

Docket Nos. 50-289, 275/323,
341, 382, 483,
362, 416

JUL 26 1983

MEMORANDUM FOR: Chairman Palladino
Commissioner Gilinsky
Commissioner Roberts
Commissioner Asselstine

FROM: Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

SUBJECT: RESOLUTION OF DIFFERING PROFESSIONAL OPINION CONCERNING
USI A-17 - SYSTEMS INTERACTION PROGRAM
(BOARD NOTIFICATION 83-105)

In accordance with the NRC procedures for Board Notification, the enclosed information is being provided directly to the Commission. The Boards are being provided this information by copy of this memorandum.

This notification provides the final resolution of the differing professional opinion concerning the NRC staff's plan for resolution of USI A-17. Information on this subject was previously provided to you in Board Notifications 83-17, 44 and 57.

Original signed by
Darrell G. Eisenhut

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosure: As stated

cc: See next page

8306270421

OFFICE	DL	DL					
SURNAME	M. Williams	Mrs. DGE Eisenhut					
DATE	7/1/83	7/26/83					

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N005

cc: EDO
OPE
QGC
SECY

ASLB for

Clinch River 50-537 (Miller, Hand, Linenberger)
Byron 50-454, 455 (Smith, Callihan, Cole)
Callaway 50-483, 486 (Gleason, Bright, Kline)
Clinton 50-461 (Clark, Ferguson, Paris)
Comanche Peak 50-445, 446 (Block, Jordan, McCollom)
Diablo Canyon 50-275, 323 (Wolf, Bright, Kline)
Ginna 50-244 (Grossman, Cole, Luebke)
Indian Point 50-247, 286 (Gleason, Paris, Shon)
Midland 50-329, 330 (Bechhoefer, Cowan, Harbour)
Perry 50-440, 441 (Bloch, Bright, Kline)
Seabrook 50-433, 434 (Hoyt, Harbour, Luebke)
Shoreham 50-322 (Brenner, Carpenter, Morris)
Zimmer 50-358 (Frye, Hooper, Livingston)

ASLAB for

Callaway 50-483, 486 (Rosenthal, Edles, Gotchy)
Diablo Canyon 50-275, 323 (Moore, Buck, Johnson)
TMI-1 50-289 (Edles, Buck, Gotchy)
Rancho Seco 50-312 (Rosenthal, Buck, Kohl)
Waterford 50-382 (Kohl, Johnson, Wilber)

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

CERTIFICATE OF SERVICE

-Marshall Miller, Esq., Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555*

Mr. Gustave A. Linenberger
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555*

Dr. Cadet H. Hand, Jr., Director
Administrative Judge
Bodega Marine Laboratory
University of California
P.O. Box 247
Bodega Bay, CA 94923 **

William E. Lantrip, Esq.
City Attorney
Municipal Building
P.O. Box 1
Oak Ridge, TN 37830

William M. Leech, Jr., Attorney General
William B. Hubbard, Chief Deputy
Attorney General
Michael D. Pearigen, Assistant
Attorney General
Michael E. Terry, Esq.
450 James Robertson Parkway
Nashville, TN 37219

Lawson McGhee Public Library
500 West Church Street
Knoxville, TN 37902

R. Tenny Johnson
Leon Silverstrom
Warren E. Bergholz, Jr.
William D. Luck
U.S. Department of Energy
1000 Independence Ave., S.W.
Room 6-B-256
Washington, DC 20585

Project Management Corporation
P.O. Box U
Oak Ridge, TN 37830

George L. Edgar, Esq.
Frank K. Peterson, Esq.
Gregg A. Day, Esq.
Thomas A. Schmutz, Esq.
✓ Irvin A. Shapell, Esq.
Morgan, Lewis & Bockius
1800 M Street, N.W.
Washington, DC 20036

Barbara A. Finamore
Dr. Thomas B. Cochran
S. Jacob Scherr
Natural Resources Defense
Council, Inc.
1725 Eye Street, N.W.
Suite 600
Washington, DC 20006

Manager of Power
Tennessee Valley Authority
819 Power Building
Chattanooga, TN 37401

Director
Clinch River Breeder Reactor
Plant Project
U.S. Department of Energy
Washington, DC 20585

Atomic Safety and Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555*

Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555*

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555*

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
COMMONWEALTH EDISON COMPANY) Docket Nos. 50-454
(Byron Station, Units 1 and 2)) 50-455

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO JOINT INTERVENORS' MOTION TO REOPEN RECORD" and "AFFIDAVIT OF D. W. HAYES AND KEVIN A. CONNAUGHTON REGARDING STATEMENTS BY JOHN HUGHES SUPPORTING INTERVENOR MOTION TO REOPEN" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, or, as indicated by double asterisks, by express mail, this 9th day of May 1983:

*Ivan W. Smith, Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. A. Dixon Callihan
Administrative Judge
Union Carbide Corporation
P. O. Box Y
Oak Ridge, TN 37830

*Dr. Richard F. Cole
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Michael Miller, Esq.
Isham, Lincoln & Beale
Three First National Plaza
Chicago, IL 60602

Joseph Gallo, Esq.
Isham, Lincoln & Beale
Suite 840
1120 Connecticut Avenue, NW
Washington, DC 20036

Region III
U.S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
799 Roosevelt Road
Glen Ellyn, IL 60137

Mrs. Phillip B. Johnson
1907 Stratford Lane
Rockford, IL 61107

Ms. Diane Chavez
326 N. Avon Street
Rockford, IL 61103

Dr. Bruce von Zellen
c/o DAARE
P. O. Box 261
DeKalb, IL 60015

Doug Cassel, Esq.
Jane Whicher, Esq.
109 N. Dearborn Street
Chicago, IL 60602

Ms. Pat Morrison
5568 Thunderidge Drive
Rockford, IL 61107

*Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

David C. Thomas, Esq.
77 S. Wacker Drive
Chicago, Illinois 60601

*Atomic Safety and Licensing Appeal
Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Richard J. Rawson
Counsel for NRC Staff

DISTRIBUTION LIST FOR BOARD NOTIFICATION

Callaway Unit 1
Docket No. STN 50-483

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Mr. Dan I. Bolef
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A. Scott Cauger, Esq.
Kenneth M. Chackes, Esq.
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Dr. Paul C. Shewmon
Dr. Chester P. Siess
Mr. David A. Ward

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

ILLINOIS POWER COMPANY, et al.
(Clinton Power Station, Unit 1)

Docket No. 50-461 OL

CERTIFICATE OF SERVICE

Hugh K. Clark, Esq., Chairman
Administrative Judge
P.O. Box 127A
Kennedyville, Maryland 21645

Dr. George A. Ferguson
Administrative Judge
School of Engineering
Howard University
2300 Sixth Street, N.W.
Washington, D.C. 20059

Dr. Oscar H. Paris*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Prairie Alliance
P.O. Box 2424
Station A
Champaign, Illinois 61820

Sheldon A. Zabel, Esq.
William van Susteren, Esq.
Schiff, Hardin & Waite
7200 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606

Philip L. Willman, Esq.
Assistant Attorney General
Environmental Control Division
188 West Randolph Street, Suite 2315
Chicago, Illinois 60601

Mr. Herbert H. Livermore
U.S. Nuclear Regulatory Commission
Clinton Nuclear Power Station
RR 3, Box 229A
Clinton, Illinois 61727

J. F. Crist, Vice President
Electricity Delivery & Energy Services
2000 North Dearborn Street
Chicago, Illinois 60610

Reed Neuman, Esq.
Assistant Attorney General
500 South Second Street
Springfield, Illinois 62701

Atomic Safety and Licensing
Board Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docketing and Service Section*
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Ms. Sean Foy
511 W. Nevada
Urbana, IL 61801*

Gary N. Wright
Illinois Department of Nuclear Safety
1035 Outer Park Drive, 5th Floor
Springfield, Illinois 62704

Atomic Safety and Licensing
Appeal Board Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Jay M. Gutierrez
Counsel for NRC Staff

DISTRIBUTION LIST FOR BOARD NOTIFICATION

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Docket Nos. 50-445/446

Peter B. Bloch, Esq.
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Dr. Robert C. Axtmann
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*Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Atomic Safety and Licensing
Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

James M. Cutchin IV
Counsel for NRC Staff

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Herbert H. Brown, Esq.
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Mr. Jeff Smith
Lucinda Low Swartz, Esq.

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Dr. Robert C. Axtmann
Mr. Myer Bender
Dr. Max W. Carbon
Mr. Jesse C. Ebersole
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Dr. Harold W. Lewis
Dr. J. Carson Mark
Mr. William M. Mathis
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Mr. David A. Ward

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Zimmer Unit 1
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Mr. Vernon Adler
Lynne Bernabei, Esq.
Brian Cassidy, Esq.
Troy B. Conner, Esq.
Andrew B. Dennison, Esq.
Steven F. Eilperin
Lawrence R. Fisse, Esq.
John H. Frye III, Esq.
W. Peter Heile, Esq.
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William J. Moran, Esq.
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Alan S. Rosenthal, Esq.
Mr. Robert F. Warnick
Deborah Webb, Esq.
Howard A. Wilber, Esq.
John D. Woliver, Esq.

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Board Panel
Atomic Safety and Licensing
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Document Management Branch

ACRS Members

Dr. Robert C. Axtmann
Mr. Myer Bender
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Dr. Harold W. Lewis
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Mr. William M. Mathis
Dr. Dade W. Moeller
Dr. David Okrent
Dr. Milton S. Plesset
Mr. Jeremiah J. Ray
Dr. Paul C. Shewmon
Dr. Chester P. Siess
Mr. David A. Ward

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of

METROPOLITAN EDISON COMPANY, ET AL. }

(Three Mile Island Nuclear Station,
Unit No. 1) }

Docket No. 50-289
(Restart - Design Issues)

CERTIFICATE OF SERVICE

I hereby certify that copies of "MEMORANDUM FROM W. J. DIRCKS DATED JUNE 22, 1983 TO THE COMMISSIONERS WITH ATTACHED MEMORANDUM FROM G. H. CUNNINGHAM, III DATED JUNE 14, 1983 TO H. R. DENTON" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, this 22nd day of June, 1983:

*Gary J. Edles, Chairman
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Christine N. Kohl
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Dr. John H. Buck
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Ivan W. Smith
Administrative Judge
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Walter H. Jordan
Administrative Judge
881 W. Outer Drive
Oak Ridge, Tennessee 37830

Dr. Linda W. Little
Administrative Judge
5000 Hermitage Drive
Raleigh, North Carolina 27612

George F. Trowbridge, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, NW
Washington, DC 20036

Douglas R. Blazey, Esq.
Chief Counsel
Department of Environmental Resources
514 Executive House, P.O. Box 2357
Harrisburg, PA 17120

Honorable Mark Cohen
512 D-3 Main Capital Building
Harrisburg, PA 17120

Ms. Marjorie Aamodt
R.D. #5
Coatesville, PA 19320

Mr. Thomas Gerusky
Bureau of Radiation Protection
Dept. of Environmental Resources
P. O. Box 2063
Harrisburg, PA 17120

Mr. Marvin I. Lewis
6504 Bradford Terrace
Philadelphia, PA 19149

Mr. C. W. Smyth, Supervisor
Licensing TMI-1
Three Mile Island Nuclear Station
P. O. Box 480
Middletown, PA 17057

Ms. Jane Lee
R.D. 3; Box 3521
Etters, PA 17319

Gail Phelps
ANGRY/TMI PIRC
1037 Maclay Street
Harrisburg, PA 17103

Allen R. Carter, Chairman
Joint Legislative Committee on Energy
Post Office Box 142
Suite 513
Senate Gressette Building
Columbia, South Carolina 29202

Chauncey Kepford
Judith Johnsrud
Environmental Coalition on Nuclear Power
433 Orlando Avenue
State College, PA 16801

Gary L. Milhollin, Esq.
4412 Greenwich Parkway, NW
Washington, DC 20007

Mr. Henry D. Hukill
Vice President
GPU Nuclear Corporation
Post Office Box 480
Middletown, PA 17057

Michael McBride, Esq.
LeBoeuf, Lamb, Leiby & McRae
Suite 1100
1333 New Hampshire Avenue, NW
Washington, DC 20036

David E. Cole, Esq.
Smith & Smith, P.L.
Riverside Law Center
2931 N. Front Street
Harrisburg, PA 17110

William S. Jordan, III, Esq.
Harmon & Weiss
1725 I Street, NW
Suite 506
Washington, DC 20006

John Levin, Esq.
Pennsylvania Public Utilities Comm.
Box 3265
Harrisburg, PA 17120

Jordan D. Cunningham, Esq.
Fox, Farr and Cunningham
2320 North 2nd Street
Harrisburg, PA 17110

Louise Bradford
Three Mile Island Alert
1011 Green Street
Harrisburg, PA 17102

Ms. Ellyn R. Weiss
Harmon & Weiss
1725 I Street, NW
Suite 506
Washington, DC 20006

Mr. Steven C. Sholly
Union of Concerned Scientists
1346 Connecticut Avenue, NW
Dupont Circle Building, Suite 1101
Washington, DC 20036

Ms. Frieda Berryhill, Chairman
Coalition for Nuclear Power Plant
Postponement
2610 Grendon Drive
Wilmington, Delaware 19808

*Judge Reginald L. Gotchy
Atomic Safety & Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Atomic Safety & Licensing Appeal
Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

*Dr. Lawrence R. Quarles
Atomic Safety & Licensing Appeal
Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Michael W. Maupin, Esquire
Hunton & Williams
707 East Main Street
P. O. Box 1535
Richmond, VA 23212

Mary E. Wagner
Counsel for NRC Staff

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of

SACRAMENTO MUNICIPAL UTILITY DISTRICT
(Rancho Seco Nuclear Generating Station)

Docket No. 50-312 (SP)

CERTIFICATE OF SERVICE

Alan S. Rosenthal, Esq., Chairman*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Christine N. Kohl, Esq.*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Richard F. Cole*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. John H. Buck*
Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

James S. Reed, Esq.
Michael H. Remy, Esq.
Reed, Samuel & Remy
717 K Street, Suite 405
Sacramento, CA 95814

Mr. Fredrick J. Shon
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

David S. Kaplan, Esq.
General Counsel
Sacramento Municipal Utility District
P.O. Box 15830
Sacramento, CA 95813

Christopher Ellison, Esq.
Dian Grueneich, Esq.
California Energy Commission
1111 Howe Avenue
Sacramento, CA 95825

Thomas A. Baxter, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Atomic Safety and Licensing
Appeal Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docketing and Service Section*
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Atomic Safety and Licensing
Board Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

DISTRIBUTION LIST FOR BOARD NOTIFICATION

Waterford Unit 3,
Docket No. 50-382

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Mr. Gary L. Groesch
William J. Guste, Jr., Esq.
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Atomic Safety and Licensing
Board Panel
Atomic Safety and Licensing
Appeal Panel
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Dr. Chester P. Siess
Mr. David A. Ward



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

July 11, 1983

MEMORANDUM FOR: Themis P. Speis, Director
Division of Safety Technology

FROM: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

SUBJECT: DIFFERING PROFESSIONAL OPINION OF MR. JAMES CONRAN

Mr. James Conran, NRR, raised several issues in a Differing Professional Opinion dated March 31, 1983. I subsequently gave Mr. Russell, NRR, the assignment of assessing the issues. Mr. Russell provided, in the enclosed memorandum dated June 22, 1983, his independent assessment and recommendations to resolve the DPO. After carefully reviewing the issues and recommendations, I have decided to adopt Mr. Russell's recommendations for the reasons stated.

Relative to the A-17 issue, you should complete, for my approval, a revision of the Task Action Plan for Systems Interaction in accordance with Mr. Russell's recommendations, including formal division and ACRS review. Your next Monthly USI Status Report should include an expedited schedule for final approval of the Task Action Plan. You should also ensure that a dedicated Task Manager continues to be assigned to USI A-17, as required by my memorandum of July 21, 1982.

To timely resolve the safety classification problem, you are to initiate a Generic Issue Action Plan and work with the Director, DOL, to develop a generic letter which shall be sent to all power reactor licensees/applicants.

In addition, you should reiterate to your staff the importance of accurately documenting in a timely manner the status, management decisions and changes in policy or approach of each generic technical effort so that we can effectively communicate this information to the staff.

Pursuant to the procedures for resolving a Differing Professional Opinion, Manual Chapter 4125, I consider the DPO resolved.

A handwritten signature in dark ink, appearing to read "HR Denton".

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc: D. Eisenhut
J. Conran

8307260525



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

June 22, 1983

MEMORANDUM FOR: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

FROM: William T. Russell, Chief
Systematic Evaluation Program Branch
Division of Licensing

SUBJECT: J. H. CONRAN DIFFERING PROFESSIONAL OPINION

As requested by your memorandum of April 15, 1983, I have conducted an independent assessment of the issues raised in James H. Conran's Differing Professional Opinion (DPO) dated March 31, 1983. Enclosure 1 is a list of the DPO documentation. Mr. Conran raised three major issues which are:

- A. Significant extension of schedule for resolution of Unresolved Safety Issue A-17-Systems Interaction without appropriate review or justification.
- B. Disproportionate emphasis and priority given PRA to the detriment of systems interaction program.
- C. Insufficient priority given to resolution of known safety classification problems.

After study of the DPO, management views, Mr. Conran's response to these management views, and related documents, I have concluded that issues A and B are essentially the same fundamental issue -- the management of USI A-17. Issue C is related to structure, system and component safety classification. A summary of these issues with recommended actions follows.

Systems Interaction-USI A-17

Mr. Conran stated that "systems interaction" had been designated an Unresolved Safety Issue (USI) as defined in the Energy Reorganization Act of 1974 as amended and, therefore, had received peer review and become an important issue that NRC was required by law to resolve in a timely manner. He was not aware of any formal change in emphasis - only an apparent lack of concern about progress and its impact on the safety of operating plants. Other related safety issues or programs such as Probabilistic Risk Assessment (PRA) appeared to be diverting attention from the systems interaction effort which had been given high priority and stature when it became a USI.

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SEP-22-83

The management of USI A-17, has not been effective nor has it been conducted in accordance with office policy as established by your memorandum of June 28, 1982, to S. Hanauer, Director Division of Safety Technology, Subject: "Management of USI Resolution" and by your memorandum of July 21, 1982, to NRR Division Directors, Subject: "USI's." Specifically the following omissions have occurred:

- . Monthly Assistant Director level meetings to discuss USIs have not included USI A-17.
- . The monthly USI reports to you have not provided a status or schedule for resolution.
- . The USI A-17 Task Action Plan dated January 1980 (NUREG-0649) has not been formally updated.
- . A dedicated Task Manager has not been assigned for sometime (Note: F. Coffman was assigned 2/10/83; however, he has retained substantial additional duties as a Section Leader and he is the only USI task manager not in the Generic Issues Branch).

As a result of the above deficiencies, the overall management direction became uncertain and mixed signals existed. This contributed to the communication problem regarding the approach to USI A-17 which is described in J. Conran's memorandum to me dated May 25, 1983. Systems interaction and activities associated with probabilistic risk assessment became entwined and confused. Significant resources were expended in both areas and additional work was identified. The staff now recognizes the need to reassess the goals and objectives for systems interaction and its relationship to probabilistic risk assessment. There is a clear need to define a logical approach for the resolution of USI A-17, Systems Interaction. The Task Action Plan for USI A-17 is currently being revised to reflect today's need, knowledge and priorities. I recommend that this revision be expedited. The Task Action Plan revision should be reviewed by NRR management, including all affected Divisions, and the ACRS views should be obtained prior to formal approval. The involvement of the ACRS is recommended because of their prior strong views on systems interaction and the need for their endorsement of the proposed approach.

DST management views the purpose of USI A-17 to either "confirm" the adequacy of the review process (i.e., the Standard Review Plan) or to discover and correct "holes" in the review process. Mr. Conran's view is that a search method should be implemented in the near term for reactors to "discover" important systems interactions before they occur. Both objectives have validity. Generally the DST management view and the current Task Action Plan (NUREG-0649) approach is valid for plants that have been reviewed for systems interactions using the appropriate sections of the Standard Review Plan (SRP). However, the majority of currently operating reactors have not been reviewed using appropriate sections of the Standard Review Plan and operating experience

shows that significant system interaction events have occurred in operating plants. If the SRP is "confirmed" as adequate and USI A-17 is thus resolved, it is possible to complete systems interactions for operating reactors by implementing a review using selected SRP sections. Conversely, TMI Action Plan Item II.C.3 proposes to resolve the systems interaction concerns by implementing a plant specific systems interaction review (an action proposed by Mr. Conran) as part of follow-on to the Interim Reliability Evaluation Program (Mr. Conran disagrees with merging PRA and system interaction reviews). I recommend that the USI A-17 Task Action Plan be updated to clearly identify its objectives and how the tasks relate to the objectives. It should include TMI Action Plan Item II.C.3 and the role of PRA, if any, in system interactions.

The approved Task Action Plan and the April 1, 1983 draft are both deficient with respect to systems interaction effort for operating reactors. In my status report to you on June 9, 1983, I recommended that USI A-17 Task Action Plan be updated to include, (1) the relationship of USI A-17 tasks to our routine review and evaluation of operating experience and (2) a basis for continued operation of plants not reviewed against the SRP. Based upon licensing actions taken on operating reactors as a result of operating experience (e.g., fire protection, environmental qualification of equipment, TMI actions, IE Bulletins, and others) and as a result of the SEP reviews on the older operating reactors, I believe a basis for continued operation with respect to systems interaction could be developed and documented. The basis should identify programs that are underway to resolve identified systems interaction problems using the SRP or equivalent criteria. On June 16, 1983, DST proposed changes to the April 1, 1983 draft Task Action Plan which includes a basis for continued operation of plants and new tasks related to operating experience. These changes should be reviewed by the affected NRR Divisions and ACRS.

Assuming the basis for continued plant operation is accepted, I feel Mr. Conran's recommended action of requiring plants to perform systems interaction reviews would be premature and is not justified based upon results of the USI A-17 tasks to date. No examples of safety significant systems interactions were identified in Mr. Conran's DPO or during my discussions with him that were not previously identified as a result of operating experience or as generic issues. Nor were deficiencies in the Standard Review Plan identified.

Safety Classification

Mr. Conran also stated that there was a potential safety problem caused by the inadequate understanding of what is important to safety, but is not safety related. His experience during an on-going licensing review and hearing intensified the specific concern that he believes may be applicable to many plants. A 1981 memo to all NRR Personnel addressed the meaning of the safety classification terms and directed the staff to use the terms in a consistent manner, but not use the definitions to cause a new requirement to be imposed on licensees. Industry has not been provided these definitions nor does NRR have assurance that industry consistently and properly interpret certain regulatory requirements. The management response to Mr. Conran on the issue of safety

classification (R. Mattson and R. Vollmer memorandum to you dated April 13, 1983) recommended that NRC management adopt the views expressed by Mr. Conran and develop a Generic Issue Action Plan. This plan should include the Office of Inspection and Enforcement efforts under TMI Action Plan Item I.F.1. Mr. Conran in his memorandum to me dated May 25, 1983, agreed with management's proposed generic approach for this issue. However, he recommended prompt action (i.e., a survey) to determine all licensees' and applicants' understanding of the concept "Important to Safety" and the related requirements of the regulations.

In addition to the Generic Issue Action Plan recommended by R. Mattson and R. Vollmer, I recommend that a generic letter be issued to inform licensees/applicants of the staff position with respect to the terms "Important to Safety" and "Safety Related." Such a letter should include your memorandum dated November 20, 1981, "Standard Definitions for Commonly Used Safety Classification Terms," should reference the TMI Restart board decisions, should identify the staff's position taken in the Shoreham hearing concerning the scope of "Important to Safety," should identify the on-going generic activity in the Office of Inspection and Enforcement with respect to graded QA (TMI Action Plan Item I.F.1) and should emphasize that the objectives of the letter are to ensure common understanding of the terms "Important to Safety" and "Safety Related" and that new requirements are not being imposed.

Conclusion

I believe that current actions being taken or recommended in the above will resolve Mr. Conran's DPO and provide for safe reactor operation. I also recommend that you reiterate to the NRR staff that management decisions and related changes in policy or approach should be documented to ensure effective communication within the staff. This is required at least annually as part of USI Task Action Plan updates by your July 21, 1982 memorandum on USIs.

William T. Russell

William T. Russell, Chief
Systematic Evaluation Program Branch
Division of Licensing

Enclosure:
Chronology of DPO Documentation

cc w/enclosure:

E. Case
R. Mattson
R. Vollmer
J. Funches
T. Speis
F. Rowsome
A. Thadani
D. Coffman
J. Conran
H. Berkow

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Enclosure 6. Letter from W. Dircks to Congressman T. Downey, March 16, 1983.

Enclosure 7. Memorandum from T. Speis to H. Denton, Subject: Annual Update of USI Task Action Plans, dated April 1, 1983 (Draft Task Action Plan for USI A-17 enclosed).

Enclosure 8. Supporting Vu-graphs for Commission Briefing April 18, 1983.

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Enclosure 5. J. H. Conran Comments on Systems Interaction Issues.

Enclosure 6. Excerpts from NUREG-0510.

Enclosure 7. Excerpts from NUREG-0585.

Enclosure 8. Excerpts from NUREG-0660.

Enclosure 9. Excerpts from NUREG-0606.

Enclosure 10. Excerpts from Annual Report for 1981.

Enclosure 11. Memo, dated 3/9/83, by D. Rubenstein.

Enclosure 12. Excerpts from 5/9/83 Submittal by Suffolk County to Shoreham ASLB, regarding Systems Interaction.

Enclosure 13. Excerpts from Meeting Summary, dated 10/21/82, by J. H. Conran.

Enclosure 14. Board Notification 83-04.

Enclosure 15. Board Notification 83-44.

Enclosure 16. Board Notification 83-57.

Enclosure 17. Note, dated 4/20/83, J. Conran to F. Coffman, regarding BN 83-44.

Enclosure 18. Memo, dated 4/21/83, J. Funches to D. Eisenhut.

Enclosure 19. Letter, dated 4/21/83, Letsche to Rawson-ELD.

Enclosure 20. Letter, dated 4/21/83, Letsche to D. Eisenhut-DL.

Enclosure 21. Memo, dated 4/28/83, J. Conran to F. Coffman.

11. May 23, 1983 Russell to Denton, "J. H. Conran Differing Professional Opinion."
12. May 27, 1983 Denton to Russell, "J. H. Conran Differing Professional Opinion."



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

June 22, 1983

MEMORANDUM FOR: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

FROM: William T. Russell, Chief
Systematic Evaluation Program Branch
Division of Licensing

SUBJECT: J. H. CONRAN DIFFERING PROFESSIONAL OPINION

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William T. Russell

William T. Russell, Chief
Systematic Evaluation Program Branch
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Enclosure 5. J. H. Conran Comments on Systems Interaction Issues.

Enclosure 6. Excerpts from NUREG-0510.

Enclosure 7. Excerpts from NUREG-0585.

Enclosure 8. Excerpts from NUREG-0660.

Enclosure 9. Excerpts from NUREG-0606.

Enclosure 10. Excerpts from Annual Report for 1981.

Enclosure 11. Memo, dated 3/9/83, by D. Rubenstein.

Enclosure 12. Excerpts from 5/9/83 Submittal by Suffolk County to Shoreham ASLB, regarding Systems Interaction.

Enclosure 13. Excerpts from Meeting Summary, dated 10/21/82, by J. H. Conran.

Enclosure 14. Board Notification 83-04.

Enclosure 15. Board Notification 83-44.

Enclosure 16. Board Notification 83-57.

Enclosure 17. Note, dated 4/20/83, J. Conran to F. Coffman, regarding BN 83-44.

Enclosure 18. Memo, dated 4/21/83, J. Funches to D. Eisenhut.

Enclosure 19. Letter, dated 4/21/83, Letsche to Rawson-ELD.

Enclosure 20. Letter, dated 4/21/83, Letsche to D. Eisenhut-DL.

Enclosure 21. Memo, dated 4/28/83, J. Conran to F. Coffman.

11. May 23, 1983 Russell to Denton, "J. H. Conran Differing Professional Opinion."
12. May 27, 1983 Denton to Russell, "J. H. Conran Differing Professional Opinion."

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July 11, 1983

PDR (w/enclosures to 06/22/83 memo)

MEMORANDUM FOR: James H. Conran
Reliability and Risk Assessment Branch
Division of Safety Technology

FROM: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

SUBJECT: YOUR DIFFERING PROFESSIONAL OPINION REGARDING
THE SYSTEMS INTERACTION PROGRAM USI A-17 AND
SAFETY CLASSIFICATION

You raised issues about the potential safety significance of the lack of progress in resolving Systems Interaction (USI A-17) and the inadequate understanding by licensees regarding what is important to safety. These issues have been evaluated and on the basis of the conclusions and recommendations presented by Mr. Russell in a June 22, 1983 memorandum to me, I have initiated certain actions. In accordance with Manual Chapter 4125, Differing Professional Opinions, enclosed is a copy of my memorandum which provides a description of the actions being taken to resolve the differing professional opinion.

Original Signed by
H. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
NRR Division Directors

8307260516

* See previous copy for concurrence.

OFFICE	NRR:TSB *	NRR:PPAS:D*	NRR:EG	NRR:D			
SURNAME	JCarter:cg	JFunches	EGCase	HRDenton			
DATE	07/01/83	07/01/83	07/5/83	07/11/83			