(7-77)	LICENSEE EVENT REPORT
:	CONTROL BLOCK:
	M A P P S 1 2 0 0 - 0 0 0 - 0 0 3 4 1 1 1 1 4 5 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58 5
	REPORT L 6 0 5 0 - 0 2 9 3 0 1 0 0 9 8 1 8 1 0 0 9 8 1 0 9 8 1 0 9 8 1 0 0 9 8 1 0 0 9 8 1 0 0 9 8 1 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 0 9 1 8 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 2	EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
03	1001-32 and MOV 1001-36A, respectively, were found to have loose and broken
04	CAP screws anchoring the motors to the valves. Related events were reported
0 5	as LER's 79-028, 030, and 037. See Attachment.
0 6	
07	
018	
7 8	9 SYSTEM CAUSE CAUSE COMPONENT CODE SUBCODE SUBCODE SUBCODE
0 9 7 8	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
	Image: Construction of the second s
	ACTION PUTURE EFECT SHUTDOWN HOURS 22 ATTACHMENT NPRD-4 PRIME COMP. COMPONENT MANUFACTURER B 18 X 19 Z 20 Z 21 0 0 0 0 0 0 Y 23 N 24 A 25 L 2 0 0 2 CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27
10	The most probable cause has been attributed to vibration causing the hold-down
	bolts to work loose resulting in the shearing of one of the bolts. A thread
1 2	locking substance will be applied to the bolts and the recommended torque values
13	verified. An engineering study of these events is currently underway.
1 4	80
7 8	Pacificity Spower OTHER STATUS 30 METHOD OF DISCOVERY DISCOVERY DESCRIPTION 32   H 28 0 0 0 29 NA A A 44 45 46 0
	ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY 35 2 33 2 34 NA LOCATION OF RELEASE 36 NA 45 NA 80
1 7	PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION 39 0 0 0 37 Z 38 NA
7 8	9 PERSONNEL INJURIES BO
7 8	0 0 0 40 NA 80 9 11 12 80 LOSS OF OR DAMAGE TO FACILITY (43)
1 9	Z 42 NA
20	PUBLICITY ADDCK 05000293 NRC USE ONLY
7 8	9 10 68 69 80 5 NAME OF PREPARER <u>G. G. Whitney</u> PHONE: <u>617-746-7900</u>

## BOSTON EDISON COMPANY PILGRIM NUCLEAR POWER STATION DOCKET NO. 50-293

Attachment to LER 81-057/03L-C

## Event Description and Probable Consequences

On October 9 and 13, 1981 during a refuel outage, loose and sheared off hold-down bolts were found on the limitorque motor operators on valves 1001-32 and 36A. MOV 1001-32 is a normally closed valve, electrically isolated (breaker-pulled). The MOV 1001-36A valve, however, is in normal use and, if all the bolts sheared, the valve would be inoperative.

## Cause Description and Corrective Action

The most probable cause has been attributed to vibration causing the bolts to work loose resulting in the shearing of one of the bolts. An immediate fix is to apply a thread locking substance to all the hold-down bolts.

Related occurrences have been reported as LER's 79-28, 30 and 37. These dealt with the shearing of a  $\frac{1}{2}$ " steel key with the recommended fix to the stem clamp of adding set screws to the clamps to prevent inadvertent movement. This was implemented as a plant design change with the caution that it was temporary and that the valves (MOV 1001-36A & B) be checked for the effectiveness of the fix. No key shearing has been found, to this date.

A request has been made for an engineering investigation into a potential common mode failure relative to the subject LER and a recent LER, 81-051/01T-0 "RHR Test Connection".

The potential exists due to the common probable cause of vibration.

An investigation into these events and the previously reported occurrences is now underway and an update report will be issued when this investigation is completed.

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