PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-5001

SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

January 29, 1982

Docket Nos. 50-277
50-278

Mr. R. C. Haynes, Director
Office of Inspection and Enforcement
Region I
US Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Haynes:

In our letter of July 2, 1980, from S. L. Daltroff, Philadelphia Electric Company to B. H. Grier, Nuclear Regulatory Commission, we responded to Bulletin 80-10, "Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release To Environment." Our response identified several interfaces with the service water system where we anticipated that sample taps would be required in order to obtain an appropriate sample.

Our investigation of proposed sampling locations has shown that alternative methods of sampling are available and that additional sample taps would neither improve the safety of operation nor be cost effective. Following is our justification for not installing sample taps on three of the systems identified in our response.

1. Spent Fuel Pool Cooling Water Leakage to Service Water:

These six sample taps were to provide a means of detecting spent fuel pool cooling water leakage into the Service Water System through the spent fuel pool cooling water heat exchangers.

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For such leakage to occur, there would have to be heat exchanger tube leakage at the same time that all operating fuel pool service water booster pumps trip.

There are three 50% capacity fuel pool service water booster pumps. Two pumps are normally in operation. Thus, if one pump should trip, service water pressure will still be maintained higher than fuel pool cooling water pressure. In addition, low service water supply pressure to the fuel pool cooling heat exchangers is indicated and alarmed in the control room. If leakage is suspected across a heat exchanger, the heat exchanger can be isolated and a tube side sample can be taken from the existing drain line. A sample can also be taken from the common discharge line downstream of the heat exchangers.

2. RHR Pump Seal Cooling Water Leakage to Service Water/Emergency Service Water:

These eight sample connections were to provide a means of detecting leakage of RHR pump seal cooling water to Service Water or Emergency Service Water through the RHR pump seal coolers.

Since the RHR pump room unit coolers are normally closed to flow, cooling water through the seal coolers may be sampled through the existing drain lines. In addition, there is a continuous radiation monitor on the SW/ESW discharge to the canal.

3. Leakage from Various Recombiner System Components to Service Water:

These two sample connections were to provide a means of sampling Service water to detect a recombiner condenser tube leak, hydrogen analyzer sample cooler leak, or a Recombiner Closed Cooling Water leak.

Service Water pressure will always be higher than pressure on the gas side of the recombiner condenser and the hydrogen analyzer sample coolers. Thus, any leakage will be into the offgas system rather than to Service Water.

In order to contaminate Service Water by leakage from the Recombiner Closed Cooling Water System, it is necessary to have a leak from the compressor gas to the cooling water and also a leak in one of the closed cooling water heat exchangers. The compressor cooler heat exchangers are redundant, therefore Service Water flow to one heat exchanger can be shut off and grab samples can be obtained from their tube side drains.

All other sample taps identified in our response to IE Bulletin 80-10 have been installed or will be completed before the end of the next refuel outage on Peach Bottom Unit No. 2. If you have any questions or require additional information, please don't hesitate to call.

Very truly yours,