



**BOSTON EDISON**

Pilgrim Nuclear Power Station  
Rocky Hill Road  
Plymouth, Massachusetts 02360

E. Thomas Boulette, PhD  
Vice President Nuclear Operations  
and Station Director

February 13, 1992  
BECO Ltr. #92-13

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

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

Subject: January 1992 Monthly Report

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.

*ET Boulette*  
E. Thomas Boulette

WJM/bal

Attachment

cc: Mr. Thomas T. Martin  
Regional Administrator, Region 1  
U.S. Nuclear Regulatory Commission  
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AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-293  
 UNIT Pilgrim 1  
 DATE February 13, 1992  
 COMPLETED BY W. Munro  
 TELEPHONE (508) 747-8474

MONTH January 1992

DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	<u>666</u>	17	<u>666</u>
2	<u>667</u>	18	<u>456</u>
3	<u>665</u>	19	<u>651</u>
4	<u>665</u>	20	<u>665</u>
5	<u>666</u>	21	<u>665</u>
6	<u>666</u>	22	<u>666</u>
7	<u>666</u>	23	<u>665</u>
8	<u>666</u>	24	<u>666</u>
9	<u>666</u>	25	<u>664</u>
10	<u>665</u>	26	<u>667</u>
11	<u>666</u>	27	<u>668</u>
12	<u>665</u>	28	<u>667</u>
13	<u>666</u>	29	<u>473</u>
14	<u>666</u>	30	<u>626</u>
15	<u>666</u>	31	<u>544</u>
16	<u>665</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 February 13, 1992  
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 TELEPHONE (508) 747-8474

OPERATING STATUS

Notes

1. Unit Name Pilgrim 1
2. Reporting Period January 1992
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) 696
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) None
10. Reasons For Restrictions, If Any N/A

	<u>This Month</u>	<u>Yr-to-Date</u>	<u>Cumulative</u>
11. Hours In Reporting Period	<u>744.0</u>	<u>744.0</u>	<u>167832.0</u>
12. Number Of Hours Reactor Was Critical	<u>744.0</u>	<u>744.0</u>	<u>98104.6</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>744.0</u>	<u>744.0</u>	<u>95246.9</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>1446768.0</u>	<u>1446768.0</u>	<u>165151248.0</u>
17. Gross Electrical Energy Generated (MWH)	<u>500130.0</u>	<u>500130.0</u>	<u>55706544.0</u>
18. Net Electrical Energy Generated (MWH)	<u>481502.0</u>	<u>481502.0</u>	<u>53532450.0</u>
19. Unit Service Factor	<u>100.0</u>	<u>100.0</u>	<u>56.8</u>
20. Unit Availability Factor	<u>100.0</u>	<u>100.0</u>	<u>56.8</u>
21. Unit Capacity Factor (Using MDC Net)	<u>96.6</u>	<u>96.6</u>	<u>47.6</u>
22. Unit Capacity Factor (Using DER Net)	<u>98.8</u>	<u>98.8</u>	<u>48.7</u>
23. Unit Forced Outage Rate	<u>0.0</u>	<u>0.0</u>	<u>12.5</u>
24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):	<u>None</u>		

25. If Shut Down At End Of Report Period, Estimated Date of Startup N/A

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

Operational Summary for January 1992

The unit started the reporting period at approximately 100 percent core thermal power (CTP) and maintained that level until January 18 when reactor power was reduced to approximately 47 percent to perform control rod scram timing, rod pattern adjustment and backwashing of the main condenser. Reactor power was increased to 100 percent and maintained 100 percent steady state operation until January 29 when at 0231 hours reactor power was reduced to approximately 33 percent and the "A" Recirculation Pump was secured to facilitate replacement of the "A" Recirculation Motor Generator Set brushes. Following repairs, the "A" Recirculation Pump was returned to service later that day. Reactor power increased to 100 percent at 0220 hours on January 30. At 2100 hours a downpower commenced and was terminated at approximately 45 percent to install a temporary modification on the brush rigging of the generator end of the "A" Recirculation Motor Generator Set. The "A" Recirculation Pump was secured to facilitate installation of the temporary modification. On January 31, following installation of the temporary modification, reactor power was increased to 100 percent and was maintained at that level for the remainder of the reporting period. Minor power reductions were initiated on January 4, 11, 18 and 25 to perform weekly control rod exercises.

Safety Relief Valve Challenges  
Month of January 1992

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

There were no safety relief valve challenges during this reporting period.

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: April 3, 1993
3. Scheduled date for restart following next refueling: June 8, 1993
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 1991 refueling outage was of the same design as loaded in the previous outage and consisted of 168 assemblies.
7. (a) There are 580 fuel assemblies in the core.  
(b) There are 1489 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 831 fuel assemblies.

Month: January 1992

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>
Salt Service Water (SSW) System	SSW pump P-208C	High vibration and low discharge Flow. (F&MR 91-504)	Spider bearing degradation	Replaced six (6) spider bearings, installed rebuilt bowl assembly, stuffing box bushing, and two (2) line shaft couplings. Also installed new twelve (12) inch expansion joint on discharge side of pump.	Engineering Service Request 91-742 initiated to evaluate and upgrade the line shaft bearings and suction head.	None
Recirculation System	"A" Recirculation Motor Generator (MG) Set *	"A" Recirculation MG Set brushes arcing severely.	Root cause under investigation	Secured "A" Recirculation pump and replaced brushes. Increased power to 100 percent. Secured "A" Recirculation pump again and implemented Temporary Modification 92-04 to add a second set of brushes on the collector rings (outboard rings). The brushes were positioned so the contact between the brush and collector is on the smooth surface near the ends of the collector rings.	Under investigation	None

\* Not safety related but required a significant power reduction to perform repairs.

Month January 1992

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>
Diesel Generators and Auxiliaries	"B" Emergency Diesel Generator (EDG) X-107B	During EDG "B" load test while synchronizing to Bus A6, oscillations between 100 and 500 KVAR developed. (F&MR 92-19)	Faulty voltage regulator motor operated potentiometer.	Secured EDG "B" and replaced motor operated potentiometer. Following repairs, load test was successfully performed.	Procedure 3.M.3-61.5 "Emergency Diesel Generator Refuel Outage Preventive Maintenance" to be revised to include inspection of motor operated potentiometer each RFG.	None
Diesel Generators and Auxiliaries	"B" Emergency Diesel Generator (EDG) X-107B turbo assist air receiver tank piping.	Check valve 47-CK-301C failed in closed position. (F&MR 92-32)	Rust and moisture buildup in check valve.	Check valve disassembled and cleaned. Installed new valve seat.	PDC 91-61 "Diesel Generator Air Start Piping" to be considered for implementation during MCO 92.	None

UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-293  
 NAME Pilgrim 1  
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REPORT MONTH January 1992

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 PREVENT RECURRENCE
01	01/18/92	S	0.0	B	5	N/A	N/A	N/A	Power reduction to perform rod pattern adjustment; scram time various control rods; and perform main condenser backwash.
02	01/29/92	F	0.0	B	5	N/A	N/A	N/A	Power reduction to replace "A" Recirculation Motor Generator Set brushes.

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)