



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 15, 1999

Mr. David A. Lochbaum  
Union of Concerned Scientists  
1616 P Street, Suite 310  
Washington, DC 20036

Dear Mr. Lochbaum:

This letter is in response to your October 28, 1999, letter in which you raised three questions about operability of the high-pressure coolant injection (HPCI) system at the James A. FitzPatrick Nuclear Power Plant. The Nuclear Regulatory Commission (NRC) reviewed the manner in which the Power Authority of the State of New York (PASNY) complied with the FitzPatrick Technical Specifications (TS) and we concluded that PASNY adequately complied with the applicable TS for HPCI operability. The NRC discussed these preliminary conclusions with you during an October 29, 1999, telephone call. We note that you acknowledged these conclusions and noted that the October 28, 1999, Daily Event Report (DER) did not provide sufficient information for you to independently reach these conclusions. The three questions that you raised in your letter are answered below.

The following discussion provides background information leading up to the issuance of the referenced DER. During a post trip review of an October 14, 1999, reactor scram, PASNY concluded that the HPCI system operated at too great a turbine speed which caused a high pressure condition in the HPCI discharge piping. During subsequent troubleshooting, PASNY discovered that a mechanism in the HPCI turbine's control oil system was not performing properly and replaced it. To verify this was the root cause, a post maintenance test plan was developed which required testing the HPCI turbine at both low and high pressure conditions. During the low pressure test conducted in the "Startup" mode at approximately 150 psig, the HPCI system responded as expected with no unusual system responses being noted. All acceptance criteria were met. Based on these satisfactory results, operators continued with plant heatup and power escalation into the "run" mode. A subsequent test of the HPCI system was performed at full operating pressure. PASNY initially concluded that this test was acceptable because the system provided the required flow at the required pressure and met all acceptance criteria. A subsequent engineering review of the detailed HPCI system traces noted that the system unexpectedly increased speed over a 2 second interval. After a number of internal discussions between operations and engineering, PASNY concluded that it would be prudent to declare the HPCI system inoperable until the cause of this anomalous response was discovered. The 7 day limiting condition for operation (LCO) was entered based on the time of the initial full operating pressure test. The anomalous response seen during the full operating pressure test had not occurred during low pressure testing.

The NRC resident inspectors, in consultation with NRC regional engineers, have been evaluating the licensee's activities related to HPCI, both in the post trip review phase and during the subsequent startup. The results of this evaluation will be documented in an NRC inspection report.

In your letter, you indicated concern that PASNY was continuing with plant startup and power escalation even with an inoperable HPCI system. This was based on your understanding that

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workers concluded that the initial HPCI test was acceptable, and then later changed their minds after reviewing the detailed traces. As a result, you raised the following three questions:

- 1. Did FitzPatrick violate its Technical Specifications? If not, why not?

No. PASNY complied with their TS. The HPCI low pressure test was acceptable because it met its acceptance criteria. Thus, the system was considered operable and heatup proceeded. Independent NRC review of the detailed traces of the low pressure test noted no anomalies.

- 2. Did FitzPatrick gain use of the 7 day LCO option because it initially called the HPCI test acceptable?

No. Although a previous test had been performed satisfactorily at the low pressure condition, the DER did not indicate it. However, because of this satisfactory test, PASNY was justified in continuing plant heatup, making a mode change, and then doing the full operating pressure test. PASNY discovered an anomalous response during review of the detailed traces for this later test which formed the basis for declaring system inoperability.

- 3. Had the initial test of the HPCI system been determined to be unacceptable, would the plant startup been allowed to proceed by the Technical Specifications?

No. Per TS 3.5.C. , HPCI is required to be operable whenever reactor pressure is greater than 150 psig with reactor coolant temperature greater than 212 °F. If the initial low pressure HPCI test had failed, then the system would have been declared inoperable. FitzPatrick TS 3.0.D prohibits changing modes under these circumstances because all equipment needed for the operation in the "Run" mode would have to be operable prior to the mode change.

Event reports provide a description of an event, usually at a summary level and only with limited background and context. We appreciate the fact that you raised these questions promptly when you found the event information to be disconcerting. Subsequent to our discussion with you in our October 29, 1999, telephone call, you sent us an e-mail (see Enclosure) that indicates we satisfactorily addressed your questions. We appreciate your timely e-mail to provide clarifications to any of the other interested parties.

Sincerely,

Original signed by:

Guy S. Vissing, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Enclosure: E-mail from D. Lochbaum  
dated October 29, 1999

cc w/encl: See next page

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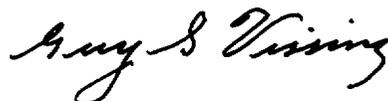
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