

FEB 10 1994

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I  
NOTICE OF SIGNIFICANT LICENSEE MEETING

No. 94-27

Licensee: Boston Edison Company (BECo)  
Facility: Pilgrim Nuclear Power Station (PNPS)  
Docket No.: 50-293  
Time and Date: 10:00 a.m., Thursday, February 17, 1994  
Location: DRP Conference Room, Region I Office, King of Prussia, Pennsylvania  
Purpose: Discussion of Motor Operated Valve Program  
NRC Attendees: M. Mayfield, Acting Deputy Director, Division of Reactor Safety (DRS)  
J. Linville, Chief, Projects Branch No. 3, Division of Reactor Projects (DRP)  
J. Durr, Chief, Engineering Branch, DRS  
P. K. Eapen, Chief, Systems Section, DRS  
T. Scarborough, Mechanical Engineering Branch, NRR  
R. Eaton, Project Manager, NRR  
Licensee Attendees: V. Oheim, Engineering Services Department Manager  
G. O'Connor, Senior Engineer  
B. Sullivan, Licensing Engineer  
J. Jures, Project Manager  
T. White, Principal Engineer  
Dr. M. S. Kalsi, Consultant

Note: This meeting is open to the public for observation only. Handicapped persons requiring assistance to attend the meeting shall make their requests known to Eugene Kelly, Chief, Reactor Projects Section 3A, U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, PA., 19406, (215) 337-5183 prior to the meeting. Attendance by NRC personnel at this meeting should be made known by February 15, 1994.

ORIGINAL SIGNED BY:

Prepared by: \_\_\_\_\_  
E. Kelly, Chief, RPS 3A

Attachment: NRC Staff Design Issues

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J. Sniezek, Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research (DEDR)  
H. Thompson, Deputy Executive Director for Nuclear Material Safety, Safeguards and Operations Support (DEDS)  
B. K. Grimes, Director, Division of Operating Reactor Support, NRR  
C. Rossi, Director, Division of Reactor Inspection and Licensee Performance, NRR  
J. Lieberman, Director, Office of Enforcement  
S. Lewis, Office of the General Counsel (OGC)  
T. E. Murley, Director, Office of Nuclear Reactor Regulation  
W. T. Russell, Associate Director for Inspection and Technical Assessment, NRR  
L. Callan, Acting Associate Director for Projects, NRR  
S. Varga, Director, Division of Reactor Projects - I/II, NRR  
J. Calvo, Assistant Director for Region I Reactors, NRR  
S. Bajwa, RPEB, NRR  
V. McCree, Regional Coordinator, OEDO  
N. Green, Jr., Policy Development & Technical Support Branch  
W. Butler, Director, Project Directorate I-3, NRR  
R. Eaton, Project Manager, PD I-3, NRR  
NRC Resident Inspector  
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P. McKee, NRR/RSGB

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## ATTACHMENT

### NRC STAFF CONCERNS REGARDING PILGRIM OVERTHRUST AND OVERTORQUE MOVs

LICENSEE IS REQUESTED TO PRESENT ITS JUSTIFICATION FOR THE OPERABILITY OF MOVs 1201-2, 1301-16, AND 2301-6 AT A MEETING IN REGION I AT ITS EARLIEST POSSIBLE CONVENIENCE (E.G., WEEK OF FEB. 7 OR 14).

LICENSEE IS REQUESTED TO ADDRESS THE FOLLOWING ISSUES IN ITS PRESENTATION:

#### MOV 1201-2 RWCU LETDOWN ISOLATION VALVE

1. COMPARISON OF ASME CODE FATIGUE CURVE (OR OTHER APPLICABLE FATIGUE CURVE) FOR ACTUATOR MATERIAL TO LICENSEE'S ANALYSIS, INCLUDING ENVIRONMENTAL CONDITIONS.
2. JUSTIFICATION FOR RELYING ON 10 CYCLES OF TESTING OF ONE ACTUATOR BY KALSİ AT 341% THRUST FOLLOWING 2000-CYCLE TESTING AND CRACK IDENTIFICATION. ALSO, CONSIDERATION OF SAMPLE SIZE AND UNCERTAINTY BANDS.
3. EFFECTS OF CRACKS FOUND IN ACTUATOR BY KALSİ AFTER 2000 CYCLES ON RELIABILITY OF LICENSEE'S ANALYSIS CONSIDERING MISALIGNMENT CAN RESULT IN FAILURE TO PERFORM WITHOUT CATASTROPHIC FAILURE OF ACTUATOR.
4. POSSIBILITY OF PERFORMING HARDWARE MODIFICATION IN NOVEMBER 1994.
5. PERFORMANCE OF NDE INSPECTION OF ACTUATOR AT NEXT AVAILABLE OPPORTUNITY.
6. CAUSE OF HIGH THRUST VALUE FOR MOV 1201-2, INCLUDING THRUST NECESSARY TO MEET APPENDIX J REQUIREMENTS.
7. INFORM STAFF IN ADVANCE OF TESTING OR INCREASE IN THRUST LEVEL OF MOV 1201-2.
8. POTENTIAL RELIEF FROM IST OR APPENDIX J REQUIREMENTS FOR NEAR TERM.
9. SIGNIFICANT INCREASE IN THRUST DESIGN LIMIT APPEARS (1) TO CONSTITUTE A DESIGN CHANGE OR MODIFICATION, AND (2) TO REQUIRE SAFETY EVALUATION OR 50.59 REVIEW.

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10. AVAILABILITY OF MITIGATING FACTORS, SUCH AS ACTIONS TAKEN TO ENSURE RELIABILITY OF DC-POWERED OUTBOARD RWCU MOV, AND CONSIDERATION OF PRA CONSEQUENCES OF VALVE FAILURE.
11. INCONSISTENCY WITH LIMITORQUE ONE-CYCLE ALLOWABLE LIMIT OF 250% THRUST AND GUIDANCE TO INSPECT ACTUATOR AFTER MULTIPLE OVERLOADS OF 162% THRUST.
12. BASIS FOR GENERICALLY ALLOWING LICENSEES TO OVERTHRUST MOVs TO 228% THRUST FOR 145 CYCLES BASED ON 10 CYCLE-TEST OF ONE ACTUATOR WITH IDENTIFIED CRACKS.
13. GUIDANCE OF GL 91-18 FOR SIGNIFICANT INCREASE IN THRUST DESIGN LIMIT RAISING QUESTION OF INDETERMINATE OPERABILITY.
14. CONSIDERATION OF VOTES PART 21 IN PAST THRUST VALUES AND CONTROL SWITCH REPEATABILITY IN FUTURE THRUST VALUE.

MOV 1301-16 RCIC STEAM LINE ISOLATION VALVE

1. TORQUE ERROR ASSUMPTION APPEARS INCONSISTENT WITH STATEMENTS IN CALCULATION PACKAGE.
2. RELIABILITY OF LICENSEE'S ANALYSIS IN LIGHT OF SMB-000 ACTUATOR EXPERIENCING 3 WORM FAILURES AT 117% TORQUE (WITH FIRST AFTER 755 CYCLES) DURING KALSI TESTING.
3. POSSIBILITY THAT MOV 1301-16 MIGHT FAIL AFTER FEWER CYCLES THAN KALSI TEST ACTUATOR BECAUSE OF LOADING ARRANGEMENT.
4. TORQUE-RELATED FAILURES CAUSED KALSI TO STATE THAT TORQUE RATINGS SHOULD NOT BE EXCEEDED.
5. APPLICABILITY OF LIMITORQUE GUIDANCE ALLOWING 2000 CYCLES AT 110% TORQUE AND 100 CYCLES AT 120% TORQUE TO OPERABILITY DECISION FOR MOV 1301-16 UNTIL NOVEMBER 1994.

MOV 2301-6 HPCI CST PUMP SUCTION VALVE

1. EXPLAIN CHANGE IN OVERTHRUST CONDITION SINCE INSPECTION.