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Docket Nos.: 50-352/353

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

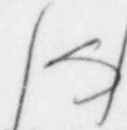
Dear Mr. Bauer:

Subject: Request for Additional Information - Limerick (Geotechnical)

The Geotechnical Engineering Section of the Hydrologic and Geotechnical Engineering Branch has reviewed FSAR Sections 2.5.4 and 2.5.5, including Revision 6 which responds to a related information request of March 3, 1982. The review of this material indicates a need for the additional information delineated in Enclosure 1.

To expedite the review, we request that you provide us with this information within two weeks from receipt of this letter. Any questions concerning this information request should be directed to Dr. Harvey Abelson, (301) 492-9774, the Licensing Project Manager.

Sincerely,



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

Enclosure:
 As stated

cc: See next page

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 PDR ADOCK 05000352
 A PDR

OFFICE	DL:LB#2/PM	DL:LB#2/BC					
SURNAME	HAbelson:pt	ASchwencer					
DATE	7/13/82	7/17/82					

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

Mr. Robert W. Adler
Assistant Counsel
Commonwealth of Pennsylvania, DER
505 Executive House
P. O. Box 2357
Harrisburg, Pennsylvania 17120

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

Lawrence Sager, Esquire
Sager & Sager Associates
45 High Street
Pottstown, Pennsylvania 19464

Joseph A. Smyth
Assistant 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, PA 19149

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

Charles W. Elliott, Esquire
Thomas & Hair
123 North Fifth Street
Allentown, PA 18102

Judith A. Dorsey, Esquire
Limerick Ecology Action
1315 Walnut Street, Suite 1632
Philadelphia, PA 19107

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

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

James M. Neill, Esquire
Associate Counsel for Del-Aware
Box 511
Dublin, PA 18917

Joseph H. White III
11 South Merion Avenue
Byrn Mawr, PA 16801

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

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

John Shniper
Meeting House Law Bldg. & Gallery
Mennonite Church Road
Schuylkill Road (Rt. 724)
Spring City, PA 19475

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

W. Wilson Goode
Managing Director
City of Philadelphia
Philadelphia, PA 19107

William A. Lochstet
119 E. Aaron Drive
State College, PA 16801

Walter W. Cohen
Consumer Advocate
Office of Attorney General
1425 Strawberry Square
Harrisburg, PA 17120

Steven P. Hershey, Esquire
Consumers' Education & Protective
Association
Sylvania House
Juniper & Locust Streets
Philadelphia, PA 19107

Alan J. Noguee
The Keystone Alliance
3700 Chestnut Street
Philadelphia, PA 19104

Sugarman & Denworth
Suite 510
North American Building
121 South Broad Street
Philadelphia, PA 19107

Donald S. Bronstein, Esq.
The National Lawyers Guild
Third Floor
1425 Walnut Street
Philadelphia, PA 19102

Lawrence Brenner, Esq., Chairman*
Administrative Judge
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Richard F. Cole*
Administrative Judge
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Peter A. Morris*
Administrative Judge
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

FSAR Review Questions - Geotechnical Engineering
Limerick Generating Station Units 1 and 2

Prepared by: Dr. Jerome R. Pearring, GES, HGEB

- 241.16
(2.5.4.2) The properties of Foundation Rock underlying all seismic Category I and safety related facilities are not identified in Subsection 2.5.4.2 of the FSAR. In accordance with Regulatory Guide 1.70 provide in this Subsection of the FSAR details of the static and dynamic engineering properties of all foundation rock in the site area including rock that was not excavated to the depth where "hard, competent bedrock" was encountered, as described in the FSAR. Include a description of the methods used to determine the properties and provide a summary table cataloging the important static and dynamic strength test results. Also discuss how the developed data was used in the safety analysis, how the test data was enveloped for design, and why the design values or range of values is conservative.
- 241.17
(2.5.4.2) The properties of foundation soils underlying all seismic Category I and safety related facilities are not identified in Subsection 2.5.4.2 of the FSAR. In accordance with Regulatory Guide 1.70, provide in this subsection of the FSAR details of the static and dynamic engineering properties of all foundation soil in the site area. Include a description of the methods used to determine the properties and provide a summary table cataloging the important static and dynamic strength test results. Also discuss how the developed data ~~were~~ used in the safety analysis, how the test data ~~were~~ enveloped for design, and why the design values or range of values is conservative.
- 241.18
(2.5.4.7) In accordance with Regulatory Guide 1.70 provide, in appropriate subsections of the FSAR, profiles illustrating the detailed relationship of the foundations of all seismic Category I and other safety related facilities to in situ subsurface soil and rock material at the site, including structural fill material. The profile should extend from plant grade to below the deepest foundations and to the depth of hard, competent bedrock. On these profiles, identify the static and dynamic properties of the soil and rock supporting all structures. Discuss, in subsection 2.5.4.7 of the FSAR, the relationship of the actual in situ soil and rock profiles and in situ soil and rock properties to the modeled profiles used to evaluate soil structure interaction effects.