



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

JUN 22 1984

Docket No. 50-352/353

Mr. Edward G. Bauer, Jr.
Vice President & General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

SUBJECT: Review of Limerick Severe Accident Risk Assessment

We are providing for your information, as Enclosure 1, a copy of a report prepared as a result of work by the Brookhaven National Laboratory (BNL) for the NRC staff. This report, BNL 33835, dated April 1984, discusses the source terms used as input to the site consequence analysis. This report is one of three major reports prepared by BNL concerning the Limerick plant specific Probabilistic Risk Assessment and the Severe Accident Risk Assessment herein after referred to as PRA. The first report, NUREG-3028, was issued in March 1983. The BNL report transmitted with this letter will soon be followed by a final BNL report on the contributions to core melt frequency of seismic and fire events.

The numerical results and much of the discussion in Enclosure 1 were included in Supplement 1 to the Limerick DES and in the FES consequence analysis but are repeated in Enclosure 1 for continuity of the report.

There are several aspects of the enclosed report for which additional discussion will aid in a better understanding of the report. These are as follows.

On page 1-1 apparent reference is made to a further report (volume II) which will discuss core melt phenomenology, fission product behavior and off-site consequences. The NRC staff notes that the enclosed report itself provides the discussion of core melt phenomenology and fission product behavior and the FES provided the off-site consequence analysis results for the plant specific review of the Limerick PRA. Other reports may be prepared in future years on these subjects as part of the NRC's generic severe accident decision making processes.

On pages 2-16 (damage state No. 64) and 3-5 (description of Class-S sequences) reference is made to the random reactor vessel failure sequence. Although not immediately apparent from the text, this sequence has been included in the analyses discussed in the enclosed report. A more detailed explanation of its inclusion into the overall analyses will be provided in the forthcoming risk evaluation report.

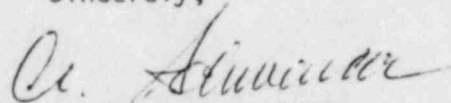
On page 3-12, Table 3.9 indicates that the analysis of Class S release categories results in core melt after two hours. This is an inappropriate

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representation of the timing of events in this particular release category and should be considered to be amended by Enclosure 2, a BNL June 11, 1984, memorandum report.

Sincerely,



A. Schwencer, Chief
Licensing Branch No.2
Division of Licensing

Enclosures: As stated

cc: See next page

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Sincerely,

A. Schwencer, Chief
Licensing Branch No.2
Division of Licensing

Enclosures: As stated

cc: See next page

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*See previous concurrence

and should be considered to be amended by the BNL letter report in Enclosure 2.

Sincerely,

A. Schwencer, Chief
Licensing Branch No.2
Division of Licensing

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Limerick

Mr. Edward G. Bauer, Jr.
Vice President & General Counsel
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

cc: Troy B. Conner, Jr., Esquire
Conner and Wetterhahn
1747 Pennsylvania Avenue, N. W.
Washington, D. C. 20006

Zori G. Ferkin
Assistant Counsel
Governor's Energy Council
P. O. Box 8010
1625 N. Front Street
Harrisburg, Pennsylvania 17105

Honorable Lawrence Coughlin
House of Representatives
Congress of the United States
Washington, D. C. 20515

Roger B. Reynolds, Jr., Esquire
324 Swede Street
Norristown, Pennsylvania 19401

Frederic M. Wentz
County Solicitor
County of Montgomery
Courthouse
Norristown, Pennsylvania 19404

Eugene J. Bradley
Philadelphia Electric Company
Associate General Counsel
2301 Market Street
Philadelphia, Pennsylvania 19101

Mr. Vincent Boyer
Senior Vice President
Nuclear Operations
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

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

Frank R. Romano, Chairman
Air & Water Pollution Patrol
61 Forest Avenue
Amler, Pennsylvania 19002

Charles W. Elliott, Esquire
Brose & Poswistilo, 1101 Bldg.
11th & Northampton Streets
Easton, Pennsylvania 18042

Phyllis Zitzer, President
Limerick Ecology Action
P. O. Box 761
Pottstown, Pennsylvania 19464

Mr. Karl Abraham
Public Affairs Officer
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19806

Mr. Suresh Chaudhary
Resident Inspector
U.S. Nuclear Regulatory Commission
P. O. Box 47
Sanatoga, PA 19464

Joseph H. White III
8 North Warner Avenue
Bryn Mawr, PA 19010

James Wiggins, Sr. R. I.
U. S. NRC
P. O. Box 47
Sanatoga, Pennsylvania 19464

Thomas Gerusky, Director
Bureau of Radiation Protection
Dept. of Environmental Resources
5th Floor, Fulton Bank Bldg.
Third & Locust Streets
Harrisburg, Pennsylvania 17120

Director, Pennsylvania Emergency
Management Agency
Basement, Transportation &
Safety Building
Harrisburg, Pennsylvania 17120

Robert L. Anthony
Friends of the Earth of the
Delaware Valley
103 Vernon Lane, Box 186
Moylan, Pennsylvania 19065

Martha W. Bush, Esq.
Deputy City Solicitor
Municipal Services Bldg.
15th and JFK Blvd.
Philadelphia, PA 19107

David Wersan, Esq.
Assistant Consumer Advocate
Office of Consumer Advocate
1425 Strawberry Square
Harrisburg, Pennsylvania 17120

Steven P. Hershey, Esq.
Community Legal Services, Inc.
Law Center North Central - Bevry Bldg.
3701 North Broad Street
Philadelphia, Pennsylvania 19140

Jacqueline I. Ruttenberg, Esq.
The Keystone Alliance
3700 Chestnut Street
Philadelphia, Pennsylvania 19104

Timothy R. S. Campbell, Director
Department of Emergency Services
14 East Biddle Street
West Chester, Pennsylvania 19380

Sugarman, Denworth & Hellegers
16th Floor Center Plaza
101 North Broad Street
Philadelphia, Pennsylvania 19106

Angus Love, Esq.
107 East Main Street
Norristown, Pennsylvania 19401

Lawrence Brenner, Esq.
Administrative Judge
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Peter A. Morris
Administrative Judge
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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

Mr. J. T. Robb, N2-1
Philadelphia Electric Company
2301 Market Street
Philadelphia, Pennsylvania 19101

Mr. Spence W. Perry, Esq.
Associate General Counsel
Federal Emergency Management Agency
Room 840
500 C St., S.W.
Washington, D. C. 20472

Mr. Edward G. Bauer, Jr.

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cc: Chairman
Board of Supervisors of
Limerick Township
646 West Ridge Pike
Limerick, Pennsylvania 19468

U. S. Environmental Protection Agency
ATTN: EIS Coordinator
Region III Office
Curtis Building (Sixth Floor)
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

Governor's Office of State Planning
and Development
ATTN: Coordinator, Pennsylvania State
Clearinghouse
P. O. Box 1323
Harrisburg, Pennsylvania 17102

Department of Environmental Resources
ATTN: Director, Office of Radiological Health
P. O. Box 2063
Harrisburg, Pennsylvania 17105