

William J. Cahill, Jr.
Vice President

Consolidated Edison Company of New York, Inc.
4 Irving Place, New York, N Y 10003
Telephone (212) 460-3819

September 10, 1973

Re: Indian Point Unit No. 2
AEC Docket No. 50-247

Mr. James P. O'Reilly
Directorate of Regulatory Operations
Region 1
U. S. Atomic Energy Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. O'Reilly:

In accordance with the request of your July 18, 1973 R. O. Bulletin 73-2, Consolidated Edison Company has reviewed the design of the control circuits for the containment ventilation system valves for Indian Point Unit No. 2. Following are the results of our review.

Containment ventilation is attained by utilizing penetrations provided for this purpose, specifically, the 36" diameter purge supply and exhaust lines, and the 10" diameter pressure relief line. Each of the purge and exhaust penetrations has redundant isolation valves, one inside and one outside of containment, with the pressure relief line having one valve inside and two valves outside of containment. Each of these isolation valves is air operated and fails closed on loss of air supply or interruption of electrical power (i.e., electrical power to the solenoid valve that controls supply air to the related isolation valve). The control circuits for these solenoid valves require that electrical power be maintained to the solenoid valves to keep their related isolation valves in the open position.

For the purge supply and exhaust isolation valves, the control circuit includes redundant manual control switches, which are located in the central control room, plus separate redundant automatic isolation signals to close the isolation valves. The two manual control switches and the two separate automatic isolation signals are all connected in series in this control circuit. As the isolation valves are of the fail close type upon interruption, or loss, of electrical power, and because there are four separate means provided (two manual switches and two automatic signals, any of which will open the electrical circuit, thus interrupting electrical power), we consider that this circuit has sufficient separate features to assure that containment isolation is not compromised. No failure of a single control switch or any other single

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control device could result in the simultaneous failure of the redundant supply valves or redundant exhaust valves to isolate the containment upon initiation of appropriate automatic or manual isolation signals.

The isolation valves in the containment pressure relief line are operated by a separate control circuit that is similar to the one for the purge supply and exhaust isolation valves. This circuit has sufficient separate features to assure that containment isolation is not compromised (two manual switches and two automatic signals, any one of which will open the electrical circuit, thus interrupting electrical power). No failure of a single control switch or any other single control device could result in the simultaneous failure of the redundant isolation valves in the containment pressure relief line to isolate the containment upon initiation of appropriate automatic or manual isolation signals.

As a result of the above review, we conclude that the present circuitry for operation of the containment ventilation isolation valves is acceptable. Accordingly, no changes are considered necessary.

Very truly yours,



William J. Cahill, Jr.
Vice President

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