

JUN 11 1985

Docket Nos. 50-313, 302, 346,  
269, 270, 312,  
and 289

Mr. H. B. Tucker, Chairman  
Babcock & Wilcox Owners Group  
Duke Power Company  
P. O. Box 33189  
422 South Church Street  
Charlotte, North Carolina 28242

DISTRIBUTION

~~Docket File~~

NRC PDR  
L PDR  
ORB#4 Rdg  
HThompson  
OELD  
EJordan  
BGrimes  
JPartlow  
ESimpson  
JTaylor

Hornstein  
ACRS-10  
RIngram  
GVissing  
HSilver  
BMozaferi  
ADeAgazio  
HNicolaras  
SMiner  
JThoma  
SHendrix  
EBrach

Dear Mr. Tucker:

We have completed our review of BAW 1843P, "The B&W Owners Group Evaluation of Internal Bolting Concerns in 177FA Plants." Our review of the report was to ensure that no unresolved safety issue exists and to determine whether or not the information presented in the report was consistent with and supportive of the conclusions reached when we reviewed plant specific findings relative to the bolting of B&W reactor vessel internals during the latter part of 1983. The licensees of B&W operating reactors have previously stated and we have agreed that no safety problem accrued from failures of much greater severity than those heretofore experienced and, because of the bolt replacement program described in BAW 1843P, the likelihood of a severe accident has been greatly reduced. We have found that the information provided in the report is consistent with the bases upon which we agreed with the licensees' positions and, therefore, we consider our actions related to this issue to be complete.

We have discovered a number of comments, both technical and typographic, in the report and these are noted in the enclosure. Please provide us your corrected copy of the report.

By a copy of this letter to each of the licensees of the B&W operating plants, the licensees are hereby informed.

Sincerely,

Original signed by

Gus C. Lainas, Assistant Director  
for Operating Reactors  
Division of Licensing

Enclosures: As Stated

cc w/enclosures:  
See next page

ORB#4:DL  
GVissing;cr  
6/4/85

ORB#4:DL  
JStolz  
6/11/85

AD:CSE  
RBosnak  
6/5/85

AD:OR:DL  
GLainas  
6/11/85

~~AD:DL  
HThompson  
6/1/85~~

AD:MCET  
WJohnston  
6/10/85

8506200042 850611  
PDR ADOCK 05000269  
P PDR

ENCLOSURE

COMMENTS OF BAW 1843P "THE B&W OWNERS GROUP  
EVALUATION OF INTERNALS BOLTING CONCERNS IN 177FA PLANTS"

THE FOLLOWING ARE TECHNICAL COMMENTS ON THE CONTENT OF THE REPORT.

On p 2-23 the statement is made that "Excessive cold working may lower the materials resistance to SCC". "Excessive" should be defined. Is "excessive" that amount of cold work that lowers the materials resistance to SCC or is it that amount that may not have been removed by solution anneal?

On p 2-25 the statement is made that "In the two instances where the fabricator passivated bolts the vendor stated that the passivation was performed after heat treatment and, therefore, it is inferred that it took place before thread-rolling and final machining."

On p 2-45 it is suggested that a no. 4 under lubrication be added which comments upon state of lubrication (whether wet or dry) and if wet, whether with water or the unevaporated solvent of the lubricant.

On p 2-50 the torque sequences for LCB & UBC are inconsistent although both bolt circles use MK 256 bolts.

On p 3-19, in the discussion of the fracture regions observed in the fracture face, there should have been included in that discussion some comment on the concentricity of those regions.

On p 5-34 figure 5-8 should be finished by hatching the section of sleeve above wire pin, showing the chamfer of the collet, and completing the hatching of the upper core plate.

On p 5-35 the second failure location (i.e., across one leg at the crotch) should have been indicated.

On p 5-55 & 5-56 there should be some notation as to the date to which the information presented is valid. Certain of this information clearly predates the publication date of the report.

THE FOLLOWING ARE TYPOGRAPHICAL COMMENTS.

On p 2-30 change Allegheny Lulgam to Allegheny Ludlum.

On p 2-33 units should be identified (it is assumed that the units are ft-lb) and change "use" in bottom note to "used".

On p 2-42 bottom paragraph change "Reator" to "Reactor" on figure 3-16.

On p 3-56 change "metallograpy" to "metallography".

On p 3-11 the columns of Table 3-20 are not correctly arranged.

On p 3-56 substitute an h for the current y in metallographic.

Mr. J. M. Griffin  
Arkansas Power & Light Company

Arkansas Nuclear One, Unit 1

cc:

Mr. J. Ted Enos  
Manager, Licensing  
Arkansas Power & Light Company  
P. O. Box 551  
Little Rock, Arkansas 72203

Mr. James M. Levine  
General Manager  
Arkansas Nuclear One  
P. O. Box 608  
Russellville, Arkansas 72801

Mr. Nicholas S. Reynolds  
Bishop, Liberman, Cook, Purcell & Reynolds  
1200 Seventeenth Street, N.W.  
Washington, D.C. 20036

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 220, 7910 Woodmont Avenue  
Bethesda, Maryland 20814

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

Mr. Robert Martin, Regional Administrator  
U.S. Nuclear Regulatory Commission, Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

Mr. Frank Wilson  
Director, Division of Environmental  
Health Protection  
Department of Health  
Arkansas Department of Health  
4815 West Markham Street  
Little Rock, Arkansas 72201

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

Mr. W. S. Wilgus  
Florida Power Corporation

Crystal River Unit No. 3 Nuclear  
Generating Plant

cc:

Mr. R. W. Neiser  
Senior Vice President  
and General Counsel  
Florida Power Corporation  
P. O. Box 14042  
St Petersburg, Florida 33733

Bureau of Intergovernment Relations  
660 Apalachee Parkway  
Tallahassee, Florida 32304

Nuclear Plant Manager  
Florida Power Corporation  
P. O. Box 219  
Crystal River, Florida 32629

Mr. Wilbur Langely, Chairman  
Board of County Commissioners  
Citrus County  
Inverness, Florida 36250

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 220, 7910 Woodmont Avenue  
Bethesda, Maryland 19814

Mr. Tom Stetka, Resident Inspector  
U.S. Nuclear Regulatory Commission  
Route #3, box 171  
Crystal River, Florida 32629

Dr. J. Nelson Grace, Regional Administrator  
U. S. Nuclear Regulatory Commission, Region II  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Mr. Uray Clark, Administrator  
Radiological Health Services  
Department of Health and  
Rehabilitative Services  
1323 Winewood Blvd.  
Tallahassee, Florida 32301

Administrator  
Department of Environmental Regulation  
Power Plant Siting Section  
State of Florida  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Attorney General  
Department of Legal Affairs  
The Capitol  
Tallahassee, Florida 32304

Mr. R. P. Crouse  
Toledo Edison Company

Davis-Besse Nuclear Power Station, Unit No. 1

cc:

Donald H. Hauser, Esq.  
The Cleveland Electric  
Illuminating Company  
P. O. Box 5000  
Cleveland, Ohio 44101

Ohio Department of Health  
ATTN: Radiological Health  
Program Director  
P. O. Box 118  
Columbus, Ohio 43216

Mr. Robert F. Peters  
Manager, Nuclear Licensing  
Toledo Edison Company  
Edison Plaza  
300 Madison Avenue  
Toledo, Ohio 43652

Attorney General  
Department of Attorney  
General  
30 East Broad Street  
Columbus, Ohio 43215

Gerald Charnoff, Esq.  
Shaw, Pittman, Potts  
and Trowbridge  
1800 M Street, N.W.  
Washington, D.C. 20036

Mr. James W. Harris, Director (Addressee Only)  
Division of Power Generation  
Ohio Department of Industrial Relations  
2323 West 5th Avenue  
P. O. Box 825  
Columbus, Ohio 43216

Paul M. Smart, Esq.  
Fuller & Henry  
300 Madison Avenue  
P. O. Box 2088  
Toledo, Ohio 43603

Mr. Harold Kahn, Staff Scientist  
Power Siting Commission  
361 East Broad Street  
Columbus, Ohio 43216

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation  
Division  
Suite 200, 7910 Woodmont Avenue  
Bethesda, Maryland 20814

President, Board of  
County Commissioners of  
Ottawa County  
Port Clinton, Ohio 43452

U.S. Nuclear Regulatory Commission  
Resident Inspector's Office  
5503 N. State Route 2  
Oak Harbor, Ohio 43449

Mr. James G. Keppler, Regional Administrator  
U.S. Nuclear Regulatory Commission, Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137



Mr. H. B. Tucker  
Duke Power Company

Oconee Nuclear Station, Units  
Nos. 1, 2 and 3

cc:

Mr. William L. Porter  
Duke Power Company  
P. O. Box 33189  
422 South Church Street  
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esq.  
Bishop, Liberman, Cook, Purcell & Reynolds  
1200 Seventeenth Street, N.W.  
Washington, D.C. 20036

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 220, 7910 Woodmont Avenue  
Bethesda, Maryland 20814

Manager, LIS  
NUS Corporation  
2536 Countryside Boulevard  
Clearwater, Florida 33515

Mr. J. C. Bryant  
Senior Resident Inspector  
U. S. Nuclear Regulatory Commission  
Route 2, Box 610  
Seneca, South Carolina 29678

Dr. J. Nelson Grace, Regional  
Administrator  
U.S. Nuclear Regulatory Commission,  
Region II  
101 Marietta Street, N.W.  
Suite 3100  
Atlanta, Georgia 30303

Mr. Heyward G. Shealy, Chief  
Bureau of Radiological Health  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

Office of Intergovernmental Relations  
116 West Jones Street  
Raleigh, North Carolina 27603

Honorable James M. Phinney  
County Supervisor of Oconee County  
Walhalla, South Carolina 29621



Mr. R. J. Rodriguez  
Sacramento Municipal Utility District

Rancho Seco Nuclear Generating Station

cc:

Mr. David S. Kaplan, Secretary  
and General Counsel  
Sacramento Municipal Utility  
District  
6201 S Street  
P. O. Box 15830  
Sacramento, California 95813

Sacramento County  
Board of Supervisors  
827 7th Street, Room 424  
Sacramento, California 95814

Ms. Helen Hubbard  
P. O. Box 63  
Sunol, California 94586

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

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 220, 7910 Woodmont Avenue  
Bethesda, Maryland 20814

Resident Inspector/Rancho Seco  
c/o U. S. N. R. C.  
14410 Twin Cities Road  
Herald, California 95638

Mr. John B. Martin, Regional  
Administrator  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

Director  
Energy Facilities Siting Division  
Energy Resources Conservation &  
Development Commission  
1516 - 9th Street  
Sacramento, California 95814

Mr. Joseph O. Ward, Chief  
Radiological Health Branch  
State Department of Health Services  
714 P Street, Office Building #8  
Sacramento, California 95814

Mr. Joseph Findaro  
California State Office  
444 North Capitol Street, N.W., Suite 305  
Washington, D.C. 20003

Mr. Henry D. Hukill  
GPU Nuclear Corporation

-1-

Three Mile Island, Unit 1

cc:

Mr. R. J. Toole  
O&M Director, TMI-1  
GPU Nuclear Corporation  
Middletown, Pennsylvania 17057

Richard J. McGuey  
Manager, PWR Licensing  
GPU Nuclear Corporation  
100 Interp. Parkway  
Parsippany, New Jersey 70754

Mr. C. W. Smyth  
TMI-1 Licensing Manager  
GPU Nuclear Corporation  
P. O. Box 480  
Middletown, Pennsylvania 17057

G. F. Trowbridge, Esq.  
Shaw, Pettman, Potts & Tworbridge  
1800 M Street, N.W.  
Washington, D.C. 20036

Ivan W. Smith, Esq., Chairman  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Sheldon J. Wolfe, Esq., Chairman  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Mr. Gustave A. Linenberger, Jr.  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dr. James Lamb, III  
Administrative Judge  
313 Woodhaven Road  
Chapel Hill, North Carolina 17514

Mr. David Hetrick  
Professor of Nuclear Energy  
University of Arizona  
Tucson, Arizona 85721

Mr. Richard Conte  
Senior Resident Inspector (TMI-1)  
U.S.N.R.C.  
P.O. Box 311  
Middletown, Pennsylvania 17057

Mr. Thomas E. Murley, Regional Administrator  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Mr. Robert B. Borsum  
Babcock & Wilcox  
Nuclear Power Generation Division  
Suite 220, 7910 Woodmont Avenue  
Bethesda, Maryland 10814

Governor's Office of State Planning  
and Development  
ATTN: Coordinator, Pennsylvania  
State Clearinghouse  
P. O. Box 1323  
Harrisburg, Pennsylvania 17120

Mr. Earl B. Hoffman  
Dauphin County Commissioner  
Dauphin County Courthouse  
Front and Market Streets  
Harrisburg, Pennsylvania 17101

Dauphin County Office of Emergency  
Court House, Room 7  
Front & Market Streets  
Harrisburg, Pennsylvania 17101

Mr. David D. Maxwell, Chairman  
Board of Supervisors  
Londonderry Township  
FRD#1 - Geyers Church Road  
Middletown, Pennsylvania 17057

Mr. Thomas M. Gerusky, Director  
Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Resources  
P. O. Box 2063  
Harrisburg, Pennsylvania 17120

Mr. Thomas Y. Au, Esq.  
Office of Chief Counsel  
Department of Environmental Resources  
505 Executive House  
P. O. Box 2357  
Harrisburg, Pennsylvania 17120

Bob Stein, Director of Research  
Committee on Energy  
P. O. Box 11867  
104 Blatt Building  
Columbia, South Carolina 29211

Ms. Jane Lee  
183 Valley Road  
Etters, Pennsylvania 17319

Ms. Marjorie M. Aamodt  
Mr. Norman Aamodt  
200 North Church Street  
Parkesburg, Pennsylvania 19365

Ms. Louise Bradford  
TMIA  
1011 Green Street  
Harrisburg, Pennsylvania 17102

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

Mr. Chauncey Kepford  
Ms. Judith H. Johnsrud  
Environmental Coalition on Nuclear Power  
433 Orlando Avenue  
State College, Pennsylvania 16801

Mr. Bruce Molholt  
Haverford College  
Haverford, Pennsylvania 19041

Mr. Donald E. Hossler  
501 Vine Street  
Middletown, Pennsylvania 17057

Mr. Ad Crable  
Lancaster New Era  
8 West King Street  
Lancaster, Pennsylvania 17602

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

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

William S. Jordan, III, Esq.  
Harmon, Weiss & Jordan  
20001 S Street, N.W.  
Suite 430  
Washington, D.C. 20009

Lynne Bernabei, Esq.  
Government Accountability Project  
1555 Connecticut Ave., N.W.  
Washington, D.C. 20009

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

Jordan D. Cunningham, Esq.  
Fox, Far and Cunningham  
2320 North 2nd Street  
Harrisburg, Pennsylvania 17110

Ms. Ellyn R. Weiss  
Harmon, Weiss & Jordan  
2001 S Street, N.W.  
Suite 430  
Washington, D.C. 20009

Michael McBride, Esq.  
LeBoeuf, Lamb, Leiby & McRae  
Suite 1100  
1333 New Hampshire Avenue, N.W.  
Washington, D.C. 20036

GPU Nuclear Corporation

-3-

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

Atomic Safety & Licensing Appeal  
Board Panel (8)  
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