

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

January 31, 1986

Docket No. 50-352

Dr. Thomas E. Murley, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

SUBJECT: Special Report - High Pressure Coolant Injection  
(HPCI) System Actuations and Injections - Limerick  
Generating Station - Unit 1

REFERENCE: Technical Specifications 3.5.1.f and 6.9.2

Dear Dr. Murley:

This Special Report is being submitted pursuant to the requirements of Limerick Generating Station Technical Specification 3.5.1.f and 6.9.2. Specification 3.5.1.f states, "In the event an ECCS system is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70". Technical Specification 6.9.2 states that, "Special Reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report".

This report concerns the occurrence of two High Pressure Coolant Injection (HPCI) System actuations and injections into the reactor coolant system during startup testing of Unit No. 1.

Below is a description of each of the HPCI system actuation and injection events.

On November 5, 1985, Startup Test Procedure (STP) 15.5, "HPCI Cold Quick Start At Rated Pressure CST to RPV", was performed. This test involved one injection into the vessel at a flowrate of

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5,600 gpm for 64 minutes. Reactor parameters for the injection were as follows:

reactor thermal power	2052 MWt
dome pressure	962 psig
coolant temperature	525 degrees Fahrenheit

This injection was the second HPCI injection to date.

On November 9, 1985 Startup Test Procedure (STP) 15.5 was performed a second time. This test involved one injection into the vessel at a flowrate 5,600 gpm for 62 minutes. Reactor parameters for the injection were as follows:

reactor thermal power	2192 MWt
dome pressure	963 psig
coolant pressure	527 degrees Fahrenheit

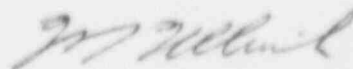
This injection was the third HPCI injection to date.

The total usage factor for these two events for each affected safety injection nozzle is 1.18 N4 for the feedwater nozzles and 1.18 N2 for the core spray nozzles. The projected usage factor for each affected safety injection nozzle, based on the effect of all design transients occurring over the 40 year life of the plant including the increase of each usage factor as a result of these two events, is 7.18 N4 for the feedwater nozzles and 6.07 N1 for the core spray nozzles and therefore is less than 0.70.

There were no adverse effects as a result of this event, since the injections were part of the Startup Test Program and the projected usage factor for each affected safety injection nozzle is less than the Technical Specification limit of 0.70. Consequently, no corrective actions are to be taken.

If you have any questions, do not hesitate to contact us.

Very truly yours,



W. T. Ullrich  
Superintendent  
Nuclear Generation Division

cc: E. M. Kelly, Senior Resident Inspector  
See Attached Service List