



Boston Edison

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

E. T. Boulette, PhD
Senior Vice President — Nuclear

February 29, 1996
BEC0 96-018

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

License DPR-35
Docket 50-293

LONG TERM PROGRAM: SEMI-ANNUAL REPORT

This letter provides the semi-annual Long Term Program (LTP) update in accordance with Boston Edison letter dated May 7, 1994, "Plan for the Long Term Program - Pilgrim Nuclear Power Station" Section V.A. (BEC0 letter 2.94.066). Attachment 1 includes the Schedule A and B regulatory items. Attachment 2 includes commitment descriptions, progress since the last update, and summaries of changes if applicable.

In addition to Schedule A and B items, we are implementing plant betterment modifications and activities. These additional items, identified in Schedule C, are included in Attachment 3. Schedule C items are outside the regulatory scope of the Long Term Program and are exempt from the license conditions imposed on Schedule A and B items.

Changes in status since our last submittal are marked by revision bars in the right margins of Attachment 2.

The current schedule for converting Pilgrim's Technical Specifications to Standard Technical Specifications is 1998 and is shown in Schedule C. We will provide a more detailed schedule in our next update.

Completed Items

- Protection Against Malevolent Use of Vehicles

Schedule Revisions

- RHR Fuel Pool Cooling Intertie Valve Modification

050058

9603050439 960229
PDR ADOCK 05000293
R PDR

ADD 1

BOSTON EDISON COMPANY

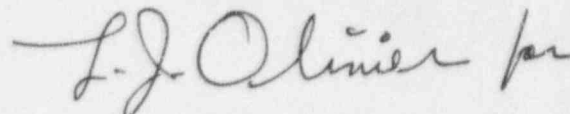
U. S. Nuclear Regulatory Commission

Page 2

New Items

- Bulletin 95-02: RHR Strainers

If you have any questions on the contents of this report, please direct these to Marie Lenhart of our Regulatory Affairs Department, at (508)830-7937.



E. T. Boulette, PhD

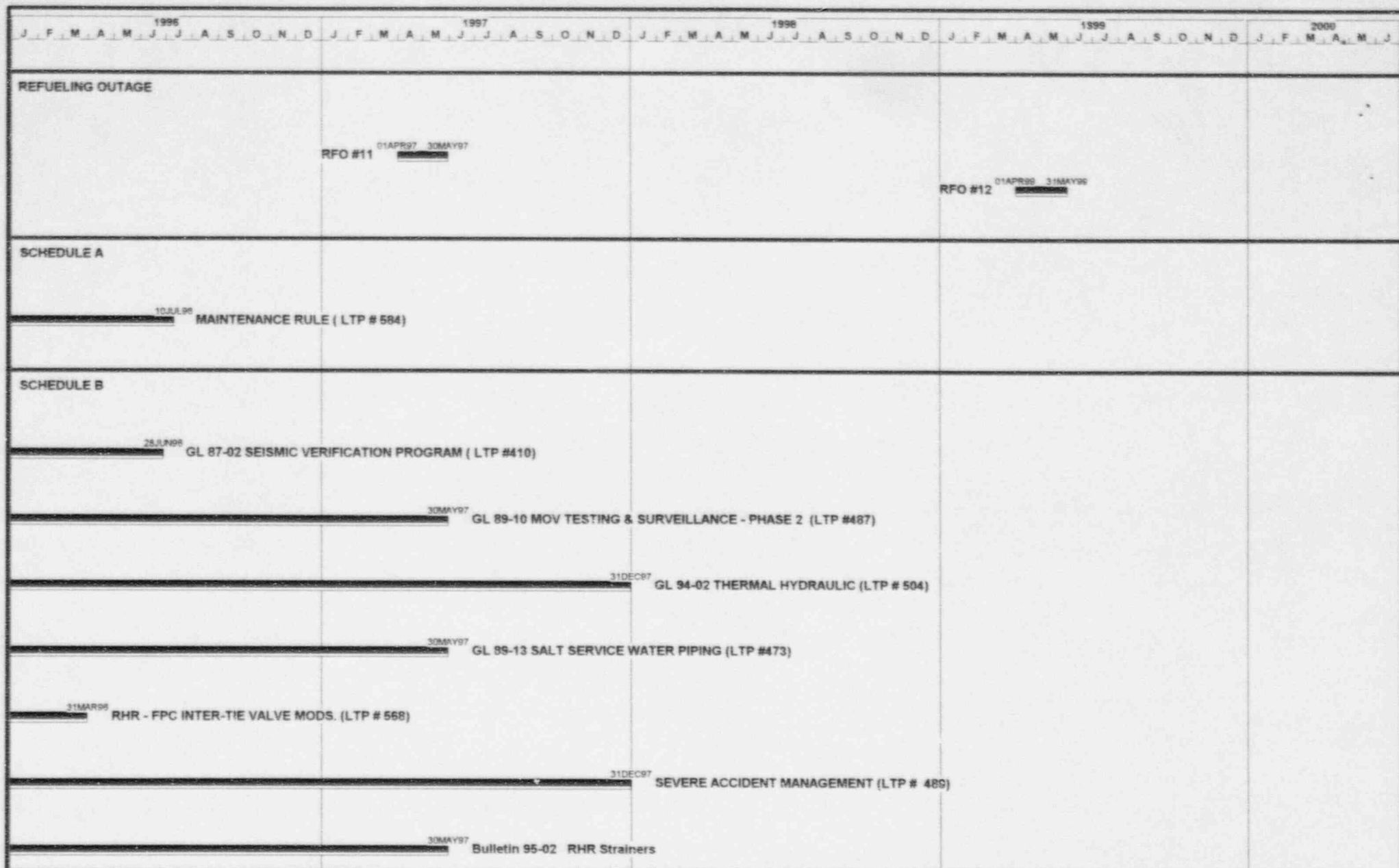
Attachments

nas/LTPL

cc: Mr. R. Eaton, Project Manager
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation
Mail Stop: 14D1
U. S. Nuclear Regulatory Commission
1 White Flint North
11555 Rockville Pike
Rockville, MD 20852

U. S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Senior NRC Resident Inspector
Pilgrim Nuclear Power Station



LONG TERM PROGRAM

BOSTON EDISON – NUCLEAR ORGANIZATION

ATTACHMENT 2

Page Index for LTP Schedule A and B Items

LTP Schedule	LTP Number	Title	Page Number
A	584	Maintenance Rule	1
A	681	Protection Against Malevolent Use of Vehicles (10 CFR Part 73.55(c))	4
B	377	Neutron Flux Monitoring	5
B	567	Seismic Verification Program (GL 87-02)	7
B	255, 473	Salt Service Water System Piping (GL 89-13)	11
B	487	Safety Related MOV Testing (GL 89-10)	14
B	489	Severe Accident Management Program	20
B	504	Thermal-Hydraulic Instability-Hardware Fix (GL 94-02)	21
B	568	RHR-FPC Intertie Valve Modification	23
B	669	IGSCC - Core Shroud (GL 94-03)	24
--	--	South Weymouth Naval Air Station	26
B	--	Bulletin 95-02 RHR Strainers	27

ATTACHMENT 2
SCHEDULE A

MAINTENANCE RULE (LTP #584)

Commitment Description

10CFR50.65 "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants " was issued as a final rule on July 10, 1991 (Reference 1). Licensees are required to have in place by July 10, 1996, a program capable of monitoring the overall continuing effectiveness of their maintenance programs to ensure that safety related and certain non-safety related structures, systems, and components are capable of performing their intended functions; failures of non-safety related equipment will not occur which could prevent the fulfillment of safety related functions; and failures resulting in scrams and unnecessary actuations of safety related systems are minimized.

The rule has a five year implementation schedule with supporting regulatory guide development and promulgation expected within the first two years. This schedule allows three years for licensee development beyond the time that final guidance is expected to be available.

(BEC0 IADB RL 95.0001)

References

1. Federal Register Vol. 56 No. 132, dated July 10, 1991

Commitment History/Progress

Progress and Summary of Changes - March 1991 to August 1991

- A program for ensuring compliance with the maintenance rule is being developed and will be provided in the next regular report for the LTP.

Progress and Summary of Changes - August 1991 to February 1992

- Our implementation approach for the maintenance rule consists of two major aspects:
- A program to monitor the performance of specified structures, systems and components (SSCs) against established goals, and
- Use of the reliability centered maintenance (RCM) concept to upgrade the Station's Preventive maintenance program.
- Development of our monitoring program is evolving in concert with the guidance documents being established by NUMARC and the NRC. The NUMARC guidance is being established to address four areas: selection of SSCs to be covered by the rule; goal setting and performance monitoring; demonstrating equipment functionality by inherent SSC characteristics or by appropriate preventive maintenance; and the removal of plant systems from service without affecting overall plant safety. We understand the NRC guidance will describe acceptable methods for Licensees to monitor the overall continuing effectiveness of their maintenance activities, while offering flexibilities in establishing goal setting, monitoring, and preventive maintenance activities.
- The RCM program commenced in January 1992 with the formal establishment of an RCM team. The EPRI "Work Station" RCM software was selected for use in RCM system analysis. RCM team training on this software and RCM methodology was completed in January 1992.

ATTACHMENT 2 (Continued)

SCHEDULE A

- The RCM program scope identifies and prioritizes 47 plant systems, each requiring approximately 16 weeks of work. A number of systems will be worked in parallel. Completion of the identified program scope is scheduled for May 1994.

Progress and Summary of Changes - March 1992 to August 15, 1992

- PNPS is continuing with a preventive maintenance program upgrade utilizing RCM methodology. An additional system has been added to the RCM program scope bringing the total number of systems to 48. The analysis of three systems has been completed. The identification of SSCs within the scope of the maintenance rule is underway and scheduled for completion in 1992.

Progress and Summary of Changes - August 15, 1992 - February 15, 1993

- The overall project continues on schedule. The RCM analysis of fourteen systems has been completed. The preliminary list of SSCs within the scope of the maintenance rule has been developed and issued for comment. A tailored collaboration with EPRI has been established and is in progress to develop a "Living PM Program" to assist in the programmatic aspects of the maintenance rule implementation plan.

Progress and Summary of Changes - February 15, 1993 - July 31, 1993

- The project is on schedule. A total of 23 system RCM analyses are complete. The Maintenance Rule Project plan is written, an implementation procedure is written, and three pilot systems have been completed.

Progress and Summary of Changes - August 1, 1993 - January 31, 1994

- This project is on schedule. A total of 36 system RCM analyses are complete. We have started the production mode of operation with 4 Maintenance Rule systems complete.

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

- A total of 40 RCM system analyses are complete. There are 12 Maintenance Rule System Evaluations Complete.
- Pilgrim has been accepted by the NRC as a volunteer pilot rule inspection plant. The pilot inspection is scheduled for the week of December 9, 1994.

Progress and Summary of Changes - July 31, 1994 - January 31, 1995

- RCM
The RCM system analysis has been completed. There have been 47 analysis completed. PM package planning for RCM recommendations is ongoing.
- Maintenance Rule
Thirteen Maintenance Rule System Evaluations were completed before the December 94 NRC Pilot Inspection. As a result of the Pilot Inspection these 13 evaluations are being reformatted. Two additional evaluations have been completed. Procedure changes and

ATTACHMENT 2 (Continued)

SCHEDULE A

generation of new procedures to support the ongoing aspect of the Maintenance Rule are being pursued

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

The Maintenance Rule project is in the production phase. We have completed 21 systems and we are completing approximately two systems a week. Currently we are on schedule.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

This project remains on schedule. We have 10 systems to be completed.

ATTACHMENT 2 (Continued)

SCHEDULE A

**PROTECTION AGAINST MALEVOLENT USE OF VEHICLES -10CFR PART 73.55(C)-
(LTP#681)**

Commitment Description

On August 1, 1994, (59 FR 38889), the NRC promulgated a new rule, 10 CFR Part 73.55(c)(7), that requires nuclear power plants have measures to protect against the use of a land vehicle as a means to gain unauthorized proximity to vital areas and to protect against a vehicle bomb.

- By February 28, 1995 licensees must submit a letter that provides a summary description of their planned vehicle control measures and the results of the vehicle bomb analysis. (Complete)
- Completion of modifications by February 28, 1996 (IADB RL95.0019.02) (Complete)
- Submit final as-built drawing (IADB RL 95.0019.01) (Complete)

References

- 1.) NRC letter dated 7/19/94.
- 2.) Final Rule-10 CFR Part 73.55(c)(7), 59 FR 38889, dated 8/1/94
- 3.) BECo letter 95.018, dated 2/10/95.
- 4.) BECo letter 96.012, dated 2/21/96

Commitment History/Progress

Progress and Summary of Changes - July 31, 1994 to January 31, 1995

Reference 3 provides our plans for rule compliance. Due to its safeguards classification, no summary description is provided in this LTP update. Our planned completion date for rule implementation and completion of modifications is February 28, 1996.

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

Design complete, bid package assembled, anticipate start of construction in September 1995.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

Construction is complete. The as-built drawing was submitted under a separate cover (Reference 4). This item is complete and will be removed from future LTP submittals.

SCHEDULE B

NEUTRON FLUX MONITORING (LTP #377)

Commitment Description

Generic Letter 82-33 required utilities to report on implementation of Regulatory Guide 1.97. Boston Edison, and some other utilities with Boiling Water Reactors, took exception to requirements related to neutron flux monitoring systems. Subsequently, the BWR Owners Group submitted NEDO-31558 that proposed alternate criteria for neutron flux monitoring. NRC issued a safety evaluation and accepted the NEDO-31558 criteria in Reference 1.

In Reference 2, the NRC requested utilities to review the neutron flux monitoring instrumentation against the NEDO-31558 to determine whether the installed system meets the criteria and to submit a letter to the NRC with the results of the review.

Boston Edison's reply (Reference 3) identified that Pilgrim Station met the criteria of NEDO-31558 with certain clarifications and exceptions.

Our exception concerned the requirements for uninterruptible power supplies (Criterion 5.2.8 of NEDO-31558). Boston Edison took exception and provided a basis for the acceptability of the present Pilgrim Station design (Reference 3). We are taking no further action on this item.

In Reference 3, Boston Edison committed to perform an analysis of the ATWS conditions in the drywell for comparison with NMS design specifications. We further stated we would be working with other BWR owners on this issue.

(BECO IADB RC95.0011)

References

- 1) NRC Letter dated January 13, 1993 from A. Boyer to C.L. Tully, BWR Owner's Group
- 2) NRC letter dated August 11, 1993, Reg Guide 1.97, BWR Neutron Flux Monitoring (TAC M77660)
- 3) BECo letter 93-136 dated October 21, 1993

Commitment History/Progress

Progress and Summary of Changes - August 1, 1993 - January 31, 1994

As planned, Boston Edison has joined with several other BWR owners through the BWR Owners Group to sponsor an analysis to determine the ATWS environment and to compare the calculated temperatures with design specifications. The BWROG task is underway and expected to be complete in approximately 6 months. We will provide an update on the analysis and its results in the next LTP update at which time we expect to be able to identify what, if any, additional efforts will be required.

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

As planned, Boston Edison supplied various input data on plant parameters to GE for their use in modeling the containment and plant systems for the ATWS analysis. (Three other utilities are also participating in the task and are supplying corresponding data.)

GE and the BWROG now expect to complete the ATWS analysis and issue the preliminary report to sponsoring utilities in early December, 1994.

ATTACHMENT 2 (Continued)

SCHEDULE B

We will provide an update on the analysis and its results in the next LTP update. By that time, if the analysis has been available for sufficient time, we expect to be able to identify what, if any, additional efforts will be required.

Progress and Summary of Changes - August 1, 1994 - January 31, 1995

We continued to supply input data to General Electric and to coordinate with the BWROG and other participating utilities on various questions regarding the analysis. GE has not, however, issued their report. We now expect a report in late April, 1995. We will provide further information in the next LTP update and should then be able to identify what further action will be taken.

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

Boston Edison has received and reviewed the draft final report from GE of their analysis to determine the ATWS environment for neutron monitoring equipment. From our review, we expect to require testing to demonstrate that one or more components (cables, connectors) are adequate for the ATWS conditions. We plan to have test results by the end of 1996.

If testing and analysis are unable to demonstrate the adequacy of the affected components, replacements will be scheduled for a future refueling outage.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

Boston Edison received the final report from GE of the analysis to determine the ATWS environment for neutron monitoring equipment. The report is based on the Dresden Plant and envelopes Pilgrim and 3 other plants with similar piping configurations.

NEDO-31558 requires a plant-specific evaluation of ATWS environments in comparison with design specifications to assure NMS system performance. Qualification to design basis environmental standards required by RG 1.89 is not necessary.

Several design specifications and vendor Certificates of Compliance have been reviewed. This preliminary review concludes the temperature specifications for the components were higher than ATWS temperatures. We are currently performing a review of the cable connectors. A simple temperature test may be required to assure that these connectors will meet the ATWS environment. Test results are expected to be complete by the end of 1996.

SCHEDULE B**SEISMIC VERIFICATION PROGRAM (G. L. 87-02)** (LTP #410, 567)**Commitment Description**

The NRC's final Supplemental Safety Evaluation Report (SER) on Revision 2 of the Generic Implementation Procedures (GIP-2) for A-46 was issued via Generic Letter 87-02, Supplement 1, on May 22, 1992 (Reference 4). By September 21, 1992, each licensee was required to respond to the SER stating whether they intend to follow the GIP-2 guidance, provide a schedule for implementation of the GIP including submission of a report summarizing the results of the A-46 review, and provide information on the procedures and criteria used to generate the in-structure response spectra used for A-46 implementation. Evaluation of equipment is to include (a) adequacy of equipment anchorage; (b) functional capability of essential relays; (c) identification of potential outliers and deficiencies; and (d) seismic systems interactions.

In our response (Reference 5), we committed to implement GIP-2 in its entirety and provided a description of the procedures and criteria used to generate the in-structure response spectra. A schedule of GIP-2 implementation and submission of a summary report was deferred to the February 1993 LTP semi-annual update (provided below).

In Reference 6, the NRC issued a Safety Evaluation Report (SER) approving our response. The SER assumed a commitment on BECo's part to implement the GIP-2 in its entirety and noted our in-structure response spectra should be treated as median-centered. We affirmed the NRC assumption to be correct in Reference 7 and clarified our continued commitment to implement the seismic verification program at Pilgrim Station through the GIP-2 and its subsequent revisions.

Our schedule for completion of the GIP and submission of a summary report is scheduled for 6/30/96. This schedule is consistent with the 3-year completion recommended in SSER Section II.4.2.3 that specifies commencement of the 3-year period will begin when one of the following conditions is met:

- Receipt of staff approval of the in-structure response spectra to be used to resolve the USI A-46 (i.e. Reference 6).
- 60 days following the licensee's initial submittal of acceptable procedures and criteria in generating those in-structure response spectra.

(BEC0 IADB RL 95.0003)

References

- 1) NRC Letter dated February 19, 1987, GL 87-02
- 2) BECo Letter 88-145, dated October 11, 1988, Response to GL 87-02
- 3) NRC Letter dated June 7, 1989, Acknowledgment of BECo Response
- 4) NRC Letter dated May 22, 1992, Generic Letter 87-02, Supplement 1,
- 5) BECo Letter 92-109, dated September 21, 1992, Response to GL 87-02, Supplement 1
- 6) NRC Letter dated November 18, 1992, SER of PNPS Response to GL 87-02, Supplement 1
- 7) BECo Letter 93-019, dated February 11, 1993, Additional Information Regarding NRC SER of PNPS Response to GL 87-02, Supplement 1
- 8) BECo Letter 94-16 dated February 9, 1994, Additional Response to GL 87-02, Supplement 1
- 9) NRC letter dated June 17, 1994, Re-evaluation of Approval for Developing Floor Response Spectra for the Resolution of USI A-46.

SCHEDULE B

Commitment History/Progress

Progress and Summary of Changes - March 1989 to February 1990

- A. Develop safe shutdown equipment list - Schedule Revised
- B. Recreate original seismic design basis documentation - Schedule Revised
- C. Training and commence walkdown of accessible areas - Schedule Revised

The schedule for performing these three items was revised from Cycle 8 to Cycle 9 as a result of our re-assessment of the work to be performed for this seismic issue, with respect to the generic work scope for other similar existing and emerging seismic issues. By incorporating the similarities of work scope for each of the below listed issues into one set of physical activities, we can best optimize our resources. Other seismic issues include:

- Seismic Design Basis (USI A-40)
- Eastern Seismicity and Seismic Design Margins
- External Events (seismic) for Individual Plant Examinations

Progress and Summary of Changes - February 1990 to November 1990

- A revised schedule for implementation of the seismic verification program will be developed after issuance of the NRC SER resolving the GIP open issues.

Progress and Summary of Changes - December 1990 to February 1991

- No changes from the previous report period.

Progress and Summary of Changes - March 1991 to August 1991

- A schedule for implementation of the seismic verification program will be developed after issuance of the NRC SER resolving the GIP open issues.

Progress and Summary of Changes - August 1991 to February 1992

- A schedule for implementation of the seismic verification program will be developed after issuance of the NRC SER resolving the GIP open issues.

Progress and Summary of Changes - March 1992 to August 15, 1992

- Reference 4, issued the final NRC SER (SSER No. 2) resolving the GIP open issues and superseded all previous NRC SER documents. A response containing the following information will be made by September 21, 1992:
- A statement whether we commit to use both the SQUG commitments and the implementation guidance provided in GIP-2 as supplemented by the SSER No. 2 for the resolution of USI A-46.
- A plant-specific schedule for the implementation of the GIP and submission of a report summarizing the results of the USI A-46 review.
- Detailed description of the procedures and criteria used to generate the in-structure response spectra.

ATTACHMENT 2 (Continued)

SCHEDULE B

Progress and Summary of Changes - August 16, 1992 - February 15, 1993

- Three BECo personnel and a contractor have completed the GIP Seismic Walkdown and Evaluation SQUG Training Program.
- A safe shutdown equipment list has been developed and is undergoing final review and approval.
- A portion of the seismic walkdowns began in MCO #9. On-line walkdowns continue during operating cycle 9. Outage walkdowns are planned for RFO 9 with any further on-line portions in operating cycle 10. Remaining off-line portions will be done in MCO 10 and RFO 10.
- At BECo's request, a meeting was held in our Braintree offices on September 3, 1992, in which we presented our intended approach to A-46 resolution and solicited NRC feedback prior to preparing our Generic Letter 87-02 response letter.

Progress and Summary of Changes - February 16, 1993 - July 31, 1993

- Walkdowns scheduled for RFO 9 were completed and other walkdowns are continuing while on-line. The goal is to minimize the impact of performing walkdowns during an outage where safe and practicable.
- Relays associated with the safe shutdown equipment list are being assessed via a full circuit analysis. This is a task being worked by Engineering and Operations.
- The majority of the SSEL equipment and relay evaluations are expected to be completed by RFO 10.
- Cable tray walkdowns have been completed and the evaluations are expected to be completed by RFO 10.
- Four more engineers have completed the SQUG Walkdown Screening and Seismic Evaluation Training Course (Total of 7 engineers now certified).

Progress and Summary of Changes - August 1, 1993 - January 31, 1994

- Remaining SSEL walkdowns have been planned and scheduled for MCO #10.
- Relay evaluations are nearing completion. Discussions between engineering and operations concerning essential relay designation is progressing.
- A letter requesting a review of our A-46 plan has been sent (Ref. 8). We have completed an initiative that demonstrates the conservatism of the PNPS design basis spectra. This would justify it to be classified as a "conservative design" spectra for A-46 implementation.
- Documentation packages are being assembled to support close-out.

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

- Final SSEL walkdowns are scheduled for MCO #10.
- Seismic Evaluation Work Sheets for SSEL components are progressing.

ATTACHMENT 2 (Continued)

SCHEDULE B

- NRC approved PNPS classification as a "conservative design" spectra for A-46 implementation above 4Hz.
- Relay qualification has been initiated.

Progress and Summary of Changes - August 1, 1994 - January 31, 1995

- Final SSE walkdowns are scheduled for RFO # 10
- Relay qualification is progressing
- We have rescheduled the report submittal date to 6/96. Greater than 90% of the walkdowns are complete. However, completion has been slowed by the temporary reassignment of uniquely qualified personnel to support significant emergent issues, e.g., the extended main generator forced outage, and the core shroud repair preparation.

Progress and Summary of Changes - January 31, 1995 - August 1, 1995

- SSEL walkdowns are now completed.
- Relay qualification is approaching completion
- Seismic Evaluation Work Sheets (SEWS) development is nearing completion.
- Final report will be started in the 4th quarter. Submittal in June 1996 remains unchanged.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

- Seismic Evaluation Work Sheets (SEWS) are complete.
- Relay qualification assessment essentially complete.
- Assessment of "potential outliers" initiated.
- Development of documentation and final report is progressing and the submittal is planned for June 1996.

SCHEDULE B

GENERIC LETTER 89-13, SALT SERVICE WATER SYSTEM (LTP #255, 473)

Commitment Description

Generic Letter 89-13 required licensees to review and evaluate the adequacy of the service water system and all safety related heat exchangers. The review identified a number of enhancements to the PNPS programs and procedures. As a result, BECo committed via Reference 2 to the following:

- Prior to end of RFO #8, modify the RBCCW heat exchanger test procedures to include an analytical model to calculate RBCCW heat exchanger performance at test and design conditions (complete). Conduct tests with modified procedures during Cycle 9. (Complete)
- Prior to end of RFO #9, modify the RHR heat exchanger test procedures to include an analytical model to calculate RHR heat exchanger performance at test and design conditions. Conduct tests with modified procedures during Cycle 10 (Complete)
- Develop a regular maintenance/test program on heat transfer capability of the remaining heat exchangers by RFO #9. (Complete)
- Conduct a Single Failure Analysis for the RBCCW subsystem by end of RFO #8. (Complete)
- Prior to end of RFO #8, upgrade the licensed operator training module to include a loss of all service water. (Complete)
- Complete SWOPI Items by the end of RFO 11. (BECo IADB RC 95.0053, SW95.XXXX)

Credit was also taken in Reference 2 for the SSW piping inspection and replacement program already underway at Pilgrim which, henceforth, will be integrated as part of our Generic Letter 89-13 implementation efforts.

References

- 1) Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment"
- 2) BECo letter 2.90.047, dated April 2, 1990, "Response to Generic Letter 89-13"

Commitment History/Progress

Progress and Summary of Changes - March 1990 to November 1990

- The licensed operator training module upgrade is complete.
- There are no changes to the other above-described commitments and schedules.

Progress and Summary of Changes - December 1990 to February 1991

- A single failure analysis of the RBCCW subsystem has been performed.
- There are no changes to the other above-described commitments and schedules.

Progress and Summary of Changes - March 1991 to August 1991

- RBCCW heat exchanger test procedures have been modified to include an analytical model to calculate RBCCW heat exchanger performance at test and design conditions.

ATTACHMENT 2 (Continued)

SCHEDULE B

- In addition, activities associated with SSW piping inspection and replacement are being integrated under our GL 89-13 effort. Further inspections of the SSW piping will be scheduled during each planned mid-cycle or refueling outage of sufficient duration. It remains our intention to replace SSW piping when the inspection of piping shows that to be necessary.

Progress and Summary of Changes - August 1991 to February 1992

- Efforts to enhance the Salt Service Water System are proceeding as indicated in our response to Generic Letter 89-13. There are no changes to the above-described commitments.

Progress and Summary of Changes - March 1992 to August 15, 1992

- A decision was made to replace the buried SSW piping with corrosion-resistant titanium. Five Plant Design Change Packages were prepared to facilitate replacement of the pipe. Construction of a pipe vault at the intake structure is in progress. Replacement activities will continue through MCO9 and RFO9. Above ground piping will be routinely examined by non-destructive technology (typically UT) and will be replaced as required. Efforts to enhance the SSW system are proceeding as indicated above.

Progress and Summary of Changes - August 15, 1992 - February 15, 1993

- There are no changes to the GL 89-13 (LTP 473) commitments described above.
- We are currently installing replacement SSW underground piping (LTP 255) in preparation for system tie in RFO #9 (4/93). To support this effort, during MCO 9 (10/92) we replaced spool pieces in the Auxiliary Bay and Screen House. We also plan to replace the remainder of the Intake Structure and Auxiliary Bay above ground inlet piping and tie in the new inlet loop buried piping in RFO #9.

Progress and Summary of Changes - February 15, 1993 - July 30, 1993

- RBCCW Heat Exchanger testing was completed on schedule in cycle 9. The RHR Heat Exchanger Test Procedure and Analytical Model was completed on schedule in RFO 9. The Heat Exchanger Maintenance and Test Program for Heat Transfer Capability was also completed on schedule in RFO 9. There are no changes to the remaining GL 89-13 (LTP 473) commitments described above.
- Replacement of the SSW piping (LTP 255) was completed on schedule in RFO 9. Through RFO 9, 250 feet of above ground rubber lined carbon steel pipe has been replaced. In addition, 430 feet of buried rubber lined carbon steel pipe has been replaced with Titanium pipe. Augmented ISI of above ground rubber lined carbon steel pipe was also completed on schedule in RFO 9. Future ISI will be captured under LTP 473. LTP 255 is completed.

Progress and Summary of Changes - August 1, 1993 - January 31, 1994

- There are no changes to the remaining GL 89-13 commitments described above. In summary, RHR heat exchanger tests will be conducted with modified procedures during Cycle 10. Ongoing inspections of the Salt Service Water System have been incorporated into our ISI program.

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

- There are no changes to the remaining GL 89-13 (LTP 473) commitments described above.

ATTACHMENT 2 (Continued)

SCHEDULE B

Progress and Summary of Changes--August 1, 1994 - January 31, 1995

- We performed an extensive self-assessment of the Salt Service Water System and our response to GL 89-13 (Reference 2). We are in the process of developing a plan to address issues and enhancements identified in the self-assessment.
- RHR heat exchanger tests were conducted with modified procedures during Cycle 10. Ongoing inspections of the Salt Service Water System have been incorporated into our ISI program.

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

- We are implementing a comprehensive set of enhancements identified in the Salt Service Water System self assessment (SWSOPI). We plan to implement most of the enhancements prior to the end of 1995, and all of these enhancements are currently scheduled for completion by the end of RFO-11.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

We are currently on schedule to complete the SWOPI items by the end of RFO 11.

SCHEDULE B

GENERIC LETTER 89-10, SAFETY-RELATED MOV TESTING AND SURVEILLANCE
(LTP #487)

Generic Letter 95-07, Pressure Locking and Thermal Binding of Safety-Related, Power-Operated Gate Valves

Commitment Description

Generic Letter 89-10 (Ref. 1) expands the scope of the motor operated valve program required by NRC Bulletin 85-03 and its Supplement, to include additional testing, inspecting, and maintenance for all safety-related motor operated valves.

In our Reference 2 response to the Generic Letter, we committed to develop a program to enhance the maintenance, analysis, and testing already being conducted on MOVs at Pilgrim. The Generic Letter calls for the development of this program within 1 year or one refueling outage from the date of the letter, whichever is later. For BECo, this schedule translates to RFO #8. Our plan was to begin a design basis review of MOVs in the first quarter of 1991 and to begin testing in RFO #9. Based on resource constraints in 1990, we revised the design basis review schedule to commence in the last quarter of 1991. This revision continues to support our commitment to begin testing in RFO #9 and supports our program development schedule. We anticipate the testing will require three refueling outages, based on the extent of known scope. Additional scope determinations as a result of NUMARC and BWROG involvement will be factored into our final scope and schedule as appropriate.

Reference 6 requested Licensees to perform a plant specific safety assessment to determine if generic safety assessments performed by the NRC staff and the BWR Owners' Group are applicable. If MOVs are discovered with potential deficiencies of greater significance than the HPCI, RCIC, and RWCU MOVs, planned activities to address the generic letter were to be re-prioritized accordingly. Notification within 30 days of receipt of Supplement 3 was required verifying a plant-specific safety assessment was performed and identifying whether there were MOVs with deficiencies of greater safety significance than in the HPCI, RCIC, and RWCU systems. An additional notification within 120 days of receipt was also requested to provide the criteria reflecting operating experience and the latest test data applied in determining whether deficiencies exist in the HPCI, RCIC, and RWCU MOVs.

In our Reference 7 letter, we concluded the subject valves in the HPCI, RCIC, and RWCU systems were capable of performing their safety function to provide containment isolation in the event of a line break outside containment. This submittal provided our 30 and 120 day response to the generic letter and precluded having to perform a plant specific safety assessment. We also committed in Reference 7 to conduct diagnostic testing on the Reactor Water Cleanup (RWCU) MO-1201-2 valve during RFO #8. We expanded our planned RFO #8 testing to include 2 additional valves: RWCU MO-1201-5 and Closed Cooling Water MO-4010A.

The NRC issued a Request for Additional Information (RAI) (Reference 10) after reviewing our Reference 7 and 8 responses to GL 89-10 Supplement 3. BECo responded to the RAI on August 29, 1991 (Ref. 11).

During the week of March 9-13, 1992, the NRC conducted an inspection of the PNPS GL 89-10 MOV program. As a result of this inspection Boston Edison committed to resubmit the GL 89-10, Supplement 3, response and accelerate the schedule for priority 1 valves to have the GL 89-10 actions completed by the end of RFO 10.

RFO 10 is scheduled for 1995. The remaining safety-related valves will be completed by the end of RFO #11.

(BECo IADB RL95.005)

ATTACHMENT 2 (Continued)

SCHEDULE B

References

- 1) Generic Letter 89-10, dated June 28, 1989
- 2) BECo Letter 90-13, dated January 15, 1990
- 3) NRC Letter dated June 7, 1990, Response to Generic Letter 89-10
- 4) NRC Letter dated June 13, 1990, Supplement 1 to Generic Letter 89-10
- 5) NRC Letter dated August 3, 1990, Supplement 2 to Generic Letter 89-10
- 6) NRC Letter dated October 25, 1990, Supplement 3 to Generic Letter 89-10
- 7) BECo letter 90-158 dated December 17, 1990
- 8) BECo Letter 91-022, dated February 26, 1991
- 9) NRC Letter dated April 1, 1991, Meeting Summary BECo/NRC
- 10) NRC Letter dated June 24, 1991, RAI regarding GL 89-10 Supplement 3
- 11) BECo Letter 91-111, dated August 29, 1991
- 12) NRC Letter dated February 18, 1992, Closure of GL 89-10, Supplement 3
- 13) NRC Letter dated February 12, 1992, Generic Letter 89-10 Supplement 4
- 14) NRC Letter dated June 3, 1992, Inspection 50-293/92-80 Motor Operated Valve Inspection.
- 15) NRC Letter dated May 5, 1992, Motor Operated Valve Inspection at PNPS (NRC Inspection Report 50-293/92-80).
- 16) BECo Letter 92-044, Revision to GL 89-10, Supplement 3, Response
- 17) NRC Letter dated June 28, 1993, GL 89-10 Supplement 5
- 18) BECo Letter 93.135, dated October 21, 1993, Response to GL89-10, Supplement 5
- 19) BECo Letter 94.005, dated January 7, 1994, Update to GL89-10, Supplement 3 Response
- 20) NRC Letter dated April 19, 1994, GL 89-10, Supplement 5
- 21) Generic Letter 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves (BECo #1.95.131)
- 22) BECo Letter 95.108, dated October 16, 1995, 60-Day Response to Generic Letter 95-07
- 23) BECo Letter 96.013, dated February 23, 1996, 180-Day Response to Generic Letter 95-07

Commitment History/Progress

Progress and Summary of Changes - February 1990 to November 1990

- Begin a design basis review of MOVs is on schedule for first quarter of 1991.
- Begin testing is on schedule for RFO #9 (completion within 3 refueling outages).
- 30 day notification in accordance with Generic Letter 89-10, Supplement 3 is planned for submittal by December 13, 1990.
- 120 day notification efforts are planned for submittal by March 13, 1991.

Progress and Summary of Changes - December 1990 to February 1991

- The schedule for commencement of design basis reviews of MOVs is being changed from the first quarter of 1991 to the last quarter of 1991. This schedule revision continues to support our commitment to begin testing in RFO #9.
- Begin testing is on schedule for RFO #9 (completion within 3 refueling outages).
- 30 day and 120 day notifications are complete.
- 3 safety related valves are on schedule for

ATTACHMENT 2 (Continued)

SCHEDULE B

Progress and Summary of Changes - March 1991 to August 1991

- Commencement of design basis reviews of MOVs is on schedule for the last quarter of 1991.
- Begin testing is on schedule for RFO #9 (completion within 3 refueling outages).
- Diagnostic testing of MO-1201-2, 1201-5, and 4010A was conducted during RFO #8. In addition to this testing, we completed diagnostic testing on the remaining GL 89-10 Supplement 3 MOVs (4 valves) and on another 10 safety related MOVs.
- Development of a Program Plan is complete.

Progress and Summary of Changes - August 1991 to February 1992

- Design basis reviews of MOVs continue to support our commitment to begin testing in RFO #9.
- Testing is on schedule to begin in RFO #9 (completion within 3 refueling outages).
- Procedures are in preparation describing design basis review methodology, control of switch settings, and degraded voltage analysis. Additionally, a Nuclear Organization Procedure establishing our MOV program is in final review.
- The schedule for static testing of MOVs has been accelerated and some testing will be done during our mid-cycle outage prior to RFO #9.
- MOVs tested using MOVATS test equipment were reviewed and have been retested using more accurate diagnostic test equipment or been reviewed to ensure there is sufficient margin.

Progress and Summary of Changes - March 1992 to August 15, 1992

- Design basis reviews of MOVs continue to support our commitment to begin testing in RFO #9.
- Testing is on schedule to begin RFO #9.
- GL 89-10 activities will be completed for priority 1 valves by the end of RFO #10.
- Reference 16 submitted a revision to GL 89-10, Supplement 3, response (Reference 8).
- Nuclear Organization Procedure 92M1 "Motor Operated Valve Program" has been approved.
- Procedures describing design basis review methodology and control of switch settings are approved. Draft procedures for degraded voltage of motors are being revised to include temperature effects on available torque. Additional procedures are being developed as necessary.

Progress and Summary of Changes - August 15, 1992 - February 15, 1993

- Design basis review is on schedule to support commitment to complete Priority 1 valves by RFO #10.
- Static testing was performed during MCO 9.
- New state of the art test equipment was purchased that provides direct stem torque and thrust measurements.
- Significant MOV testing, maintenance, and inspections scheduled for RFO 9.

Progress and Summary of Changes - February 15, 1993 - July 31, 1993

- Design Basis Reviews (DBR) and Diagnostic Testing are on schedule to complete Priority I MOVs (55 valves) by RFO 10. DBR and Testing related to the remaining Safety Related (SR) MOVs (35 valves) is also on schedule and is expected to be completed by RFO 11.
- Significant MOV testing, maintenance and inspections were completed in RFO 9. Maintenance and inspections were conducted on 56 SR MOVs. Diagnostic Testing was completed on 21 SR MOVs.

ATTACHMENT 2 (Continued)

SCHEDULE B

- Through RFO 9, 46 out of a total population of 90 SR MOVs have been set up via diagnostic testing techniques. Through RFO 9, 29 of 55 Priority I MOVs have been set up via diagnostic testing techniques.
- MOV testing, maintenance, and inspections are scheduled to continue in MCO 10, including the first phase of Dynamic Testing.

Progress and Summary of Changes - August 1, 1993 - January 31, 1994

- Design Basis Reviews (DBR), Diagnostic Testing, Inspections, Maintenance and Modifications are on schedule to support the commitment to complete Priority I MOVs (55 valves) by RFO 10. Similar efforts related to the remaining Safety Related (SR) MOVs (35 valves) are also on schedule and are expected to be completed per the current commitment, RFO 11.
- The first phase of Dynamic Testing is on schedule to commence in MCO 10. The use of an alternative valve and actuator design is under consideration for implementation on a certain population of MOVs. Candidate MOVs are those which would require significant modifications utilizing typical manufacturer product design and applications. The alternative design has several advantages including a solid-state control system, enhanced repeatability, reduced electrical power demand and a reduced preventative maintenance frequency. The alternate design would also decrease the probability of potential common mode failure issues and diversify plant design.
- Our response to Generic Letter 89-10, Supplement 5. (Reference 18), indicated actions to be taken to resolve the accuracy issues associated with the use of Liberty Technologies VOTES equipment. The following actions were required:
- Update the VOTES test results using the revised property constants and torque correction factors. This action is complete. Subsequent to this action, Liberty issued Customer Service Bulletin (CSB) 031 that requires review of test results due to a software problem in the VOTES equipment. This new action will be completed and updated by our next LTP submittal.
- Revise Liberty Technologies test results to use a curve fit algorithm and determine extrapolation error. This action is complete. Subsequent to completion, Liberty issued CSB-031 causing a need to review post test results. This new action will be completed and updated by our next LTP submittal.

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

- Design Basis Reviews (DBR), Diagnostic Testing, Inspections, Maintenance and Modifications are on schedule to support the commitment to complete Priority I MOVs (55 valves) by the end of RFO 10. Similar efforts related to the remaining Safety Related (SR) MOVs (35 valves) are also on schedule and are expected to be completed per the current commitment, RFO 11. The work scope applicable to the Priority I MOVs includes approximately (90) Inspections, (17) Overhauls, (48) Static Diagnostic Tests, (36) Dynamic Diagnostic Tests and (52) Modifications.
- The first phase of Dynamic Testing is on schedule to commence in MCO 10.
- The use of an alternative valve design, as previously discussed, is being aggressively pursued for implementation on (4) MOVs in RFO 10. The use of an alternative actuator design is also being aggressively pursued for implementation on (1) MOV in RFO 10. The alternate design incorporates GL89-10 'lessons learned' as well as the most recent EPRI and INEL technical information. Back-up plans are also being developed should new product qualification issues not support our RFO 10 schedule commitment.

ATTACHMENT 2 (Continued)

SCHEDULE B

Progress and Summary of Changes - July 31, 1994 - January 31, 1995

- 'Generic Letter 89-10, Safety Related MOV Testing and Surveillance' activities continue on schedule to support the commitment to complete Priority I MOVs (55 valves) by RFO 10, with the remaining Safety Related (SR) MOVs (35 valves) following per the current schedule commitment, RFO 11.
- Significant progress was made during the generator forced outage in the Fall of 1994. The forced outage enveloped the original scheduled MCO 10. A total of forty-nine (49) MOVs were worked during the Fall outage. Industry corrective actions and GL 89-10 design changes accounted for thirty-six (36) of the forty-nine (49) activities performed. Activities ranged in complexity from complete actuator replacement/valve disassembly to simple changes in gear ratio and EQ inspections.
- Valve modifications were completed on three (3) MOVs for the purpose of installing pressure locking relief paths. Potential over-thrust/over-torque conditions were also dispositioned on two MOVs in the RWCU and RCIC systems.
- The first phase of Dynamic Testing was completed during the Fall outage. Differential pressure diagnostic testing was completed on thirteen (13) MOVs. Static diagnostic testing also continued during this outage with twenty-five (25) MOVs being set using state-of-the-art equipment and industry data.
- The use of an alternative valve design, as previously discussed, is scheduled for implementation on (4) MOVs in RFO 10. The use of an alternative actuator design is also being aggressively pursued for implementation on (1) MOV in RFO 10. The alternate designs incorporate GL 89-10 'lessons learned' as well as the most recent EPRI and INEL technical information. Back-up plans are in place to install a conventional design actuator should delivery of the new actuator not support our RFO 10 schedule commitment. Whichever actuator is installed, committed actions will be completed in RFO10.

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

- The first phase of Generic Letter 89-10, Safety Related (SR) MOV Testing and Surveillance activities (55 Priority I MOVs) was completed on schedule in RFO 10. The remaining Safety Related MOVs (35 valves) will follow per the current schedule commitment, RFO 11.
- Significant progress was made during RFO 10 (Spring 95). A total of sixty eight (68) SR MOVs were worked during the refueling outage. Industry corrective actions and GL89-10 design changes accounted for forty (40) of the sixty eight (68) activities performed. Activities ranged in complexity from complete valve/actuator replacement to simple changes in gear ratio and EQ inspections.
- Valve modifications were completed on five (5) MOVs in RFO 10 for the purpose of installing pressure locking relief paths. This brings the total number of MOV related modifications to eight. No additional MOV modifications related to this issue are expected.
- During RFO10, differential pressure diagnostic testing was completed on thirty five (35) MOVs. Static diagnostic testing also continued during the RFO with forty (40) MOVs being set using state-of-the-art equipment and industry data.
- Design basis operation for eight three percent (83%) of Priority 1 gate and globe motor operated valves has been confirmed via differential pressure diagnostic testing. Static diagnostic testing has been performed on all Priority 1 gate and globe motor operated valves (47).

SCHEDULE B

- The installation of an alternative valve design ("Sentinel"), as discussed in the previous update, was completed on (4) MOVs in RFO 10. Three of the six GL89-10 Supplement 3 MOVs were replaced with the new design. RFO10 test results indicate excellent performance characteristics. The use of an alternative actuator design is also continuing to be aggressively pursued for future implementation. The alternate designs incorporate GL89-10 "lessons learned" as well as the most recent EPRI and INEL technical information and thus represent a truly engineered solution to many outstanding design issues.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

The scope of work associated with RFO 11 will be similar in nature and in quantity to that accomplished in RFO 10 (summarized in the previous update). Certain Priority I MOV's will again be worked for the purpose of accomplishing standard preventative maintenance, disposition of emergent generic industry issues, or to inspect for potential degradation for trending or corrective maintenance. The strategy is to complete as much of the scope on line within the scheduled system windows as possible. This strategy optimizes resources and considers ALARA.

The issue of "Pressure Locking and Thermal Binding..." with respect to MOVs is essentially complete. Twelve (12) MOVs have been determined to be susceptible to pressure locking and three (3) MOVs have been determined to be susceptible to thermal binding. Physical modifications are complete on eleven (11), procedure changes are planned on four (4), with the remainder being dispositioned via engineering evaluation as not susceptible. Specific details are available in our 180-day response to GL 95-07. (Reference 23)

SCHEDULE B

SEVERE ACCIDENT MANAGEMENT PROGRAM (LTP #489)

Commitment Description

By letter dated March 24, 1995, we informed you that Pilgrim Station intends to implement the formal industry position on severe accident management approved by the Nuclear Energy Institute's Nuclear Strategic Issues Advisory Committee on November 21, 1994, from NEI to the Director, Office of Nuclear Regulation states that:

Each licensee will:

- Assess current capabilities to respond to severe accident conditions using Section 5 of NEI 91-04, Revision 1, "Severe Accident Issue Closure Guidelines."
- Implement appropriate improvements identified in the assessment, within the constraints of existing personnel and hardware, on a schedule to be determined by each licensee and communicated to the NRC, but in any event no later than December 31, 1998.

Based on previous interactions between NEI and the NRC, we understand the NRC agrees with the need for licensee flexibility in their methods of assessing and establishing severe accident management guidance. Utilizing the associated implementing guidance (contained in NEI report 91-04, Revision 1), our target date for completion of the assessment of severe accident management capabilities and implementation of any identified enhancements is December 31, 1997.

(BEC0 IADB RC 96.0001)

Commitment History/Progress

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

- Multi-disciplined Task Force and Project Manager assigned to Program.
- Integration with EOP update initiated
- Project goals, objectives, schedules, costs, and task ownership approved.
- Detailed task assignments have been made.
- Continued interaction with the BWROG's Severe Accident Working Group.
- Detailed reviews of governing guidance documents have been initiated.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

- Vendor selected to complement in-house resources.
- Continued interaction with the BWROG's Severe Accident Working Group.
- Data collection to support calculations initiated.
- The following tasks have been initiated:
 - develop Plant Specific Technical Guidelines and Plant Specific Severe Accident Guidelines
 - evaluate Emergency Response Organization
 - verify technical guidelines
 - formulation of design decisions

SCHEDULE B**BWR THERMAL-HYDRAULIC INSTABILITIES (GL 94-02) (LTP#504)****Commitment Description**

The NRC issued this Generic Letter requesting each BWR licensee take appropriate actions to augment its procedures and training for preventing or responding to thermal-hydraulic instabilities in their reactors. Each licensee is to submit a plan describing which long-term stability solution hardware option it has selected and provide a proposed implementation schedule for the necessary modifications.

Boston Edison implemented the Stability Guidelines (Reference 3) coincident with startup from RFO 10. Boston Edison will install Enhanced Option 1A as its long-term stability solution. Milestones are:

- | | |
|--|--------------|
| • Submit Tech. Spec. changes for Option 1A Modifications | 3rd Qtr/1996 |
| • NRC approval of Tech. Specs. | 3rd Qtr/1997 |
| • Option 1A modifications implemented at PNPS | 4th Qtr/1997 |

(BEC0 IADB RL 95.0016)

References

- 1.) Generic Letter 94-02, dated 7/11/94. "Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in Boiling Water Reactors"
- 2.) BECo Response to GL 94-02, dated 9/9/94, BECo Letter No. 94.102.
- 3.) BWR Owners Group Letter, dated 6/6/94, "BWR Owners Group Guidelines for Stability Interim Corrective Action".

Commitment History/Progress

Progress and Summary of Changes - July 31, 1994 to January 31, 1995.

In Reference 2, Boston Edison informed the NRC we would, within design and license constraints, modify procedures and conduct operator training consistent with the guidelines provided in reference 3. These actions will be implemented coincident with startup from RFO #10, currently scheduled to start March 25, 1995.

ATTACHMENT 2 (Continued)

SCHEDULE B

Also in Reference 2, BECo stated we are presently planning to install the Enhanced Option 1A stability solution at Pilgrim Station by the end of 1997. The proposed milestones for Option 1A were included in reference 2 as follows:

<u>Milestone</u>	<u>Owner</u>	<u>Date</u>
• Submit PNPS specific power/flow map region boundaries to NRC for review and approval	PNPS	3rd Qtr/1995
• NRC approval of submitted region boundaries	NRC	2nd Qtr/1996
• Submit Tech. Spec. changes for Option 1A modifications	PNPS	3rd Qtr/1996
• NRC approval of Tech. Specs.	NRC	3rd Qtr/1997
• Option 1A modifications implemented at PNPS	PNPS	4th Qtr/1997

We also stated we are continuing to monitor the Option 3 progress and would inform the NRC via the LTP Update process if Option 3 became a more viable long-term solution for PNPS.

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

The milestones reported on the last LTP are unchanged except the NRC has indicated at a July 10, 1995 BWROG meeting that we do not have to separately submit the PNPS specific power/flow MAP region boundaries to the NRC for review and approval. We can submit the boundaries as part of the technical specification package for the hardware modifications. BECo may separately send these proposed boundaries to the NRC in support of requesting approval for our use if such boundaries offer significant relief from the in-place BWROG interim corrective action guidelines.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

The design of hardware and software modifications is in progress. The project is on schedule.

SCHEDULE B

RHR/FPC INTERTIE VALVE MODIFICATION, LTP # 568

Commitment Description

Boston Edison requested and obtained code relief on May 18, 1995, from having to inspect RHR/FPC Intertie piping during the 2nd ten year inspection interval ending June 30, 1995, based on excessive radiation exposure. The relief was based upon a BECo commitment to install a 6 inch manual isolation valve during RFO#11 that would isolate this piping from the code inspection boundary, thereby eliminating the inspection requirement (Reference 2).

(BECo IADB RC 95.0060.03)

References

1. BECo Letter # 95-015, dated February 9, 1995
2. NRC Letter dated May 18, 1995

Commitment History/Progress

Progress and Summary of Changes - July 31, 1994 to January 31, 1995

Plant Design Change has been prepared, and is scheduled for implementation during RFO#11

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

In reviewing the ASME Code requirements for the 3rd ISI interval, the 1989 editions of ASME XI deletes the requirement to inspect this particular run of piping, eliminating the need to install the 6" manual isolation valve (no Plant Design Change is required).

The PNPS third ten year inspection interval started on July 1, 1995. The ISI Program has been updated in accordance with the 1989 edition of the ASME code as provided by 10CFR50.55a.

The inspection requirements of the 1989 edition of ASME XI, Category C-F-2 in particular, have changed with respect to Class 2 piping of less than 0.375 inch wall thickness. Previously, a surface examination of circumferential piping welds, visual examination of pipe supports and pressure testing was required. The new code requires only pressure testing which, with the use of Code Case N-498, can be easily performed. The Intertie piping is M-300 Pipe Class HB (6 inch Sch.40) with a wall thickness of 0.280 inches. This means there is no longer a reason to install the 6 inch valve for the purpose of isolating the RHR/FPC Intertie return piping from the Class 2 code inspection boundary. We will submit a revised relief request on this issue.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

The revised relief request will be submitted by March 31, 1996.

SCHEDULE B

INTERGRANULAR STRESS CORROSION CRACKING OF THE CORE SHROUD (G.L. 94-03)
(LTP #669)

Commitment Description

This Generic Letter requires an Inspection or repair of the Core Shroud no later than the next scheduled Refueling Outage.

During RFO 10 (April 1995) shroud stabilizers will be installed in lieu of an inspection of horizontal welds. These stabilizers will vertically and laterally support and replace the circumferential welds (H-1 through H-10) in the shroud and will be designed to meet the BWR Vessel & Internals Project (BWRVIP) generic repair criteria. Selected vertical welds, ring segment welds and vessel attachment welds will be inspected to ensure structural adequacy.

A detailed plan for installing 4 shroud stabilizers and inspecting selected parts of the shroud was submitted to the NRC on January 16, 1995.

(BECO IADB RL 95.0012)

References

- 1) NRC Generic Letter 94-03 dated July 25, 1994, Intergranular Stress Corrosion Cracking of Core Shrouds in BWR's (BECO #1.94.152)
- 2) BECO Letter dated August 27, 1994, Response to GL 94-03 Intergranular Stress Corrosion Cracking of Core Shrouds (2.94.090)
- 3) BECO Letter dated January 16, 1995, 2.95.004, Core Shroud Stabilizer Design.
- 4) BECO Letter dated March 21, 1995, 2.95.037, PNPS response to the NRC Staff request for additional information concerning the Pilgrim Core Shroud.
- 5) BECO Letter dated April 14, 1995, 2.95.048, Additional information concerning our planned modification of the Pilgrim Core Shroud.
- 6) BECO Letter dated April 27, 1995, 2.95.056, Response to Request for Additional Information Regarding the Pilgrim Core Shroud Modification.
- 7) BECO Letter dated May 3, 1995, 2.95.060, Commitment letter to provide Inservice inspection plan by November 9, 1995 and information on XM-19 by August 9, 1995.
- 8) NRC Letter dated February 1, 1995, Request for withholding information from Public disclosure.
- 9) NRC Letter dated February 24, 1995, Request for Additional Information.
- 10) NRC Letter dated March 14, 1995, Request for Additional Information (BECO Letter 1.95.042).
- 11) NRC Letter dated April 17, 1995 Request for Additional Information (BECO Letter 1.95.066).
- 12) NRC Letter May 12, 1995, Safety Evaluation Regarding Pilgrim Nuclear Power Station Core Shroud Repair.
- 13) BECO Letter dated July 24, 1995, 2.95.079, provided additional test data on air cooled XM-19.

SCHEDULE B

Commitment History/Progress

Progress and Summary of Changes - February 1, 1994 - July 31, 1994

We submitted a response to the Generic Letter on August 27, 1994.

Progress and Summary of Changes - August 1, 1994 - January 31, 1995

Installation and inspection plan submitted to NRC, January 16, 1995, BECo Letter # 95.004

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

The Core Shroud stabilizers (4) were installed at PNPS during RFO #10.

In our May 3, 1995 letter (Reference 7) we stated we would submit our reinspection plans in November 1995. These plans will be based on the BWR VIP Guidelines that are now expected to be finalized in June 1996. We will provide a status of the reinspection program in our next LTP update.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

Inspection plans for the core shroud and stabilizer hardware will be in compliance with the BWRVIP Guidelines. These guidelines are currently expected to be finalized by June 1996. We will include these inspection plans as part of our standard refueling outage inspection plan submittal. This plan will be submitted six months prior to the start of the refueling outage.

SCHEDULE B

SOUTH WEYMOUTH NAVAL AIR STATION

Commitment Description

We committed to include a status of the possible closure of the South Weymouth Naval Air Station and its impact on Emergency Planning for Pilgrim Station in this Long Term Program Report.

The Massachusetts Emergency Preparedness Agency (MEMA) has overall responsibility for Radiological Emergency Response planning in the Commonwealth of Massachusetts.

(BEC0 IADB RC 95.0059)

References

- 1) Boston Edison letter dated September 30, 1995 (2.95.098)

Commitment History/Progress

Progress and Summary of Changes - February 1, 1995 - July 31, 1995

A final decision has not been made regarding the closure of the South Weymouth Naval Air Station. Formal Congressional approval is not expected until December.

We met with the Massachusetts Emergency Management Agency on August 17th to discuss plans should the federal government close the station.

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

The South Weymouth Naval Air Station is expected to be officially closed as a naval air base in September 1997. It is our understanding the base will be turned over to the local communities at that time.

Approximately 100 emergency personnel are required to staff the South Weymouth reception center. During 1994 and 1995, approximately 135 Navy, civilian, and local volunteer personnel were trained and assigned to the reception center.

Some emergency personnel are expected to be transferred out of the area when the base closes. Additional emergency personnel from the surrounding local towns were recruited in October 1995. Approximately 100 additional personnel were identified as emergency volunteers.

On November 17, 1995, and February 7, 1996, classroom training was held for both new and existing personnel. On February 24, 1996, a training practical at the reception center will be conducted.

SCHEDULE B

BULLETIN 95-02: UNEXPECTED CLOGGING OF A RESIDUAL HEAT REMOVAL (RHR) PUMP STRAINER WHILE OPERATING IN SUPPRESSION POOL COOL MODE

Commitment Description:

Pilgrim has performed testing for the purpose of confirming suppression pool and strainer cleanliness. The testing confirmed strainer cleanliness, and the results were transmitted to the NRC (Reference 3). Pilgrim will inspect the ECCS suction strainers in RFO 11 and will also continue with pool cleaning in that outage. Future pool cleaning frequency will be based on a plan consistent with generic studies currently on going via the BWROG. Pilgrim completed foreign material exclusion (FME) procedure enhancements on 2/8/96.

(BEC0 IADB RL 95.0033)

References:

1. NRC Bulletin 95-02 dated 10/17/95 (BEC0 Letter 1.95.165)
2. BEC0 Response dated 11/16/95 (BEC0 Letter 2.95.118)
3. BEC0 120-Day Response dated 2/13/96 (BEC0 Letter 2.96.007)

Commitment History/Progress:

Progress and Summary of Changes - August 1, 1995 - January 31, 1996

Pilgrim has conducted a review of ECCS capability and has determined that the ECCS systems are operable, the strainers are not clogged or degraded, and the suppression pool is free of debris that is or can become suspended and result in strainer clogging. This conclusion is based on previous pool cleaning activities and inspections and verified by representative pump performance testing.

Foreign material exclusion (FME) procedures are in place that should prevent the introduction of material with the potential to compromise ECCS capability. Further enhancements to drywell cleanliness practices are planned to reduce the potential for foreign material entering the torus. Trending in terms of water cleanliness and pump suction pressures are in place and will continue in order to monitor water quality with respect to this issue. Suppression pool cleaning is scheduled for RFO 11. This and subsequent cleaning/inspection are intended to be consistent with BWROG guidance with respect to items such as sludge generation rate and cleanliness criteria.

Pilgrim is active in the BWROG committee and intends to participate aggressively in the development of the Utility Resolution Guide (URG) currently being developed by the owners group.

ATTACHMENT 3

Page 1 of 2

ADDITIONAL ITEMS LIST (SCHEDULE C)*

<u>LTP No.</u>	<u>Title</u>	<u>August 1995 Target Schedule</u>	<u>Current Status</u>
022	Radwaste Betterment	End of 1997	No Change
108	Setpoint Calculation Project	N/A	1998
322	Cooling Water Betterment	Ongoing through 1995.	Complete
448	Inspect/Replace Lower Core Support Plate Flow Plugs (GE SIL 359)	Deferred to RFO #11	No Change
479	Replace Embrittled GE Cables FRN 93-02-12 FRN 93-02-15 FRN 93-02-18	RFO 10 scope complete. Samples taken for testing and evaluation.	Complete
486	Intake Canal Dredging	Phase 1, 1996, (subject to approvals from EPA & Army Corps of Engineers) Phase 2, 1997	No Change
524	Replace Simplex Panels	1998	No Change
528	Radwaste Filter Demin	System Turned Over for Interim Operations. Outstanding Item Closure 4th Quarter 95	Closure 1st quarter 1996
546	Instrument Recirc. Pump Shaft	2/28/96	RFO 11
575	Roof Replacement	Ongoing - to be completed in 2000	No Change
590	Turbine Building Effluent Monitoring	Partially complete. Final completion scheduled for 1995	Construction complete. Procedure revisions should be completed by June 1996

* This list represents a portion of major plant betterments at Pilgrim Station. The total LTP contains additional plant betterments, programs/projects, and issues.

ATTACHMENT 3

Page 2 of 2

ADDITIONAL ITEMS LIST (SCHEDULE C)*

<u>LTP No.</u>	<u>Title</u>	<u>August 1995 Target Schedule</u>	<u>Current Status</u>
621	3D Monicore	Phase 1 Complete. Phase 2 by 1st Qtr '96	1996 (Simulator 1997)
628	Emergency Preparedness Facility Upgrade	NA	1998
646	Gaitronics Mods	End 1996	No Change
684	Augmented Offgas System Upgrade	Substantial upgrade performed in RFO 10. Additional work planned for RFO 11.	No Change
686	Demin Water System Equipment Removal	N/A	1996
687	EPIC Upgrade	1996 (Simulator 1997)	No Change
690	Electronic Imaging	NA	1999
691	Plant Material Condition Upgrade	Ongoing - to be completed in 2000	No Change
700	Personnel Contamination Monitor Upgrade	N/A	1996
706	Standard Technical Specifications	N/A	1998

* This list represents a portion of major plant betterments at Pilgrim Station. The total LTP contains additional plant betterments, programs/projects, and issues.