PALISADES PLANT

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1	M I P A L 1 (2)	0 0 - 0 0 0 0 0 - 0 0 (3)	4 1 1 1 1 (4)	(5)
	LICENSEE CODE	LICENSE NUMBER	LICENSE TYPE	CAT 58

CON'T

0 1	REPORT SOURCE L (6)	0 5 0 0 0 2 5 5 (7)	1 0 1 2 7 9 (8)	1 0 2 6 7 9 (9)
		DOCKET NUMBER	EVENT DATE	REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 During testing of pressurizer code safety valves, it was determined

0 3 that the lift settings for two of the valves were 2897 psia (RV 1039)

0 4 and 2462 psia (RV 1040). T.S. 3.1.7A requires the lift settings to be

0 5 between 2500 psia and 2580 psia (+/- 1%). The lift setting of the

0 6 third code safety valve was within specs. No similiar failures have

0 7 occurred in the past. All three pzr code safeties were tested this out-

0 8 age by using steam as the test fluid.

0 9	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
	C J (11)	X (12)	Z (13)	V A L V E X (14)	X (15)	B (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 9	–	0 4 2	/	0 1	T	–	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
E (18)	X (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	N (25)	D 2 4 3 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Disassembly of RV 1039 revealed that an alignment pin was mispositioned.

1 1 This may have caused the out of spec condition of that valve. In

1 2 addition, info from the vendor reveals that testing with cold nitrogen

1 3 can result in up to 10% errors when compared to the lift settings with

1 4 steam as the test medium. Future testing will be done with steam.

1 5	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
	H (28)	0 0 0 (29)	NA	B (31)	Test Results

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

PERSONNEL EXPOSURES

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

PERSONNEL INJURIES

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

7910300198

LOSS OF OR DAMAGE TO FACILITY (43)

1 9	TYPE	DESCRIPTION
	Z (42)	NA

PUBLICITY

2 0	ISSUED	DESCRIPTION (45)	NRC USE ONLY
	N (44)	NA	

Attachment to LER 79-042/01-T-0
Consumers Power Company
Palisades Nuclear Plant
Docket 50-255

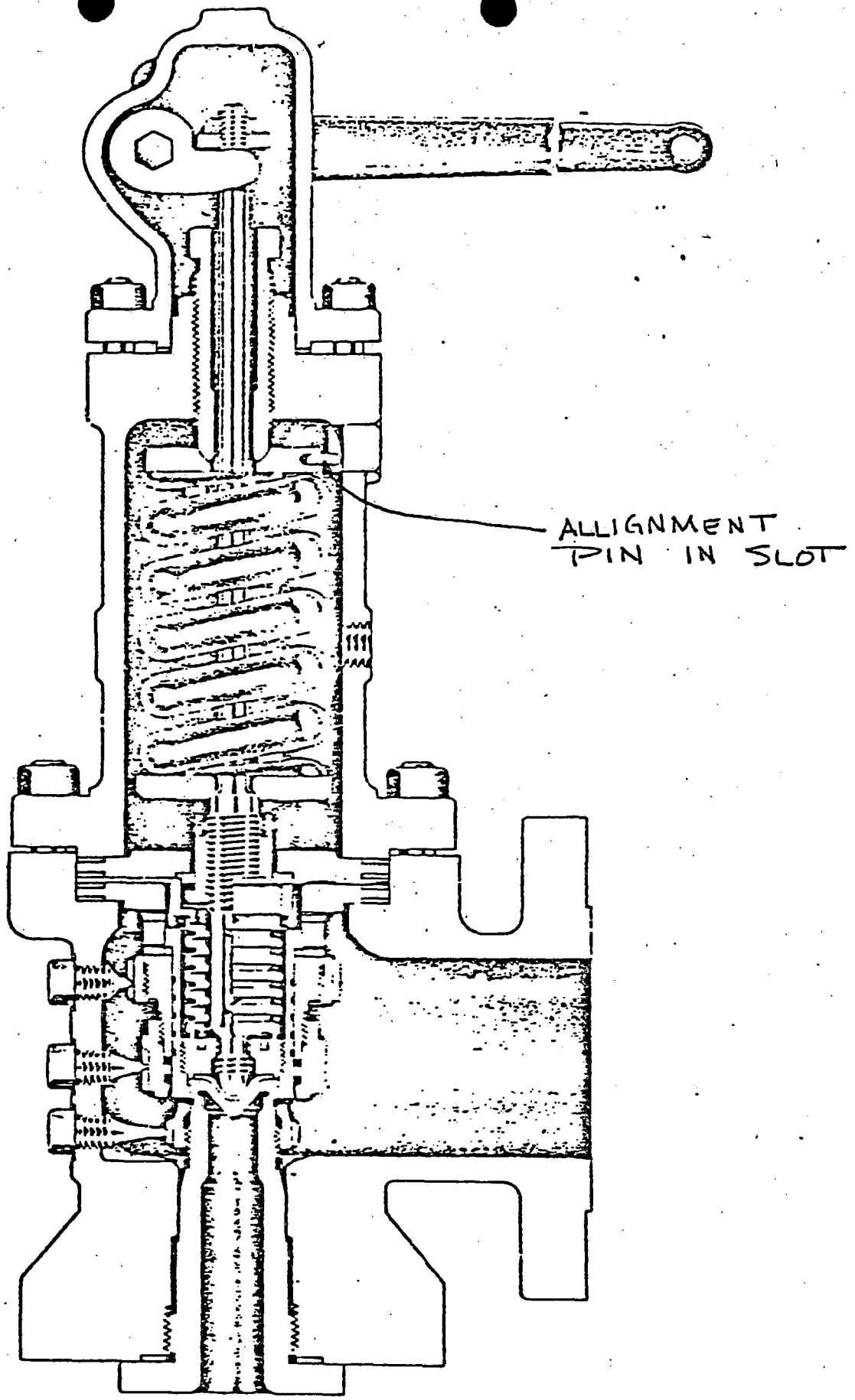
During the 1979 refueling outage, which is currently in progress, all three pressurizer code safety valves were sent to a test facility in order to have their lift setpoints checked with steam as the test fluid. Previously, testing of these valves had been performed on site and cold nitrogen had been used as the test fluid. Two of the three valves tested had lift settings which were outside of the Technical Specifications limits. Specifically, RV 1039 had a lift setting of 2897 psia, and RV 1040 had a lift setting of 2462 psia. Technical Specification 3.1.7A requires the lift settings for the pressurizer code safety valves to be between 2500 psia and 2580 psia (+/- 1%). The valve data is as follows:

. Manufacturer: Dresser Industries, Inc.
. Model No: DI 31739A-1

The valves were disassembled, inspected, refurbished and retested satisfactorily with steam. Inspection of RV 1039 revealed that the alignment pin on the upper spring washer was out of its slot, and was bound on the land under the slot (see attached figure). It is probable that the mispositioning of the alignment pin occurred during the previous rebuilding of the valve in March, 1976. It is noted; however, that subsequent to the rebuilding of the valve in March, 1976, it was tested satisfactorily by checking the lift setting four times with cold nitrogen. Inspection of RV 1040 revealed no apparent deficiencies.

Information supplied by the valve vendor in August, 1979 indicates that using cold nitrogen to test the lift settings of the valves in question is not acceptable. The vendor stated that when the data from tests with steam were compared with data from cold nitrogen tests, differences of 8% to 10% in lift setting values were noted. The vendor further stated that correlation of data between steam tests and cold nitrogen tests was not achievable. The vendor stated that this anomaly was applicable specifically to the Palisades pressurizer code safety valves and did not state whether this phenomenon existed in other safety valves manufactured by them.

To avoid future errors in the lift settings of the Palisades pressurizer code safety valves, these valves will continue to be tested with steam as long as there exists no other practical means of testing which will provide acceptable results.



ATCH 1, NO92