(7-77)

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	N J O C P 1 (2) LICENSEE CODE	0 0 - 0 0 0 0 0 - 0 0 (3) LICENSE NUMBER	4 1 1 1 1 (4) LICENSE TYPE	(5) CAT		
CON'T 0 1	REPORT SOURCE L (6)	0 5 0 0 0 2 1 9 (7) DOCKET NUMBER	0 8 0 7 7 9 (8) EVENT DATE	0 9 0 6 7 9 (9) REPORT DATE		

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On August 7, 1979, during routine surveillance of Core Spray System I,
0 3 parallel isolation valve V-20-15 became inoperable in the open position.
0 4 The circuit breaker for the motor operator tripped when the actuation
0 5 pressure sensor was reset. A parallel valve V-20-40, which is actuated
0 6 by the same pressure sensor, operated normally. Valve stroking currents
0 7 were read with the breaker reset and found to be normal. The valve was
0 8 stroked to determine operability and resurveilled without incident.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	S F (11)	X (12)	Z (13)	C K T B R K (14)	A (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 9	—	0 2 8	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	G 0 8 0 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The apparent cause of the occurrence was the high motor current drawn
1 1 when a valve close signal was inadvertently initiated during the period
1 2 when the valve was still stroking open. All associated electrical
1 3 components were functionally tested and found satisfactory. The sur-
1 4 veillance procedure was revised. Motor current tests were performed.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	NA	B (31)	Operator observation.

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

943 279

7909120 521

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	Y (44)	Weekly news release - september 12, 1979.	

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/79-28/3L-0

Report Date

September 6, 1979

Occurrence Date

August 7, 1979

Identification of Occurrence

Core Spray System I parallel isolation valve V-20-15 became inoperable in the open position when the motor breaker tripped. This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.B.2.

Conditions Prior to Occurrence

The plant was operating at steady state power.

Power:	Core, 1930 MWt
	Electric, 641 MWe
Flow:	Recirculating, 15.2×10^4 gpm
	Feedwater, 7.143×10^6 lb/hr
Stack Gas:	34,100 µci/sec

Description of Occurrence

On Tuesday, August 7, 1979, at approximately 2:00 p.m., during routine surveillance of Core Spray System I, parallel isolation valve V-20-15 motor circuit breaker tripped when the actuation pressure sensor was reset.

The parallel valve V-20-40, which is actuated by the same pressure sensor, operated normaliy. The circuit breaker for V-20-15 was meggered as were the motor and cables with no abnormal conditions found. Valve stroking currents were read with the breaker reset and the tripping elements were tested to determine their setpoints. All parameters were found to be normal. The valve was stroked to determine operability and resurveilled without incident.

943 230

Apparent Cause of Occurrence

The apparent cause of the occurrence was the inadvertent initiation of a valve close signal during the period when the valve was still stroking open. This occurs when the valve open signal is removed in less time than is required for the valve to assume the full open stop position. The instantaneous reversal in direction of the motor operator is not the intended mode of operation. Reversal of motor inertia while driving requires greater torque causing greater than normal starting current to be seen by the motor circuit breaker. The added current is believed to have caused the circuit breaker to trip.

Analysis of Occurrence

The safety significance of this event is considered to be minimal, since each of the parallel isolation valves are designed for rated system flow and the alternate parallel valve, V-20-40, functioned as designed. Had the Core Spray System been required at the time the valve became inoperable, the system would have operated as intended.

Corrective Action

Initial corrective action consisted of the testing of the breaker and electrical valve components to assure proper functional capability and designed setpoints. In addition, the surveillance procedure was revised to include more specific guidance to avoid inadvertent operational modes.

Subsequently, a test was conducted by the electrical staff to demonstrate the changes in current magnitude during simulated identical conditions. The starting current during an instantaneous reversal in motor direction was found to be approximately 20% higher than normal starting current which tends to confirm the suspected cause for breaker trip. The same current/time traces were made under similar conditions for parallel isolation valve V-20-40. Since the results show the identical response found for V-20-15, we are assured that such response is not indicative of component failure or abnormal reactions of circuit elements.

Failure Data

None