



**BOSTON EDISON**

Pilgrim Nuclear Power Station  
Rocky Hill Road  
Plymouth, Massachusetts 02360

**K. L. Highfill**  
Station Director

June 12, 1989  
BECO Ltr. #89-076

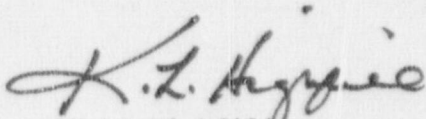
U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

License No. DPR-35  
Docket No. 50-293

Subject: May 1989 Monthly Report

Dear Sir:

In accordance with PNPS Technical Specification 6.9.A.2, a copy of the Operational Status Summary for Pilgrim Nuclear Power Station is attached for your information and planning. Should you have any questions concerning this report please contact me directly.



K.L. Highfill

WJM:bjh

Attachment

cc: Regional Administrator, Region 1  
U.S. Nuclear Regulatory Commission  
475 Allendale Rd.  
King of Prussia, PA 19406

Senior Resident Inspector

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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-293  
 UNIT Pilgrim 1  
 DATE June 12, 1989  
 COMPLETED BY W. Munro  
 TELEPHONE (508) 747-8474

MONTH May 1989

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>114</u>	17	<u>0</u>
2	<u>116</u>	18	<u>0</u>
3	<u>16</u>	19	<u>0</u>
4	<u>0</u>	20	<u>0</u>
5	<u>0</u>	21	<u>0</u>
6	<u>0</u>	22	<u>0</u>
7	<u>0</u>	23	<u>0</u>
8	<u>0</u>	24	<u>0</u>
9	<u>0</u>	25	<u>0</u>
10	<u>0</u>	26	<u>71</u>
11	<u>0</u>	27	<u>125</u>
12	<u>0</u>	28	<u>125</u>
13	<u>0</u>	29	<u>126</u>
14	<u>0</u>	30	<u>127</u>
15	<u>0</u>	31	<u>128</u>
16	<u>0</u>		

This format lists the average daily unit power level in MWe-Net for each day in the reporting month, computed to the nearest whole megawatt.

OPERATING DATA REPORT

DOCKET NO. 50-293  
 DATE June 12, 1989  
 COMPLETED BY W. Munro  
 TELEPHONE (508) 747-8474

OPERATING STATUS

Notes

1. Unit Name Pilgrim 1
2. Reporting Period May 1989
3. Licensed Thermal Power (Mwt) 1998
4. Nameplate Rating (Gross MWe) 678
5. Design Electrical Rating (Net MWe) 655
6. Maximum Dependable Capacity (Gross MWe) 690
7. Maximum Dependable Capacity (Net MWe) 670
8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:  
None

9. Power Level To Which Restricted, If Any (Net MWe) 25% Core Thermal Power
10. Reasons For Restrictions, If Any Regulatory Restriction, Confirmatory Action Letter 86-10. Power Ascension Phase.

	<u>This Month</u>	<u>Yr-to-Date</u>	<u>Cumulative</u>
11. Hours In Reporting Period	<u>744.0</u>	<u>3623.0</u>	<u>144431.0</u>
12. Number Of Hours Reactor Was Critical	<u>213.8</u>	<u>1630.4</u>	<u>81421.8</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>210.8</u>	<u>1052.9</u>	<u>78282.2</u>
15. Unit Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
16. Gross Thermal Energy Generated(MWH)	<u>91752.0</u>	<u>513744.0</u>	<u>135513624.0</u>
17. Gross Electrical Energy Generated(MWH)	<u>24880.0</u>	<u>137810.0</u>	<u>45582414.0</u>
18. Net Electrical Energy Generated (MWH)	<u>22797.0</u>	<u>126520.0</u>	<u>43801949.0</u>
19. Unit Service Factor	<u>28.3</u>	<u>29.1</u>	<u>54.2</u>
20. Unit Availability Factor	<u>28.3</u>	<u>29.1</u>	<u>54.2</u>
21. Unit Capacity Factor (Using MDC Net)	<u>4.6</u>	<u>5.2</u>	<u>45.3</u>
22. Unit Capacity Factor (Using DER Net)	<u>4.7</u>	<u>5.3</u>	<u>46.3</u>
23. Unit Forced Outage Rate	<u>71.7</u>	<u>49.9</u>	<u>13.0</u>

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):  
Maintenance outage, October 1, 1989 for a duration of 30 - 42 days  
(scope under review).

25. If Shut Down At End Of Report Period, Estimated Date of Startup -

26. Units In Test Status (Prior to Commercial Operation):

	<u>Forecast</u>	<u>Achieved</u>
INITIAL CRITICALITY	<u>_____</u>	<u>_____</u>
INITIAL ELECTRICITY	<u>_____</u>	<u>_____</u>
COMMERCIAL OPERATION	<u>_____</u>	<u>_____</u>

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

Operational Summary for May 1989

The unit remained on line operating at approximately 25 percent rated thermal power, in accordance with the approved Power Ascension Program, until 0326 hours on May 3, 1989 when a high reactor vessel water level occurred that resulted in an automatic turbine trip, generator trip, and Reactor Protection System load reject scram. The high reactor vessel water level was primarily caused while troubleshooting the actuator controls of a feedwater regulating valve. The unit remained in cold shutdown for maintenance until May 25, 1989 when the reactor was made critical at 0525 hours, and the generator was synchronized to the grid 0834 hours. The unit remained on line for the remainder of the reporting period.

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Safety Relief Valve Challenges  
Month of May 1989

Requirement: NUREG-0737 T.A.P. II.K.3.3

There were no safety relief valve challenges during the month.

An SRV challenge is defined as anytime an SRV has received a signal to operate via reactor pressure, auto signal (ADS) or control switch (manual). Ref. BECo ltr. #81-01 dated 01/05/81.

## REFUELING INFORMATION

The following refueling information is included in the Monthly Report as requested in an NRC letter to BECo, dated January 18, 1978:

For your convenience, the information supplied has been enumerated so that, each number corresponds to equivalent notation utilized in the request.

1. The name of this facility is Pilgrim Nuclear Power Station, Docket Number 50-293.
2. Scheduled date for next Refueling Shutdown: First Quarter 1991
3. Scheduled date for restart following refueling: Second Quarter 1991
4. Due to their similarity, requests 4, 5, & 6 are responded to collectively under #6.
5. See #6.
6. The new fuel loaded during the 1986/87 refueling outage was of the same design as loaded in the previous outage, and consisted of 192 assemblies.
7. (a) There are 580 fuel assemblies in the core.  
(b) There are 1320 fuel assemblies in the spent fuel pool.
8. (a) The station is presently licensed to store 2320 spent fuel assemblies. The actual usable spent fuel storage capacity is 2320 fuel assemblies.  
(b) The planned spent fuel storage capacity is 2320 fuel assemblies.
9. With present spent fuel in storage, the spent fuel pool now has the capacity to accommodate an additional 1000 fuel assemblies.

PILGRIM NUCLEAR POWER STATION  
MAJOR SAFETY RELATED MAINTENANCE

<u>SYSTEM</u>	<u>COMPONENT</u>	<u>MALFUNCTION</u>	<u>CAUSE</u>	<u>MAINTENANCE</u>	<u>CORRECTIVE ACTION TO PREVENT RECURRENCE</u>	<u>ASSOCIATED LER</u>
Feedwater System	Feedwater Regulating Valve FV-642B Actuator	Flow fluctuations. (F&MR 89-181)	Faulty valve actuator control components	Disassembled inspected, and replaced selected components for both FV-642 A and B valve actuators.	Added feedwater regulating valves and controls to the PM Program.	LER 89-015-00
Main Steam System	Main Steam Isolation Valve (MSIV)AO-203-1A DC Solenoid assembly	Main Steam Isolation Valve AO-203-1A (inboard valve) inadvertently closed (F&MR 89-182)	Random Failure of MSIV DC pilot solenoid assembly	Replaced MSIV DC solenoid assembly. Replaced cables for outboard MSIV pilot solenoids.	Inspected and tested all remaining inboard and outboard MSIV DC pilot solenoid assemblies.	LER 89-015-00
Sampling System	Sampling System Isol. valves SV-5065-11A, 14A, 20B and 70	Isol. valves inadvertently closed (F&MR 89-183)	Transient Voltage decrease that energized related relay coils.	Adjusted coil dropout voltage for PCIS relays 16AK14 and 16AK16; and replaced the coils for PCIS relays 16AK17 and 16AK18.	N/A	LER 89-015-00
Reactor Core Isolation Cooling System	Reactor Core Isolation Injection valve MO-1301-49	Valve failed to close completely. (F&MR 89-179)	Packing installed too tight.	Readjusted packing	Performed MOVATS testing	N/A
Reactor Water Cleanup System	Regenerative Heat Exchanger E-208A	Leaking identified from flange bolt (F&MR 89-199)	Thru wall pin hole leaks in diaphragm.	Removed and replaced diaphragm with new unit.	N/A	N/A

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-293

NAME Pilgrim 1  
 DATE June 12, 1989  
 COMPLETED BY W. Munro  
 TELEPHONE (508) 747-8474

REPORT MONTH May 1989

NO.	DATE	TYPE <sup>1</sup>	DURATION (HOURS)	REASON <sup>2</sup>	METHOD OF SHUTTING DOWN REACTOR <sup>3</sup>	LICENSE EVENT REPORT #	SYSTEM CODE <sup>4</sup>	COMPONENT CODE <sup>5</sup>	CAUSE & CORRECTIVE ACTION TO PREVENTIVE RECURRENCE	
07	05/03/89	F	533.2	B	3	89-015-00	SJ	FCO	High Reactor Water Level resulting in T/G trip and Rx Scram. Replaced selected components in FW Reg. Valve actuator FW valve added to PM Program.	

1	2	2	3	4&5
F-Forced S-Sched	A-Equip Failure B-Maint or Test C-Refueling D-Regulatory Restriction E-Operator Training & License Examination	F-Admin G-Oper Error H-Other	1-Manual 2-Manual Scram 3-Auto Scram 4-Continued 5-Reduced Load 9-Other	Exhibit F & H Instructions for Preparation of Data Entry Sheet Licensee Event Report (LER) File (NUREG-1022)