OYSTER CREEK



NUCLEAR GENERATING STATION

(609) 693 -6000 PO BOX 388 • FORKED RIVER • NEW JERSEY • 08731

October 26, 1981

Mr. R. R. Keimig, Chief Projects Branch No. 2 Division of Resident and Project Inspection U.S. Nuclear Regulatory Commission Region I 631 Park Avenue King of Prussia, PA 19406

Dear Mr. Keimig:

Subject: Oyster Creek Nuclear Generating Station Docket No. 50-219 IE Inspection 81-08

In accordance with the provisions of 10 CFR 2.201, the enclosure to this letter represents our response to the Notice of Violation regarding the inspection conducted by G. Napuda of your office on March 30 - April 3, 1981.

If there are any questions regarding the enclosed information, please contact me or Mr. Michael Laggart of my staff at (609) 693-6932.

Very truly yours,

Philip R. Clark Vice President - Nuclear Jersey Central Power & Light Executive Vice President -GPU Nuclear

Sworn to and subscribed to before me this 26 day of 2016 for 1981.

Notary Public

PHYLLIS A. KABIS NOTARY PUBLIC OF NEW JERSEY My Commission Expires Aug. 16, 1984

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. Mr. R. R. Keimig

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cc: Director Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D.C. 20555

> Mr. Ronald Haynes, Director Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Region I 631 Park Avenue King of Prussia, PA 19406

Response to IE Inspection 50-219/81-08

The following information provides a response to the Notice of Violation contained in the U.S. Nuclear Regulatory Commission letter dated September 25, 1981.

A. Violation:

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10 CFR 50.55a(g)(4) states, in part, that: "Throughout the service life of a ... nuclear power facility, components ... shall meet the requirements ... set forth in Section XI of the ASME Boiler and Pressure Vessel (B&PV) Code ..."

Section XI of the ASME B&PV Code, Subarticle IWP-3100, Inservice Test Procedure, states, in part, that:

- (1) "An inservice test shall be conducted with the pump operating at a speed adjusted to the reference speed for variable speed drives."
- (2) "In variable resistance systems, the resistance of the system shall be varied until either the measured differential pressure or the measured flowrate shall equal the corresponding reference value."
- (3) "Test quantities shown in Table IWP-3100-1 shall be measured or observed."
- (4) "Each measured test quantity shall then be compared to the reference value of the same quantity. Any deviations determined shall be compared to the limits given in Table IWP-3100-2 and the specified corrective action taken."

Contrary to the above, as of April 3, 1981, required pump operability tests were performed using procedures which did not conform to Section XI of the ASME B&PV Code. Test records reviewed indicated that the latest tests performed, using procedures 610.4.002, 612.4.001, 642.4.001, and 645.4.001 on February 19, 1981, March 1, 1981, March 18, 1981, and February 10, 1981 respectively, did not conform to the above requirements in that:

- The Fire Pumps are engine driven with variable speed potential and Test Procedure 645.4.001 does not establish a fixed reference speed as required by IWP-3100.
- (2) The Core Spray, Liquid Poison, Reactor Building Closed Cooling Water, and Fire Protection are variable resistance systems and the applicable Pump Operability Test Procedures 610.4.002, 612.4.001, 642.4.001, 645.4.001 do not specify that the resistance be varied to equal an established reference value for differential pressure or flowrate as required by IWP-3100.

- (3) The test procedures noted above do not address all test quantities required to be measured or observed.
- (4) The test procedures noted above do not establish reference values or allowable limits for measured quantities in accordance with Table IWP-3100-2.

Response:

In response to the specific noncompliances, the following actions have been taken.

- (1) An independent procedure has been written, i.e., Fire Pump Inservice Test, 645.4.018, and is being used for all fire pump inservice tests. Although the fire pumps have the potential of being a variable speed system, the engine governor has been set and tachometer calibrated to a referenced engine speed as per procedure 645.4.018.
- (2) Within procedures A and B listed below, pump flow is considered the fixed, independent variable, while pump differential pressure is considered the measured, dependent variable. Within Procedure C listed below, pump differential pressure is the fixed, independent variable, while pump flow is the measured, dependent variable. In addition, the below procedures have been written and are tailored to satisfy IWP-3100.
 - A. Core Spray Inservice Test (610.4.012)
 - B. Fire Pump Inservice Test (645.4.018)
 - C. Liquid Poison Pump Operability & Inservice Test (612.4.004)

Because of flow measurement and instrument positioning problems, a test procedure for the Reactor Building Closed Cooling Water (RBCCW) and Service Water System (SWS) could not be completed in compliance with the code. As soon as modifications to the aforementioned areas have been completed, test procedures, identical in format to the above, will be written.

(3) A complete review of all pertinent pump procedures was completed resulting in either revisions or the generation of a completely new procedure. Except for the containment spray pump suction pressure, all inservice test quantities, namely flow rates utilizing either installed or ultra-sonic flow measuring equipment, vibration, and inlet and discharge pressures are considered. Lubrication levels and inlet pressures are observed prior to pump startup and during each test. As soon as modifications to the Containment Spray System have been accomplished, the necessary procedures will be revised to reflect compliance. Because of the degree of sophistication and overall superiority of monitoring bearing condition by vibration spectra rather than bearing temperature, a request for relief was submitted. This method of monitoring pump and bearing condition is being used throughout the industry and has been found to be an excellent indicator for before the fact failures.

(4) Because of continuous operation of both pumps in the RBCCW and SW Systems, and the problems mentioned in paragraph 3, no data base could be formed with any degree of confidence. Our Engineering Department has been tasked to install permanent flow measuring instrumentation for these systems. Therefore, until this modification has been completed, we are unable to comply with IWP-3100-2 for these systems.

As stated in the letter of May 22, 1981 from Oyster Creek to the NRC, by using the revised pump test procedures, inservice tests were conducted during the April-May maintenance outage as well as throughout the summer and will be continued through to the next scheduled refueling outage. From this accelerated test schedule, the objective is to develop a practical statistical data base for the purpose of determining appropriate required action, alert, and acceptable operating ranges for each pump. Upon completion, the test procedures will be revised to include the appropriate operating ranges derived from the data taken during the inservice test period.

B. Violation:

10 CFR 50, Appendix B, Criterion XIII states, in part, "Measures shall be established to control the handling, storage, shipping, cleaning, and preservation of materials and equipment ... to prevent damage or deterioration."

"JCP&L Operational Quality Assurance Manual" requires that procedures be developed, approved, and implemented to control the handling, storage, shipping, cleaning and preservation of materials and equipment using the guidance provided by ANSI N 45.2.2.

The following discrepancies were in noncompliance to the requirements of ANSI N 45.2.2 and are collectively considered examples of a single violation:

(1) ANSI N45.2.2, section 6.4.2, (1), requires that "Items in storage shall have covers, caps, plugs or other closures intact" and section 6.2.4 prohibits "The use or storage of food, drinks ... in any storage area."

Contrary to the above, pipes and valves were found with broken or missing caps or plugs and a soft drink container was found in the Level B storage area. Contrary to the above, four large (approx. 8" diameter) stainless steel pipe sections were found stored on a pallet, in the Level B storage area, with the weld preps on both ends of each section left unprotected.

(3) ANSI N 45.2.2, section 6.2.2 requires that "Cleanliness and good housekeeping shall be enforced at all times in the storage areas. The storage areas shall be cleaned as required to avoid the accumulation of trash, discarded packaging materials and other detrimental soil."

Contrary to the above, the Level B storage area floor and shelves are coated with a layer of what appears to be cement dust or fiberglass powder.

Response:

The violation cites three examples not in compliance with the requirements of ANSI N 45.2.2. Our response, therefore, addresses each example separately.

Example 1

We agree with the noncompliance as stated in that pipes and valves were found with broken or missing caps in a Level B storage area. Our immediate corrective action was to conduct a thorough inspection of the existing inventory and cover, cap or plug those components not having their closures intact. Full compliance with section 6.4.2 of ANSI N 45.2.2 was obtained on April 24, 1981 upon completion of the inventory review.

With the organization of GPU Nuclear, the responsibility for materials management is placed under the Vice President of Administration. Under his direction, and subsequent to IE Inspection No. 81-08, formal procedures have been placed into effect which among other subjects specifically address ANSI requirements to be followed. The procedures, which will be issued as controlled documents to all storeroom personnel, also require a weekly inspection of the storage areas that emphasizes compliance to the ANSI standard. In addition to the procedure issuance, all warehouse personnel have been trained in the requirements of ANSI N 45.2.2. The formalized procedures and training should ensure that violations in this area will not recur.

The noncompliance with regard to a soft drink container being found in a Level B storage area is correct as stated. As identified, all warehouse personnel have been instructed in the requirements of ANSI N 45.2.2. It is believed that the specific soft drink container found may have been brought into the area by an escorted visitor. Warehouse personnel have been instructed to be more observant with what is brought into the storage areas when escorting personnel. Compliance is presently being obtained and with the increased attention our procedures place on ANSI N 45.2.2 requirements, future violations in this area should not recur.

Example 2

ANSI N 45.2.2, Section 3.2 requires that for items in storage "Weld end preparations shall be protected against corrosion and physical damage".

We agree that the items in question did not have covers, caps, or plugs as required by Section 6.4.2 of ANSI N 45.2.2 and our response to Example No. 1 provides the corrective action taken to ensure compliance. We take exception, however, with the statement in the example that the weld end preps were left unprotected. The fact that the items were stored on a pallet in a Level B storage area is adequate protection against the effects of corrosion or physical damage.

Example 3

We agree with the noncompliance as stated.

As identified in the body of the inspection report, a contributing factor which aggravates our housekeeping efforts is the deteriorating concrete floor in the Level B storage area. Monies to make the necessary repairs have been budgeted for 1982 and once the repairs are effected, the level of cement dust should be reduced significantly.

Full compliance is being achieved by increased housekeeping efforts which include more frequent sweeping and cleaning of shelves. The addition of personnel to the warehouse staff provides the capability to increase and maintain our efforts in this area.

The eventual reduction in the amount of dust and the increased housekeeping efforts should ensure that future noncompliances in this area will not recur. In addition to the specific corrective actions listed in the above examples and in an effort to provide a more effective warehousing function, the position of warehouse foreman has been created. The position supervises the everyday operations of the warehouse and has proven to be an asset in the fulfillment of responsibilities delimented in our Operational Quality Assurance Manual.

We have reviewed our corrective action responses to IE Inspection 79-05 with regard to the recurrent nature of this violation. Specifically, the recurrent items include:

- 1. An open soft drink can was found in the QA storage area, and
- Valves and pipes were found with open ends not plugged, sealed, or capped.

The ineffectiveness of our corrective actions can, in part, be attributed to failing at that time to establish formal procedures for warehouse activities. The changes in warehouse personnel from 1979 have been significant and "Storeroom instructions", as referred to in our 79-05 response, may not have conveyed the same emphasis to new personnel as it did to those present in 1979. As identified in the body of this violation response, formal procedures are now in effect and a continuity of instructions will be maintained via their utilization.