Indian Point 3
Nuclear Power Plant
P.O. Box 215
Buchanan, New York 10511
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New York Power Authority

Robert J. Barrett
Site Executive Officer

August 28, 1997
IPN-97-115

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
License No. DPR-64
Licensee Event Report 97-014-00
Lack of Weld Channel and Containment Penetration Pressurization System Air Supply to Airlock Shaft Seals, Equalizing Ball Valve Flanged Joints and Containment Penetration Welds, a Condition Prohibited by Technical Specifications due to Personnel Error

Dear Sir:

The attached Licensee Event Report (LER) 97-014-00 is submitted as required by 10 CFR 50.73. This event is of the type defined in 10 CFR 50.73 (a)(2)(i)(B).

The corrective actions have been completed and no commitments are made in this LER.

Very truly yours,

Robert J. Barrett
Site Executive Officer
Indian Point 3 Nuclear Power Plant

Attachment

cc: see next page

cc: Mr. Hubert J. Miller
Regional Administrator
Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

INPO Record Center
700 Galleria Parkway
Atlanta, Georgia 30339-5957

U.S. Nuclear Regulatory Commission
Resident Inspectors' Office
Indian Point 3 Nuclear Power Plant

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Indian Point 3	05000286	1 OF 4

TITLE (4) Lack of Weld Channel and Containment Penetration Pressurization System Air Supply to Airlock Shaft Seals, Equalizing Ball Valve Flanged Joints and Containment Penetration Welds, a Condition Prohibited by Tech Specs Due to Personnel Error

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
08	05	97	97	-- 014 --	00	08	28	97		05000
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	N
POWER LEVEL (10)	000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

20.402(b)		20.405(c)		50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)	OTHER
20.405(a)(1)(iii)	✓	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
Charles Bristol, Senior Maintenance Engineer	(914) 736-8635

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).		X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

This Licensee Event Report (LER) describes events pertaining to the lack of Weld Channel and Containment Penetration Pressurization System (WCCPPS) air supply to the 80' and 95' airlock shaft seals, equalizing ball valve flanged joints and containment penetration welds. At the time of discovery of these events, the plant was in cold shutdown condition due to a refueling outage. On August 5, 1997, at approximately 1852 hours, during installation of the 80' airlock shaft seal upgrade, it was discovered that the weld channel port to the existing door mechanism shaft seal had been blocked by the seal housing flange gasket. This condition prevented weld channel supply to the airlock door shaft seal. On 8/7/97, at approximately 1655 hours, the Authority discovered that the 3/4" pipe associated with 80' inner door seal pressure gauges PI-1434 A & B that directly penetrates the 80' airlock inner bulk head did not have WCCPPS air supplied to the containment boundary weld. It was also discovered that the equalizing ball valve flanged joints had no WCCPPS supply. An extent of condition review indicated that the same discrepancies existed on the 95' airlock. Corrective actions have been completed that ensure supply of WCCPPS air to the 80' and 95' airlock shaft seals, equalizing ball valve flanged joints and containment penetration welds. The purpose of WCCPPS is to prevent potential leakage of the Vapor Containment air to the surrounding environment and eliminate offsite doses in the event of a design basis accident. However, without WCCPPS, offsite doses would still be within the limits of 10 CFR Part 100. The cause of these events was personnel error. Repairs were made to correct these deficiencies. These events had no effect on the health and safety of the public.

Note: The Energy Industry Identification System Codes are identified within the brackets { }

DESCRIPTION OF EVENT

A vendor was contracted to perform airlock {AL} shaft seal upgrade and several maintenance activities on the 80' and 95' airlocks(the plant was in cold shutdown condition due to a refueling outage). These activities consisted of replacing the teflon seals used in the mechanism shaft and ball valve and performing preventive maintenance on each airlock. During these activities discrepancies were noted concerning the Weld Channel and Containment Penetration Pressurization System (WCCPPS) {BD} air supply to the airlocks and are discussed below:

The WCCPPS prevents vapor leakage, through mechanical joints and in the event there are weld failures during a LOCA, from the containment to the surrounding environment by supplying a regulated supply of pressurized air to containment penetrations and liner weld channels. The pressure of supply air is maintained in excess of the containment accident pressure, thereby ensuring that there is no out-leakage through the penetration and liner welds.

WCCPPS air is supplied to the flat gaskets between the airlock bulkhead mounting flanges and the shaft seal housings and is diverted by a group of holes in the flat gaskets to an annulus located between the shaft seals. It was noted during the removal of the shaft seal housing that the flat gasket did not have the appropriate holes to permit WCCPPS air to be supplied to the shaft seals for the 80' and 95' airlocks (Deviation Event Report (DER) Nos. 97-1972 & 97-2050). This condition prevented WCCPPS pressurized air from being supplied to the shaft seals.

The second event pertains to the lack of WCCPPS air supply to the 80' and 95' airlock penetration welds for the 3/4" pipe associated with the inner door seal pressure gauges PI-1434 A & B and PI-1436 A & B . This pipe directly penetrates the airlock inner bulkhead and did not have WCCPPS air supplied to the containment boundary welds. The original plant design supplied two pressure gauges to provide indication of adequate pressure in the airlock door seals. A modification was made to include a 3/4" pipe penetration to permit installation of pressure gauges PI-1434 A & B and PI-1436 A & B on both sides of the containment side airlock bulkhead for the 80' and 95' airlocks. However, subsequent revision to the modification during installation resulted in the containment penetration welds not being connected to WCCPPS air supply (DER Nos. 97-1985 & 97-2049). The third event pertained to the lack of WCCPPS air supply to the equalizing ball valve flanged joints for the 80' and 95' airlocks.

CAUSE OF EVENT

The cause for weld channel blockage to the shaft seals and equalizing ball valve flanged joints was personnel error. The incorrect gaskets were installed in the shaft seal housing flanges which prevented weld channel air supply to the shaft seals. Since the shaft seals have no maintenance history, it is concluded that the personnel error occurred during original plant construction.

The lack of WCCPPS air supply to the containment penetration welds for the 3/4" pipe associated with the pressure gauges PI-1434 A & B and PI-1436 A & B for the 80' and 95' airlocks respectively was due to personnel error. This error occurred when a revision was made to the modification to include installation of the pressure gauges without consideration of weld channel configuration requirements.

CORRECTIVE ACTION

The correct gasket design was installed and tested on all 80' and 95' shaft seal housing flanges under the Work Request 97-02709 series which was performed to eliminate teflon materials in the airlock shaft seals. The equalizing ball valve flanged joints on both airlocks were reassembled with the proper gasket configuration. The containment penetration welds have been connected to WCCPPS pressurized air supply. The current design and modification controls in place should preclude these events from recurring.

ANALYSIS OF EVENT

These events are reportable under 10 CFR 50.73(a)(2)(i)(B) for operation in a condition prohibited by the Technical Specifications. The prohibited condition is that the reactor shall not be brought above the cold shutdown condition unless all required portions of the four WCCPPS zones are pressurized above 43 psig. Since original installation until the current outage, the WCCPPS configuration did not meet the requirements.

A review of Licensee Event Reports (LER) for the last 2 years for events related to WCCPPS identified the following LERs: LER 96-010, and LER 95-021.

SAFETY SIGNIFICANCE

There is no effect on the health and safety of the public. Even though WCCPPS is an engineering safety feature, no credit is taken for its operation in calculating the amount of radioactivity released for offsite dose evaluations. The offsite dose calculations demonstrate that the results are well within the limits of 10 CFR Part 100. Furthermore, the containment airlocks are leak tested in accordance with the Technical Specifications and 10 CFR 50 Appendix J requirements. Acceptable leak rates were found on both containment airlocks during the most recent testing which indicates that the integrity of the shaft seal, the equalizing ball valve flanged joints and the penetration weld were satisfactory prior to the discovery of the WCCPPS deficiencies.