**William J. Cahill, Jr.**
Vice President

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4 Irving Place, New York, N Y 10003
Telephone (212) 460-3819

May 28, 1980

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

Director of Nuclear Reactor Regulation
ATTN: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Schwencer:

Attachment A to this letter provides our partial response to the request for additional information concerning the electrical override/bypass aspects of the containment purge system contained in Mr. A. Schwencer's April 23, 1980 letter.

It is presently anticipated that a response to the remainder of your information request will be provided by July 15, 1980.

Also as discussed in our March 11, 1980 letter and as requested by the Commission's September 27, 1979 letter, our valve qualification program for the containment purge and pressure relief isolation valves is continuing on an expedited basis. The status of this qualification program together with the status of our evaluation considering the issues contained in Standard Review Plan 6.2.4 Rev. 1 and the associated Branch Technical Position CSB6-4 will be provided by September 2, 1980.

Should you or your staff have additional questions, please contact us.

Very truly yours,

William J. Cahill, Jr.
Vice President

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Attachment A

Partial Response to NRC's April 23, 1980 Request for Additional Information concerning Electrical Override/Bypass Aspects of the Containment Purge System

Consolidated Edison Company of New York
Indian Point Unit No. 2
Docket No. 50-247
May 1980

Question 1.a

With regard to the safety injection (SI) circuits:

Identify all control devices and circuits that actuate relay SIM-1

Answer

Relay SIM-1 is actuated by the manual safety injection push-buttons only

Question 1.b(i)

With regard to the safety injection (SI) circuits;

Identify all of the systems that are automatically actuated (SIA-1).

Answer

The following systems are automatically actuated. (SIA-1)

- Containment Isolation Phase A
- Feedwater Isolation
- Component Cooling Pumps 21 and 22
- Valves 851 A and 851 B (HHSI Pump 22 crossover)
- Valves 746 and 747 (RHR loop discharge stop valves)
- Valves 822 A and 822 B (Component cooling water to RHR heat exchanger stop valves)
- Valves 856 A,C,D and E (HHSI Branch line stop valves)
- Valves 1821, 1822 A and B and 1831 (Boron Injection Tank discharge valves)
- Containment Recirculating Fans Air Flow Alarms
- 52/2AT3A (Bus 2A-3A tie)
- 480 volt switchgear 21 and 22 (interlocks)
- Reactor trip circuitry
- SOV-1171 (Containment cooling water valve)
- SOV-1276 (Diesel Generator Cooling water valve)
- Containment cooling water low flow alarm
- Diesel start circuitry
- Containment Recirculating Air units flow control valves
- Auxiliary Feedwater Pumps
- Control Building Air Conditioning

Question 1.b(ii)

With regard to the safety injection (SI) circuits:

Identify all of the systems that are actuated by relay SIM-1

Answer

Refer to answer 1.b(i)

Delete: Containment Isolation Phase A

Add: Containment Ventilation Isolation

Question 2a

Describe the following components, modules and/or sub-systems in accordance with the information requirements of Section 7.3 of Regulatory Guide 1.70. (This information shall include but not be limited to; type, purpose, location and power supply as well as suitable drawings).

The radiation monitor and sensor for "BF Auxiliary Relay";

Answer

"BF" is the generic designation for a particular model of Westinghouse relay used extensively throughout plant circuitry and is not a specific plant relay designation. These relays are located in the control room panels. The information provided in question 2b however should satisfy your information requirements in this area.

Question 2b

Describe the following components, modules and/or sub-system in accordance with the information requirements of Section 7.3 of Regulatory Guide 1.70. (This information shall include; but not limited to; type, purpose, location and power supply as well as suitable drawings).

Radiation monitors:

(i) R11
(ii) R12
(iii) RIA-011
(iv) RIA-012

Answer

(i) Radiation monitor R11 consists of an hermetically sealed-photomultiplier tube scintillation sodium Iodide crystal combination used to monitor containment air particulates. Air samples are taken from the inlet of containment recirculation fan coolers 21 and 22 and passed through a penetration to the analyzer located on the 68' elevation in the penetration area. Power supply to the monitor is provided from vital 120VAC instrument bus number 24 via Rack no. D2 in the control room.

(ii) Radiation monitor R-12 consists of a Geiger-Muller tube used to monitor containment radio-gas. After leaving the R11 analyzer the containment air sample is passed to the R12 analyzer for radio-gas analysis and then returned to containment through another penetration. The R12 analyzer is located in the same area as the R11 monitor. Power supply to the R12 monitor is also provided from instrument vital 120VAC bus number 24 via rack no. D2 in the control room.

(iii) Relay RIA-011 is provided to isolate the containment purge and pressure relief lines upon receipt of a high containment particulate radiation signal from the R-11 monitor. Containment ventilation isolation (system level) is also affected from relay RIA-011. Power supply to this relay, which is located in Rack no. D2, console no. 2, (in the control room) is via instrument bus no. 24

(iv) Relay RIA-012 is provided to isolation the containment purge and pressure relief lines upon receipt of a high containment radio-gas signal from the R-12 monitor. Containment ventilation isolation (system level) is also affected from relay RIA-012. Power supply to this relay, which is located in Rack no. D2, console no. 2, (in the control room) is via instrument bus no. 24

Question 2c

Describe the following components, modules and/or sub-systems in accordance with the information requirements of Section 7.3 of Regulatory Guide 1.70. (This information shall include; but not be limited to; type, purpose location and power supply as well as suitable drawings).

Switches 1/PR and 1/CBP

Answer

Both switch 1/PR and 1/CBP are two position spring return switches located on a panel in the fan house at elevation 42'. Switch 1/PR provides local control of containment pressure relief valve number PCV-1190 (Train A) inside containment. Switch 1/CBP provides local control of containment purge valves FCV-1170 and FCV-1172 inside containment (Train A). Power supplies to switch 1/PR and 1/CPB are via instrument Bus 21,circuits 18 and 16, respectively.

Question 3

Describe the function of each of the interlocks shown on Drawing B208412-1. Also explain why only CVI Train B has the interlocks shown on the cited drawing.

Answer

The interlocks shown on drawing B208412-1 have been installed to preclude resetting of Containment Isolation-Phase A with the various pieces of safeguards equipment in other than the position required to fullfill their safety function.

Containment Ventilation Isolation-Train A safeguards valves will not reopen upon resetting due to remote spring return switches which require manual operation from a panel in the fan room at elevation 42', thus assuring these valves remain in their safeguards position. Containment Ventilation Isolation-Train B was not provided with the remote manual switches included in Train A, thereby necessitating the installation of interlocks as shown on the cited drawing to preclude possible automatic reopening after resetting.

Question 4

Provide 3 copies of each of these following drawings

a) C208413
b) 9321-LL-3127 Sheet 1
c) 9321-LL-3127 Sheet 7

Answer

Three copies of each of the above drawings are enclosed

Question 5

Describe the location of the reset and bypass switches that are a part of any engineered safety feature circuit. Also provide this information for the switches that actuate relay SIM-1 and switches 1/PR and 1/CPB

Answer

Reset switches for the safety injection system are located on supervisory panel SB2 in the control room

Reset switches for the containment spray system are located on supervisory panel SB1 in the control room

Reset switches for containment isolation phase A and B, and containment ventilation isolation are located on supervisory panel SN in the control room

The switches that actuate relay SIM-1 are located on supervisory panel SB2 in the control room. Switches 1/PR and 1/CPB are located in the fan room at elevation 42' in the Fan House which is adjacent to the Primary Auxiliary Building.