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September 19, 2003

Mr. David Vito
U.S. Nuclear Regulatory Commission
Region I
P.O. Box 80377
Valley Forge, PA 19484

Subject: Oyster Creek Nuclear Generating Station
Response to Request for Evaluation - NRC Tracking No. RI-2003-A-0098

Reference: Letter from A.R. Blough (U.S. Nuclear Regulatory Commission) to
J. L. Skolds (Exelon Generation Company, LLC), dated August 20, 2003

Dear Mr. Vito:

Pursuant to your request, we are providing the results of our evaluation of the matters described in the referenced letter. As requested, this response is not being submitted on the station docket. This response was requested to be submitted to the NRC by September 20, 2003.

The evaluation was conducted independently by the Oyster Creek Nuclear Oversight organization. We have determined that the evaluation was of sufficient depth and scope to address the issues identified in the referenced letter. The attachment does not contain any personal privacy, proprietary, or safeguards information. In summary, and as detailed in the attachment, the investigation failed to substantiate the concern.

Should you have any questions concerning this letter, please contact me at (610) 765-5664.

Sincerely,



Michael P. Gallagher
Director, Licensing and Regulatory Affairs
AmerGen Energy Company, LLC

Attachment: Evaluation Report – NRC Tracking No. RI-2003-A-0098

B-16

Attachment

Evaluation Report

For

NRC Letter No. RI-2003-A-0098

Evaluation Report – NRC Tracking No. RI-2003-A-0098

I. INTRODUCTION

In a letter from A. R. Blough (NRC) to J. L. Skolds (Exelon), dated Aug. 20, 2003, the United States Nuclear Regulatory Commission (NRC), Region I, forwarded the following information concerning Oyster Creek Nuclear Generating Station to Exelon for evaluation.

“Concerns have been raised about the level of fatigue plant employees have experienced due to the large increase in work hours, the changes in the normal types and patterns of work they perform and the lack of time off while they covered for the bargaining unit employees that went on strike. While the strike ended on August 7, 2003, these personnel are not yet scheduled to return to a normal work schedule for several weeks. Specifically, based on external observations of site engineering/environmental personnel, the staff supporting operation during the strike appeared tired and fatigued.”

II. EVALUATION DETAILS

AmerGen Oyster Creek Nuclear Oversight conducted the investigation independently. This evaluation was comprised of the following elements:

1. Review of oversight documents containing observations performed during the strike and/or reintegration period.
2. Review of the Corrective Action Program database, focusing on identification of whether human performance deficiencies have increased during the strike/reintegration period.
3. Interviews of Engineering and Environmental personnel focusing on expectations and worker/supervisor/manager actions relative to work hours during the strike/reintegration period.

III. EVALUATION RESULTS

A summary of the results of the evaluation is below:

1. Review of oversight documents

Several groups performed oversight of station activities during the strike. Nuclear Oversight (NOS) directly observed activities in the field and the Main Control Room (MCR). NRC inspectors provided extended oversight in both the field and MCR. The Exelon Nuclear Safety Review Board also came to the site

for a two-day period during the latter stages of the strike and directly observed activities, interviewed station personnel, and reviewed numerous station documents and reports. None of these groups identified in any of their reports that fatigue levels had caused a negative impact on operation or maintenance of the plant.

A review was performed of NOS Field Observations that were conducted during the strike and reintegration period. This period also included three reactor restarts from forced outages. A total of 107 field observations were reviewed in addition to data from the Rapid Trending Process, which NOS utilized during the first five days of the strike with additional support from assessors from other Exelon sites. The results of this review showed that NOS did not identify any instances where fatigue levels indicated that personnel performance was in jeopardy of being impacted.

A review of the Nuclear Safety Review Board (NSRB) report dated July 29, 2003 was performed. This report, while critical of some aspects of overall management of processes and programs during the strike, made positive comments regarding worker performance and the lack of impact of fatigue. The conclusions of the NSRB are summed up in the final paragraph of the report, which states, "Overall, the plant appears as though it is being run in a very competent manner. Worker morale is high, fatigue does not seem to be a performance factor, and there is strong commitment operating the plant in a high quality manner."

2. Review of the Corrective Action Program database

Review of deficiency documentation contained in the station Corrective Action Program (CAP) identified that the number of human performance deficiencies has decreased during this period as both a function of the number identified and the percentage of the total deficiency population.

In addition, a review of the Corrective Action Program deficiency documents (CAPs) originated by NOS during this period was performed. NOS generated a total of 108 CAPs during the period of May 23 (beginning of strike) through August 25, 2003. While NOS identified a number of issues during this period, review of the data does not show any issues directly related to fatigue in the work force.

3. Interview of Engineering and Environmental personnel

Interview of Engineering and Environmental personnel identified that in their opinions, the issue of worker fatigue was adequately managed during the strike and no worker who was interviewed identified a single instance of worker fatigue causing or contributing to an event or deficiency. Most personnel worked twelve-hour shifts six days a week initially and moved into a ten-hour shifts schedule, with days off, later on in the strike. Workers interviewed stated that management was sensitive to the issue and these personnel identified several

instances in which they or someone they observed became fatigued, reported this to management, and was quickly relieved and allowed to rest.

A total of twelve personnel were selected for interview. The personnel who were selected were from the Engineering and Environmental groups.

The sample is as follows:

- o Six Engineers who worked in the Maintenance organization during the strike/reintegration
- o Three Engineers who remained in the Engineering organization during the strike/reintegration
- o Two Environmental Engineers who worked in the Chemistry organization during the strike/reintegration
- o One Department Manager

IV. CONCLUSIONS

While it is acknowledged that station personnel worked extended hours in the performance of tasks that they do not normally perform, the results of this investigation do not substantiate a concern that the level of fatigue experienced by plant workers during the strike/reintegration period has had a negative effect on plant operations. This investigation did not identify any events or deficiencies indicative of degradation in performance or the level of nuclear safety or compliance with the Operating License and Technical Specifications. On the contrary, this investigation found a motivated and effective work force who successfully operated and maintained the station during this period, while reducing the number of human performance deficiencies. AmerGen will continue to monitor and be sensitive to worker fatigue.