

DEC 15 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 No. 3A,
Division of Reactor Projects

SUBJECT: PILGRIM STATUS REPORT FOR THE PERIOD NOVEMBER 18 -
DECEMBER 8, 1989

Enclosed is the Pilgrim 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 shift basis during the report period.

On December 6, 1989, NRC Commissioner James R. Curtiss and Mr. William T. Russell, NRC Region I Administrator, toured the Pilgrim facility. Commissioner Curtiss and Mr. Russell also met with local town officials at the Plymouth Town Hall.

The Pilgrim 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. The next status report will cover the period December 8, 1989 to January 1, 1990.

Original Signed By:

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

Enclosure: As stated

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cc w/encl:

R. Bird, Senior Vice President - Nuclear
L. Gustin, Vice President - Corporate Relations
K. Highfill, Vice President - Nuclear Operations
R. Anderson, Plant Manager
J. Dietrich, Licensing Division Manager
E. Robinson, Nuclear Information Manager
B. Fairbanks, Nuclear Engineering Department Manager
The Honorable Edward M. Kennedy
The Honorable John F. Kerry
The Honorable Edward J. Markey
The Honorable Edward P. Kirby
The Honorable Peter V. Forman
Chairman, Board of Selectmen, Plymouth
Chairman, Board of Selectmen, Carver
Chairman, Board of Selectmen, Duxbury
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Mayor, City of Taunton
Plymouth Civil Defense Director
P. Agnes, Assistant Secretary of Public Safety, Commonwealth of Massachusetts
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- bcc w/encl:
- Region I Docket Room (with concurrences)
- J. Taylor, EDO
- J. Dyer, EDO
- T. Murley, NRR
- F. Miraglia, NRR
- J. Partlow, NRR
- S. Varga, NRR
- B. Boger, NRR
- J. Roe, NRR
- K. Perkins, NRR
- D. Crutchfield, NRR
- C. Rossi, NRR
- F. Congel, NRR
- L. Shao, NRR
- R. Wessman, NRR
- D. McDonald, NRR
- L. Whitney, NRR
- P. Boehnert, ACRS
- W. Russell, RI
- T. Martin, RI
- W. Kane, RI
- M. Hodges, RI
- M. Knapp, RI
- J. Johnson, RI
- R. Blough, RI
- J. Durr, RI
- R. Gallo, RI
- R. Bellamy, RI
- W. Lazarus, RI
- M. Miller, RI
- K. Abraham, RI (2)
- M. Oprendeck, RI (2)
- T. Kim, RI - Pilgrim
- C. Carpenter, RI - Pilgrim
- C. Marschall, SRI - Ginna
- G. Grant, SRI - Vermont Yankee
- H. Eichenholz, SRI - Yankee Rowe
- T. Cerne, SRI - Seabrook

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PILGRIM STATUS 11/18 - 12/8/89 -
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ENCLOSURE

PILGRIM STATUS REPORT FOR THE PERIOD NOVEMBER 18 - DECEMBER 8, 1989

1.0 Plant Status

As of 8:00 a.m. on December 8, 1989, the reactor was in the hot shutdown condition with reactor pressure at about 450 psig. The reactor vessel level was being maintained at about 30 inches with the condensate and feed water systems.

2.0 Facility Operations Summary

At the end of the last report period, the plant was operating at approximately 94% power. The power was limited to 94% due to inconsistent performance of the "A" recirculation motor-generator set speed control mechanism. In a boiling water reactor such as Pilgrim, the reactor recirculation system provides forced circulation of reactor coolant through the core to enable the reactor to achieve a higher power output than would be possible without forced circulation.

Following a minor modification to the "A" recirculation motor-generator (M-G) set speed control circuitry on December 6, 1989, the M-G set tripped with the reactor power at about 97% when the generator field breaker opened due to generator field undervoltage. The reactor power stabilized at about 55% of rated power. Licensee troubleshooting identified a failed resistor in the M-G set voltage regulation circuitry and a degraded resistor in the M-G set speed control circuitry which could have caused the M-G set trip. After replacement of the resistors and testing of additional components, the "A" recirculation M-G set was returned to service.

At 3:08 a.m. on December 8, 1989, the reactor automatically scrammed from about 95% power on low reactor water level signals during calibration of a reactor vessel level instrument. All systems responded and functioned properly following the plant trip and associated Group II isolation signal except a secondary containment damper which indicated partially opened. (This damper was later determined to be properly fully closed; the position indicator was out of adjustment.) A redundant damper was verified closed. All plant loads were being powered from the offsite power sources via the startup transformer.

The scram occurred while Instrument & Controls technicians were restoring the level instrument to service. When an isolation valve to the instrument rack containing the "A" and "B" reactor level and pressure transmitters was opened, a pressure spike in the common variable leg caused the low reactor water level scram signal. There was no actual low water level condition.

Detailed NRC review of this event will be documented in NRC Inspection Report No. 50-293/89-13.

At the close of this report period, the reactor was in stable hot shutdown condition. The licensee planned to remain in shutdown condition for approximately two days to complete the post-trip review and conduct further testing on the "A" recirculation M-G set.

3.0 Items of Special Interest

NRC Restart Assessment Panel

An NRC Restart Assessment Panel teleconference was held on November 22, 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 was briefed by the NRC Restart Staff Manager on the status of the licensee's power ascension test program and their performance. The Panel meets periodically to coordinate planning and execution of NRC inspection and licensing activities related to Pilgrim. The Panel is now chaired by Mr. William F. Kane, Director, Division of Reactor Projects, NRC Region I. (Mr. Samuel J. Collins, formerly Deputy Director, Division of Reactor Projects and Panel Chairman, has been transferred to the NRC Region IV Office in Texas.)

NRC Commissioner Tours Pilgrim

On December 6, 1989, NRC Commissioner James R. Curtiss toured the Pilgrim facility. The resident inspector led the tour. Commissioner Curtiss was accompanied by his staff and Mr. William T. Russell, Region I Administrator. Commissioner Curtiss and Mr. Russell also met with local town officials at the Plymouth Town Hall after the plant tour.

NRC Evaluation of Operator Requalification Program

During the weeks of December 4, 1989 and December 11, 1989, the NRC is conducting an evaluation of the licensee's operator requalification program. The evaluation involves the administration of NRC-prepared operating and written examinations for a portion of the facility licensed operators. The purpose is to measure the effectiveness of the licensee's requalification program through the operators' performance. The results of this review will be documented in the NRC Inspection Report 50-293/89-14.

4.0 Emergency Notification System (ENS) Reports

Inoperable HPCI Gland Seal Condenser Blower

On November 22, 1989, the licensee declared the High Pressure Coolant Injection (HPCI) system inoperable after the HPCI gland seal condenser blower failed to start. The gland seal condenser blower removes non-condensibles from the HPCI gland seal condenser. The licensee assessment

determined the blower failure resulted from a damaged brush on the motor. The licensee replaced the brush and the HPCI system was returned to service.

NRC review of the event described above will be documented in NRC Inspection Report 50-293/89-13.

Reactor Scram Due to Low Reactor Water Level Indications

On December 8, 1989, the licensee notified the NRC via ENS at 5:27 a.m. of the reactor scram detailed in Section 2.0 of this report.

5.0 Pilgrim Restart Staff Activities

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

An NRC-developed inspection plan addressing the 100% power plateau, as well as the primary functional areas of operations, maintenance, surveillance, and startup testing was 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.

Contact with the press and public continued throughout the period. The NRC Restart Manager and Public Affairs Officers from both Region I and Headquarters have been handling inquiries.

Pilgrim Restart Staff Composition During Period

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

- C. Marschall, Senior Resident Inspector and Restart Manager
- T. Kim, Resident Inspector
- J. Macdonald, Resident Inspector, Vermont Yankee
- G. Bethke, NRC Contractor
- G. Bryan, NRC Contractor