Jersey Central Power & Light Company

MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N.J. 07960 • 539-6111

April 20, 1972

Dr. Peter A. Morris, Director
Division of Reactor Licensing
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Dr. Morris:

Subject: Oyster Creek Station
Docket No. 50-219
Loss of Secondary Containment Integrity

The purpose of this letter is to report to you a violation of a Limiting Condition for Operation in that Secondary Containment Integrity was not maintained as required by Specification 3.5.B.1. of our Technical Specifications.

On April 11, 1972, during performance of a routine weekly surveillance test of isolation of the Reactor Building and initiation of the Standby Gas Treatment System due to simulated high radiation levels on the Reactor Building Operating Floor and in the Reactor Building Ventilation Exhaust ducts, the supply dampers for the Reactor Building Ventilation System failed to close as required. As a result of this failure, Secondary Containment was not in effect.

Isolation of the Reactor Building Ventilation System supply damper is initiated by "b" contacts from the Reactor Building Ventilation System supply fans, SF1-12, SF1-13, and SF1-14 wired in series. However, due to an electrical problem with supply fan 1-13, which resulted in the discovery that the motor was shorted, its supply breaker was racked-out. Thus, the logic control circuit for the dampers was "opened", the normal situation with the fans in operation. When the remaining fans were tripped during the surveillance test conducted at 2:00 a.m. on April 11, 1972, the logic control circuit was still open, the damper control relays remained de-energized, and the dampers did not close.

The logic circuit was restored by disconnecting the motor leads from the breaker and racking-in the breaker. At 9:20 a.m. on April 11, 1972, an operability check of Reactor Building Isolation was conducted and proved to be satisfactory. A caution tag was placed at the fan control switches in the Control Room to notify operators that if a supply fan breaker is racked-out, the Reactor Building supply damper isolation control logic is defeated unless a jumper is installed in the breaker cabinet. A similar caution note is being stenciled locally on the supply fan breakers.

As noted in the FDSAR, the primary objective of the Secondary Containment System is to minimize ground level release of airborne radioactive materials and to provide for controlled elevated release of the building atmosphere under accident conditions. The containment systems, Primary and Secondary, provide the principle mechanism for mitigation of accident consequences. The off-site accident consequences, however, are relatively insensitive to the Reactor Building in-leakage rate as long as the Standby Gas Treatment System can maintain the building at a vacuum. In this particular instance, the supply and exhaust fans tripped, the exhaust dampers closed, and the Standby Gas Treatment System was initiated. With the above situation, the air supply to the building was not only via the various in-leakage paths but also, and no doubt primarily, via the Reactor Building supply dampers.

Any accident conditions postulated that require secondary containment in determining environmental releases would, under these conditions, have a second path permitting release of the Reactor Building air at approximately a 60-foot elevation.

In order to prevent a reoccurrence of this incident, a circuit design change will be implemented that will permit a Reactor Building supply fan breaker to be racked-out for maintenance without defeating the Reactor Building supply damper isolation logic. Until this design change can be implemented, a standing order will be issued instructing plant personnel in the appropriate practice to be followed to avoid defeating the Reactor Building supply damper isolation logic.

Very truly yours,

Ivan R. Finfrock

Ivan R. Finfrock, Jr.
Manager, Nuclear Generating Stations

IRF/pk
Enclosures

cc: Mr. J. P. O'Reilly, Director
Division of Compliance, Region I