

November 10, 2005

Mr. William Levis
Senior Vice President and Chief Nuclear Officer
PSEG Nuclear LLC - N09
P. O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM AND HOPE CREEK NUCLEAR GENERATING STATIONS - NRC
SPECIAL INSPECTION - SAFETY CONSCIOUS WORK ENVIRONMENT -
REPORT 05000272; 05000311; 05000354/2005013

Dear Mr. Levis:

On September 30, 2005, the US Nuclear Regulatory Commission (NRC) completed a Special Inspection of the safety conscious work environment (SCWE) at the Salem and Hope Creek Nuclear Generating Stations. The enclosed inspection report documents the inspection results, which were discussed on October 19, 2005, with you and members of your staff.

On August 23, 2004, the NRC's Executive Director for Operations approved a Deviation from the NRC's Action Matrix to provide a greater level of oversight for the Salem and Hope Creek Generating Stations than would typically be called for by the Reactor Oversight Process Action Matrix. The Deviation Memorandum provided for a number of additional oversight activities, including management meetings with PSEG, an oversight coordination team, and additional inspections. The Deviation Memorandum was renewed on July 29, 2005, and included plans to perform a team inspection of the SCWE at the stations.

The purpose of this inspection was to review your program and implementation progress in addressing the safety conscious work environment substantive cross-cutting area, which was most recently discussed in the NRC's Reactor Oversight Process Mid-Cycle Performance Review letters for Salem and Hope Creek dated August 30, 2005 (ADAMS accession numbers ML052420726 and ML052420725). We evaluated your progress and plans for improving the work environment, your metrics and means to monitor the effectiveness of the work environment improvements, and the effectiveness of your corrective actions and self assessment initiatives. The NRC inspection approach included using focus group forums to receive input and comments directly from a broad range of site workers. These comments were used to evaluate the extent of the site change management challenge and provided an input to our review of the program's effectiveness measures.

Overall, we concluded that you have made progress in addressing work environment problems. No findings of safety significance were identified during this inspection. Consistent with your recently completed self assessment, we also noted issues that require additional action and focused attention. We understand that you have initiated actions to address the recommendations from your self assessment, including efforts to evaluate and resolve negative perceptions in certain work groups.

Mr. William Levis

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In addition to these conclusions, the inspection team identified two observations. First, the team determined that the security work group, which was not evaluated in your self assessment, also has negative perceptions of the work environment. Second, due to the importance of the role of the Salem and Hope Creek operations' groups, the team challenged the priority of your actions to address the existing negative perceptions within these groups. We understand that you have initiated actions to address these inspection team observations.

We intend to discuss the results of this inspection report and your progress in improving the safety conscious work environment at the stations as part of a public meeting on November 17, 2005. The Meeting Notice is available on the NRC website (ADAMS accession number ML052910207). We will continue to monitor your progress in addressing work environment issues through our enhanced oversight of the stations as described in the Deviation Memorandum. Additionally, we will review the SCWE and problem identification and resolution substantive cross-cutting issues during our End-of-Cycle Reviews for Salem and Hope Creek.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian E. Holian, Director
Division of Reactor Projects

Docket Nos: 50-272, 311, 354
License Nos: DPR-70; DPR-75; NPF-57

Enclosure: Inspection Report 05000272; 05000311; 05000354/2005013
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos: 05000272; 05000311; 05000354

License Nos: DPR-70; DPR-75; NPF-57

Report No: 05000272; 05000311; 05000354/2005013

Licensee: Public Service Enterprise Group (PSEG) Nuclear LLC

Facility: Salem and Hope Creek Nuclear Generating Stations

Location: P.O. Box 236
Hancocks Bridge, NJ 08038

Dates: September 26 through 30, 2005

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Approved By: Eugene W. Cobey, Chief
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Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000272/2005013; 05000311/2005013; 05000354/2005013; 09/26/2005 - 09/30/2005; Salem and Hope Creek Nuclear Generating Stations; Special Inspection.

The report covered a Special Inspection of the safety conscious work environment by regional inspectors and by NRC headquarters specialists in safety conscious work environment review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

C No findings of significance were identified.

B. Licensee Identified Violations

C None

C. Conclusions and Key Observations Related to Safety Conscious Work Environment

The inspection team concluded the following:

C Overall, the team concluded that PSEG has made progress in addressing work environment problems. Consistent with PSEG's self assessment, the team noted issues that require additional action and focused attention.

C Given PSEG's current stage of progress in addressing the work environment issues at the stations, there remains a wide range of worker perceptions across each of the four safety conscious work environment pillars (Willingness to Raise Concerns, Normal Problem Resolution Process, Effectiveness of Alternate Avenue for Raising Concerns, and Preventing and Detecting Retaliation). PSEG has not fully evaluated and addressed the negative perceptions in certain work groups.

C PSEG's metrics and other means to monitor the effectiveness of the work environment improvements are adequate. The PSEG self assessment and the inspection team identified examples where the metrics and means to monitor are somewhat limited with respect to providing clear information to management and communicating their effectiveness in resolving issues.

C PSEG's self assessment was effective and its findings were generally consistent with the inspection results. However, the self assessment did not fully explore workers' views on the progress of improvements in work management and the corrective action program, did not review all major work groups, and did not

review inputs to the corrective action program, all of which limited its effectiveness.

The team observed the following:

- C Security is a work group with negative perceptions of the work environment.
- C Negative perceptions in the Salem and Hope Creek operations' work groups could be addressed in a more timely manner.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA5 Other - Safety Conscious Work Environment Review

a. Inspection Scope

Background

In late 2003, the NRC initiated a special review of the environment for raising and addressing safety issues at the Salem and Hope Creek stations. The NRC undertook the review in light of information received in various allegations and inspections as well as NRC management insights related to the safety conscious work environment (SCWE). Information gathered had led to concerns about the work environment, particularly as it related to the handling of emergent equipment issues and associated operational decision-making.

On January 28, 2004, NRC Region I issued a letter to PSEG that provided interim results of the special review. This review had included numerous interviews of current and former Salem and Hope Creek employees, at various levels of the organization up to and including nuclear executives. The interviews sought to understand the extent to which a SCWE existed at the stations. The review had accumulated information about a number of events which, to varying degrees, called into question PSEG management's openness to concerns and alternative views, strength of communications, and effectiveness of the stations' corrective action and feedback processes. Several events had involved disagreements or differing perspectives of operators and senior PSEG managers regarding plant operating decisions, particularly as they might impact on continuing plant operation and outage schedules. At a minimum, these interviews raised questions about whether management had fully assessed and addressed the negative impact such disagreements have had on station personnel.

In response to the NRC's January 28, 2004, letter, PSEG committed to provide significant financial resources to improve station performance and discussed plans to assess the work environment in February 13, and February 27, 2004, letters, respectively. In a March 18, 2004, management meeting, PSEG provided the preliminary results of three major assessments of the work environment at the stations and subsequently communicated the results in a letter dated May 21, 2004. These assessments included: (1) a safety culture survey conducted by Synergy Corporation in December 2003; (2) a safety culture assessment conducted by the Utility Service Alliance (USA) in March 2004 to evaluate the Salem and Hope Creek safety culture against standards of excellence; and (3) an evaluation of the work environment for raising and addressing safety issues conducted by an Independent Assessment Team (IAT) between February and April 2004. The assessments identified the need for improvement of the work environment and equipment reliability. These assessments also identified that better implementation of station processes, such as corrective actions and work management, were important to achieving equipment improvements.

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Subsequently, PSEG discussed their plans to address SCWE issues in a June 16, 2004, management meeting with the NRC staff. In a letter dated June 25, 2004, PSEG indicated the general methods they intended to use to improve the work environment at the station.

On July 30, 2004, NRC Region I issued a letter to PSEG that provided the results of the special review. This in-depth review generally agreed with the results of PSEG's self-assessments. Specifically, the NRC did not identify any serious safety violations; however, the agency concluded that there were numerous indications of weaknesses in corrective actions and management efforts to establish an environment where employees are consistently willing to raise safety concerns. Some PSEG staff and managers felt that the company had emphasized production to a point which negatively impacted the handling of emergent equipment issues and associated operational decision-making. Additionally, management had not been consistent in its support of station staff identifying concerns and providing alternate views. The NRC found examples of unresolved conflict and poor communication between management and staff, as well as underlying staff and management frustration with poor equipment reliability. The equipment issues stemmed, in part, from weaknesses in implementation of station processes such as work management and corrective action.

On August 23, 2004, the NRC's Executive Director for Operations approved a Deviation from the NRC's Action Matrix to provide a greater level of oversight for the Salem and Hope Creek Generating Stations than would typically be called for by the Reactor Oversight Process Action Matrix. This deviation was subsequently renewed on July 29, 2005. One provision of the renewed Deviation Memorandum was to perform a team inspection of the SCWE at the stations.

Inspection Objective

As stated in the NRC's Action Matrix Deviation Memorandum, this inspection was performed to monitor PSEG's progress in the safety conscious work environment substantive cross-cutting area.

The inspection assessed three main areas:

- PSEG's progress and plans for improving the work environment;
- Metrics and means to monitor the effectiveness of the work environment improvements; and
- Effectiveness of PSEG's corrective actions and self assessment.

The team's inspection plan is included in the Supplemental Information attached to this report.

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Inspection Methodology

The inspection methodology included the following:

- Document reviews;
- Observations of meetings and general discussions;
- Focus group meetings and interviews; and
- NRC analysis and team interaction to develop observations and conclusions.

The majority of the team's effort concentrated on focus group meetings and interviews as means to gather and understand workers' perceptions of the work environment. The team held 19 focus group meetings and 20 individual interviews, which allowed the team to interface with about 200 site personnel. The team evaluated the perceptions and beliefs expressed by these individuals, with the understanding that these perceptions and beliefs may not directly translate to actual performance.

The team performed a thorough review of PSEG's self assessment of the safety conscious work environment, which was completed by PSEG on September 21, 2005, shortly before the inspection began. The self assessment included interviews of over 100 station personnel, a review of PSEG's SCWE initiatives listed in the 2004-2005 PSEG Nuclear Business Objectives, and a review of the "PSEG Plan for Improving the Work Environment," detailed in the June 25, 2004, letter to the NRC.

The team also performed an independent review of PSEG's planned actions and commitments to the NRC described in the June 25, 2004, letter and the SCWE-related items in the 2004-2005 PSEG Nuclear Business Objectives. In addition, the team reviewed the results of the January 2005 "Comprehensive Cultural Assessment" performed by Synergy.

b. Findings and Observations

No findings of significance were identified.

The team assessed PSEG's progress in addressing work environment problems in what is often termed "the four pillars" of a SCWE: Willingness to Raise Concerns, Normal Problem Resolution Process, Effectiveness of Alternate Avenue for Raising Concerns, and Preventing and Detecting Retaliation. In addition, the team collected observations related to SCWE in other areas. Finally, the team analyzed the results of these assessments to develop key observations and conclusions.

Observations

.1 Pillar 1: Willingness to Raise Concerns

During the team's focus group interviews and individual interviews, workers indicated that they will raise nuclear safety concerns, and most workers stated that they would have no reservations about raising issues or writing notifications. Some expressed the

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opinion that management now exhibits an attitude of not shying away from any issue. Some staff view this type of management behavior as a positive posture that will allow for significant improvements to the corrective action program and thus will remove employee-perceived barriers against raising concerns. The belief by some that management is more receptive to opposing viewpoints is another example of positive change that encouraged raising concerns. Many workers have perceived that improvements in conservative decision-making also have had a positive influence on workers' willingness to raise issues.

While there were many examples of support for raising concerns and issues, there were also some negative comments made during some interviews, especially with specific work groups. For example, some individuals in a Salem operations focus group stated they may not raise some balance-of-plant equipment issues. These individuals expressed an opinion that most in the group (60-70%) did not feel comfortable raising concerns themselves. Some of these operations personnel stated that inconsistent expectations regarding procedure use have adversely affected their willingness to raise procedure adherence issues. Likewise, some workers in the Salem chemistry work group also indicated that they may not raise procedure compliance issues due to inconsistent expectations regarding procedure use. In addition, some personnel indicated that they would be unwilling to self-report fatigue issues. The team did not identify instances where this had actually occurred.

The team noted several factors that affected some workers' willingness to raise concerns. For example, a few individuals from maintenance organizations stated that they perceived some negative responses after raising some issues that affected the work schedule. Further, some in a few groups reported that those who raise concerns or challenge management decisions were labeled as "roadblocks" or "troublemakers," which made those people and others reluctant to raise concerns. Perceptions of a lack of timely or comprehensive resolution for issues exist and contribute to an apathetic approach to raising concerns for some groups, such as Hope Creek operations and some maintenance groups. Additionally, a few employees believe that high workload and long work hours limit the willingness to raise issues, because it only adds to their own workload. Though not a direct nuclear safety issue, workers in several groups expressed reluctance about reporting industrial safety accidents.

Conclusion

Workers indicated that they were willing to raise issues that they recognized as nuclear safety concerns. Almost all workers across a majority of work groups also indicated that they are willing to raise concerns, write notifications, and challenge management decisions that they believe are unsafe. Overall, the team noted improvement in this area from 2004 assessments.

In a few work groups, such as Salem chemistry and Salem operations, there were several workers that stated that they would be hesitant to raise concerns in other areas, some of which may have nuclear safety implications. For example, some operations personnel stated they may not raise some balance-of-plant issues. These equipment

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issues could potentially have an impact on the initiating events and mitigating systems cornerstones. The team also noted that factors such as timeliness of response, comprehensiveness of corrective action, and inconsistencies in expectations have affected the willingness of some staff to raise concerns.

.2 Pillar 2: Normal Problem Resolution Process

The team determined that PSEG has taken a significant number of actions to improve the effectiveness of the corrective action and work management programs. PSEG has established and enforced expectations stressing personal and organizational responsibility and accountability with respect to implementing these programs. This area of improvement was evidenced by the perception of most employees in the majority of work groups that there has been progress in implementing the corrective action program (CAP) and resolving longstanding equipment problems. Increased individual and organizational accountability was cited most often by the majority of workers as the largest contributor to the positive changes in these programs. PSEG has implemented improvements to the CAP which appear to address the problems with the CAP noted in the 2004 assessments. For example, a new screening committee was formed and more structured trending of CAP issues is being conducted. Improved CAP and work management-related performance metrics, such as corrective and elective maintenance backlog reduction, are also key indicators of improvement in this area.

However, the team noted that many employees mentioned some specific areas requiring focus and improvement to ensure that continued progress is made in CAP and work management. For example, many employees in maintenance organizations cited difficulty securing parts and specialized tools and ineffective work group coordination as examples of lingering problems in the work management area. Some workers in other groups indicated that supervisors were not particularly responsive to concerns raised by their subordinates. Some workers in certain groups described workarounds for equipment deficiencies and discussed corrective actions that did not address the common causes of failures. The team also noted that many individuals in certain work groups (Salem chemistry, Salem operations, Salem mechanical maintenance, Hope Creek operations, and Hope Creek maintenance) indicated that they would raise issues, but believed that these issues would not be resolved or corrected in a timely manner. Likewise, they expressed that the lack of timely or comprehensive resolution made them feel less inclined to report minor equipment problems.

Conclusion

Overall, there has been improvement in the Normal Problem Resolution Process area. To address the issues identified in previous NRC and other independent assessments, PSEG has taken a significant number of actions to improve the effectiveness of the corrective action and work management programs. However, the team noted that many employees indicated some specific areas requiring continued focus and improvement to ensure that substantial progress is made in CAP and work management.

.3 Pillar 3: Effectiveness of Alternate Avenue for Raising Concerns

The team determined that PSEG has taken actions to improve the effectiveness of the Employee Concerns Program (ECP) as an alternate avenue for raising concerns. Specifically, PSEG has increased staffing in the program, and has taken steps to address perceptions of the ECP as discussed in the 2004 Independent Assessment Team review, which noted that 15-20% of personnel did not view the program as viable due to concerns over confidentiality and independence. In addition, PSEG's staff has conducted bench-marking at other sites and has implemented changes to the ECP's processes and procedures in response to this bench-marking.

The inspection team's interviews of plant staff confirmed that most individuals are aware of the program and recognize the efforts taken to improve the program since 2004. Most individuals in a majority of work groups indicated that they were satisfied with the program.

However, consistent with the NRC's observations in June 2005 (NRC Inspection Report 05000272;05000311;05000354/2005009), many individuals continue to perceive that the program is not sufficiently confidential. These perceptions can be attributed to both: 1) rumors regarding historical incidents in which the identities of individuals who reported concerns to the ECP were revealed and, 2) that the process requires that management be notified of these concerns. Following the issuance of the NRC's June 2005 Employee Concerns Program Inspection Report, which documented that about 20% of individuals interviewed would not use the program due to confidentiality concerns, the ECP staff initiated additional actions to address the staff's perceptions regarding the confidentiality of the program. For example, the ECP staff initiated "in-plant Wednesdays" and lunches with the staff, so they could engage the workforce in the field and provide training on the steps that the ECP takes to protect the confidentiality of individuals. In addition, to address the NRC's observation that the ECP procedures require that several members of management be notified of concerns, PSEG modified the procedures to reflect that efforts are made to protect the confidentiality of individuals. While the team determined that the corrective actions taken in response to concerns about confidentiality appear appropriate, it is too soon to fully assess the effectiveness of these actions.

The team's interview with the ECP Manager and review of statistical data regarding the number and type of concerns received by the site indicated that the program has elements to support a SCWE. For example, the ECP Manager monitors the number and type of anonymous complaints, the number of discrimination complaints, and the departments which generate the majority of concerns. Data reviewed by the inspection team indicated that, while the number of complaints has increased since last year, the ECP staff is effectively assessing the data for SCWE implications.

Conclusion

The site has implemented several corrective actions in the area of the ECP that address the issues from a 2004 independent assessment. Most workers in the majority of work

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groups indicated they were aware of and satisfied with the ECP or believed that other workers who had used the program were satisfied. However, several workers in certain work groups indicated they would not feel comfortable using the program due to confidentiality concerns. While PSEG has recently taken actions which appear to be appropriate to address these perceptions, it was too soon to fully assess their effectiveness.

.4 Pillar 4: Preventing and Detecting Retaliation

The team determined that PSEG has taken actions to address work environment issues in the area of Preventing and Detecting Retaliation. PSEG established an Executive Review Board (ERB) to review proposed personnel actions, before they were taken, to ensure they were not in violation of 10 CFR 50.7 employee protection regulations. To ensure personnel actions did not unnecessarily challenge the safety conscious work environment (SCWE), the ERB was also chartered to: 1) assess whether the actions planned could be perceived by the workforce to be retaliatory and, 2) propose mitigating actions, where appropriate, to address the perceptions of the workforce.

One member of the inspection team observed an ERB meeting to assess the current status of its effectiveness. The meeting involved three separate proposed actions by contractors. During the meeting, the ERB members demonstrated a healthy questioning attitude and working comprehension of important SCWE principles. In addition to this observation, information gathered during employee focus groups provided insights with regard to the licensee's effectiveness in preventing the perception of retaliation for engaging in protected activities. Discussions were also held with two members of the ERB concerning the meeting observed and recent changes to the ERB charter.

In addition to the ERB, PSEG has established and recently modified the Executive Protocol Group (EPG). The revised EPG replaced the People Team, and one of its purposes is to provide a mechanism for timely and comprehensive response to events that could involve harassment, intimidation, retaliation, discrimination or otherwise challenge the SCWE. The EPG has held two meetings, and the team concluded that it was too soon to fully assess the effectiveness of the Group.

Most of the workforce interviewed were not aware of incidents of retaliation for raising concerns or challenging unsafe acts. However, as evidenced by information shared with the inspectors during four of the focus groups, there are perceptions that subtle actions occur within a few groups. These actions allegedly included supervisors demeaning individuals or providing undesirable work assignments.

Prior to the NRC's inspection, a few personnel actions taken by a contractor (Wackenhut) were not reviewed by the ERB, as required by the charter. The team determined that this was a minor issue, due to the isolated nature. PSEG's corrective action, a review of all recent disciplinary actions taken by contractors on site to ensure they were appropriately reviewed by the ERB, was appropriate.

Conclusion

The team determined that PSEG has made progress in the area of Preventing and Detecting Retaliation by instituting the Executive Review Board and the Executive Protocol Group. Most of those interviewed had not experienced, nor were they aware of others experiencing, retaliatory actions for engaging in protected activity. However, there are perceptions that subtle actions occur within a few groups. These actions, although not directly affecting the raising of safety issues, are important for PSEG to address.

.5 Assessments and Observations in Other Areas

Safety Conscious Work Environment Self Assessment

The team concluded that the recently completed safety conscious work environment self assessment was effective in that it evaluated work environment actions taken to date, appropriately identified a number of additional actions needed to improve the work environment, and identified some actions previously planned that were not fully implemented. As appropriate, these items were placed in the CAP for further evaluation and action. There were about 150 specific actions and recommendations to evaluate issues that were initiated following the self assessment. Most of these items were issued during the week prior to the team inspection. Thus, the effectiveness of these actions could not be fully assessed by the team.

The team identified three areas that were not in the scope of the self assessment and, therefore, limited its effectiveness. First, the team identified that the self assessment did not fully explore employee perceptions of the progress in work management and the CAP. The team noted that the survey questions in the self assessment did not specifically address CAP and work management. Consequently, workers' perceptions of performance in these areas were not fully captured. Secondly, the inspectors noted that the self assessment did not review all major work groups; specifically, security was not included. Therefore, the self assessment missed an opportunity to identify security as a group with negative views of the work environment. Finally, the self assessment did not review corrective action program notifications. Consequently, the assessment did not benefit from insights in these items.

The team noted that the self assessment reviewed the actions taken to address groups with significantly negative views of the work environment. The self assessment appropriately noted that the Synergy survey results were not used in a timely manner to address these groups. The team found that for the groups with longstanding negative perceptions prior to the 2005 survey, such as Hope Creek operations and Salem chemistry, actions taken to date have not yet fully addressed the negative perceptions in these groups.

Additionally, the team determined that for the Salem and Hope Creek operations groups, the negative perceptions are not currently being addressed at a pace consistent with their role in day-to-day safe operation. The perceptions and potential impact on

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workers' willingness to raise issues in these groups could be addressed in a more timely manner than indicated in the PSEG plan. Operators play a critical role in identifying deficiencies that have safety significance, so it is important that PSEG routinely assess and take timely action to address negative perceptions that could influence their willingness to raise issues.

Conclusion

PSEG's self assessment was effective and its findings were generally consistent with the inspection results. However, the self assessment did not fully explore workers' views on the progress of improvements in work management and the corrective action program, did not review all major work groups, and did not review inputs to the corrective action program.

Safety Conscious Work Environment Metrics and Means to Monitor the Work Environment

Overall, the SCWE metrics that PSEG committed to tracking in the June 25, 2004, letter to the NRC provide valuable information related to the work environment improvement efforts. Additionally, the Synergy surveys conducted in January 2005 and management observations have been useful for monitoring the work environment.

The details of the self assessment describe some opportunities to improve the metrics and related performance measures. For example, the assessment noted that metrics are not tied to pillars and do not clearly indicate how they apply to SCWE. The self assessment also indicated that survey and management observation tools could be used more effectively or in a more timely manner for improving SCWE.

The team identified that some metrics have vague acceptance criteria. For example, the Repeat Maintenance and Operational Challenges metrics have a criteria of "no adverse trend," but this is not defined. The numbers in some of these metrics were significantly worse during the last quarter, but this trend was not considered adverse, nor was the trend explained in the metric information. As such, it was unclear how these metrics provided insight into trends for assessing the work environment. The team noted that PSEG documented this issue in the CAP and intends to improve the documentation for these metrics.

With respect to the use of other means to monitor the work environment, the team noted that the work environment related aspects of inputs to the corrective action program (notifications) are addressed through actions by the SCWE leader and line management. However, in a few instances, the team noted that the work environment related aspects of notifications were not addressed. These included closing of notifications and orders with deficiency tags left hanging (20242994, 20242730, and 20245100) and issues related to shift technical adviser and reactor operator responsibilities (20240134). These types of notifications provide valuable insight into work environment trends and were not fully utilized.

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Conclusion

PSEG's metrics and other means to monitor the work environment are adequate. The PSEG self assessment and the inspection team identified examples where the metrics and means to monitor are somewhat limited with respect to providing clear information to management and communicating their effectiveness in resolving issues.

Communications

The team determined that, for discrete work groups, the effectiveness of communications was an underlying contributor to many of the negative perceptions of the work environment. The team observed that communication effectiveness was mixed with regard to PSEG's reorganization, the Exelon management model, Synergy survey results, and the priority of issues in the corrective action program. The team also noted positive comments about the communication of the bases for operational decisions. With respect to change management, some personnel were concerned about shifting tasks and responsibilities without proper resources and trained staff.

.6 NRC Analysis, Key Observations, and Overall Conclusions

The inspection team analyzed the information collected in document reviews, meeting observations, personnel interviews, and focus group meetings to develop common themes, assessments in the four safety conscious work environment pillars, key observations, and overall conclusions. Following the period of the onsite inspection, the team reviewed this information, and then conducted a debrief meeting with PSEG management on October 14, 2005. The team considered PSEG's feedback during this meeting while developing final observations and conclusions.

Key Observations

- C Security is a work group with negative perceptions of the work environment.
- C Negative perceptions in the Salem and Hope Creek operations work groups could be addressed in a more timely manner.

Overall Conclusions

- C Overall, the team concluded that PSEG has made progress in addressing work environment problems. Consistent with PSEG's self assessment, the team noted issues that require additional action and focused attention.
- C Given PSEG's current stage of progress in addressing the work environment issues at the stations, there remains a wide range of worker perceptions across each of the four safety conscious work environment pillars. PSEG has not fully evaluated and addressed the negative perceptions in certain work groups.

- C PSEG's metrics and other means to monitor the effectiveness of the work environment improvements are adequate. The PSEG self assessment and the inspection team identified examples where the metrics and means to monitor are somewhat limited with respect to providing clear information to management and communicating their effectiveness in resolving issues.

- C PSEG's self assessment was effective and its findings were generally consistent with the inspection results. However, the self assessment did not fully explore workers' views on the progress of improvements in work management and the corrective action program, did not review all major work groups, and did not review inputs to the corrective action program, all of which limited its effectiveness.

4OA6 Meetings, Including Exit

On October 19, 2005, the team presented the inspection results to Mr. Levis and other members of PSEG management and staff. PSEG acknowledged the inspection results and stated that they initiated actions to address the inspection team's observations.

ATTACHMENT: SUPPLEMENTAL INFORMATION

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SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

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J. Barstow, Corrective Actions Manager
D. Benyak, Regulatory Assurance Director
C. Fricker, Salem Plant Manager
M. Gallagher, Vice President - Engineering/Technical Support
G. Gellrich, Plant Support Manager
T. Gierich, Salem Operations Manager
H. Hanson, Hope Creek Operations Manager
S. Jones, Employee Concerns Manager
T. Joyce, Site Vice President - Salem
J. Keenan, PSEG Counsel
T. Lake, SCWE Leader
W. Levis, Chief Nuclear Officer
M. Massaro, Hope Creek Plant Manager
D. Romashko, NOS Manager
D. Winchester, Vice President Nuclear Assessments

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

In addition to the documents identified in the body of this report, the inspectors reviewed the following documents and records:

PSEG Self Assessment: Safety Conscious Work Environment (SCWE), Rev. 1, dated September 21, 2005
Independent Review Responding to the January 28, 2004, NRC Letter Regarding SCWE at Salem and Hope Creek Generating Stations (IAT Report), dated May 4, 2004
Salem/Hope Creek Safety Culture Assessment, Utilities Service Alliance, March 1 - 5, 2004
2003 "Comprehensive Cultural Assessment" performed by Synergy, dated February 2004
2005 "Comprehensive Cultural Assessment" performed by Synergy, dated April 2005
NRC letter to PSEG, Work Environment for Raising and Addressing Safety Concerns at the Salem and Hope Creek Generating Stations, dated January 28, 2004
PSEG letter to NRC, Plan for Improving the Work Environment to Encourage Identification and Resolution of Issues, dated May 21, 2004
PSEG letter to NRC, PSEG Plan for Improving the Work Environment, dated June 25, 2004

NRC letter to PSEG, Work Environment at the Salem and Hope Creek Generating Stations, dated July 30, 2004
 Salem/Hope Creek Corrective Action Program Excellence Plan
 PSEG Metrics for Improving the Work Environment, Salem and Hope Creek Generating Stations, Quarterly Report, dated July 29, 2005
 PSEG Frontline Emails (various)
 PSEG Roadmap of How People Team Triggers are Addressed in Executive Protocol Group
 Salem/Hope Creek Work Environment Improvement Strategy
 Work Environment Improvement Plan, dated September 22, 2005
 Source Report to Business Plan Matrix
 PSEG 2004 - 2005 Business Plan (selected portions)
 Safety Conscious Work Environment Training Material
 Compliments and Concerns Meeting Minutes (various)
 Executive Protocol Group Charter
 Executive Review Board Charter, Revision 2
 Nuclear Review Board Reports 05-007, 05-008, 05-009
 Nuclear Review Board Meeting Minutes , No. 05-01

Notifications and Orders:

20187069	20242994	20252181	20253880
20206978	20244108	20253170	20253962
20229112	20245100	20253283	20254206
20232916	20245412	20253380	20254283
20232948	20250300	20253409	20254300
20236084	20251489	20253539	70044173
20236499	20251944	20253587	70044229
20238223	20251945	20253748	70045758
20240134	20251946	20253750	70045907
20240137	20251947	20253769	70046605
20242730	20251948	20253783	

LIST OF ACRONYMS

ECP	Employee Concerns Program
EPG	Executive Protocol Group
ERB	Executive Review Board
IAT	Independent Assessment Team
NOS	Nuclear Oversight
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
PARS	Publicly Available Records
PSEG	Public Service Enterprise Group
ROP	Reactor Oversight Process
SCWE	Safety conscious work environment
USA	Utility Service Alliance

SALEM & HOPE CREEK
SAFETY CONSCIOUS WORK ENVIRONMENT INSPECTION
SEPTEMBER 26 - SEPTEMBER 30, 2005
INSPECTION COVER SHEET

INSPECTORS:

Lead: Blake Welling Facility: Salem 1 & 2, Hope Creek
J. Persensky Report No: 50-272;311;354/2005-013
Lisa Jarriel Stand-alone Team Report
Andrea Kock Insp Dates: 9/26/05 - 9/30/05
Ted Wingfield

Trainees: Steve Dennis
Molly Keefe
June Cai

CONTACTS:

NRC SRIs: Dan Orr, Mel Gray Phone: 856-935-5151
Licensee POC: Howard Berrick, Licensing Phone: 856-339-1862
Team Leader: Blake Welling Office: 610-337-5328
Logding: Pennsville Hampton Inn Phone: 856-351-1700

INSPECTION PLAN:

Refer to the attached plan.

INSPECTION PROCEDURE DATA:

<u>Procedure</u>	<u>IPE Code</u>	<u>Title of Procedure</u>	<u>In RPS</u>
71152	OA	Identification and Resolution of Problems	Y

OpE REVIEWED: (Summary)

- Davis-Besse Special Inspection Reports 2002-018, 2003-012, 2004-003, 2004-013
- Regulatory Issue Summary (RIS) 2005-18, Guidance for Maintaining a Safety Conscious Work Environment. Note: This RIS is intended to provide guidance to the industry, not the NRC inspection staff.

ACKNOWLEDGED/APPROVED:

/RA/ 9/20/05
(Gene Cobey / Date)

Distribution:

Assigned Inspectors
Inspectors' Branch Chiefs (Region I)

INSPECTION PLAN - Salem and Hope Creek
SAFETY CONSCIOUS WORK ENVIRONMENT INSPECTION
Inspection Report 50-272;311;354/2005-013

I. Inspection team make-up:

Lead Inspector -	B. Welling
SCWE Specialists -	J. Persensky
	L. Jarriel
	A. Kock
	T. Wingfield
	J. Cai (trainee)
	M. Keefe (trainee)
	S. Dennis (trainee)

II. Inspection Schedule:

TL Prep	September 1 - 23, 2005 (in-office)
Team Prep	September 7 - 8, 2005 (at HQ)
TL Prep (bagman)	September 15 - 16, 2005 (on-site)
Team Prep	September 19 - 23 (in-office)
Team Inspection	September 26 - 30, 2005 (on-site)
Exit Meeting	October 6, 2005
Team Doc	October 3 - 14, 2005 (in-office)
TL Doc / IR to BC	October 17 - 21, 2005

III. Inspection Deliverables:

This special inspection will evaluate Public Service Enterprise Group's (PSEG) completed and planned actions to mitigate the work environment problems described in PSEG's May 21, 2004, letter for Salem/Hope Creek Nuclear Generating Stations. The following deliverables will be documented in the inspection report.

- A. An assessment of the metrics and methodologies used to monitor the effectiveness of the work environment improvement plan.
- B. An assessment of the plans for and progress in improving the work environment.
- C. An assessment of the effectiveness of the corrective actions taken thus far to address the identified work environment problems, as well as an evaluation of any effectiveness assessments conducted for those corrective actions.

IV. Inspection Details:

A. Evaluate the licensee's methodology and metrics for monitoring effectiveness of the improvement program in the following areas:

1. Adequacy of monitoring work environment problems
2. Ability to identify problems similar to those found by the surveys/assessments described in the May 21, 2004, letter
3. Appropriateness of the criteria and thresholds used to assess program effectiveness
4. Implementation of licensee's processes to address metrics with declining trends

B. Review the licensee's plan for improving the work environment in the following main areas, as described in the May 21, 2004, and June 25, 2004, letters, and additional documentation. Assess progress in each of these areas:

1. Safety Conscious Work Environment (SCWE):

a. Use the following guidance in the review, as appropriate

1. Inspection Procedure 71152 "Identification and Resolution of Problems" section 03.03d "Assessment of Safety Conscious Work Environment"; and
2. NRC: Policy Statement for Nuclear Employees Raising Safety Concerns Without Fear of Retaliation

b. Assess the appropriateness of actions for each of the following licensee goals:

1. Improve willingness of employees to raise concerns
2. Improve the effectiveness of policies and procedures for resolution of issues
3. Improve the effectiveness of the alternative mechanism for resolution of concerns-the Employee Concerns Program (ECP)

a. Use the following guidance in the review:

1. Inspection Procedure 40001, Resolution of Employee Concerns;
2. NRC Policy Statement for Nuclear Employees Raising Safety Concerns Without Fear of Retaliation; and
3. NEI 97-05

b. Evaluate the effectiveness of the ECP to address and resolve employee concerns

4. Improve management effectiveness in detecting and preventing retaliation and chilling effect
 - a. Evaluate ERB corrective action effectiveness
 - b. Review any recent examples of perceptions of retaliation or chilling effect

2. Corrective Action Program

- a. Review corrective actions associated with the surveys/assessments results in the May 21, 2004, letter for
 1. Applicability to original problems
 2. Effectiveness of implementation
 3. Work Management Program
 - a. Assess the appropriateness of actions
 - b. Assess the appropriateness and effectiveness of current and planned implementation methods
 4. SCWE Training
 - a. Assess the appropriateness of training program content and methods
 - b. Assess the effectiveness of current and planned implementation methods
- C. Corrective Action Effectiveness Review
1. Evaluate the effectiveness of corrective actions associated with the work environment problems and determine whether they addressed the causes of the conditions

V. Methods

A. Document review

1. The inspection team will review documentation related to the work environment problems
2. The inspection team will review documentation related to actions for improvement in the main areas from the May 21, 2004, and June 25, 2004, letters, selected business plan items, and current action plans
3. The inspection team will review a sample of relevant documents related to problem identification and resolution of work environment issues at the sites, including:
 - a. Notifications (NOTFs)
 - b. Corrective actions
 - c. ECP reports
 - d. Employee survey results
 - e. Training Materials

B. Focus group meetings and individual interviews. These activities will be a major portion of the NRC's onsite inspection. The team will conduct approximately 18 individual interviews and 18 focus group meetings.

1. The inspection team will interview and/or conduct focus groups with a sample of individuals, including
 - a. Staff and managers responsible for the corrective actions associated with the plan to address work environment issues
 - b. Selected members of the site management team

- c. Individuals at the staff level, randomly selected and/or on an as needed basis
- d. Work groups selected on the basis of survey results and at random with the intent of providing a cross-section of groups at the site

2. The inspection team will meet with any individuals who request to discuss issues related to the work environment.

C. Observations of meetings and workgroups, as available, such as

- 1. All hands meetings
- 2. NRB
- 3. SORC
- 4. ERB
- 5. Executive Protocol Group (formerly People Team)
- 6. Daily Meetings and Plan of the Day Meetings
- 7. Others as needed