

May 25, 1988

Docket No. 50-293

MEMORANDUM FOR: Steven A. Varga, Director  
 Division of Reactor Projects - I/II

Bruce A. Boger, Assistant Director  
 Division of Reactor Projects I/II

THRU: Richard H. Wessman, Director  
 Project Directorate I-3  
 Division of Reactor Projects I/II

FROM: Daniel G. McDonald, Project Manager  
 Project Directorate I-3  
 Division of Reactor Projects I/II

SUBJECT: DRAFT NRR SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE  
 (SALP) FOR BOSTON EDISON COMPANY'S PILGRIM NUCLEAR POWER  
 STATION FOR FEBRUARY 1, 1988 THROUGH MAY 15, 1988

Enclosed is the NRR SALP report for Pilgrim Nuclear Power Station for licensing activities. This report is based upon direct inputs solicited from selected staff personnel who have had substantial contact and/or involvement with Boston Edison Company's (RECO's) licensing activities for the Pilgrim Station. Input to the other SALP area(s) is based on NRR staff interaction in the area(s) during the SALP period. Also enclosed is a summary of the previous two rating periods.

Please review the draft assessment and provide any comments you feel are appropriate. This draft was prepared in accordance with NRR Office Letter No. 44, Revision 1, dated December 22, 1986.

The NRC SALP Board meeting for Pilgrim is scheduled for June 27, 1988.

*Original signed by:*

Daniel G. McDonald, Senior Project Manager  
 Project Directorate I-3  
 Division of Reactor Projects I/II

Enclosures:  
 As stated

Distribution:

Docket File, NRC & Local PDRs, PDI-3 r/f, BBoger, DMcDonald, MRushbrook, Tech Branch

OFC	: PDI-3	: PDI-3	: PDI-3/BJR	:	:	:	:
NAME	: MRushbrook	: DMcDonald	: ck: RWessman	:	:	:	:
DATE	: 5/25/88	: 5/25/88	: 5/25/88	:	:	:	:

OFFICIAL RECORD COPY

Docket No. 50-293

FACILITY: Pilgrim Nuclear Power Station, Unit 1  
LICENSEE: Boston Edison Company  
EVALUATION PERIOD: February 1, 1987, through May 15, 1988  
PROJECT MANAGER: Daniel G. McDonald/Richard H. Wessman

## I. INTRODUCTION

This report contains NRR's input to the SALP review for the Pilgrim Nuclear Power Station. The assessment of the licensee's performance was conducted according to NRR Office Letter No. 44, Revision 1, "NRR Inputs to SALP Process," dated December 22, 1986. This Office Letter incorporates NRC Manual Chapter 0516, "Systematic Assessment of Licensee Performance."

## II. SUMMARY

NRC Manual Chapter 0516 specifies that each functional area evaluated will be assigned a performance category (Category 1, 2 or 3) based on a composite of a number of attributes. The single final rating should be tempered with judgment as to the significance of the individual elements.

Based on this approach, the performance of Boston Edison Company (BECO) in the functional area of "Licensing Activities," is a recommended rating of Category 2.

## III. CRITERIA

The evaluation criteria used in this assessment are given in NRC Manual Chapter 0516 Appendix, Table 1, Evaluation Criteria with Attributes for Assessment of Licensee Performance.

## IV. METHODOLOGY

This evaluation represents the integrated inputs of the Operating Reactor Project Manager(s) (ORPMs) and those technical reviewers who expended significant amounts of effort on the Pilgrim Nuclear Power Plant licensing actions during the current rating period. In addition, input for the other SALP area(s) is based on NRR staff interactions in the area(s). Using the guidelines of NRC Manual Chapter 0516, the ORPMs and each reviewer applied specific evaluation criteria to the relevant licensee performance attributes, as delineated in Chapter 0516, and assigned an overall rating category (1, 2 or 3) to each attribute. The reviewers included this information as part of each Safety Evaluation input transmitted to the Division of Reactor Projects. The ORPM, after reviewing the SALP inputs of the technical reviewers, combined this information with his own assessment of licensee performance and, using appropriate weighting factors, arrived at a composite rating for the licensee.

A written evaluation was then prepared by the ORPM and circulated to NRR management for comments, which, if provided, were incorporated in the final draft. This area was rated category 2 in the previous assessment.

The basis for this appraisal was the licensee's performance in support of licensing actions that were either completed or had a significant level of activity during the rating period. These actions consisted of amendment requests, exemption requests, responses to generic letters, TMI items, and other actions. The licensing actions considered during the period can be summarized as follows:

Active actions at beginning of period (2/1/87)	49
Actions added during period	26
Total actions	75
Completed actions during period (5/15/88)	42
Active actions at end of period	33

#### V. ASSESSMENT OF PERFORMANCE ATTRIBUTES

The licensee's performance evaluation in the functional area of Licensing Activities is based on a consideration of five attributes which are;

- a. Management Involvement and Control in Assuring Quality
- b. Approach to Resolution of Technical Issues from a Safety Standpoint
- c. Responsiveness to NRC Initiatives
- d. Staffing (Including Management)
- e. Training and Qualification Effectiveness

#### VI. LICENSING ACTIVITIES

##### A. Analysis

The licensee has exhibited a high level of management involvement in major licensing initiatives; however more routine licensing actions do not receive substantive management attention. An example of high management involvement and superior initiative is the licensee's actions to improve their Mark I containment and implement other plant safety improvements as part of its Safety Enhancement Program (SEP). This program includes improvements to emergency operating procedures, modifications to containment spray nozzles, enhancements to water supplies that would be available in the event of a severe accident, the installation of a direct torus vent (which is not yet operational), and the installation of a third emergency diesel generator. The licensee is in the forefront of the industry in their effort to deal with severe accidents and has expended substantial resources on the SEP. The licensee has been very active in industry owner's groups involved in severe accident initiatives. Although much of the SEP effort did not involve direct licensing actions, the staff did assess the safety significance of the licensee's modifications, inspected portions of the modifications and commends the licensee for its leadership on the SEP program. It should be noted that the staff is still continuing its assessment of the proposed direct torus vent system and clarification of some of the other SEP modifications.

The licensee's management involvement in more routine licensing actions (such as some Technical Specification amendments and exemption requests) has been somewhat sporadic. Several fire protection licensing actions have required numerous submittals and frequent interchanges with the staff. For example, the licensee reversed their technical position twice in their determination of the appropriate basis for their exemption request involving the lack of 3-hour fire proofing for structural steel in the Reactor Building Torus Compartment, several submittals were required, and the staff had to request detailed calculations to support the licensee's basis. In a technical specification change involving Appendix J requirements (Amendment 113), the licensee had to make numerous submittals in response to staff concerns and was required to correct errors in previous submittals identified by both the staff and BECo. The staff identified inconsistencies in proposed changes to the technical specifications for the Standby Gas Treatment System and Control Room High Efficiency Air Filtration System (Amendment 112) and revised submittals by the licensee were required.

The licensee has not been aggressive in correcting the technical specifications to reflect corporate and onsite management changes. As allowed by the technical specifications, the licensee informed the NPC of management changes within 30 days of their being made; however, several months have elapsed since the changes were made and the proposed technical specifications have not been submitted.

The licensee has submitted, and the staff has approved, a number of technical specification changes or exemption requests that are of high quality, demonstrating high technical quality and management involvement. Examples include the scheduler exemption for conduct of the emergency preparedness exercise, Core Reload (Amendment 105), Control Rod Block Actuation (Amendment 110), LPCI Subsystem Surveillance (Amendment 111), and others. Where staff requests for additional information were made, the licensee has been prompt and comprehensive.

BECo has usually been responsive to NRC initiatives. The licensee has been responsive to staff requests to track and control actions of mutual interest between NRR and the utility. For example, the licensee has developed a tracking system to assist in the management of licensing actions and has provided extensive resources to support our effort in updating the Safety Information Management System (SIMS) data base. Particularly noteworthy was the licensee's Technical support to the staff's review of Emergency Operating Procedures.

There has been evidence of an improving trend during the later portion of the SALP period in the approach to the resolution of technical issues and responsiveness to NRC initiatives. This is in part due to recent organizational changes which have resulted in a closer relationship of the licensing group and engineering group. The overall staffing to support licensing activities is adequate and should be technically improved by the recent organizational changes. A reduction in technical errors, requests for clarification and additional information has shown some improvement recently.

In summary, the licensee has exhibited high management involvement in several major licensing actions but management attention to more routine licensing actions has been somewhat inconsistent. The licensee has shown some improvement in the licensing area during the later portion of the SALP period. The extensive activities and resources required to correct problems identified in Confirmatory Action Letter 86-10 and subsequent management meetings has impacted the licensee's overall performance in the licensing area. The involvement of management in routine, as well as major licensing activities, is necessary. The continued strengthening of mid-level management and increased technical capability of the licensing staff is necessary.

B. Conclusion

Category 2

C. Board Recommendation

Increase management involvement in all licensing activities and continued effort to strengthen mid-level management and technical capabilities in the licensing area.

VII. ASSESSMENT OF OTHER FUNCTIONAL AREAS

While the primary thrust of this evaluation is focused on licensing activities and the rating assignment pertains only to this functional area, some NRR observations relating to the other functional areas are included. These observations were gained principally from site visits and inspections performed by NRR staff members.

Plant Operations

The licensee maintains a professional atmosphere in the control room based on several visits and walk-throughs by NRR staff members during this SALP period. The licensed operators were extremely helpful and knowledgeable when questioned by the NRR staff members during the emergency operating procedure audit.

Housekeeping

It has generally been noted, based on site visits, that overall cleanliness and housekeeping is improving. Efforts have been taken and are underway to improve the condition of existing components and facilities. Improvements to plant material readiness, including the improvement in unrestricted radiological access to most of the plant, have been observed.

Other Areas

The NRR staff has no specific input for the other functional areas assessed during this SALP period. Members of the NRR staff will assist the Region in the upcoming Integrated Assessment Team Inspection (IATI) which, in conjunction with the current SALP, will form the basis for the NRC staff's recommendation for restart decision.

VIII. Supporting Data and Summaries

A. NRR Licensing Meetings

<u>Date</u>	<u>Subject</u>
21 May 87	Licensing Issues Bethesda, MD
4 Aug 87	Emergency Operation Procedure and Direct Torus Vent
24 Sept 87	Status of Pilgrim Restart/Schedule
19-20 Aug 87	Multi-Plant Action Items
24 Aug 87	Ongoing Fire Protection Reviews
10 Dec 87	Emergency Operation Procedures Upgrade (Air Rights)
07 Jan 88	Discussion in Senate Office Bldg. (Wash. DC) of Pilgrim Health Effects, Loss of Off-Site Power, Halting Construction Activities on Nov. 9, Off-site Emergency Plans and Decommissioning
14 Jan 88	Discussion in Bethesda of inservice test program development

B. Commission Briefings

<u>Date</u>	<u>Subject</u>
12 Feb 87	Regional Administrators Meeting (Pilgrim Included)
17 Dec 87	Briefing on Status of Operating Reactors and fuel facilities (Pilgrim Included)



C. Schedular Extensions Granted

<u>TAC Number</u>	<u>Subject</u>	<u>Date</u>
66297	Emergency Preparedness (EP) Exercise	12/09/87
67905	Emergency Preparedness (EP) Exercise	05/11/88

D. Reliefs Granted

<u>TAC No.</u>	<u>Subject</u>	<u>Date</u>
61370	Inservice Inspection (ISI) Relief	03/26/87

E. Exemptions Granted

<u>TAC No.</u>	<u>Subject</u>	<u>Date</u>
65076	Duplicate Yard Lighting	10/06/87
66369	Appendix R-Operator Action	04/14/88

F. License Amendments Issued

<u>Tac Numbers</u>	<u>Amendment No.</u>	<u>Subject</u>	<u>Date</u>
62851	98	New Design-Reactor Control Rod Blades	02/27/87
60936	99	Analog Trip System Surveillance Requirements	03/03/87
63043	100	MAPLHGR Changes	04/09/87
64475	101	Control Room Ventilation System	06/23/87
59127	102	Standby Liquid Control System 10 CFR 50.62 Rule	08/05/87
65404	103	Administrative Changes per 10 CFR 50.4	08/05/87
60466	104	Nuclear Safety Review and Audit Committee (NSRAC) changes	08/25/87
65491	105	Cycle 8, Core Reload	8/31/87

F. Licensing Amendments Issued (Continued)

<u>TAC Number</u>	<u>Amendment No.</u>	<u>Subject</u>	<u>Date</u>
45699	106	Automatic Depressurization System (ADS) Timer	09/04/87
65834	107	Analog Trip System - Calibration Frequency	10/28/87
65494	108	Undervoltage Relay Requirements	10/29/87
65523	109	High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) Requirements	10/29/87
65605	110	Rod Block and APRM Trip Functions	11/30/87
65787	111	Low Pressure Coolant Injection (LPCI) Requirements	11/30/87
55571	112	Standby Gas Treatment & Control Room Air Filter Systems	01/20/88
59190	113	Primary Containment Isolation Values Appendix J Requirements	01/21/88
54610	114	Fire Protection - Appendix R to CFR 50 Requirements	03/08/88
65284	115	Security Requirements - 10 CFR 73.55	03/28/88
66974	116	Modification of Reporting Schedule Supplemental Dose Assessment & Meteorological Summary	05/10/88

G. Other Licensing Actions

<u>TAC Number</u>	<u>Action</u>	<u>Date</u>
45699	NUREG-0737 Item II.K.3.18 ADS Actuation Study	09/04/87
47313	Correct Performance of Operating Activities	11/16/87
57154	Generic Letter 83-08, Mark I Drywell Vacuum Breakers	02/27/87
60216	Containment Leak Rate Monitor	02/19/87



G. Other Licensing Actions (Continued)

<u>TAC Number</u>	<u>Action</u>	<u>Date</u>
60272	Recirculation Flow Anomaly	02/28/87
63001	IGSCC Augumented Inspection Program	11/25/87
63012	ISI Plan - 1986 Refueling Outage	03/16/87
63011	Process Control Program (PCP) Review	03/03/88
63002	Offsite Dose Calculation Manual	10/28/87
64376	Refueling Interlocks	12/17/87
64406	Appendix J Review (Penetration X-21)	02/19/87
64478	Pilgrim SALP Activity	05/15/87
65226	Appendix R Review	05/15/87
66913	Control Room Floor-Fire Seals	03/24/88
67259	Steam Binding - Pumps	04/15/88
67523	Smoke Seals - Conduit	03/24/88
67706	Defects Westinghouse DC Circuit Breakers	04/13/88

**PILGRIM NUCLEAR POWER STATION**

SALP SUMMARY		
BEGINNING OF PERIOD	10/84	11/85
END OF PERIOD	10/85	1/87
PLANT OPERATIONS	3	2
RADIOL. CONTROLS	3	3
MAINTENANCE	2	2
SURVEILLANCE	2	3
FIRE PROTECTION	*	3
EMERGENCY PREP.	3	2
SECURITY & SAFEG.	2	3
OUTAGES	1	1
LIC. ACTIVITIES	1	2
TRAINING & QUAL. EFF.	*	2
ENG. & CORP. TECH. SUP.	*	1
ASSURANCE OF QUALITY	*	3

\* Not Evaluated as a separate functional area