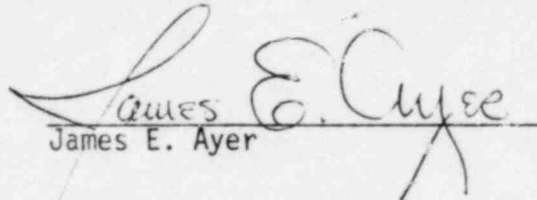
Docket No. 50-537

(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF JAMES E. AYER

I, James E. Ayer, being duly sworn, state as follows.

1. I am employed by the U.S. Nuclear Regulatory Commission as a Senior Chemical Engineer, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards.
2. I am duly authorized to participate in answering Interrogatory 14 of the 27th Set filed on September 17, 1982 and I hereby certify that the answer given is true to the best of my knowledge.

  
James E. Ayer

Subscribed and sworn to before me  
this 13<sup>th</sup> day of October 1982

Virginia Lee Shupe  
Notary Public

My Commission Expires: July 1, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

UNITED STATES DEPARTMENT OF ENERGY  
PROJECT MANAGEMENT CORPORATION  
TENNESSEE VALLEY AUTHORITY

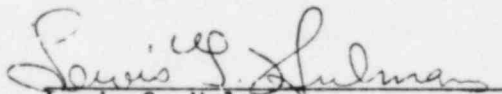
(Clinch River Breeder Reactor Plant)

}  
}  
}  
}  
}  
} Docket No. 50-537


AFFIDAVIT OF LEWIS G. HULMAN

I, Lewis G. Hulman, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as Chief of the Accident Evaluation Branch, Division of Systems Integration, in the Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 25, a, d, and e of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Lewis G. Hulman

Subscribed and sworn to before me  
this 7<sup>th</sup> day of October 1982

  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

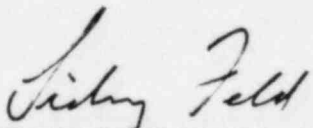
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
(Clinch River Breeder Reactor Plant) )


AFFIDAVIT OF SIDNEY FELD

I, Sidney Feld, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Regional Environmental Economist, Antitrust and Economic Analysis Branch, Division of Licensing, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 78 to 81 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
\_\_\_\_\_  
Sidney Feld

Subscribed and sworn to before me  
this 5th day of October 1982.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

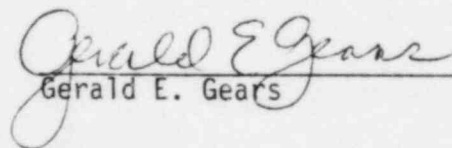
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
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(Clinch River Breeder Reactor Plant) )

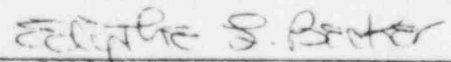
AFFIDAVIT OF GERALD E. GEARS

I, Gerald E. Gears, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Senior Land Use Analyst, Terrestrial Resources Section, Environmental Engineering Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 75x, xv, xvii, and xviii of the 27th Set filed on September 17, 1982 and I certify that the answers given are true to the best of my knowledge.

  
Gerald E. Gears

Subscribed and sworn to before me  
this 4 day of October 1982.

  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

UNITED STATES DEPARTMENT OF ENERGY  
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(Clinch River Breeder Reactor Plant)

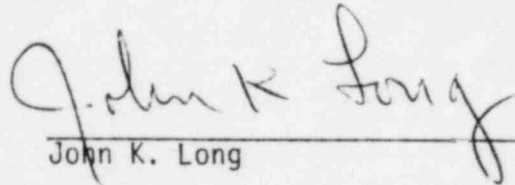
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Docket No. 50-537

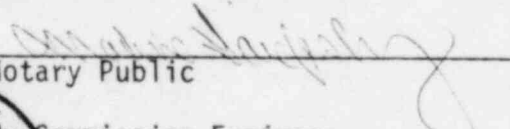
AFFIDAVIT OF JOHN K. LONG

I, John K. Long, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Nuclear Engineer, Research Systems Branch, Division of Systems Integration, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 47 and 54 of the 27th Set filed on September 17, 1982, and I hereby certify that the answers given are true to the best of my knowledge.

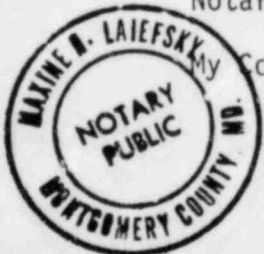
  
John K. Long

Subscribed and sworn to before me  
this 6th day of October 1982.

  
Notary Public

My Commission Expires:

7/1/86



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
)  
(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF RICHARD B. CODELL

I, Richard B. Codell, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a R.C.  
Senior <sup>Hydraulic</sup> ~~Hydrologic~~ Engineer, Hydrologic and Geotechnical Engineering  
Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 72,  
75xi-xiv, xvi, xviii, 82, and 85a-f of the 27th Set filed on Septem-  
ber 17, 1982 and I hereby certify that the answers given are true to  
the best of my knowledge.

Richard B Codell  
Richard B. Codell

Subscribed and sworn to before me  
this 6th day of October 1982.

Clair G. Harwood  
Notary Public

My Commission Expires: July 1, 1986



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

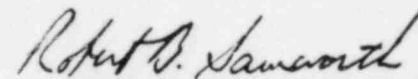
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
 )  
(Clinch River Breeder Reactor Plant) )


AFFIDAVIT OF ROBERT B. SAMWORTH

I, Robert B. Samworth, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Section Leader of Aquatic Resources Section, Environmental Engineering Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 75ix and 77 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
\_\_\_\_\_  
Robert B. Samworth

Subscribed and sworn to before me  
this 5<sup>th</sup> day of October 1982.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 7/1/86



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

UNITED STATES DEPARTMENT OF ENERGY )  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )

Docket No. 50-537

(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF MICHAEL T. MASNIK

I, Michael T. Masnik, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Senior Fisheries Biologist, Environmental Engineering Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 75i, ii, 83a, and 84iv, v of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

*Michael T. Masnik*  
\_\_\_\_\_  
Michael T. Masnik

Subscribed and sworn to before me  
this 12 day of October 1982.

*Maxine H. Winesky*  
\_\_\_\_\_  
Notary Public

My Commission Expires: 7/1/86



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

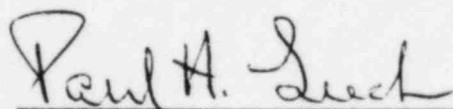
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD


In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF PAUL H. LEECH

I, Paul H. Leech, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Project Manager, Clinch River Breeder Reactor Program Office, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 73, 74, and 75iii-viii of the 27th Set filed on September 17, 1982, and I hereby certify that the answers given are true to the best of my knowledge.

  
Paul H. Leech

Subscribed and sworn to before me  
this 10th day of October 1982.  
  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

UNITED STATES DEPARTMENT OF ENERGY )  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )

Docket No. 50-537

(Clinch River Breeder Reactor Plant) )

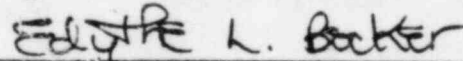
AFFIDAVIT OF JERRY J. SWIFT

I, Jerry J. Swift, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Reactor Engineer, Clinch River Breeder Reactor Program Office, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 3, 30, 42-46, 48-53, 55-57, 62, 67, 69, 71 and 85a., b. of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Jerry J. Swift

Subscribed and sworn to before me  
this 5<sup>th</sup> day of October 1982.

  
Notary Public

My Commission Expires:

7/1/83

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
 )  
(Clinch River Breeder Reactor Plant) )


AFFIDAVIT OF MOHAN C. THADANI

I, Mohan C. Thadani, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Nuclear Engineer, Accident Evaluation Branch, Division of Systems Integration, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 21-24, 58, 60, 61, 63-65, and 70 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Mohan C. Thadani

Subscribed and sworn to before me  
this 5th day of October 1982.

  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
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UNITED STATES DEPARTMENT OF ENERGY ) Docket No. 50-537  
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TENNESSEE VALLEY AUTHORITY )  
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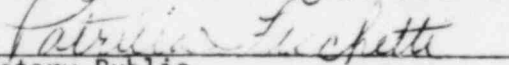
AFFIDAVIT OF EDWARD F. BRANAGAN, JR.

I, Edward F. Branagan, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Radiological Physicist, Radiological Assessment Branch, Division of Systems Integration, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 14 through 18 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Edward F. Branagan, Jr.

Subscribed and sworn to before me  
this 8th day of October 1982.

  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

UNITED STATES DEPARTMENT OF ENERGY )  
PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )

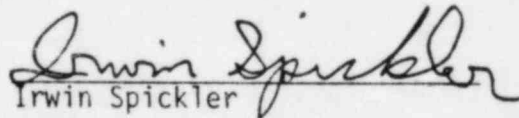
(Clinch River Breeder Reactor Plant) )

Docket No. 50-537


AFFIDAVIT OF IRWIN SPICKLER

I, Irwin Spickler, being duly sworn, state as follows:

- 1. I am employed by the U.S. Nuclear Regulatory Commission as a Chief of Section C of the Accident Evaluation Branch, Division of Systems Integration, Office of Nuclear Reactor Regulation.
- 2. I am duly authorized to participate in answering Interrogatories 84i, ii, iii, 87 and 88 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Irwin Spickler

Subscribed and sworn to before me  
this *12th* day of *October* 1982.

  
Notary Public

My Commission Expires: *July 1, 1986*

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

UNITED STATES DEPARTMENT OF ENERGY  
PROJECT MANAGEMENT CORPORATION  
TENNESSEE VALLEY AUTHORITY

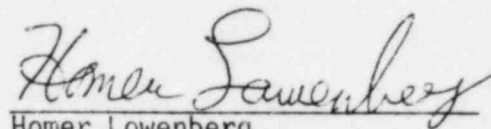
(Clinch River Breeder Reactor Plant)

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} Docket No. 50-537

AFFIDAVIT OF HOMER LOWENBERG

I, Homer Lowenberg, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Chief Engineer, Office of Nuclear Material Safety and Safeguards.
2. I am duly authorized to participate in answering Interrogatories #1 through #13, #19 and #20 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
Homer Lowenberg

Subscribed and sworn to before me  
this 12<sup>th</sup> day of October 1982.

  
Notary Public

My Commission Expires: July 1, 1986



UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )

UNITED STATES DEPARTMENT OF ENERGY )  
PROJECT MANAGEMENT CORPORATION )  
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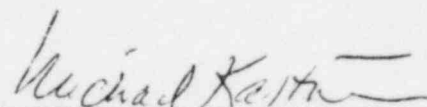
Docket No. 50-537

(Clinch River Breeder Reactor Plant) )

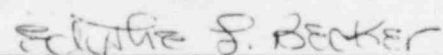
AFFIDAVIT OF MICHAEL KALTMAN

I, Michael Kaltman, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Regional Planning Analyst, Siting Analysis Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 76 and 83b, of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
\_\_\_\_\_  
Michael Kaltman

Subscribed and sworn to before me  
this 5<sup>th</sup> day of October 1982.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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TENNESSEE VALLEY AUTHORITY )  
 )  
(Clinch River Breeder Reactor Plant) )


AFFIDAVIT OF PETER B. ERICKSON

I, Peter B. Erickson, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Project Manager, Standardization and Special Projects Branch, Division of Licensing, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 89 to 95 of the 27th Set filed on September 17, 1982, and I hereby certify that the answers given are true to the best of my knowledge.

  
Peter B. Erickson

Subscribed and sworn to before me  
this 5<sup>th</sup> day of October 1982.

  
Notary Public

My Commission Expires: 7/1/86

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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TENNESSEE VALLEY AUTHORITY )  
(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF RICHARD B. McMULLEN

I, Richard B. McMullen being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Geologist, Geosciences Branch, Division of Engineering, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 84vi and 86 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

Richard B. McMullen  
Richard B. McMullen

Subscribed and sworn to before me  
this 6th day of October, 1982.

John E. Scott  
Notary Public

My Commission Expires: July 1, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

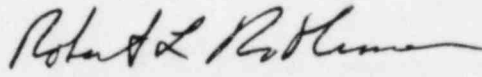
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(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF ROBERT L. ROTHMAN

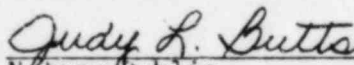
I, Robert L. Rothman, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Seismologist, Geosciences Branch, Division of Engineering, Office of Nuclear Reactor Regulation.

I am duly authorized to participate in answering Interrogatories 84vi and 86 of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

  
\_\_\_\_\_  
Robert L. Rothman

Subscribed and sworn to before me  
this 7<sup>th</sup> day of October 1982.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: July 1, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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PROJECT MANAGEMENT CORPORATION )  
TENNESSEE VALLEY AUTHORITY )  
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(Clinch River Breeder Reactor Plant) )

AFFIDAVIT OF EDMUND T. RUMBLE, III

I, Edmund T. Rumble, III, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a consultant to the Office of Nuclear Reactor Regulation on safety matters related to the proposed Clinch River Breeder Reactor Plant.
2. I am employed as a Corporate Vice President of Science Applications, Inc.
3. I am duly authorized to participate in answering Interrogatories 27-29, 31, 36-38, 40-45, 48, 51-54, 56, 57, 59, 63, and 67e of the 27th Set filed on September 17, 1982 and I hereby certify that the answers given are true to the best of my knowledge.

Edmund T. Rumble, III  
Edmund T. Rumble, III

Subscribed and sworn to before me  
this 20<sup>th</sup> day of October 1982.

Janella H. Casper  
Notary Public

My Commission Expires:

July 1, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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UNITED STATES DEPARTMENT OF ENERGY )  
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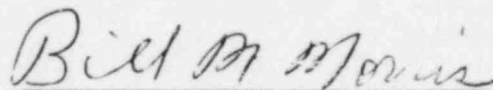
Docket No. 50-537

(Clinch River Breeder Reactor Plant) )

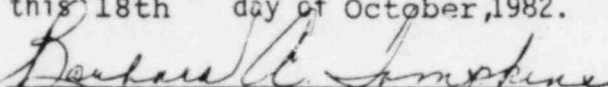
AFFIDAVIT OF BILL M. MORRIS

I, Bill M. Morris, being duly sworn, state as follows:

1. I am employed by the U.S. Nuclear Regulatory Commission as a Section Leader of the Technical Review Section, Clinch River Breeder Reactor Program Office, Office of Nuclear Reactor Regulation.
2. I am duly authorized to participate in answering Interrogatories 25b, c, f, g, 26-41, 66, 67, 68, and 71 of the 27th Set filed on September 17, 1982, and I hereby certify that the answers given are true to the best of my knowledge.

  
Bill M. Morris

Subscribed and sworn to before me  
this 18th day of October, 1982.

  
Notary Public

My Commission Expires: July 1, 1986