

AUG 01 1989

Docket No. 50-293

MEMORANDUM FOR: Jon R. Johnson, Chief, Projects Branch No. 3, Division of  
Reactor Projects

FROM: A. Randy Blough, Chief, Reactor Projects Section 3A,  
Division of Reactor Projects

SUBJECT: PILGRIM STATUS REPORT FOR THE PERIOD JULY 15-28, 1989

Enclosed is the Pilgrim bi-weekly status report from the NRC Resident Office at Pilgrim. The NRC Restart Staff is in place and was on-site monitoring licensee activities on an extended day shift basis during this report period.

The Pilgrim bi-weekly status report is intended to provide NRC management and the public with an overview of plant activities and NRC restart inspection activities. Subsequent inspection reports will address many of these topics in more detail.

**ORIGINAL SIGNED BY**

A. Randy Blough, Chief  
Reactor Projects Section 3A  
Division of Reactor Projects

Enclosure: As stated

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PILGRIM STATUS REPORT - 0001.0.0  
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cc w/encl:

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L. Gustin, Vice President - Corporate Relations  
K. Highfill, Station Director  
R. Anderson, Plant Manager  
J. Dietrich, Licensing Division Manager  
E. Robinson, Nuclear Information Manager  
R. Swanson, Nuclear Engineering Department Manager  
The Honorable Edward M. Kennedy  
The Honorable Edward J. Markey  
The Honorable Edward P. Kirby  
The Honorable Peter V. Forman  
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Chairman, Board of Selectmen, Carver  
Chairman, Board of Selectmen, Duxbury  
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R. Boulay, Director, Massachusetts Civil Defense Agency and Office of  
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M. Miller, RI  
K. Abraham, RI (2)  
M. Oprendeck, RI (2)  
J. Lyash, RI  
C. Warren, SRI - Pilgrim  
T. Kim, RI - Pilgrim  
C. Carpenter, RI - Pilgrim

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PILGRIM STATUS REPORT - 0003.0.0  
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## ENCLOSURE

### PILGRIM STATUS REPORT FOR THE PERIOD JULY 15-28, 1989

#### 1.0 Plant Status

As of 8:00 a.m. on July 28, 1989, the reactor was operating at approximately 33% power with the turbine generator synchronized to the grid.

#### 2.0 Power Ascension Test Program Status

The licensee has completed, with the exception of routine Local Power Range Monitor (LPRM) calibrations, the original scope of the Power Ascension Test Program up to the 50% power plateau. Prior to continuation of the power ascension program to the 75% power plateau, the licensee must obtain the NRC Region I Regional Administrator's concurrence. The program includes NRC approval points prior to initial criticality and at 5%, 25%, 50% and 75% of full power and both a licensee written report and NRC review after completion of testing at full power. The NRC Restart Assessment Panel will recommend to the Regional Administrator when the plant is considered ready to be released from each approval point.

#### 3.0 Facilities Operations Summary

As reported in the last Pilgrim Status Report (July 1-14, 1989), the plant began this period operating at approximately 50% power.

On July 18, 1989 at 10:26 a.m., the licensee manually tripped the reactor from about 50% power due to decreasing vacuum in the main condenser. The degrading condenser vacuum was determined to be due to having two sets of steam jet air ejectors (SJAE) in service concurrently during air ejector shifting, exceeding the heat removal capacity of the air ejector condensers. The SJAE's remove noncondensable gases from the main condenser. Detailed NRC review of this event will be documented in NRC Inspection Report No. 50-293/89-08.

At 12:47 a.m. on July 26, 1989 the licensee brought the reactor critical. The turbine generator was synchronized to the electric power distribution grid at 9:35 a.m. on July 26, 1989.

During this report period, the licensee experienced degraded condenser vacuum due to fouling of the condenser tubes with mussels and algae. Due to the degraded condenser vacuum, the licensee has operated the reactor at power levels between approximately 26% and 50% of full power while addressing this problem. Following the manual reactor scram on July 18, 1989, the licensee performed manual cleaning of the condenser water boxes, the salt service water bay and the turbine building and reactor building component cooling water heat exchangers in order to remove the buildup of mussels and algae. At the close of this report period, the reactor was at about 33% power.

The licensee continued to conduct routine surveillances along with preventive and corrective maintenance throughout the period.

#### 4.0 Items of Special Interest

##### NRC Restart Assessment Panel

An NRC Restart Assessment Panel meeting was held on July 19, 1989 in the NRC Region I Office in King of Prussia, Pennsylvania. The Panel received a presentation from the licensee on their assessment of the results of the 25% to 50% Power Ascension Program, including their assessment of the July 18, 1989 manual reactor scram. The Panel also was reviewing plant readiness to proceed up to 75% power.

An NRC Restart Assessment Panel teleconference was held on July 24, 1989 at the NRC Region I Office in King of Prussia, Pennsylvania. NRC management from Region I, the Office of Nuclear Reactor Regulation (NRR) and the NRC resident staff participated. The Panel meets periodically to coordinate planning and execution of NRC inspection and licensing activities related to Pilgrim. The Panel is chaired by Mr. Samuel J. Collins, Deputy Director, Division of Reactor Projects, NRC Region I.

##### Enforcement Conference

A supplemental Enforcement Conference to further discuss additional issues regarding the April 12, 1989 Reactor Core Isolation Cooling (RCIC) system piping pressurization event was held on July 19, 1989 in the NRC Region I Office in King of Prussia, Pennsylvania. The NRC staff had previously verified the licensee's implementation of corrective actions in response to the findings prior to plant startup on April 28, 1989. NRC Region I had issued the Augmented Inspection Team's evaluation of the RCIC system event in NRC Inspection Report 50-293/89-80 on May 8, 1989.

#### 5.0 Emergency Notification System (ENS) Reports

##### Reactor Water Cleanup (RWCU) System Isolation

On July 26, 1989 the licensee experienced a partial isolation of the Reactor Water Cleanup (RWCU) system. The RWCU system removes dissolved impurities and corrosion products from the reactor coolant. The isolation occurred during plant startup and was caused by a false indication of high system flow due to trapped air in the instrument lines.

Detailed NRC review of the above event and licensee actions will be documented in NRC Inspection Report No. 50-293/89-08.

#### 6.0 Pilgrim Restart Staff Activities

The Pilgrim Restart Staff was in extended shift coverage throughout this report period, consistent with reduced testing activities.

An NRC-developed inspection plan addressing the 25-50% power plateau, as well as the primary functional areas of operations, maintenance, surveillance and startup testing continued to be implemented. The inspectors assessed operator performance, organizational interfaces, adherence to procedures and Technical Specification compliance.

The Pilgrim Restart Staff continued to evaluate the performance of licensee personnel and the plant to determine whether the licensee should be permitted to proceed to the next NRC approval point, 75% of rated power.

Contact with the press and public continued throughout the period. The NRC Restart Manager and the Region I Public Affairs Officer have been handling all inquiries.

#### Pilgrim Restart Staff Composition During Period

The Pilgrim Restart Staff on-site was comprised of the following personnel during the period.

C. Warren, Senior Resident Inspector and Restart Manager  
T. Kim, Resident Inspector  
C. Carpenter, Resident Inspector  
T. Dragoun, Senior Radiation Specialist, RI

On July 17, 1989, Dr. Thomas Murley, Director, Office of Nuclear Reactor Regulation and Mr. Samuel Collins, Deputy Director, Division of Reactor Projects were also onsite to tour the plant.