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ATTACHMENT

Docket No. 50-247
LER 83-026/03X-1

Consolidated Edison Company of New York, Inc.
Indian Point Station Unit No. 2

On July 6, 1983, during normal operation, the charcoal filter outlet valve FCV-22-4 of No. 22 fan cooler unit did not open during normal surveillance testing (Technical Specification 3.3.B.2.a). The pneumatic control piping for this one valve was modified during the 1982 refueling/maintenance outage. A containment entry was made to investigate why the outlet valve did not operate.

Upon observation of the action of solenoids SOV 1296 and SOV 1296A, which are the control solenoids for FCV-22-4, it was determined that their inlet and outlet ports were connected in reverse. It was also found that the needle valve/check valve combination in the timing portion of the pneumatic control piping for seat ring sealing was also installed in reverse during construction. The instrument air filter for this equipment, although installed in the right direction, was mounted upside down.

The two solenoid valves and the needle valve/check valve combination were reinstalled and adjusted correctly and the instrument air filter was inverted. The complete control system was tested satisfactorily both locally and from the control room.

Each charcoal filter for the fan coolers is provided with a total of three valves (i.e., inlet, outlet and bypass). During normal operation, the bypass is open and the inlet and outlet valves are closed. Instrument air is required to maintain the valves in these positions. The valves are provided with an inflatable seat around the valve disk to provide a tight shutoff when in the closed position.

The valves are designed to go to their incident mode (inlet and outlet open, bypass closed) upon safety injection, manual signals, loss of instrument air or when the solenoid valves are de-energized. In the incident mode, containment air flow passes through the charcoal filters as would be required to remove radioactive iodine from the containment atmosphere during an accident.

The post maintenance test and six successive monthly surveillance tests were successfully performed on the valve prior to the failure to open on July 6, 1983. It is possible that sufficient instrument air was depleted from the valve actuator to facilitate valve opening during these tests despite improper installation.

Investigation of the causes of the deficiencies in the implementation of this plant modification has led to the following conclusions:

1. Clearer instructions in the modification procedure would better insure that the pneumatic control piping would be built in accordance with the design;
2. A quality control hold point was not observed by the installer;
3. The functional test of the control piping was marginal in its ability to confirm that the modification reasonably produced expected results.

Corrective actions for each contributing factor above, taken to preclude the recurrence of such events in the future are given below:

1. To better insure that modification packages provide suitable documentation of the required quality of work, Engineering Procedure OP-290-1 was revised October 1, 1983 to include the requirement that modification packages contain full construction details, vendor furnished information (including drawings), specifications and support and information drawings as applicable.
2. Sufficient procedures exist to control inspection hold points and administration of Construction work packages. Special emphasis has been placed on adherence to these procedures by contractor personnel in meetings held with them and as part of their training program.
3. As an interim measure, the Test and Performance Section is making more extensive reviews of modification packages to identify any pre-functional tests which must be performed by the installer to ensure that the modification reasonably produces expected results. The improvement of modification control had been under active review prior to this event. One of the planned objectives of this review is the revision of appropriate Engineering and Nuclear Power procedures to institute a review by cognizant organizations of a modification procedure from the scoping document stage to the procedure issuance stage. This review will insure that a suitably documented modification procedure is written and that it satisfactorily implements the modification. Included will be reviews by the Test and Performance Section to determine that pre-functional checks or tests and inspections are properly specified at the appropriate point in the modification prior to a functional test, and that appropriate functional test criteria have been provided prior to the installation of the modification. These actions assure that post-maintenance tests are written to

confirm that the modification reasonably produced expected results. Engineering procedures that implement these actions were revised as of October 7, 1983. Nuclear Power procedures were scheduled to be revised March 1, 1984. (The planned improvement of modification control is being implemented).

In addition, to further insure that modifications do not reduce the safety of operations, the Station Nuclear Safety Committee now reviews all post-maintenance tests not previously reviewed.

John D. O'Toole
Vice President

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March 29, 1984

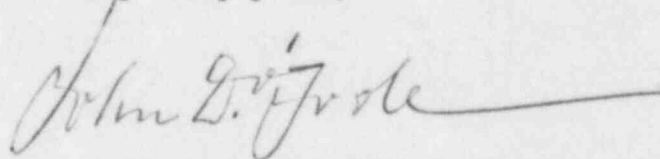
Re: Indian Point Unit No. 2
Docket No. 50-247
LER-83-026/03X-1

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

Dear Dr. Murley:

Transmitted herewith is an updated report for Licensee Event Report
LER-83-026.

Very truly yours,



attach.

cc: Document Control Desk (2 copies)
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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