



BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

E. S. Kraft, Jr.

Vice President Nuclear Operations
and Station Director

April 12, 1993
BECO Ltr. #93- 51

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

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

March 1993 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.

E. S. Kraft, Jr.
E. S. Kraft Jr.

WJM/bal

Attachment

cc: Mr. Thomas T. Martin
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
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OPERATING DATA REPORT

DOCKET NO. 50-293
 DATE April 12, 1993
 COMPLETED BY: W. Munro
 TELEPHONE (508) 747-8474

OPERATING STATUS

NOTES

1. Unit Name Pilgrim I
2. Reporting Period March 1993
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 (Item 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>2160.0</u>	<u>178032.0</u>
12. Number of Hours Reactor Was Critical	<u>666.4</u>	<u>2082.4</u>	<u>107941.0</u>
13. Reactor Reserve Shutdown Hours	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
14. Hours Generator On-Line	<u>659.5</u>	<u>2075.5</u>	<u>103981.9</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>1247976.0</u>	<u>4036032.0</u>	<u>182044848.0</u>
17. Gross Electrical Energy Generated (MWH)	<u>431340.0</u>	<u>1396550.0</u>	<u>61530544.0</u>
18. Net Electrical Energy Generated (MWH)	<u>414649.0</u>	<u>1343591.0</u>	<u>59136507.0</u>
19. Unit Service Factor	<u>88.6</u>	<u>96.1</u>	<u>58.4</u>
20. Unit Availability Factor	<u>88.6</u>	<u>96.1</u>	<u>58.4</u>
21. Unit Capacity Factor (Using MDC Net)	<u>83.2</u>	<u>92.8</u>	<u>49.6</u>
22. Unit Capacity Factor (Using DER Net)	<u>85.1</u>	<u>95.0</u>	<u>50.7</u>
23. Unit Forced Outage Rate	<u>11.4</u>	<u>3.9</u>	<u>12.2</u>

24. Shutdown Scheduled Over Next 6 Months (Type, Date, and Duration of Each):
Refueling Outage #9 starting 4-3-93 for a duration of 58 days.

25. If Shut Down At End of Report Period, Estimated Date of Startup Unit Operating.

AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO. 50-292
UNIT Pilgrim I
DATE April 12, 1993
COMPLETED BY: W. Munro
TELEPHONE 508) 747-8474

MONTH March 1993

DAY	AVERAGE DAILY POWER LEVEL (MWe Net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-Net)
1	659	17	257
2	661	18	605
3	608	19	666
4	605	20	663
5	584	21	660
6	511	22	635
7	610	23	660
8	665	24	653
9	664	25	616
10	666	26	654
11	666	27	644
12	665	28	640
13	457	29	637
14	0	30	634
15	0	31	631
16	0		

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.

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

OPERATIONAL SUMMARY FOR MARCH 1993

The unit started the reporting period at approximately 100 percent core thermal power (CTP). On 3-1-93 reactor power was reduced briefly to avoid exceeding main condenser delta T limitations. On 3-3-93 at 2020 hours, power was reduced to approximately 50 percent CTP to perform a main condenser backwash in response to increased macrofouling caused by ocean storm conditions. On 3-4-93, the unit attained 100 percent CTP where it was maintained until 3-5-93 when due to the onset of a severe winter storm reactor power was reduced to approximately 50 percent CTP to perform main condenser backwashes on three occasions. On 3-7-93, the unit attained 100 percent CTP where it was essentially maintained until 3-13-93. At 1628 hours on 3-13-93 during a severe northeast storm, the unit experienced a full reactor scram while at 100 percent CTP due to a load rejection signal in the switchyard. Following the storm an inspection of the switchyard was made. Evidence of arcing was found at air circuit breaker (ACB) 102 phase 'A' current transformer bushing, and at ACB 105 stack 1 (Phase 'C') insulator. No cleaning or other corrective actions were necessary. A washdown of the switchyard insulators was unnecessary because of heavy rains that followed the snow storm. Following completion of selected maintenance items, the reactor was made critical at 2209 hours on 3-16-93 and the unit was synchronized to the grid at 0459 hours on 3-17-93. Reactor power was increased and on 3-18-93 at 2249 hours the unit attained 100 percent CTP where it was essentially maintained until 3-22-93 when it was reduced to approximately 64 percent CTP to facilitate maintenance in the condenser bay. Following maintenance, power was increased to 100 percent CTP. At approximately 2300 hours on 3-20-93 the unit commenced "end of cycle coastdown" (gradual decrease in power resulting from fuel depletion). On 3-25-93, power was reduced briefly from 98 percent CTP to 63 percent CTP to facilitate a repair of the 'A' feedwater pump. Following repairs, power was increased to approximately 99 percent CTP. The unit was maintained in coastdown condition through the remainder of the reporting period ending the period at approximately 95 percent CTP.

SAFETY RELIEF VALVE CHALLENGES
Month of February 1993

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

DATE: 03/13/93

VALVE: #203-3A

REASON: During a load reject transient reactor pressure increased to 1150 psig (setpoint 1115 psig) causing the SRV to momentarily lift and reseal.

DATE: 03/14/93

VALVES: #203-3A

#203-3B (twice)

#203-3C

#203-3D

REASON: To reduce pressure and reactor water level (manual operation).

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 date 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: May 31, 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 1629* 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.

* Includes 140 new fuel assemblies for RFO-9.

PILGRIM NUCLEAR POWER STATION
MAJOR SAFETY RELATED MAINTENANCE

SYSTEM	COMPONENT	MALFUNCTION	CAUSE	MAINTENANCE	CORRECTIVE ACTION TO PREVENT RECURRENCE	ASSOCIATED LER
Reactor Water Cleanup (RWCU) System	High flow sensors DPIS-1243 and -1244 (ITT Barton Model #288A)	Trip settings greater than the Tech. Spec. limit.	Setpoint drift.	Sensors DPIS-1243 and 1244 recalibrated per Proc.8.M.2-1.2.1 Rev. 24. successfully.	Sensors DPIS 1243 and 1244 to be replaced during RFO 10 with upgraded model. (Refer to associated LER for additional information).	93-003-00
Trans-mission System*	Switchyard (Station #650)	Reactor Scram.	Load reject 345KV switch-yard flash-overs due to wind driven snow packing on the 345KV insulators.	Inspection of switchyard and insulators. No washdown required.	Refer to associated LER.	93-004-00
Trans-mission System*	Switchyard (Station #650)	120VAC safe-guard busses 'A' and 'B' deenergized.	Trip settings were too low.	Trip settings of the main input circuit breakers for voltage regulating transformers X55 and X56 were increased.	Refer to associated LER.	
Reactor Water Cleanup (RWCU) System	RWCU System suction valve MO-1201-85	Automatic actuation of the Primary Containment Isolation Control System (PCIS) Group 6/ RWCU System isolation valves.	RWCU System isolated on sensed high flow while throttling suction valve MO-1201-85. RWCU System flow was sufficient to cause high flow sensors DPIS-1243 and 1244 to generate a trip signal to the PCIS logic circuitry.	PCIS logic circuitry reset per Procedure 2.2.125.1. RWCU System satisfactorily returned to service.	Evaluating changing suction valve MO-1201-85 from a gate valve to a globe valve to reduce the likelihood of isolations accuracy while throttling the valve.	93-005-00

MONTH March, 1993PILGRIM NUCLEAR POWER STATION
MAJOR SAFETY RELATED MAINTENANCE

SYSTEM	COMPONENT	MALFUNCTION	CAUSE	MAINTENANCE	CORRECTIVE ACTION TO PREVENT RECURRENCE	ASSOCIATED LER
Diesel Generator and Auxiliaries	Emergency Diesel Generator X107B	Failed to meet start time requirement during performance of surveillance Proc. 8.9.1.	Air start motor internal dowel pin was engaged in the wrong hole so that the air inlet piping and the air inlet parts were not lined up.	Properly positioned internals. Tested with satisfactory results.	To be determined	N/A

*Not safety related, but caused plant shutdown.

UNIT SHUTDOWNS AND POWER REDUCTIONS DOCKET NO: 50-293

DOCKET NO: 50-293
NAME: Pilgrim I
DATE: April 12, 1993
COMPLETED BY: W. Munro
TELEPHONE: 508) 747-8474
REPORT MONTH March 1993

NO.	DATE	TYPE1	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSE EVENT REPORT #	SYSTEM CODE4	COMPONENT CODE5	CAUSE & CORRECTIVE ACTION TO PREVENT RECURRENCE
03	3/13/93	F	84.5	A	3	93-004-00	FK		Load reject 345KV switchyard. Insulator flash- over due to wind packed snow during blizzard conditions.

1	2	2	3	4&5
F-FORCED S-SCHED	A-Equip Failure B-Main 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 Preparations of Data Entry Sheet Licensee Event Report (LER) File (NUREG-1022)