

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION  
DR. THOMAS E. MURPHY, DIRECTOR

IN THE MATTER OF	)	DOCKET NO. 50-293
BOSTON EDISON COMPANY	)	(10 C.F.R § 2.206)
(PILGRIM NUCLEAR POWER STATION)	)	

SECOND INTERIM DIRECTOR'S DECISION UNDER 10 CFR § 2.206

INTRODUCTION

On October 15, 1987, Massachusetts Governor Michael S. Dukakis and Attorney General James M. Shannon filed a Petition on behalf of the Commonwealth of Massachusetts and its citizens (Petitioners) with the Nuclear Regulatory Commission (NRC) requesting that the Director of the Office of Nuclear Reactor Regulation (NRR) institute a proceeding to modify, suspend, or revoke the operating license held by Boston Edison Company (BECO, the licensee) for its Pilgrim Nuclear Power Station (Pilgrim). In particular, the Petitioners requested the NRC to (1) modify the Pilgrim license to bar restart of the facility until a plant-specific probabilistic risk assessment (PRA) is performed for Pilgrim and all indicated safety modifications are implemented, (2) modify the Pilgrim license to extend the current shutdown pending the outcome of a full hearing on the significant outstanding safety issues and the development and certification by the Governor of adequate emergency plans, and (3) issue an Order, effective immediately, to modify the Pilgrim license to preclude the licensee from taking any steps in its power ascension program until a formal adjudicatory hearing is held and findings of fact are made concerning safety questions raised regarding Pilgrim.

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On May 27, 1988, I issued an Interim Director's Decision in response to the Petition. I concluded that information identified in the Petition does not warrant the initiation of the requested actions in regard to the probabilistic risk assessment and attendant plant modifications. Accordingly, I denied the request on this issue. I further stated that the management and emergency preparedness portions of the Petition would be addressed in a subsequent response.

As noted in my Interim Decision, the Petitioners alleged that serious managerial deficiencies continue to exist at Pilgrim. As the bases for their Petition, the Petitioners cite (1) consistently low ratings in systematic assessment of licensee's performance (SALP) reports; (2) the licensee's inability to sustain performance improvements (3) the licensee's poor enforcement record regarding the severity level and number of violations and (4) recent news articles concerning security problems and the use of excessive overtime. Documents cited by the Petitioners include SALP Reports Nos. 85-99 and 86-99 and various inspection reports dated from 1985 to 1987.

The Petitioners provided no substantial new information or evidence that was not known to the NRC when it issued the "Interim Director's Decision Under 10 CFR 2.206," DD-87-14, dated August 21, 1987, in response to the Petition filed on July 15, 1986, by Massachusetts State Senator William B. Golden and others also alleging deficiencies in the licensee's management.

The NRC staff's conclusions on the adequacy of management at the Pilgrim facility arise principally from the inspection efforts reflected in two documents (1) SALP Report No. 87-99, which covers the period of February 1, 1987, through May 15, 1988, and (2) the report on the Integrated Assessment Team Inspection (IATI) performed in August 1988.

### DISCUSSION

The staff's concerns with respect to management not only encompassed but went beyond the specific items raised by the Petitioners. It is in this broader context that the staff has evaluated actions taken by BECo to resolve management deficiencies.

#### A. SALP Report No. 87-99 Results

On July 27, 1988, the staff issued its most recent SALP report, SALP Report No. 87-99 (Enclosure A), which covers the period of February 1, 1987 through May 15, 1988. The staff indicated that the licensee had made extensive efforts, including corporate and site reorganizations, and had installed a new management team. The new management team undertook numerous projects and programs to improve the physical condition of the plant and to enhance programmatic performance. These management initiatives were generally successful in correcting deficiencies in organization, staffing, and upgrading of the physical condition of the plant. The staff also indicated that the new management team was effective in improving programmatic performance in areas previously identified as having significant weaknesses. The staff further stated that the licensee's self-assessment process was effective in identifying other areas needing further management attention.

The Regional Administrator, Mr. William Russell, acknowledged in the

letter transmitting the SALP report that BECo had made extensive efforts to upgrade performance in functional areas that were previously assigned Category 3 ratings. These areas were Radiological Controls, Surveillance, Fire Protection, Security and Safeguards, and Assurance of Quality. Only one area remained with a rating lower than Category 2; a Category 3-Improving rating was assigned to the Radiological Controls functional area. The use of "Improving" in the rating indicated improvement in the organization, programs, and performance in the functional area. (The definitions of the category ratings and detailed findings in all the SALP functional areas are provided in Enclosure A.)

Although the necessary positive results were becoming apparent at the close of the assessment period, the ability to sustain the improved performance had not yet been demonstrated. The NRC staff determined that close monitoring of the licensee's activities was necessary to ensure continued performance improvement. This close monitoring required an assessment team inspection, discussed below, to further measure the effectiveness and readiness of the BECo management controls, programs, and personnel to support safety restart and operation of the Pilgrim Nuclear Power Station.

#### B. Integrated Assessment Team Inspection Results

The IATI was conducted during the period of August 8 through August 24, 1988, and the inspection report, dated September 7, 1988, is provided as Enclosure B. The team inspection included an assessment of the organizational structure currently in place at the Pilgrim Nuclear Power Station. The assessment also included the administrative processes in place to control and coordinate the activities and actions affecting safe and reliable operation of

the Pilgrim facility. The adequacy of staffing, qualifications of personnel, and mechanisms to enhance and promote stability in the organization's technical and managerial staff.

The inspection team concluded that the current organization is well structured and provides for an appropriate distribution of responsibilities and accountabilities for the activities being performed by the functional units within the organization. This appraisal was not true for the former organization. The depth of managers in functional areas should contribute to stability in the organization by providing for the development of technical and managerial skills previously lacking. The current organizational structure provides a framework for career growth that should help reduce chronic staffing vacancies that existed in the past. Redistribution of functional responsibilities and depth in management throughout the organization provides the framework necessary to enhance stability and to support safe and reliable operation of Pilgrim.

The authorized staffing level is ample, in contrast to previous staffing levels, and has been filled to a degree acceptable to perform all the necessary activities and functions of the organization for all plant conditions, including operation.

The resumes and position descriptions of key managers and selected personnel throughout the organization were audited by NRC inspectors during the IATI. The educational and experience backgrounds of personnel were compared to the requirements of the positions held, as delineated in American National Standards Institute (ANSI) N18.1-1971, "Selection and Training of Personnel for Nuclear Power Plants," with a focus on the management experience

of key personnel. No deficiencies were identified relating to the qualification requirements of the ANSI standard. More significantly, there has been an increase of talented management personnel with extensive and successful management experience in key positions. The enhanced mixture of qualified management and technical personnel on the plant staff should result in a stable management team that was previously lacking.

Management has updated a variety of procedures to provide policy for and control and coordination of the activities and actions of the organization. The corporate policy relating to the Nuclear Organization contained in the Mission, Organization and Policy Manual includes, among other goals, striving to achieve rising standards of performance, dedication to protecting the environment and public, and rigorous adherence to procedures. The other procedures adequately identify corporate policy, organization, interfaces, functional requirements, responsibilities, accountabilities, and qualifications necessary for the control of activities and coordination of actions within the organization. This improved control and coordination has resulted in progress in the functional SALP areas that was previously inhibited.

Several management meetings were observed during the IATI to assess the interactions of managers and the effectiveness of the policies and procedures being implemented. Close observation of the functional areas was made to augment findings and conclusions on the effectiveness of the organization, management controls, and communications. These observations and interviews also provided the team with insight into the worker's perception of management policies, involvement, effectiveness, and the resulting effect on safety.

The team members, through the observations and interviews, noted a positive change in the attitude toward nuclear safety throughout the Pilgrim organization. This change in attitude is evidence of corporate management's ability to communicate policy and has resulted in improved performance of safety-related activities. These improvements were acknowledged in the most recent SALP report and the IATI report. The IATI observations support the conclusion that BECo management is effective in communicating corporate goals and that management oversight is ensuring that the goals are being supported and pursued.

The IATI report concluded that the licensee has an acceptable organization that is adequately staffed with qualified personnel, has mechanisms in place to enhance stability, and has controls and programs to support safe startup and operation of the Pilgrim Nuclear Power Station. These conclusions are based on the above discussion and supported by the details in the enclosures to this Decision.

C. Emergency Preparedness Update

In the May 27, 1988 Interim Director's Decision, the emergency preparedness portion of the Petitioner's request was deferred. The Decision stated, however, that the determination as to whether to restart Pilgrim will involve consideration of the emergency planning issues identified by the Federal Emergency Management Agency (FEMA).

Since that Decision, considerable progress has been made toward improving

offsite emergency preparedness, including an updated evacuation time estimate study, the development of a shelter implementation program, the development of a training program for offsite emergency response personnel, and the renovation of the offsite emergency operations centers. Draft plans for all seven of the emergency planning zone towns and reception center communities have been forwarded by the Commonwealth of Massachusetts to FEMA for informal technical review. FEMA has provided a review of six of the plans to the Commonwealth. In its letters of March 30, 1988 and August 12, 1988, FEMA has indicated that progress in improving offsite emergency planning for Pilgrim has been made. In addition, classroom training and hands-on training have been conducted for some emergency responders.

The NRC will continue to monitor the progress of the licensee's efforts to assist Massachusetts and the local governments in improving their emergency response programs. Although progress has been made toward improving emergency preparedness at Pilgrim, the process is not complete.

#### CONCLUSION

For the reasons discussed in my May 27, 1988 Interim Director's Decision and above, a decision cannot be made at this time regarding emergency preparedness issues. That portion of the Petition will be addressed in a subsequent response.



For the reasons discussed above, the information identified by the Petition does not warrant the initiation of the requested actions in regard to the management issues. Accordingly, the Petitioners' request for action pursuant to 10 CFR 2.206 on this issue is denied.

As provided in 10 CFR 2.206(c), a copy of this Decision will be filed with the Secretary for the Commission's review.

Dated at Rockville, Maryland, this <sup>th</sup> ~~is~~ day of October 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

*Thomas E. Murley*

Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

Attachments:

- A. SALP Report No. 50-293/87-99
- B. IATI Report No. 50-293/88-21