



## PHILADELPHIA ELECTRIC COMPANY

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MAR 18 1983

JOHN S. KEMPER  
VICE-PRESIDENT  
ENGINEERING AND RESEARCH

Mr. Ronald C. Haynes, Director, Region 1  
United States Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Subject: NRC Office of Inspection and Enforcement Letter  
Dated: January 21, 1983 Re: Request for Additional  
Information Re: IE Bulletin No. 81-03 "Flow Blockage  
of Cooling Water to Safety System Components by  
Corbicula sp. (Asiatic Clam) and Mytilus sp. (Mussel)"  
Limerick Generating Station Units 1 and 2  
Dockets Nos. 50-352 and 50-353

File: GOVT 1-1 (Bulletin 81-03)

Dear Mr. Haynes:

The subject letter requests the following additional information  
relative to item 3.9 of Bulletin No. 81-03:

1. The results of studies conducted since the initial response  
to the Bulletin,
2. The details of the program developed for preoperational  
monitoring.

1) Philadelphia Electric Company initiated a program in the summer of 1982 to determine the spatial distribution of Corbicula in relation to water supply sources for Limerick Generating Station (LGS) in the Delaware and Schuylkill Rivers. Sampling was conducted at irregular intervals in August, September, and October, 1982. On the Delaware River samples were collected from 35 locations spaced at 2 to 4-mile intervals from Pt. Pleasant, PA (river mile 157) downstream to the Commodore Barry Bridge, Chester, PA (river mile 88). Schuylkill River samples were collected from 19 locations at 2 to 4-mile intervals from LGS (river mile 48) downstream to the mouth (river mile 0). At each location samples were collected from both shorelines and midstream dependent on substrate type and access. At sample locations in which water was greater than 2.5 feet deep, samples were collected with a pipe dredge (6" diameter x 18" long). The pipe was dragged along the bottom and filled with sediment which was sieved through 1/8-inch mesh wire screen. In shallow water areas, sediment was collected with a shovel and sieved as above, or organisms were collected by hand from the bottom or shoreline. Any bivalve mollusk encountered was preserved in isopropanol and identified in the laboratory.

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IEH

Corbicula was present on the Delaware River from Trenton, NJ (river mile 137, approximately 20 miles downstream of Pt. Pleasant) to the Benjamin Franklin Bridge in Philadelphia (river mile 105). An empty shell was found 3 miles downstream at the Walt Whitman Bridge (river mile 102). On the Schuylkill River Corbicula was present from just upstream of the Norristown Dam (river mile 24) to just downstream of the Fairmount Dam in Philadelphia (river mile 8).

2) A preoperational program similar to that described for 1982 will be undertaken starting in the summer of 1983 on the Schuylkill and Delaware Rivers. Additional emphasis will be placed on determining abundance of Corbicula in areas where they are now known to occur in these rivers. Additionally, the mainstream Perkiomen Creek will be sampled from upstream of the mouth of the East Branch Perkiomen Creek to downstream of Graterford, PA to determine presence or absence of Corbicula. A benthic macroinvertebrate monitoring program to be undertaken on the entire East Branch Perkiomen Creek will provide information on the species composition and abundance of all benthic macroinvertebrates, including Corbicula if it is present.

Sincerely,

*John S. Kemper*

HFH/dg/L/9

Copy to: Edward L. Jordan, Director  
Division of Engineering and Quality Assurance  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

S. K. Chaudhary, U.S. NRC Site Resident Inspector,  
Limerick Generating Station

COMMONWEALTH OF PENNSYLVANIA :  
COUNTY OF PHILADELPHIA : ss.

JOHN S. KEMPER, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company, the holder of Construction Permits CPPR-106 for Limerick Generating Station Unit 1; that he has read the foregoing letter providing additional information relating to the Company's Response to IE Bulletin 81-03 - and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

John S. Kemper

Subscribed and sworn to  
before me this 18<sup>th</sup> day  
of March 1983

Patricia D. Scholl  
Notary Public

PATRICIA D. SCHOLL  
Notary Public, Philadelphia, Philadelphia Co.  
My Commission Expires February 10, 1986