



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

JAN 23 1986

Docket Nos. 50-352/353

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

Dear Mr. Bauer:

SUBJECT: REPORTS ON PRA INSIGHTS

Enclosed are two draft reports concerning technical insights gained from Probabilistic Risk Assessments (PRAs). These reports are the outcome of an ongoing effort to make available and utilize in numerous technical and managerial activities the information in probabilistic risk assessments regarding the factors which dominate the risk associated with nuclear power plants. This effort includes identification of the features of design or operational practices which have been found to be important to safety in the types of plants which have been subjected to risk assessments. In addition, the section on insights into PRA method focuses on areas which are sensitive to the results and the overall perception of plant weaknesses and vulnerabilities.

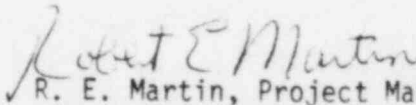
In particular, these reports contain discussions of: general insights on plant strengths and weaknesses gained from PRAs; the contribution to core melt frequency from classes of sequences induced by various initiating events; modifications, both hardware and procedural, which have been implemented to address problems identified in the conduct or as a result of PRAs; insights into PRA methodologies; and the contribution to measures of risk (core melt frequency and consequences of radioactive releases) from systems, components and events.

These reports will be published in their final forms in approximately two months. These reports are being provided to you, as well as all other licensees, in advance of formal publication for your information. Portions of the enclosed staff report which concern the Limerick plant are based on

8602050052 860123  
PDR ADOCK 05000352  
P PDR

an early version of the Limerick internal events PRA and should be considered accordingly. If, after reviewing these reports, you wish to provide comments to the staff, please provide them by February 24, 1986.

Sincerely,

  
R. E. Martin, Project Manager  
BWR Project Directorate No. 3  
Division of BWR Licensing

Enclosures:

1. "Insights Gained from Probabilistic Risk Assessments," S. M. Davis, NRC, September 20, 1984.
2. "Probabilistic Risk Assessment (PRA) Insights," NUREG/CR-4405, Brookhaven National Laboratory, December 1985.

cc: See next page

Mr. Edward G. Bauer, Jr  
Philadelphia Electric Company

Limerick Generating Station  
Units 1 & 2

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

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

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

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

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

Charles W. Elliott, Esquire  
Brose & Poswistilo, 1101 Bldg.  
325 N. 10th Street  
Easton, Pennsylvania 18402

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

Ms. M. Mulligan  
Limerick Ecology Action  
762 Queen St.  
Pottstown, Pennsylvania 19464

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

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

Mr. Gene Kelly  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P. O. Box 47  
Sanatoga, Pennsylvania 19464

cc:

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

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

Kathryn S. Lewis, Esq.  
Municipal Services Bldg.  
15th and JFK Blvd.  
Philadelphia, Pennsylvania 19102

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 - Bevery Bldg.  
3701 North Board Street  
Philadelphia, Pennsylvania 19140

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

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

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

Angus Love, Esq.  
107 East Main Street  
Norristown, Pennsylvania 19402

Helen F. Hoyt, Chairman  
Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dr. Jerry Harbour  
Administrative Judge  
Atomic Safety & Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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

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

an early version of the Limerick internal events PRA and should be considered accordingly. If, after reviewing these reports, you wish to provide comments to the staff, please provide them by February 24, 1986.

Sincerely,

**Original Signed by**

R. E. Martin, Project Manager  
BWR Project Directorate No. 4  
Division of BWR Licensing

**Enclosures:**

1. "Insights Gained from Probabilistic Risk Assessments," S. M. Davis, NRC, September 20, 1984.
2. "Probabilistic Risk Assessment (PRA) Insights," NUREG/CR-4405, Brookhaven National Laboratory, December 1985.

**DISTRIBUTION**

**Docket File**

NRC PDR  
Local PDR  
PD#4 Reading  
RBernero  
Vogler, OELD  
EJordan  
BGrimes  
JPartlow  
RMartin  
EHylton  
ACRS (10)

cc: See next page

PD#4YPM  
REMartin:mn  
01/23/86