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MAY 04 2006

LR-N06-0216

Mr. Samuel Collins
Regional Administrator
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

SAFETY CONSCIOUS WORK ENVIRONMENT PEER ASSESSMENT REPORT
SALEM AND HOPE CREEK GENERATING STATIONS
DOCKET NOS. 50-272, 50-311 AND 50-354

References:
1. NRC letter, "Work Environment for Raising and Addressing Safety Concerns at the Salem and Hope Creek Generating Stations", dated January 28, 2004
2. PSEG letter, "PSEG Plan for Improving the Work Environment to Encourage Identification and Resolution of Issues", dated May 21, 2004
3. PSEG letter, "PSEG Plan for Improving the Work Environment at Salem and Hope Creek Generating Stations", dated June 25, 2004
4. NRC letter, "Work Environment at Salem and Hope Creek Generating Stations", dated July 30, 2004

Dear Mr. Collins:

This letter provides a copy of an independent peer assessment commissioned by PSEG Nuclear (PSEG) to examine the Safety Conscious Work Environment (SCWE) at Salem and Hope Creek Generating Stations.

In 2004, NRC identified concerns with our environment for raising and addressing safety issues (reference 1). In-depth assessments were conducted into these matters and short-term and long-term actions were established to address the identified concerns (references 2 and 3). PSEG completed the actions to resolve these concerns, resulting in significant improvements in the work environment and the Corrective Action and Work Management Programs at Salem and Hope Creek Generating Stations.

PSEG concluded in March 2006 that the improvements achieved were both substantial and sustainable. In accordance with PSEG's commitment to the NRC (reference 4), a peer assessment was obtained to confirm this conclusion. An independent team of industry peers conducted this assessment by interviewing more than 170 site personnel, observing station activities and meetings, and reviewing programs, procedures, policies, metrics, past assessments and resulting actions. The team confirmed that substantial improvements in SCWE have been realized and a solid foundation exists for sustaining these improvements.

PSEG has completed the actions committed to the NRC to improve our work environment. Furthermore, PSEG is prepared for an NRC review to confirm the effectiveness of these actions.

Background

In late 2003, NRC began a review of our environment for raising and addressing safety issues due to concerns with PSEG's ability to effectively address such issues. NRC subsequently requested that PSEG perform an in-depth assessment of the issues (reference 1). Comprehensive, in-depth assessments were performed and provided to the NRC (reference 2). Short- term and long-term actions were developed by PSEG and incorporated into the Business Plan for the remainder of 2004 and for 2005 (reference 3). Business Objectives of SCWE, Corrective Action Program, Work Management, Leadership Effectiveness, and Facilities/Housekeeping were developed, with the first three objectives having the most significant and immediate impact on improving our work environment.

Implementation of the Business Plan initiatives resulted in substantial and visible improvements during 2005. Forced loss rate was significantly reduced at Salem and Hope Creek Generating Stations as a result of improvements in equipment reliability and our operational focus. Safety system performance improved during 2005 as a result of more effectively managing our problem resolution processes and most safety system performance indicators reflected annual top quartile performance levels by the end of the year. For example, the availability of emergency diesel generators at Salem Generating Station and high pressure injection systems at Hope Creek Generating Station reached top quartile performance levels in 2005.

The changes in our execution of the Work Management and Corrective Action Programs improved the operation of our plants. These changes are attributed to management intrusiveness and engagement of the workforce to use these tools to improve performance. Corrective Action Program backlogs were significantly reduced and the timeliness of evaluations and corrective actions improved. The number of open

evaluations in the Corrective Action Program was reduced by 67 percent and the number of open corrective actions was reduced by 59 percent over the course of 2005. Many long-standing equipment deficiencies were resolved in 2005 through online and outage work execution. Online work improvements resulted in a 90 percent reduction in the online corrective maintenance backlog and a 48 percent reduction in online elective maintenance backlog. Refueling outages were performed for Salem Units 1 and 2 with many improvements in the plant material condition and outage execution. For example, Salem Unit 1 was performed without a lost time accident and with very low personnel exposure while completing more than 170,000 person-hours of work. Refueling outage work for Hope Creek in April 2006 included replacement of the 'B' reactor recirculation pump rotating assembly and motor, and application of noble metals chemical addition. Facility upgrades in 2005 included application of approximately 450,000 square feet of new plant coatings at the stations and renovations to the workspaces of our staff. Long-term asset management efforts were also completed, including replacement of both reactor vessel heads at Salem Generating Station and preparations for dry cask fuel storage at Hope Creek.

Visible changes were also made to our organizational structure and its operational focus that improved station performance and the work environment. An operating services agreement (OSA) with Exelon Nuclear LLC (Exelon) was implemented in January 2005 that resulted in use of the Exelon Management Model at Salem and Hope Creek Generating Stations. This model provides a proven, standardized approach to achieving positive and sustainable change by defining clear roles and responsibilities, applying proven processes, and fostering the behaviors of a learning organization. Early actions under the OSA instilled an operational focus into daily activities through use of structured plant-of-the-day meetings and assignment of key personnel to the role of nuclear duty officer to improve the rigor of communications. Improvements to our training programs increased the effectiveness of our workforce. An organization change in September 2006 realigned personnel to place the resources under the control of each station to improve the teamwork, alignment, and communications. This also focused our personnel on a single station to increase the accountability and ownership of plant issues. Overall, the relationship with Exelon has yielded positive changes in plant and personnel performance, processes, and programs. These changes are evident in the improved morale, teamwork, communications, and alignment of our staff.

Synergy Consulting Services Corporation completed a survey of the Salem and Hope Creek workforce during the first quarter 2006. The survey results showed improvement in essentially all cultural metrics since the last Synergy survey conducted in 2005. Furthermore, the rate of improvement was characterized as strong, providing a solid foundation for sustainable improvement. The results showed that personnel have

maintained a strong willingness to report nuclear safety issues. Opportunities for continued improvement were identified and entered into the Corrective Action Program.

Substantial and Sustainable Performance Improvement

Collectively, efforts to improve the work environment and execution of the Corrective Action and Work Management Programs resulted in substantial improvements in plant and personnel performance. The 2006 Business Plan maintains management's focus on these areas with current performance reflecting continued progress.

In March 2006, PSEG concluded that these substantial work environment improvements were sustainable. This conclusion was reached after careful consideration of many different indicators of the work environment, including plant and personnel performance, established processes and procedures, SCWE-related metrics, a 2006 site-wide survey, periodic self-assessments, assessments by external organizations and individuals, and management observations.

PSEG commissioned an independent peer assessment team with extensive management, regulatory, and SCWE-related experience to assess the work environment at Salem and Hope Creek Generating Stations. In April 2006, the team interviewed more than 170 site personnel, observed station activities and meetings, and reviewed programs, procedures, policies, metrics, past assessments and resulting actions.

The team concluded that substantial improvements in SCWE have been realized at Salem and Hope Creek Generating Stations. Every interviewee demonstrated a willingness to raise nuclear safety issues. Improvements to the Corrective Action and Work Management Programs resulted in improved equipment reliability and facility performance and most site personnel recognize these improvements. The Employee Concerns Program has high visibility as well as management and employee support. Employees are generally willing to use the program and believe that their concerns will be addressed without breach of confidentiality. Management has been effective at detecting and preventing retaliation and chilling effects in response to raising safety concerns. There is highly visible and continuous reinforcement of SCWE principles. Training and communications regarding SCWE have been extensive, employing a variety of communication methods to foster an understanding of SCWE among site personnel. Improvement in the SCWE at Salem/Hope Creek has also been reflected in objective performance metrics and in a number of surveys, inspections and assessments conducted since early 2004.

The peer assessment team also concluded that a solid foundation exists for sustaining these improvements. Strong capability and alignment was noted among the Salem/Hope Creek senior management team. Station management and personnel are sensitive to SCWE issues and recognize and support the need to maintain a strong SCWE. Organizational and program changes and performance challenges are not interfering with the raising of nuclear safety and quality concerns. A substantial majority of employees exhibit a willingness to embrace changes to enhance performance. Methods used to evaluate SCWE are comprehensive and intrusive, and collectively enable identification and response to emergent SCWE issues.

Opportunities for continued improvement were also identified by the peer assessment team. Additional rigor is recommended to manage changes that might impact SCWE, including the evolution of current processes, execution of SCWE-related action plans, and the need for a comprehensive, coordinated site communications strategy. The team noted that correcting human performance issues and increasing the acceptance of personal accountability at all levels of the organization would continue to be a challenge. These issues were entered into the Corrective Action Program for resolution. Further details of the team's results are provided in the attached assessment report.

Conclusion

In summary, substantial and sustainable progress has been made and an independent assessment has been conducted that confirms such progress. PSEG has completed the actions committed to the NRC relating to our work environment. Furthermore, PSEG is prepared for an NRC review to confirm the effectiveness of these actions. If you have any questions, please contact me at (856) 339-1100.

Sincerely,

Attachment

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Washington, DC 20555

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ATTACHMENT

INDEPENDENT PEER ASSESSMENT OF

SALEM AND HOPE CREEK

SAFETY CONSCIOUS WORK ENVIRONMENT

May 2, 2006

Team Leader: William T. Cottle
[original signed by W.T. Cottle]

Team Members: Carey E. Foy
Barry R. Letts
William E. Baer, Jr.
Brian C. McCabe
Joseph J. Muth
Jeannie M. Rinckel
Andrew J. Vomastek

EXECUTIVE SUMMARY

Background

Deficiencies in the Safety Conscious Work Environment (SCWE) at the Salem and Hope Creek nuclear stations were documented in late 2003 and early 2004 in surveys, assessments, and Nuclear Regulatory Commission (NRC) communications. Since that time, PSEG Nuclear LLC (PSEG) has implemented a number of actions to improve the SCWE at the stations. In March 2006, PSEG commissioned a team of independent peer evaluators (the Assessment Team) to perform an assessment to determine:

- Whether there has been substantial improvement in the SCWE at Salem/Hope Creek since early 2004.

- Whether any improvement in the SCWE at Salem/Hope Creek is sustainable.

This Report presents the results of that peer assessment.

In performing the assessment, the Assessment Team spent two weeks at the Salem/Hope Creek site, and a number of Team members spent several additional days on site. During that time, the Assessment Team interviewed more than 170 personnel, held discussions with site management and supervision, observed site meetings and ongoing activities, reviewed objective performance measures, and examined site programs, processes, and other documentation relating to the SCWE. During most of the onsite assessment period, Hope Creek was in a refueling outage. The Assessment Team briefed Salem/Hope Creek senior management on the preliminary results of the assessment on April 14, 2006.

Overall Conclusions

There has been substantial improvement in the SCWE at Salem/Hope Creek since early 2004.

- Personnel, throughout the organization, exhibit a willingness to engage in open and candid discussions and raise safety and quality issues. Site personnel perceive that the willingness to raise concerns has improved. One hundred percent of the site personnel interviewed during the assessment indicated a willingness to raise nuclear safety and quality concerns.

- The Corrective Action Program (CAP) and the Work Management program have improved, resulting in improved equipment reliability and facility performance, and a clear majority of site personnel perceive that improvement in these programs has occurred.

- The Employee Concerns Program (ECP) has high visibility, and management and employee support. Employees are generally willing to use the program and believe that their concerns will be addressed without breach of confidentiality.

- Management has been effective at detecting and preventing retaliation and addressing chilling effects in response to the raising of safety concerns. Employees generally do not fear retaliation for raising concerns.

- Management provides high visibility and strong and continuous reinforcement of SCWE principles. Site training and communications regarding SCWE have been extensive, have employed a variety of communication methods, and have succeeded in fostering an understanding of SCWE among site personnel.

- Objective performance metrics and the results of a number of surveys, inspections, and assessments conducted since early 2004 reflect improvement in the SCWE at Salem/ Hope Creek.

The current station management and site programs, processes, procedures, and training provide a solid basis to conclude that the improved SCWE at Salem/Hope Creek is sustainable.

- There is strong capability and alignment among the Salem/Hope Creek senior management team.

- Station management and personnel are sensitive to SCWE issues and recognize and support the need to maintain a strong SCWE.

- Organizational and program changes and performance challenges are not interfering with the raising of nuclear safety and quality concerns.

- A substantial majority of employees exhibit a willingness to embrace changes to enhance performance.

- Methods used to evaluate the SCWE are comprehensive and intrusive, and collectively enable identification and response to emergent SCWE issues.

Areas for continued improvement include:

- Continued evolution of the current programs, processes, and procedures requires a higher degree of adherence to change management practices with respect to transitions that might impact the SCWE.

- Additional management attention is required with respect to the follow-up of action plan execution related to SCWE. In particular, management must vigorously implement and appropriately track and document action plans to address organizations identified as having a SCWE less robust than the site as a whole.

- Although there has been extensive communication on SCWE issues, there is a need for a coordinated and comprehensive communication strategy for the site.

- Correcting human performance issues and increasing the acceptance of personal accountability at all levels of the organization will continue to be a challenge, as evidenced by difficulties in obtaining site-wide "buy-in" on the need for strong personal accountability for industrial safety.

Specific recommendations to address these areas for improvement are included in the body of the Report and are listed in Attachment 5.

A final observation: Salem and Hope Creek have experienced significant management change in the past several years. The current management team is perceived as well-aligned, with consistent standards and focus. The alignment and consistency of current management are acknowledged and appreciated by the workforce and have contributed to the improvements in SCWE. Care should be taken not to make unnecessary management changes and to ensure that necessary changes are effective.

TEAM COMPOSITION AND ASSESSMENT METHODOLOGY

The SCWE Peer Assessment Team was composed of eight individuals with significant experience in various aspects of nuclear power plant management and the maintenance of a SCWE at nuclear power plant sites. The team members were:

- William T. Cottle, former Chairman, President and CEO, STP Nuclear Operating Company (Team Leader).
- Jeannie M. Rinckel, Vice President, Fleet Oversight, FENOC.
- Barry R. Letts, former Field Office Director, Region I, NRC Office of Investigations.
- Brian C. McCabe, Manager, Regulatory Affairs, Progress Energy.
- Joseph J. Muth, Shift Manager, Operations, Columbia Station.
- Andrew J. Vomastek, Employee Concerns Program Specialist, Millstone.
- Carey E. Foy, former Employee Concerns Program Manager, Entergy Nuclear South.
- William E. Baer, Jr., Attorney, Morgan, Lewis & Bockius LLP.

Two members of the Team, Mr. Letts and Mr. Muth, participated in independent assessments of the safety culture and/or SCWE at Salem/Hope Creek during early 2004. In addition, Mr. Vomastek and Mr. Baer participated as industry peers in PSEG assessments of ECP and SCWE, respectively, during 2005. Summaries of the experience of each of the Team members are provided in Attachment 1.

The Team conducted its activities pursuant to an Assessment Plan (Attachment 2) that was developed based upon industry guidance and best practices relating to SCWE. This Assessment Plan was also structured to ensure that the Assessment Team examined previously-identified weaknesses in the SCWE at Salem/Hope Creek.

Members of the Assessment Team:

- Interviewed more than 170 site personnel. These interviews consisted of interviews of both groups and individuals, including management, staff, bargaining unit, and contractor

personnel. Group interviews were conducted for 16 groups and involved a total of 86 individuals. Individual interviews were conducted of 87 individuals (one individual participated in both a group interview and an individual interview).

- All personnel interviewed, whether in a group or individual setting, were informed that, although the results of their interviews would be used in this Report, the Team would not attribute issues to individuals nor would information that would facilitate identification of individual interviewees be included in the Report. Also, all personnel were provided the means to contact the Team at a later time if they desired to do so.

- To ensure consistency, interviews of both groups and individuals were conducted using a standard set of questions. These questions included both "Yes/No" type questions to ensure the gathering of specific data, as well as more general questions designed to elicit explanations for the answers provided. Time was allowed for general discussion of the SCWE challenges known to interviewees. Interviewees were also specifically invited to discuss any other issues of concern to them.

See Attachment 3 for additional information regarding interview methodology, including methods of selecting interviewees and questions used during the interviews.

- Held discussions with site management at all levels to assess their commitment to, and understanding of, SCWE attributes and management actions being taken to reinforce and strengthen the SCWE at Salem/Hope Creek.

- Observed more than 20 site activities and meetings. During these observations, the Team reviewed whether personnel appeared comfortable raising issues, displayed a questioning attitude, treated one another with professionalism and respect, and displayed a conservative approach to safety. The Team also assessed whether management behavior facilitated open discussion and the raising of concerns.

- Reviewed performance measures indicative of SCWE. These included both the measures specifically established by PSEG to measure SCWE at Salem/Hope Creek, as well as other measures associated with particular SCWE-related programs such as the ECP, the CAP, and the Executive Review Board (ERB).

- Reviewed policies, programs, procedures, training, communications, and other documentation related to the SCWE, including documentation of corrective actions and improvement plans.

- Reviewed previous assessments, inspections, and surveys conducted to evaluate the SCWE at Salem/Hope Creek, as well as the implementation and effectiveness of actions taken to address weaknesses identified in those assessments, inspections, and surveys.

- Reviewed Corrective Action Program (CAP) inputs (Notifications) to identify potentially significant SCWE issues and trends.

To ensure that all personnel who wanted to provide input to the assessment could do so, PSEG issued site-wide paper and e-mail communications describing the SCWE Peer Assessment and providing information on how individual personnel could contact the Assessment Team.

ASSESSMENT RESULTS

The Assessment Results presented below follow the Assessment Plan (Attachment 2). That Plan contains six main assessment areas:

1. Assess SCWE Pillar 1 – Personnel Willingness to Raise Concerns Without Fear of Retaliation.

2. Assess SCWE Pillar 2 – Effectiveness of Site Problem Identification and Resolution Process (Primarily the Corrective Action Program) When Addressing Concerns.

3. Assess SCWE Pillar 3 – Availability and Effectiveness of Alternate Mechanisms, Such as an Employee Concerns Program, for Personnel to Raise Nuclear Safety Concerns.

4. Assess SCWE Pillar 4 – Management Effectiveness in Detecting and Preventing Retaliation and Addressing any Chilling Effect in Response to Concerns.

5. Assess Performance Measures, Surveys, Direct Observations, and Other Methods Used to Evaluate SCWE.

6. Assess Effectiveness of Actions Taken Since January 2004 to Create Substantial and Sustainable Improvement in the Work Environment.

The assessment activities undertaken and conclusions reached by the Assessment Team in each of these areas are presented in Sections 1.0 through 6.0 below.

1.0 SCWE Pillar 1 – Personnel Willingness to Raise Concerns Without Fear of Retaliation

Overall Conclusion for Pillar 1

The Assessment Team determined that Salem/Hope Creek personnel demonstrate a strong willingness to raise safety and quality concerns without fear of retaliation. The Team based this conclusion on the following:

- During interviews of personnel and in observed meetings and site activities, participants were very willing to engage in open and candid discussions of their concerns.

- One hundred percent of individual and group members interviewed stated that they would raise nuclear or industrial safety or quality concerns.

- Almost without exception, both individual and group interviewees stated that their supervision, department management, and station management are receptive to the raising of concerns.

- Interview results demonstrate that the willingness of site personnel to raise concerns has increased. These results are confirmed by the results of the 2006 Synergy survey.

- Some individuals and groups expressed hesitancy to report personal injuries due to the potential for discipline for violation of industrial safety rules. However, this reluctance does not appear to extend to other types of issues.

- Policies and programs supporting Pillar 1 are generally consistent with industry guidelines and best practices.

The specific assessment activities and results that support the above points are described in Sections 1.1/1.2 through 1.4.6 below. Note that the discussions of results for assessment activities 1.1 and 1.2, which present the results of group and individual interviews, have been combined and are arranged by topic to facilitate clearer analysis.

1.1/1.2 Results of Individual and Group Interviews of Site Personnel Regarding Willingness to Raise Concerns Without Fear of Retaliation

The Assessment Team conducted 87 individual interviews. Interviewees were selected from a wide variety of site organizations, and included management, staff, bargaining unit, and contractor employees. More information on how interviewees were selected is presented in Attachment 3.

The Assessment Team conducted sixteen group interviews, which included a total of 86 individuals. These groups were not randomly selected, but were from organizations which had been identified during previous assessments, surveys, or inspections as having SCWE issues or low ratings in safety culture surveys. These groups were:

Hope Creek Shift Operations (two groups)
Hope Creek Operations Support
Hope Creek Maintenance and Technical Training
Hope Creek Engineering Programs
Hope Creek Design Engineering
Hope Creek Chemistry
Hope Creek 12hr./WIN Maintenance
Salem Shift Operations
Salem Operations Support
Salem Maintenance and Technical Training

Salem Design Engineering
Salem Chemistry
Salem 12hr./WIN Maintenance
Security
Fire Department

Selection of the individuals from those organizations to participate in the group interviews was based upon their availability. The groups selected included members of the five site organizations identified as Priority Level 1 or Priority Level 2 groups considered outliers for safety culture in the 2006 Synergy survey, with the exception of the Yard Electrical Maintenance organization. The Yard Electrical Maintenance organization has only 11 members and Synergy identified it as a Priority 1 group in 2006 based upon responses from three individuals. Members of that group work on multiple shifts and it was difficult to schedule a group interview. Consequently, in lieu of a group interview, two members of the Yard Electrical Maintenance group were interviewed individually.

A general note on interview results: The results of both group and individual interviews generally indicate an improving SCWE at Salem/Hope Creek. However, from a purely statistical standpoint (*i.e.*, percentages of those responding positively or negatively to particular questions), the individual interviews were somewhat more positive than those of the group interviews. The Assessment Team believes this difference is due to several factors. First, the organizations selected for group interviews were chosen specifically because they were groups that had provided negative perceptions of the SCWE in previous surveys, assessments, or inspections. Therefore, these groups were expected to be less positive than the site population as a whole. Second, given the nuances of group dynamics, it is often difficult to tell with certainty how everyone within a five to eight person group feels in response to any given question, as it is possible that one or two individuals with strong feelings on an issue and/or having a specific personal experience with the subject may influence the group's direction in response to specific questions. Because the selected groups were known to have more negative views, it is likely that this dynamic would amplify those views.

The Assessment Team found that the individual interviews were well suited to a detailed discussion of employee issues and perceptions, and provided a good balance and supplement to the information developed during the group interviews. It should be noted that even among groups selected due to previous negative perceptions of SCWE, most groups believe that there is improvement in several areas and that the areas of SCWE about which they were asked are acceptable. See Sections 1.1/1.2, 2.1/2.2, 3.1/3.2, and 4.1/4.2.

NOTE: Percentage figures presented in discussions of interview results are based upon the numbers of interviewees who provided a clear response, and do not include individuals who did not respond to the particular question asked.

1.1.1/1.2.1 Knowledge of Means for Raising Concerns

Personnel interviewed during individual interviews demonstrated their knowledge of how to raise safety concerns. When asked how they would raise a concern, 100% of the interviewees

were able to identify at least one appropriate method. Most identified at least two methods, usually reporting to their first-line supervisor and/or initiating a Notification. Personnel indicated that they would choose these methods because those are the most direct means to raise concerns, because those are the methods that they are encouraged to use, or because they are comfortable or familiar with those methods. As noted in Section 3.1/3.2 below, personnel are also aware that they can raise concerns to the ECP or to the NRC.

Personnel interviewed during the focus group interviews also demonstrated their knowledge of how to raise safety concerns. When asked how they would raise a concern, all the focus groups were able to identify at least one appropriate method, and all groups stated that they would report a concern to their first-line supervisor. Thirteen of the 16 groups also stated that they would initiate a Notification. The groups generally indicated that they would choose these methods because they are the most direct means to raise concerns, and because they are the methods that personnel are encouraged to use. As noted in Section 3.1/3.2 below, the group personnel are also aware that they can raise concerns to the ECP or to the NRC.

Based upon these results, and in consideration of the number of Notifications generated (see Section 1.3 below), it is clear that Salem/Hope Creek personnel know how to raise safety concerns. This knowledge appeared to be present in all of the groups interviewed.

1.1.2/1.2.2 Willingness to Raise Concerns

Willingness to Raise Nuclear and Industrial Safety and Quality Concerns

Personnel interviewed during both individual and group interviews demonstrated their willingness to raise nuclear or industrial safety and quality issues. One hundred percent of the individuals interviewed stated that he or she would raise a nuclear or industrial safety or quality issue.

Receptivity of Supervision and Management to Concerns

During individual interviews, when asked whether their supervisors, managers, and station management are very receptive, receptive, or not receptive to the raising of concerns, 100% of the individuals who responded indicated that his or her immediate supervisor is receptive or very receptive to the raising of concerns. Similarly, 100% of the individuals who responded noted that their department management is either receptive or very receptive to the raising of concerns. Also, 100% of the individuals who responded one way or the other stated that station management is receptive or very receptive to the raising of concerns. Some individuals stated that they did not know, generally because they do not personally interact with senior management. None stated that station management was not receptive to the raising of concerns.

During group interviews, when asked whether their supervisors, their managers, and station management are very receptive, receptive, or not receptive to the raising of concerns, all of the groups responded that their immediate supervisors and department management are either very receptive or receptive to the raising of concerns. All groups but one also indicated that station management is either receptive or very receptive to the raising of concerns. That group (Fire

Protection) identified one particular member of station management whom they believe is not receptive to the raising of concerns. Another focus group that also reports up to that member of station management did not share this perception, nor did any individual interviewees identify that member of station management as being unreceptive to concerns.

Increase or Decrease in Willingness to Raise Concerns

During individual interviews, when asked whether station personnel are more willing, about the same, or less willing to raise concerns than they were a year ago, individuals who responded indicated as follows:

- 69% stated that station personnel are more willing to raise concerns.
- 5% stated that personnel are less willing to raise concerns.
- 26% stated that the willingness of station personnel to raise concerns has stayed about the same.

When asked whether they themselves are more willing, about the same, or less willing to raise concerns than they were a year ago, individuals who responded indicated as follows:

- 32% stated that they are more willing to raise concerns.
- 4% stated that they are less willing to raise concerns.
- 65% stated that their willingness to raise concerns has stayed about the same.

Many individuals who responded "about the same" to the above two questions explained that they have always been willing to raise concerns.

[NOTE: Due to rounding of percentages, the above percentages add up to more than 100%.]

During group interviews, when asked whether station personnel are more willing, about the same, or less willing to raise concerns than they were a year ago, the groups responded as follows:

- More Willing – five groups, plus part of one group.
- Less Willing – two groups (Fire Department and Hope Creek Shift Operations), plus one group cited less willingness, but only for personal injuries.
- About the same – seven groups, plus part of one group.
- No consensus – one group.

When asked whether they personally are more willing, about the same, or less willing to raise concerns than they were a year ago, the groups responded as follows:

- More Willing – two groups, plus parts of three groups.
- Less Willing – part of one group.
- About the Same – 11 groups, plus part of one group.
- No consensus – one group.

Most groups that responded "about the same" explained that they have always been willing to raise concerns. [NOTE: Because some groups expressed multiple views, or did not respond to every question, subtotals presented above do not always add up to the total number of groups interviewed.]

In sum, individual interviewees who perceived greater station willingness to raise concerns outnumber those who perceive less willingness by a ratio of more than 13 to 1. Even in the groups, which were selected based upon a history of negative perceptions of SCWE, those groups who perceive that station personnel are more willing to raise concerns outnumber those groups who perceive they are less willing by more than 2 to 1. Accordingly, overall willingness to raise concerns appears to be on an improving trend.

Whether There is Hesitancy or Reluctance to Raise Concerns

Ninety-four percent of the individuals interviewed stated that they have no hesitancy or reluctance to raise concerns. Six percent expressed some hesitancy or reluctance. In several of the cases where individuals indicated having some hesitancy or reluctance, that hesitancy was described as being based upon incidents that occurred long ago. Two of the five individuals who expressed reluctance were from the Salem Engineering group; the remaining individuals were from disparate groups.

Twelve of the 16 groups indicated that there is no hesitancy or reluctance to raise safety or quality concerns. The four groups who responded that they felt some hesitance or reluctance were: Hope Creek Shift Operations, Hope Creek Maintenance and Technical Training, Salem Chemistry, and Hope Creek Chemistry. Some of these groups indicated that hesitancy might arise in connection with raising issues previously raised and not resolved.

Conclusions Regarding Willingness to Raise Concerns as Assessed Through Individual and Group Interviews

Interviews of both individuals and groups indicated a clear willingness to raise nuclear or industrial safety and quality issues, and a general willingness to raise other types of issues. All individuals and groups felt that their immediate supervision is either receptive or very receptive to the raising of concerns. The number of individual respondents who believe that the willingness to raise concerns has improved is more than 13 times the number who believe that the willingness to raise concerns has declined. Some individuals and groups did express a reluctance to raise certain types of concerns for particular reasons, but all individuals and groups stated that they will in fact report nuclear and industrial safety and quality concerns.

It should be noted that in both the group and individual interviews, and in a review of Notifications, several views were expressed regarding management's efforts to hold personnel accountable for failure to obey safety rules, particularly when discipline or other personnel action has been taken in response to those failures. Some personnel stated that these actions have made them reluctant to report personal on-the-job injuries. Others, however, recognize that the rate of injuries at PSEG and Salem/Hope Creek has consistently been higher than industry norms, and strongly support these management actions, believing that management must demand

accountability and take vigorous action to ensure that unsafe personal behaviors do not result in serious injuries or fatalities.

Recommendation 1.2.2 – Management should place continued strong focus and communication on the need to report and resolve industrial safety issues, specifically including workplace injuries. Communication on this topic should clearly reinforce that discipline and other personnel actions are taken because personnel have not followed safety rules, not because they report injuries.

1.3 Willingness to Raise Concerns as Indicated by Performance Measures

Salem and Hope Creek performance measures indicate that the number of Notifications written at the site has been on an increasing trend, from an average of 1679 per month in 2003, to an average of 1932 per month in 2004, to an average of 2217 per month in 2005. Employee usage of the ECP continues to be strong, with 110 concerns reported to ECP in 2005. These results indicate increased willingness on the part of Salem/Hope Creek personnel to raise issues. These results are consistent with the results of the 2005 and 2006 Synergy surveys, which also indicate improved willingness to raise issues.

1.4 Programs and Policies Supporting SCWE Pillar 1

1.4.1 SCWE Policy

The Assessment Team examined the Salem/Hope Creek Policy for Maintaining a Safety Conscious Work Environment Policy, NC.NP-PO.ZZ-0101 – Rev. 2 (SCWE Policy) and found it to be sound and to include the requisite elements for an effective SCWE program. The SCWE Policy clearly states that these elements apply to contractors as well as PSEG employees. It includes the attributes described in NRC Inspection Manual Chapter 0305, NRC Regulatory Issue Summary 2005-18, and Inspection Procedure 71152. Key points of the SCWE Policy are frequently reinforced in communications such as postings, site video monitor displays, the daily electronic newsletter, the weekly site newspaper, and in SCWE training.

Three issues were noted with respect to the SCWE Policy and other documents related to matters discussed in the SCWE Policy. First, the Policy states that the ERB will review all proposed personnel actions above oral reprimand prior to implementation. But under the ERB Charter, the ERB may review some actions (Immediate Management Actions) within five working days after the fact. Second, the ERB Charter does not define what personnel actions can qualify as Immediate Management Actions (IMAs), although discussions with management indicate that IMAs normally involve response to direct insubordination, aberrant behavior, or creation of a safety hazard. Third, the SCWE Policy applies to "safety (nuclear or industrial)" concerns, but other parts of the Policy and other documents relating to the ECP and ERB refer only to "nuclear safety" concerns. None of these issues appears to have affected the site SCWE, but they should be corrected for clarity and consistency.

Recommendation 1.4.1 – The SCWE Policy and the ERB Charter and process should be reviewed and revised as necessary to ensure consistency in discussing ERB review of personnel actions. The ERB Charter should be revised to clearly define what actions constitute Immediate Management Actions that are exempt from prior ERB review, but which must be reviewed by the ERB within five working days. The SCWE Policy, ECP documents, and the ERB Charter should be reviewed and revised to apply generally to "safety and quality" concerns.

1.4.2 SCWE Training

Several Salem/Hope Creek training packages relating to SCWE were reviewed. These included:

- The SCWE General Training Package provided in 2004.
- The SCWE Manager and Supervisor Training provided in 2004.
- The SCWE Employee Training provided in 2004.
- SCWE Refresher Training to be provided in 2006.
- The SCWE module included in current General Employee Training.

Also, training records for the implementation of several parts of the training were reviewed. The SCWE Group Leader was interviewed, and discussions regarding the training were held during interviews with other site personnel.

Overall, the SCWE training was found to be appropriate. The SCWE training initiated in 2004 and the planned 2006 SCWE Refresher training were found to be particularly comprehensive and helpful. Each of the training modules reviewed addresses attributes of all four pillars of SCWE. Training records indicate that the 2004 training (which was completed in 2005) was provided to all personnel designated for attendance except for one individual who was assigned to the Institute for Nuclear Power Operations (INPO) at the time. The SCWE training module included in the General Employee Training is provided to all personnel granted unescorted access to the Salem/Hope Creek site, including contractors. Many members of the Exelon management team participated in the SCWE training that was initiated in 2004, but some did not because they did not assume their responsibilities until after that training was completed. However, all of the Exelon managers have been required to complete the SCWE module in the General Employee Training (GET) prior to receiving badges for unescorted access, and will also receive the 2006 Refresher training.

The SCWE module included in the GET includes a discussion regarding the possibility that an individual may be disciplined for incorrect performance. The training states that "Although you may be disciplined for reporting your mistake ..." errors should be reported. This wording is misleading, in that discipline is not imposed for the reporting of errors, but for the underlying error itself.

Recommendation 1.4.2.1 – Correct the language in the SCWE module in General Employee Training to eliminate the possibility that it might be misconstrued to imply that discipline may be imposed because a mistake was reported.

Recommendation 1.4.2.2 – Consider requiring all managers and supervisors (including temporary upgrades) to receive SCWE training (beyond the training module in the General Employee Training) within a specified time of being appointed to a supervisory position.

1.4.3 SCWE Incentives

PSEG uses several forms of incentives which reinforce and promote behavior consistent with a strong SCWE. These include personnel performance appraisals, annual pay incentive goals, and various programs for recognition of individuals who raise or resolve issues.

- Safety is reinforced in annual performance incentive goals. For both 2005 and 2006, incentive goals related to safety account for over 50% of the total incentive program.

- Personnel evaluation forms for PSEG employees specifically include "Creates and Sustains a Safety Conscious Work Environment" as a rated behavior. However, the specific behaviors which support a SCWE are not identified or rated.

- Programs for recognition and/or reward of personnel for raising concerns or solving problems include the Instant Recognition, Good Catch, and Boundary Breakers programs. Review of records indicated that these programs are being used to encourage personnel to raise issues. However, there is no overall mechanism for monitoring the use of these programs.

As a group, the incentives used by PSEG are consistent with encouraging personnel behaviors necessary to maintain a strong SCWE.

Recommendation 1.4.3.1 – Revise the SCWE section in performance evaluation forms to more specifically align it to behaviors that encourage personnel to raise concerns without fear of retaliation. Ensure that SCWE competencies continue to be appropriately addressed in personnel evaluations following transitions associated with the PSEG/Exelon merger.

Recommendation 1.4.3.2 – Consider creating a process for providing senior management with periodic information on the use of site recognition programs as a vehicle for rewarding positive SCWE behaviors.

1.4.4 SCWE Metrics

The Assessment Team determined that Salem/Hope Creek have appropriate metrics for measuring SCWE at the site, including metrics that measure willingness to raise concerns. See Section 5.1 below.

1.4.5 Overtime Controls

The Assessment Team reviewed the extent of overtime worked at Salem/Hope Creek by the following means:

- Reviewed the Hope Creek Chemistry Department Roll-Up Meeting report, which included information on overtime for 2005.
- Reviewed the Salem/Hope Creek site overtime report summary for the week of March 5-11, 2006.
- Reviewed a sample of bargaining unit overtime lists posted in shops and work areas.
- Observed the Hope Creek Outage Control Center (OCC) manager verifying that OCC team members had scheduled the required time off to ensure compliance with overtime limits.

The above observations provided no indication that overtime is a factor that is discouraging people from raising concerns. Although some individuals and work groups have raised issues regarding the amount of overtime sometimes required, they did not identify overtime as a specific cause of any reluctance or hesitancy to raise concerns.

1.4.6 Contractor Awareness of SCWE Policies

The Salem/Hope Creek SCWE Policy explicitly applies to contractors as well as PSEG employees. At a minimum, contractors who are provided with unescorted access are required to complete GET, which includes a module and testing on SCWE principles. Contractor and vendor organizations have also been formally notified by letter (most recently in April 2006) of their obligations to comply with the requirements of the Salem/Hope Creek SCWE Policy, 10 C.F.R. Section 50.7, and are directed to maintain a SCWE among their employees, regardless of whether they are located at Salem/Hope Creek or at other facilities. Similar requirements are included in standard contract clauses incorporated into contractor and vendor contracts. Group and individual interviews of contractor personnel indicated that they are aware that they have the right to raise concerns without fear of retaliation, know how to report concerns, and know that the ECP and NRC are available as alternative means to report concerns. In addition, ERB reviews of proposed contractor personnel actions reinforce SCWE principles among contractor management and supervision. See Section 4.7.2.2 below.

Recommendation 1.4.6 – Ensure follow-up and response to any instances in which contractors fail to acknowledge and agree to the SCWE requirements set forth in PSEG's April 2006 letter to contractors.

2.0 SCWE Pillar 2 – Effectiveness of Site Problem Identification and Resolution Processes When Addressing Concerns

Overall Conclusion for Pillar 2

The Assessment Team determined that there has been considerable improvement in the station's CAP and Work Management programs to properly prioritize and address safety or quality concerns in a timely manner, and that these programs are generally adequate. The Team based this conclusion on the following:

- Interviews indicate that site personnel perceptions of problem identification and resolution (PI&R) processes–specifically CAP and Work Management–are improving.
- Most personnel believe that the CAP and Work Management programs are generally effective and that they address identified issues in a timely and appropriate manner.
- Performance metrics for CAP and Work Management reflect strong improvement since 2004, and assessments and inspections of PI&R also reflect this improvement.
- Programs and policies supporting PI&R are generally consistent with industry guidelines.
- There remains continued room for improvement, particularly in Work Management.

The specific assessment activities and results that support the above points are described in Sections 2.1/2.2 through 2.5 below.

2.1/2.2 Results of Individual and Group Interviews Regarding Effectiveness of Site Problem Identification and Resolution Processes When Addressing Concerns

The CAP's Ability to Appropriately Prioritize and Timely Resolve Actual or Potential Nuclear Safety and Quality Issues

Ninety-six percent of personnel responding during individual interviews expressed the view that the Salem/Hope Creek CAP appropriately prioritizes potential nuclear safety and quality issues. 94% of respondents believe that the CAP resolves those issues in a timely manner. These individuals felt that process improvements, management focus, better screening, and greater accountability were having a positive impact. The respondents who did not view the Salem/Hope Creek CAP as appropriately prioritizing (4%) or timely resolving (6%) these issues provided a variety of reasons for their views, but did not identify a common issue or trend.

Among the focus groups, 10 of 16 groups, and part of another group, believe that the CAP appropriately prioritizes nuclear safety and quality issues. Similarly, 11 groups, and part of another group, believe that the CAP resolves those issues in a timely manner. Four groups, and part of another group, believe that nuclear safety issues are not appropriately prioritized, and

three groups, and part of another group, believe that those issues are not resolved in a timely manner. Groups responding negatively to one or both of these questions included Salem Shift Operations, Salem 12hr./WIN Maintenance, Hope Creek Chemistry, Fire Department, and Hope Creek 12hr./WIN Maintenance. No common issue or trend was identified among these groups as the reason for their criticisms of CAP prioritization and timeliness.

The CAP's Ability to Address Other Types of Concerns (Industrial, Administrative, etc.) in a Timely Manner.

Eighty-nine percent of the personnel responding during individual interviews expressed the view that the Salem/Hope Creek CAP addresses other types of concerns (industrial, administrative, etc.) in a timely manner. Many of these individuals cited this as an area showing improvement. Eleven percent of respondents do not believe that these other types of concerns are addressed in a timely manner. Several responders (both positive and negative) indicated that the focus on administrative issues was not as good as on industrial safety issues.

Among the focus groups, 8 of 16 groups expressed the view that the Salem/Hope Creek CAP addresses other types of concerns (industrial, administrative, etc.) in a timely manner. Seven groups (Fire Department, Hope Creek 12hr./WIN Maintenance, Hope Creek Maintenance and Technical Training, Salem Operations Support, Salem Shift Operations, Salem 12hr./WIN Maintenance, and Hope Creek Chemistry) did not believe that these other types of concerns are addressed in a timely manner. Some of the groups that responded negatively indicated that among these non-nuclear safety issues, ones that affected operation or production of electricity generally received higher priority.

CAP Effectiveness in Addressing Long-Standing Equipment Issues Today, Versus One Year Ago

Eighty-three percent of personnel responding during individual interviews expressed the view that the Salem/Hope Creek CAP is more effective in addressing long-standing equipment issues today than it was a year ago. Seventeen percent believe that CAP performance in this regard is about the same. None of the individual personnel responding believe that the CAP is worse at addressing long-standing equipment issues than it was a year ago.

Among the focus groups, 6 of the 16 groups expressed the view that the Salem/Hope Creek CAP is more effective today than it was a year ago in addressing long-standing equipment issues. Five of the groups believe that CAP performance in this regard is about the same. Two groups (Salem Shift Operations and Salem 12hr./WIN Maintenance) believe that performance in this area is worse. Among groups who responded positively, management focus and accountability were cited as reasons for improvement. The two groups that responded negatively did not provide a common reason for their views.

The Work Management Program's Effectiveness in Maintaining Equipment and Getting It Fixed

Eighty-six percent of personnel responding during individual interviews expressed the view that the Salem/Hope Creek Work Management program is effective in maintaining equipment and getting it fixed. 14% believe that the Work Management program is not effective in this regard. Several of those who responded positively cited declining backlogs as a reason for their views, while others mentioned training and greater ownership of the process as reasons for improvement. Those who responded negatively cited lack of schedule stability, quality of work packages, and heavy workload as reasons for their perception that Work Management is not effective. A number of positive responders also noted the need for further improvement in this area, even though they felt that Work Management works better now than in the past.

Among the focus groups, 9 of the 16 groups expressed the view that the Salem/Hope Creek Work Management program is effective in maintaining equipment and getting it fixed. Four groups (Hope Creek Shift Operations, Salem Maintenance and Technical Training, Salem 12hr./WIN Maintenance, and Hope Creek Chemistry, and one individual from another group) believe that the program is not effective in this regard. Two of the groups that responded negatively cited the quality of work packages as an issue.

Management Demonstration of the Importance They Place on the CAP to the Overall Success of the Station

Ninety-seven percent of personnel responding during individual interviews expressed the view that Salem/Hope Creek management demonstrates the importance they place on the CAP to the overall success of the station. Three percent (two individuals) believe that management does not demonstrate the importance of the CAP to the success of the station. Personnel who responded positively cited the following as bases for their views: a consistent message and alignment of the management team regarding the importance of the CAP, resource commitments to the program, appreciation shown to those who raise concerns, consistent inquiry from management as to whether a Notification had been written when problems are discussed, and inclusion of CAP indicators in Business Plan goals and metrics.

Among the focus groups, 10 of 16 groups expressed the view that Salem/Hope Creek management demonstrates the importance placed on the CAP to the overall success of the station. These groups cited backlog reductions and greater accountability as bases for their perceptions. Five groups (Hope Creek 12hr./WIN Maintenance, Hope Creek Shift Operations [one of two groups], Salem Maintenance and Technical Training, Salem 12hr./WIN, and Hope Creek Chemistry) indicated that they do not believe that management demonstrates the importance of the CAP to the overall success of the station. The interview results for those groups did not identify common issues or trends as the basis for their perceptions.

Conclusions Regarding Effectiveness of Site Problem Identification and Resolution as Assessed Through Individual and Group Interviews

Overall, the results of individual and group interviews indicate that the large majority of site personnel believe that the CAP and Work Management programs are effective and are improving. The CAP is perceived as effective for both nuclear safety and other types of concerns, although respondents have greater confidence that nuclear safety issues will be addressed in a timely manner. Site personnel also perceive that the resolution of longstanding issues is improving. Nearly all individual interviewees, and the large majority of groups, believe that management demonstrates the importance they place on the CAP to the overall success of the station. Bases for the improvements seen in the CAP and Work Management programs that were frequently cited included process improvements, greater accountability imposed by management, and backlog reductions. There is also recognition that, although Work Management has improved, further improvement is needed, including better schedule adherence and improved work package quality. Some groups (Salem Shift Operations, Salem 12hr./WIN Maintenance, Hope Creek Chemistry, Hope Creek 12hr./WIN Maintenance) appeared to have more negative perceptions in the area of PI&R, in contrast to the very positive responses from individuals and most other groups interviewed.

2.3 Effectiveness of Site Problem Identification and Resolution Processes as Indicated by Performance Measures

PSEG metrics included in the fourth quarter 2005 SCWE metrics package, the February 2006 Business Plan Performance Reports for Salem and Hope Creek, and information contained in the March 28, 2006 Equipment Reliability Review Meeting packages for Salem and Hope Creek were reviewed. Particular items of note include:

- Since 2003, there has been a consistent trend of increase in the number of Notifications written by site personnel, indicating that personnel are willing to use site processes in the identification of problems.

- The number of control room distractions at Salem has been substantially reduced.

- Backlogs of corrective maintenance and elective maintenance items have declined substantially at both Salem and Hope Creek.

- Numbers of repeat maintenance items in 2006 were substantially lower at all three units than in 2005.

- The Industrial Safety Accident Rate (ISAR) has improved considerably at Salem since July of 2005 (the ISAR rate for Hope Creek has not improved).

- The rate of Corrective Action Closure Board acceptances of corrective actions in response to Notifications has improved since early 2004, and remained above the target level of 96% in 2005, except for one month (June) in which 95% were accepted.

- Most equipment reliability indicators are showing improved or continued good performance.

- In the area of Work Control, schedule stability remains an issue, but has improved.

Overall, the information contained in these performance measure packages indicates improved effectiveness in site problem identification and resolution processes.

2.4 Programs and Policies Supporting SCWE Pillar 2

2.4.1 Promptness of Management Notification of Concerns

Salem and Hope Creek procedures and programs include several mechanisms to ensure that management is promptly notified of significant concerns. These include:

- Salem/Hope Creek procedures and processes require immediate notification of the control room of any issues with the potential to cause operability or plant safety impacts. In addition, Notifications or Condition Reports for any types of adverse conditions are expected to be written within 24 hours of the time the condition is identified. Once written, condition reports having potential to affect plant safety are screened by on-shift Operations personnel for operational impact and an Initial Screening Committee (ISC) (Hope Creek) or Station Ownership Committee (SOC) (Salem), which meets each business day to make initial significance determinations for the Notifications written since its last meeting. Thereafter, the Management Screening Committee (Hope Creek) or Management Review Committee (Salem) meets within two business days to review the significance assigned by the ISC or SOC. Assessment Team members observed screening meetings and concluded that they are appropriately conducted to ensure prompt and proper screening of emergent issues.

- For issues that may affect operability or plant safety that come to the ECP, there is a process for immediate entry of the issue into the Notification system, which causes prompt screening by Operations.

- There are daily meetings and phone calls that keep management informed promptly of significant concerns. These include the Plan of the Day (POD) meeting and the daily plant status call, which are normally attended by management up to and including the Vice President and/or Chief Nuclear Officer (CNO) level. Assessment Team members observed these activities and determined that they are an appropriate means for keeping management informed.

- For concerns specifically related to SCWE, monthly meetings of the Executive Protocol Group are held, along with *ad hoc* meetings for emergent issues. Also, senior management is notified of significant issues identified through the ECP by means of monthly briefings of the Site Vice Presidents. Confidentiality is protected during these briefings.

Interviews and discussions with plant management and personnel, and observations of meetings and activities, also indicated that management was aware of significant issues.

2.4.2 Promptness of Prioritization and Review of Concerns

Prioritization and review of concerns is appropriately prompt. See section 2.4.1 above.

2.4.3 Timely and Appropriate Resolution of Concerns

A variety of performance metrics were reviewed regarding timely and appropriate resolution of concerns. These metrics indicate that:

- The average age of open corrective actions for Salem and Hope Creek is not excessive and has consistently been maintained within appropriate levels.

- The median age of open non-outage corrective actions for Salem and Hope Creek is not excessive and has consistently been maintained within appropriate levels.

- The Corrective Action Closure Board acceptance rate for corrective actions has been high for the last year and a half, indicating that appropriate corrective actions resulted after issues were documented.

This information indicates that timely and appropriate resolution of concerns is occurring.

During this Assessment, the Team observed two examples (relating to bypass of the load cut out signal for the Hope Creek polar crane load cell and loss of power to the Hope Creek refuel floor) of issues that were initially given a "trend and close" (Level 4) designation by the Initial Screening Committee (ISC) with no apparent cause evaluation requested. These appeared to be items that, in the view of the Team, should have received a higher priority level designation from the ISC. The Management Screening Committee (MSC) subsequently upgraded each item to require an Apparent Cause evaluation. The Assessment Team viewed this as an appropriate performance by the MSC of its function.

Recommendation 2.4.3 – Consider training, coaching, or other actions to drive the ISC to take a more critical look at issues when assigning priority level.

2.4.4 Communications Regarding Resolution of Concerns

The Assessment Team reviewed whether the resolution of significant problems and concerns is effectively communicated. Numerous examples of communication on the resolution of long-standing issues, or the status of progress in resolving those issues, were identified. These included both equipment and plant performance issues and issues specifically related to SCWE. The effectiveness of these communications was confirmed by personnel interviews showing that employees perceive improvement in the corrective action for long-standing equipment problems (see Sections 2.1 and 2.2 above), and by the increased numbers of Notifications being written, which indicates that employees may be more confident that issues they raise will be addressed

(see Section 2.3 above). Resolution of issues is also communicated through the CAP feedback process (see Section 2.4.9 below). The ECP procedure also requires feedback to concernees regarding resolution of concerns reported to ECP.

2.4.5 Training Regarding Problem Identification and Resolution

Because training on problem identification and resolution was not previously identified as an area of concern, the Assessment Team did not perform a detailed review of training in this area. However, the Team confirmed that all personnel granted unescorted access receive training on site problem identification and resolution processes through the GET program. Interviews and discussions with personnel generally indicated that there is a good understanding of methods for raising concerns (see Section 1.1/1.2 above).

GET training also includes material on the ECP, including how to raise concerns through the ECP. The interviews of Salem/Hope Creek personnel corroborate that they know that the ECP is available as an avenue for raising concerns.

2.4.6 Resolution of Long Standing Issues

Hope Creek and Salem Corrective Maintenance backlog aging is being maintained within goal, indicating that, in general, issues are being resolved in a timely fashion. In addition, the number of Maintenance Rule a(1) systems in Action Required status is decreasing at both Salem and Hope Creek. For Salem, the number of a(1) systems in Action Required status is six, which is above goal but down from nine in 2005. For Hope Creek, the number of Maintenance Rule a(1) systems in Action Required status is two, below the goal of three for the unit. These results demonstrate the improved condition of important plant systems, indicating that issues relating to these systems are being addressed. Other indicators also demonstrate that problems are being fixed in a more timely fashion (see Section 2.3 above).

Salem/Hope Creek maintains a list of items that are excluded from normal CAP backlog metrics because of special circumstances, such as the need to await regulatory approvals. There is a potential that exclusion of these items from backlog metrics might result in less management focus on these items.

During the current Hope Creek refueling outage, the "B" recirculation pump shaft issue is scheduled to be resolved. This issue was probably the highest-profile long-standing equipment problem on the site.

Again, interviews of site personnel also indicated a perceived improvement in the resolution of longstanding issues. See Section 2.1/2.2 above.

Recommendation 2.4.6 – Ensure that the "Excluded List" is periodically reviewed by management to ensure that items on the list have the appropriate priority, are evaluated for aggregate impact, and are timely addressed.

2.4.7 Effectiveness of Work Management Processes

The Assessment Team examined the effectiveness of the Work Management process through review of objective performance measures, observation of work-management related activities, review of work management program documents, discussions with responsible management, and interviews of site personnel. The Team noted that the schedule freeze time is E-2 (two weeks before the work is to be executed), and that many plants are using an earlier time (such as E-3 or E-5) for schedule freeze. Also, the Team noted some issues with scope stability. However, the Assessment Team concluded that overall the Work Management program is effective. As noted above in Sections 2.1, 2.2, and 2.3, personnel interviews and Work Management performance metrics generally indicate improved work completion.

2.4.8 Management of CAP Backlogs

The Assessment Team reviewed performance measures related to CAP backlogs, held discussions with the CAP Manager, and interviewed personnel regarding their views of CAP performance. Several measures are used to manage CAP backlogs. These include:

- Number of Notifications generated.
- Percentage of Corrective Actions accepted by the Corrective Action Closure Board.
- Percentage of Condition Report Activities overdue.
- Number of Condition Report evaluations with due date extensions.

Overall, the Team concluded that the performance measures used to manage CAP backlogs are appropriate, and that those measures show that backlogs are being effectively managed. These conclusions were confirmed during discussions and interviews of site management and personnel, who generally believe that the CAP is effective in resolving issues and that CAP performance is improving (see Sections 2.1 and 2.2 above). As noted in Section 5.1 below, the goal for percentage of Condition Report Activities overdue may warrant adjustment.

2.4.9 Feedback to Concerned Individuals

A recent revision of the Salem/Hope Creek CAP provides for automatic e-mailed feedback to individuals who prepare a Notification. The e-mail informs individuals of the resolution of their concern, and includes a survey which requests the initiator to evaluate:

- Timeliness of the evaluation of the concern.
- Timeliness of the proposed corrective action due dates.
- Depth and scope of any evaluation associated with the concern.
- Whether corrective actions identified in response to the concern, if implemented, will address the concern.

This feedback system appears superior to other feedback mechanisms in the industry with which Assessment Team members are familiar, and appears to be generally well received by station personnel.

2.4.10 Supervisory/Management Involvement In and Responsiveness to Concerns

As noted in Sections 1.1, 1.2, 2.1 and 2.2 above, interview results indicate that Hope Creek and Salem personnel generally believe that supervision and management are receptive to concerns and demonstrate strong support for the CAP. One hundred percent of personnel interviewed believe that their supervision is receptive to the raising of concerns. During observation of meetings attended by supervisors and managers, Assessment Team members observed that managers and supervisors displayed an interest in actions being taken to correct problems and had a questioning attitude toward the adequacy of proposed corrective actions.

2.4.11 Appeals Process for Concerns

The Assessment Team interviewed site personnel and management, and reviewed CAP processes, the SCWE Policy, and communications and training regarding SCWE and the ECP. Although there is generally no formal appeals process for concerns, personnel are provided with the means for addressing issues if they are not satisfied with the initial response.

- Communications and training clearly inform personnel that there are multiple avenues for raising concerns, including the ECP, the Employee Ethics Resolution Procedure (for MAST employees), the grievance process (for bargaining unit employees), and the Ethics Hotline. In particular, they are informed that if they are not satisfied with the resolution of a concern, they can take the issue to the ECP.

- Employees are informed that they may take their concerns to more senior management.

- Employees are informed that they may take their concerns to the NRC, the Equal Employment Opportunity Commission, and other government entities.

- Results of interviews conducted during this assessment indicate that employees understand that there are multiple ways to raise concerns.

In sum, the Assessment Team concluded that there are adequate multiple avenues for an individual to take in the event he or she is not satisfied with the initial resolution of a concern.

2.4.12 Assessments of Problem Identification and Resolution Processes

The Assessment Team reviewed the PI&R Program Focused Self-Assessment completed on November 15, 2005, which evaluated the effectiveness of the Corrective Action Program. That assessment covered 14 identified assessment objectives and 53 specific assessment activities. The assessment identified deficiencies and recommended actions to address those deficiencies as well as opportunities for improvement. The Assessment Team determined that the PI&R Program Focused Self-Assessment was comprehensive and thorough, and effective in assessing

the CAP. The Team also reviewed a July-August 2005 Audit of the CAP, which also appeared comprehensive, thorough, and effective in assessing the CAP.

2.4.12.1 Observation of Problem Identification and Resolution Process Meetings

The Assessment Team observed a Salem Station Ownership Committee (SOC) meeting, a Salem Management Review Committee (MRC) meeting, a Hope Creek Initial Screening Committee (ISC) meeting, and a Hope Creek Management Screening Committee (MSC) meeting. The purpose of the SOC and the ISC meetings is to review recently initiated Notifications, assign a priority level, and determine what kind of cause evaluation is necessary. The purpose of the MRC and MSC meetings is to review the initially assigned priority levels and cause evaluations. During these meetings, the assignment of priority levels and cause evaluation methods to the items reviewed appeared appropriate. Personnel present displayed a questioning attitude and an appropriate focus on safety. Participants in the meetings demonstrated clear understanding of the CAP process.

2.5 Review of CAP Inputs (Notifications) Regarding SCWE

As an additional method to identify any significant SCWE issues or trends, the Assessment Team requested PSEG to perform a search of the CAP database. The specific terms and methodology for this search are described in Attachment 4 to this Report. In general, this review did not identify new or different issues from those identified through interviews or other assessment activities. See Attachment 4 for the specific results of this review.

3.0 SCWE Pillar 3 – Availability and Effectiveness of Alternate Mechanisms, Such as an Employee Concerns Program, for Raising Concerns

Overall Conclusion for Pillar 3

The Assessment Team determined that the ECP is an effective alternative mechanism for raising concerns. The Team based this conclusion on the following:

- Observations on the site and discussions and interviews with site management indicate that the ECP has high visibility and management support.

- Employee interviews and periodic surveys indicate that a high percentage of employees have confidence that the ECP will thoroughly investigate their concerns and address them in a confidential manner.

- Confidence in the ECP is indicated by consistently strong use of the program by site personnel.

- Communications to reinforce the availability and confidentiality of the ECP have generally been effective and should continue.

- Investigations are generally thorough, although some improvement is warranted in ECP's documentation and classification of investigation issues and results.

The specific assessment activities and results that support the above points are described in Sections 3.1/3.2 through 3.6.6 below.

3.1/3.2 Results of Individual and Group Interviews of Site Personnel Regarding Alternate Mechanisms for Raising Concerns

Is the Employee Concerns Program (ECP) Sufficiently Visible and Are Personnel Aware that Safety and Quality Concerns Can Be Reported Anonymously or Confidentially Through ECP

Ninety-eight percent of the individual respondents believe that the ECP is sufficiently visible and known to site personnel, to include contractors / supplemental personnel, and 100% of the individual respondents understand that safety and quality concerns can be reported anonymously or confidentially to ECP. The individual respondents cited their training on the subject, numerous communications on the ECP, management talking about it, and the posters around the site, which permit face recognition of the ECP staff, as contributing to their knowledge of ECP.

Fourteen of the 16 focus groups indicated that they also believe that ECP is sufficiently visible and known to the workforce, while two of the groups (Salem Chemistry and Salem Maintenance and Technical Training) were divided on the answer to that question. Members from one of those groups felt that there was not a clear distinction between the SCWE and ECP functions.

Fifteen of the 16 focus groups indicated that they were aware that safety and quality concerns can be reported anonymously or confidentially to ECP. One group offered the observation that it is difficult for ECP to truly offer anonymity because of the tendency of people to try to guess and make assumptions about who has raised a concern to the program.

Does ECP Receive Sufficient Management Support

Ninety-seven percent of the individual respondents believe that ECP receives sufficient management support. The following observations were offered as the bases for believing that management supports the ECP: ECP now reports to senior management/CNO; the ERB lends credibility to the program; and ECP is discussed with contractor supervision during the outages. One positive individual respondent did offer the observation that not replacing the former ECP Manager and leaving it staffed with only two people could reduce ECP's credibility.

Ten of the 16 focus groups indicated their belief that ECP has a sufficiently high degree of management support. One group was divided on the answer to that question, and three groups

did not really know. One group (Hope Creek Shift Operations) felt that ECP did not receive sufficient management support.

Are Site Personnel Confident that Issues or Concerns Reported Through ECP Will Be Thoroughly Investigated and Appropriately Resolved

Eighty-nine percent of the individual respondents indicated that they were confident that issues or concerns reported to ECP would be thoroughly investigated and appropriately resolved. Eleven percent of the individual respondents did not express such confidence in ECP, with several of those who provided a negative response qualifying their answers by stating that they thought issues would be thoroughly investigated, but not necessarily appropriately resolved. A couple of individual respondents cited previous negative experiences as influencing their response to this question.

Ten of the 16 focus groups expressed their belief that concerns reported through ECP will be thoroughly investigated and appropriately resolved. One group was divided on the answer to that question and three groups did not provide a definitive answer. Two of the focus groups (Hope Creek Shift Operations and Salem Chemistry) did not think concerns would be thoroughly investigated and/or appropriately resolved.

Are Site Personnel Confident that Concerns Reported through ECP Will Be Treated in a Manner that Maintains an Individual's Confidentiality

Ninety-six percent of the individual respondents expressed confidence that ECP would maintain confidentiality. Several offered comments in acknowledgment of the difficulties inherent in maintaining confidentiality during investigation of issues and concerns.

Eleven of the 16 focus groups indicated that they are confident that matters brought to ECP will be treated in a manner that maintains confidentiality. Two of the focus groups were divided on their response to this question and one group did not provide a definitive answer to the question. Two of the groups (Salem Chemistry and Hope Creek Chemistry) either stated that they were not confident that ECP would maintain confidentiality, or questioned whether concerns could be handled confidentially by ECP.

Have There Been Any Specific Instances Within the Past Year In Which the Confidentiality of an ECP Concerned Individual Was Breached

Ninety-nine percent of the individual respondents (all but one) said that they were not aware of any such breaches of ECP confidentiality. The remaining respondent felt that there might have been a breach of confidentiality regarding an issue that he/she had identified to ECP, but was not really sure whether, in fact, his/her identity had been compromised.

Fourteen of the 16 focus groups indicated that they were not aware of any specific breaches of ECP confidentiality within the past year. Although two groups (Salem Chemistry and Salem Operations Support) responded that they were aware of such a breach, they did not provide specific examples in support of their response.

Are Site Personnel Willing to Use ECP If They Feel That Using Their Management Chain or Other Avenues of Problem Resolution Has Been Unsuccessful

Ninety-five percent of the individual respondents expressed a willingness to use ECP if they felt other avenues of problem resolution had been unsuccessful. Of the four individual respondents (5%) who said that they wouldn't use ECP, two of them cited previous negative experiences with the program. Two of the negative respondents were members of Salem Chemistry. However, four other individual respondents from Salem Chemistry expressed their willingness to use ECP.

Thirteen of the 16 focus groups expressed their willingness to use ECP. One group was divided over the answer to this question, while two groups (Salem Chemistry and one of the Hope Creek Shift Operations groups) generally indicated that they would not be willing to use ECP.

Conclusions Regarding Alternate Mechanisms for Raising Concerns as Assessed Through Individual and Group Interviews

In summary, the individual and group responses indicate that the ECP has a sufficiently high level of visibility, that its provisions for anonymity and confidentiality are understood, and that it receives a sufficient level of management support. Questions regarding confidence in ECP's ability to maintain confidentiality received a very positive response from the individual respondents (a 96% confidence rating), as well as general support from the focus groups, with 11 of the 16 groups expressing confidence in this area. Some of the expressed lack of faith in ECP's ability to maintain confidentiality appears to be based on previous negative experiences with the program or on hearsay information that a breach of confidentiality occurred. However, 99% of the individual respondents and 14 of the 16 focus groups indicated that they were not aware of any specific breaches of ECP confidentiality in the past year, and no clear cases of breach of confidentiality were identified.

ECP is viewed by the workforce as a viable alternate means of problem resolution, as can be seen by the fact that 95% of the individual respondents and 13 of the 16 focus groups expressed their willingness to use the program if a situation warranted it. The individual and group responses indicate that the Salem Chemistry and Hope Creek Operations organizations have a less positive view of the value of ECP as an alternate problem resolution mechanism.

3.3 Availability and Effectiveness of Alternate Mechanisms for Raising Concerns as Indicated by Interviews of ECP and SCWE Staff

The Assessment Team interviewed the ECP Manager, the ECP Coordinator, the SCWE Group Lead, the Vice President – Nuclear Assessment and others regarding the availability and effectiveness of the ECP. ECP and SCWE personnel demonstrated strong commitment to providing a viable alternative means for raising concerns. They make a determined effort to be visible to the workforce through formal communications, through meetings with groups of employees (*e.g.*, Lunch with Mike), and by being present in the plant and holding informal discussions with site personnel.

Other members of management believe that the ECP generally has the confidence of site personnel, and that the program generally does a good job of addressing issues, maintaining confidentiality, and keeping management informed of emerging significant issues and trends. The number and availability of the staff is adequate and accessibility has been enhanced by relocation of the office inside the fence to the NOSF and the addition of drop boxes.

The SCWE Group Lead will be leaving Salem/Hope Creek in June 2006. Also, over the long term, ECP will be transitioning to the Exelon model, which does not contemplate a full-time two person staff. This change is not expected to occur for some time.

Recommendation 3.3 – Change management practices should be rigorously implemented as the SCWE Group Lead departs and any further changes to the ECP are made. See also Recommendation 3.5 below.

3.4 Availability and Effectiveness of Alternate Mechanisms for Raising Concerns as Indicated by Performance measures

The Assessment Team reviewed ECP performance measures and the 2005 and 2006 Synergy surveys. Those measures indicate that the ECP is being used by site personnel, and that the rate of use by personnel is increasing. The 2005 and 2006 Synergy surveys indicate progressively increasing site personnel confidence in the ECP compared to the 2003 survey. In sum, performance measures and survey results generally indicate that the ECP is available and effective.

3.5 Transition of Current SCWE Group Processes into ECP

The current SCWE Group Leader is scheduled to leave Salem/Hope Creek in June 2006. A transition plan has been prepared and is being implemented to ensure a smooth transition of functions. Under this plan, a number of SCWE group functions will be transferred to the ECP. Based upon review of this plan, and discussions with the SCWE Group Lead, ECP personnel, and other personnel who interface with the SCWE Group Lead and ECP, the Assessment Team determined that:

- The transition plan is fairly detailed and includes a specific listing of tasks that must be completed in order to transfer SCWE Group functions to the ECP and elsewhere.

- The SCWE Group Lead is actively implementing the plan and has kept the organizations who will take over SCWE Group functions informed of the plan. However, organizations that will become responsible for these functions demonstrate varying levels of understanding and ownership.

- A greater focus on site communications regarding transfer of SCWE Group functions to other groups is necessary. For example, the plan does not include provisions for revision to the SCWE Policy and ECP Policy to reflect the upcoming changes, or for specific communications regarding those policy changes.

- The report of status of completion of transition plan items could use more detail. For example, the status report reflects that a new owner for the SCWE files has been identified, but does not identify that individual by name or position and does not indicate when transfer of the files will occur.

- The SCWE Group will be transferring its functions at the same time as the ERB functions are being transitioned. See Section 4.8 below.

Additionally, the SCWE Group has responsibility for auditing contractor compliance with SCWE expectations, and it is not clear what organization will assume this significant responsibility.

Recommendation 3.5 – Vigorously implement strong change management practices, including up-front participation by stakeholders and implementation of necessary communications or training, in connection with any changes to the SCWE Group. Ensure that this change management is closely coordinated with change management for transition of functions of the ERB. See Recommendation 4.8.

3.6 Programs and Policies Supporting SCWE Pillar 3

3.6.1 Accessibility

The ECP is readily accessible. The ECP office has recently been moved into the Protected Area to permit easier access by site personnel. Concerns may be submitted by telephone, e-mail, in person, or through concern drop boxes both inside and outside the Protected Area. Personnel are informed how to contact ECP by multiple means, including postings, site newsletters, video postings, the Salem/Hope Creek web site, and through training, including GET, which is required for all persons granted access to the Protected Area. The accessibility of ECP through the web site is acceptable, but might be made simpler (*e.g.*, fewer clicks needed to reach ECP portion of the site). Also, the drop boxes are not checked frequently enough.

Recommendation 3.6.1 – If drop boxes are to be used to capture potential safety concerns, they should be checked very frequently.

3.6.2 Independence and Accountability

The independence and accountability of the ECP is acceptable. The ECP Manager reports directly to the Chief Nuclear Officer. Interviews with the ECP staff indicated that they consider themselves an independent organization and do not feel any inappropriate pressure from line management. They believe that significant issues raised through ECP are accepted and addressed by line management. A review of ECP files did not provide any indications that investigations were being impacted by any improper outside influences.

3.6.3 Training and Communication on Availability of Alternate Mechanisms

The availability of the ECP has been communicated by multiple means, as described in Section 3.6.1 above. SCWE training presented in 2004-2005 included information on the availability of the ECP, and SCWE refresher training being presented in 2006 will again reinforce the availability of the ECP. ECP personnel are also holding periodic lunches with groups of site personnel to increase the visibility of ECP and discuss issues. Interviews with site personnel generally indicate that they are well aware of the ECP and willing to use the program (see Sections 3.1 and 3.2 above). Personnel are also informed by postings, training, and other communications of other means available for raising concerns, including raising them to the NRC. See also Section 2.4.11.

3.6.4 Confidentiality

Review of ECP policies and procedures, and discussions with ECP personnel, indicate that appropriate steps are taken to protect the identities of those who raise concerns through the ECP.

- The ECP offices are kept locked.
- Files are kept in locked cabinets.
- Electronic information is kept on a controlled CD or a stand-alone laptop computer.
- During this Peer Assessment, team members observed the ECP staff taking careful measures to protect confidentiality.

Both the 2005 and 2006 Synergy surveys indicate that employee confidence in ECP protection of confidentiality has increased. Also, individual interviews conducted by the Assessment Team indicate that more than 96% of the respondents believe that ECP appropriately protects confidentiality. Individuals did not identify any specific case in which confidentiality had been breached.

Nonetheless, a small number of individuals and groups continue to be concerned with confidentiality of ECP investigations. See Section 3.1/3.2 above.

Recommendation 3.6.4.1 – Continue to reinforce reasonable expectations for confidentiality of ECP investigations in communications with site personnel.

Recommendation 3.6.4.2 – Consider whether the practice of referring certain investigations to line management is consistent with expectations of confidentiality.

3.6.5 Tracking and Closure of Concerns

The Assessment Team examined the methods used by the ECP to track and close concerns, and discussed these methods with the ECP staff. The ECP uses its own database to track concerns and corrective actions in response to concerns to closure. Overall, review of the database and of ECP files indicated that resolutions were appropriate and tracked to closure. The April 2005 ECP Focused Self-Assessment indicated that closure is generally occurring within acceptable time

frames. However, the Assessment Team believes that the documentation of the bases for conclusions and corrective actions could in some instances be improved. In a number of cases, the reasoning behind the conclusions/resolutions was not apparent from the files without additional discussion with the ECP staff. Also, the classification of some types of concerns (such as HIRD issues) is more conservative than is commonly used in the industry, and there was an individual case in which it was not clear that the most effective investigation method was used in a case involving contractor personnel (however, that case appears to have been appropriately resolved).

Recommendation 3.6.5 -- Consider additional training/guidance for ECP staff members on systematic approaches to analysis and documentation of ECP cases, and handling of cases involving contractor personnel issues.

3.6.6 Feedback to Concerned Individuals

The ECP procedure requires that individuals be informed of the results of the ECP's evaluation of their concern. Notes in the files indicated that this feedback has been provided. The ECP process also includes a mechanism for concernees to provide feedback to the ECP regarding their satisfaction with the resolution. ECP metrics indicate that approximately 30% of concernees provide such feedback.

4.0 SCWE Pillar 4 – Management Effectiveness in Detecting and Preventing Retaliation and Addressing Any Chilling Effect in Response to Concerns

Overall Conclusion for Pillar 4

The Assessment Team determined that management has been effective in detecting and preventing retaliation and addressing potential chilling effects. The Team based this conclusion on the following:

- Salem/Hope Creek have not had a substantiated violation of 10 CFR § 50.7 or § 211 of the Energy Reorganization Act in several years.
- Site personnel interview results indicate that many employees perceive improved management effectiveness in detecting and preventing retaliation and chilling effects.
- Site personnel were generally not aware of specific recent instances in which retaliation had occurred in response to the raising of a safety concern (however, some were concerned that discipline might ensue if they reported a personal injury involving violation of safety rules).
- A number of overlapping programs and processes ensure that potential retaliation and chilling effects are detected and prevented.

The specific assessment activities and results that support the above points are presented in Sections 4.1/4.2 through 4.7.2.2 below.

4.1/4.2 Results of Individual and Group Interviews of Site Personnel Regarding Management Effectiveness in Detecting and Preventing Retaliation and Addressing Potential Chilling Effects

Have There Been Any Incidents or Events Within the Past Year that Have Had the Effect of Discouraging Personnel from Raising Safety or Quality Concerns

Eighty-nine percent of the individual respondents stated that they weren't aware of any incidents or events within the past year that have discouraged individuals from raising safety or quality concerns. Of the 11% who responded "yes" to this question, a common theme involved the station's handling of industrial safety issues/injuries, such as a relatively recent injury at Hope Creek due to failure of an individual to wear a hard hat.

Several individual and group respondents familiar with a recent incident in Salem Chemistry acknowledged that it could cause a "chilling effect," although they do not believe that has happened yet. However, one individual respondent who responded "no" to the question of being aware of any incidents that have discouraged the raising of concerns, referenced three or four Chemistry technicians commenting that they weren't going to bring things up if management was going to react as it did in that particular instance.

Eleven of the 16 focus groups indicated that they weren't aware of any incidents within the past year that have discouraged or "chilled" personnel from raising safety or quality concerns. Four the 16 focus groups responded yes to this question and two of these groups (Hope Creek Engineering and Hope Creek Operations) referenced the situation wherein an individual was disciplined for not wearing his/her hard hat and incurring a head injury. One of the groups also referenced another incident involving an Equipment Operator who sustained a knee injury.

Are Site Personnel Aware of Anyone Who Feels They Have Been Retaliated Against Within the Past Year for Raising Safety or Quality Concerns

Eighty-nine percent of the individual respondents stated that they were not aware of anyone who felt that had been retaliated against for raising safety or quality concerns within the past year. Of the 11% of individuals who referenced someone feeling retaliated against within the past year, two cited the recent Salem Chemistry incident, which is under station review. Two contractors who were not aware of any specific instances of retaliation did offer that they felt they might be assigned undesirable jobs if they were always bringing up problems.

Twelve out of the 16 focus groups indicated that they were not aware of any site personnel feeling that they had been retaliated against within the past year for raising safety or quality concerns. Two of the groups (both Hope Creek Operations) which expressed knowledge of someone feeling retaliated against referenced the industrial safety accident involving the head injury and actions related to someone self-identifying the mis-operation of a breaker (not further

identified). Another group (Salem Design Engineering) had one participant who believed an individual raising a safety concern involving workload had subsequently been designated a transitional employee.

The Salem Chemistry group indicated that they generally thought the work environment was improving but are concerned that things may have slipped back, specifically referencing the recent incident in their group and the perception by some that it may be indicative of retaliation.

Are Site Personnel Aware of Any Instances Within the Past Year in Which a Safety or Quality Concern Was Not Reported for Fear of Retaliation

Ninety-six percent of the individual respondents indicated that they were not aware of instances within the past year in which a safety or quality concern was not reported due to fear of retaliation. Two of the three who said they were aware of such a situation cited an unwillingness by some individuals to report industrial safety/minor injuries.

Fourteen of the 16 focus groups responded no to this question. One group (Fire Department) indicated knowledge of such an incident, which was purported to involve an industrial safety concern over the failure to have the appropriate tools available. One focus group did not conclusively respond to this question.

Are Site Personnel Aware of Their Rights to Report Nuclear Safety and Quality Concerns to Their Management or the NRC Without Being Retaliated Against

One hundred percent of the individual respondents, including contractor personnel, indicated their knowledge of their right to raise nuclear safety or quality concerns to their management or the NRC without being retaliated against. The respondents cited the following sources as the bases for their knowledge: various training sessions; NRC posters placed around the plant; the site's television; and multiple communications on the subject at seminars and rollouts.

Fifteen of the 16 focus groups indicated their knowledge of their right to raise safety or quality concerns to either management or the NRC. Those groups cited the GET training, other continuing training sessions, various communications on the subject, and the NRC posters on those rights as the means by which they have become aware of these rights. The remaining group (Salem Chemistry), while not explicitly addressing this question, appeared to be generally aware of their rights in this regard.

Within the Security group, three participants did not think that anything negative would happen as a result of contacting the NRC; two participants expressed some concern that someone who went to the NRC might be viewed unfavorably.

Management's Effectiveness Today, As Compared to One Year Ago, in Detecting and Preventing Retaliation

Ninety-seven percent of the individual respondents described management as more or equally effective today than one year ago at detecting and preventing retaliation. Those respondents

offered the following types of responses: I never really saw any retaliation before; there have been many improvements; and management is now more sensitive to, and aware of such issues. The two individual respondents who felt that management was less effective today than one year ago cited Exelon's (in their view) general management style and the feeling of it being an "us (PSEG)" versus "them (Exelon)" type of situation.

Personnel interviewed during the focus group interviews provided a variety of responses when asked to rate management as either "more effective, equally effective, or less effective." Three groups thought management was "more effective" today than one year ago, and three groups thought they were about "equally effective." Three groups (Hope Creek 12hr./WIN, Hope Creek Shift Operations, and Fire Department) thought management was "less effective," but offered no specific bases for those perceptions. Two of those groups offered a divided response to this question, commenting that management and/or the CNO was viewed as "more or equally effective," whereas their supervision was seen as "less effective." Seven groups did not provide a definitive response to this question.

The group responses to the question of management's effectiveness in detecting and preventing retaliation included: they haven't seen any retaliation; management today appears to be more aware of the issue and requirements in this area; they aren't aware of any specific management actions to prevent retaliation; they really don't know; the new Exelon team has done things, such as creating the Executive Review Board, that would lead one to believe they are taking action to prevent retaliation; and they have better management than they have had in the past.

Conclusions Regarding the Effectiveness of Management Prevention and Detection of Retaliation and Chilling Effects as Assessed Through Individual and Group Interviews

In summary, neither individual nor group responses indicate any significant fear of retaliation for the reporting of nuclear safety and quality concerns. Personnel generally did not identify specific clear cases of retaliation in response to the raising of a concern, although members of Salem Chemistry were concerned about a recent incident in their group.

From the focus group perspective, the greatest single negative revolves around management's actions in response to industrial injuries. The emergent incident within Salem Chemistry that is currently under review by the site also has the potential for a possible localized negative impact in regard to raising issues or exhibiting a questioning attitude and highlights the tentative nature of the gains seen by this group and noted by recent culture surveys. Only one group referenced an industrial safety issue that may not have been reported for fear of retaliation, and all of the groups expressed their understanding of their rights to raise safety and quality concerns through management or the NRC.

Similar to the group interviews, the individual respondents also suggest that the issue that has the greatest potential to impact people's willingness to raise concerns and related fears of retaliation involves the site's attempt to hold personnel accountable for safety-related behaviors and management's response to industrial safety issues and related personal injuries. The individual respondents who had insight into the emergent issue in Salem Chemistry generally did not think

that it has/would deter people from raising issues, although one respondent allowed that it may be too early to tell.

As with the group responses, all individual interviewees understood their right to raise nuclear safety and quality issues either with their management or the NRC without fear of retaliation. The overwhelming majority (97%) of the individual respondents felt that management has become more effective or is about equally effective at detecting and preventing retaliation. Individual respondents were generally more willing than the groups to credit management for improving (*i.e.*, becoming "more effective") in this area.

4.3 Executive Protocol Group Effectiveness

The purpose of the Executive Protocol Group (EPG) is to review employee and contractor issues received both internally and from outside organizations, analyze them for trends, and make recommendations to management on how they should be addressed. Members of the EPG include representatives from Human Resources, Legal Services, Regulatory Assurance, Emergency Services, Industrial Safety, Corporate Ethics and Compliance, Employee Concerns, and the SCWE Group. The EPG reviews information from a wide range of sources, including:

- Industrial safety accidents and OSHA recordable injuries
- NRC referred allegations
- NRC OI investigations
- Department of Labor (DOL) 211 complaints
- New Jersey Conscientious Employee Protection Act (CEPA) complaints
- Litigation
- ECP issues
- Labor relations grievances
- Disciplinary actions
- Involuntary terminations
- Corporate Business Ethics issues
- Executive Review Board reviews
- Fitness-for-Duty issues

Members of the Assessment Team reviewed the EPG Charter and standard meeting agenda, examined several sets of EPG meeting minutes, and observed an EPG meeting. Based upon these reviews, the team determined that:

- The EPG reviews information from an appropriate, wide variety of sources.

- The membership of the EPG includes representatives from the appropriate organizations, and includes members of sufficient management seniority to ensure that EPG recommendations are attended to.

- The EPG periodically reports the results of its reviews to the CNO.

- Follow-up actions and recommendations generally appeared to be appropriate to the nature and significance of issues and trends identified.

- Personnel who participated in the EPG meeting appeared to be well-prepared.

- Discussion of issues in the EPG meeting was open and candid, and participants exhibited a questioning attitude.

- There was substantial discussion designed to determine whether particular issues might represent broader trends or themes, or could impact the SCWE at the site.

- Actions and issues for follow-up discussed during prior EPG meetings were reviewed; actions and issues for follow-up are tracked by the EPG Chairman.

Overall the Assessment Team believes that the EPG is an effective process for monitoring site SCWE and identifying and responding to trends that may affect SCWE. This process is more comprehensive and systematic than processes used at many other nuclear stations.

4.4 Plant Managers' Protocol Group Effectiveness

The purposes of the Plant Managers' Protocol Group (MPG) are to:

- Develop consensus interpretations and guidelines for existing policies, practices, procedures, rules and agreements to ensure Nuclear supervision is consistent in handling employee complaints/concerns and utilization of coaching/counseling techniques to improve job performance.

- Communicate these consensus interpretations and monitor their application.

- Evaluate alternative interpretations/applications regarding new or existing policies and practices for this site.

- Serve as a focal point for communications regarding clarifications, recommendations, and concerns.

- Establish strategy for contract revisions.

- Execute labor strategy to improve performance.

The group is composed of the Salem and Hope Creek Plant Managers and representatives from Radiation Protection, Operations, Maintenance, Plant Support, Chemistry, and Human Resources.

During its meetings, the MPG reviews:

- Grievances, arbitrations, and litigation involving site personnel.

- Disciplinary actions.

- Potential inconsistencies in policies and practices, and supervisory concerns with policies and practices.

- Safety incidents.

Action items are identified at the end of each meeting and followed up on during subsequent meetings.

Assessment Team members reviewed the MPG Charter and several sets of meeting minutes, and attended an MPG meeting. Based upon these reviews, the Assessment Team determined that:

- The MPG is a useful program for ensuring that personnel policies, procedures, and practices are consistently applied.

- The MPG keeps senior station managers apprised of concerns that supervisory personnel have with personnel policies, procedures, and practices.

- During the MPG meeting, management displayed a good questioning attitude to ensure understanding and proper response to issues discussed.

Overall, the Assessment Team concluded that the MPG is likely to be helpful to SCWE by making the application of personnel policies and procedures, and the bases for discipline, consistent and therefore clearer and more understandable to the workforce. It also provides another opportunity for site management to prevent and detect potential retaliation or chilling effects.

4.5 Effectiveness in Detecting and Preventing Retaliation and Addressing Chilling Effects as Indicated by Performance Measures

The Assessment Team reviewed the metrics of ERB actions and metrics compiled by the ECP. Those reviews indicated that the ERB did not identify any instances in which either PSEG or contractor management proposed to take an action that would have constituted retaliation for the raising of a safety concern. ERB data indicates that more than 80 individual proposed actions were reviewed by the ERB since January 1, 2006, involving both PSEG and contractor personnel. Accordingly, this data indicates that management has been effective in preventing retaliation. Although specific metrics data do not exist on detecting chilling effects, the interviews conducted during this Assessment, and the survey data from the 2005 and 2006 Synergy surveys also indicate that site personnel generally do not fear retaliation for the raising of concerns and are willing to raise concerns. Accordingly, this data supports the conclusion that management has generally been effective in addressing chilling effects.

The ERB metrics indicate that there has not been a case of failure to perform a required ERB review since August 2005. However, while the Assessment Team was on site, an additional instance of failure to perform an ERB was identified. This was identified by site Human Resources personnel within five days of the time the personnel action was taken, and an ERB was subsequently held. No retaliatory action was identified in connection with the personnel action. The Assessment Team has been informed that PSEG is reviewing the reason why the ERB was missed and confirming that it is an isolated instance, and has already initiated corrective actions in response to this occurrence.

ECP metrics indicate that during 2006 there have not been any instances of retaliation in response to the raising of a safety concern. Similarly, discussions with counsel for PSEG indicate that there have not been any substantiated allegations of a violation of 10 CFR 50.7 or Section 211 in the last several years.

4.6 Effectiveness in Detecting and Preventing Retaliation and Addressing Chilling Effects as Indicated by Information in MARC Files

After discussions with site Human Resources personnel, it was concluded that a review of Management Action Response Checklist (MARC) files would not be likely to produce significant insights regarding management effectiveness in detecting and preventing retaliation. All personnel actions above the level of an oral reprimand are reviewed by the ERB, and these actions are also reviewed for trends and potential chilling effects by the EPG. See Sections 4.3 and 4.7.1.

4.7 Programs and Policies Supporting Pillar 4

4.7.1 Involvement of Senior Management in Employment Actions

There are several mechanisms used at Salem/Hope Creek to ensure that senior management is informed of and involved in personnel actions. At least two of these mechanisms, the ERB and the EPG, are designed specifically to ensure that management is involved in preventing retaliation and addressing potential chilling effects.

4.7.1.1 Executive Review Board

The Assessment Team examined the ERB through review of the ERB Charter, review of a summary of proposed employment actions examined by the ERB, review of ERB metrics, discussions with ERB participants, review of specific ERB case files, and observation of an ERB meeting.

PSEG established the ERB specifically to prevent personnel actions that might be in retaliation for the raising of safety concerns, and to address any potential chilling effects that might arise from personnel actions, even in the absence of any retaliatory actions. The ERB reviews any personnel actions above the level of an oral reprimand. The ERB is normally chaired by the

Vice President, Nuclear Assessment, and is supported by the SCWE Group Lead, Human Resources, and legal counsel. The ERB reviews proposed personnel actions not only for PSEG employees, but also for contractor employees assigned to Salem/Hope Creek.

The ERB Charter was revised in February 2006 to place more responsibility for the preparation of information to be reviewed by the ERB on the responsible line management, to streamline the paperwork for processing personnel actions through ERB, and to place more responsibility for pre-ERB screening activities with Human Resources personnel. These changes anticipate the departure from Salem/Hope Creek of the SCWE Group Lead in June 2006.

The ERB process includes appropriate reviews and questions designed to determine whether a proposed personnel action is retaliatory or likely to cause a chilling effect. At the ERB meeting observed by the Assessment Team, participants in the meeting asked probing questions to test the reasoning behind the proposed actions and to ensure that they did not involve retaliation for any protected activity. Meeting participants also tested whether any chilling effect would be likely to arise from the proposed actions, and discussed steps to minimize the potential for any chilling effect.

The Assessment Team reviewed a sample of 27 of 137 ERB proposed action files compiled since October 1, 2005. The contents of these files correctly matched the description provided in the summary matrix used by ERB to track these cases. Two of these files reflected an after-the-fact review within five working days of a personnel action involving Immediate Management Action, as permitted by the ERB Charter. Three files included minor administrative errors that did not affect the results of the ERB, and which were corrected during this Assessment. The Assessment Team concluded that the ERB files reflected action in conformity with the ERB Charter.

Based on its reviews, the Assessment Team concluded that the ERB is an effective means by which senior management stays involved in detecting and preventing retaliation and potential chilling effects. The ERB will be transitioning its functions to line management and Human Resources later in 2006. See Section 4.8 for a discussion of that transition.

Recommendation 4.7.1.1 – The ERB Charter permits after-the-fact review of personnel actions in cases where an "Immediate Management Action" is necessary. However, this term is not specifically defined. To prevent confusion and abuse, this term should be defined in the ERB Charter and other appropriate training, policy, and guidance documents.

4.7.1.2 Executive Protocol Group

As described in Section 4.3 above, the Assessment Team reviewed the EPG Charter and several sets of meeting minutes, and attended an EPG meeting. Based upon its review, the Assessment Team concluded that the EPG is an effective tool for monitoring site SCWE and keeping management aware of personnel actions and involved in addressing any potential chilling effects.

4.7.2 Oversight of Contractors

4.7.2.1 Oversight of Contractor SCWE in General

As noted in Sections 1.4.1 and 1.4.6 above, the Salem/Hope Creek SCWE Policy specifically applies to contractors. In addition, PSEG utilizes standard contract terms which require contractor/vendor organizations to comply with the requirements of 10 CFR 50.7 and the Salem/Hope Creek SCWE Policy. The company has periodically sent letters to contractor/ vendor organizations reminding them of these requirements, most recently in April 2006. In the most recent set of these letters, PSEG requested that contractor organizations re-acknowledge in writing that they understand and comply with these requirements, including the requirement for prior ERB review of contractor personnel actions. See Recommendation 1.4.6.

PSEG metrics, assessments, and surveys also include review of contractors so that any trends or problems in contractor SCWE can be identified and addressed. Specifically, the Salem/Hope Creek SCWE metrics include data from both PSEG and contractor personnel. The Synergy surveys have been distributed to and included responses from contractor personnel. Self-assessments, such as the April 2005 ECP Focused Self-Assessment and the August/September SCWE Self-Assessment, have included interviews with contractors and review of information on contractor SCWE.

4.7.2.2 Involvement in Contractor Cases of Alleged Discrimination

As noted in Section 4.7.1.1 above, the ERB reviews all proposed contractor personnel actions above the level of written reprimand to ensure that the proposed actions are not retaliatory and to address any potential chilling effects. Also, the ECP is available to contractors who believe they have been retaliated against for raising safety concerns, and it investigates such allegations and provides a response to the concernee irrespective of whether a contractor or PSEG employee is involved. ECP metrics indicate that contractors continue to use the program. These avenues provide strong, direct involvement in contractor cases of alleged discrimination. Discussions with legal counsel for PSEG indicate that there has not been a substantiated case of retaliation against a contractor in violation of 10 CFR 50.7 or §211 of the Energy Reorganization Act involving a Salem/Hope Creek contractor for the past several years. Accordingly, there is an appropriate level of involvement in contractor cases of alleged discrimination.

4.8 Transition of Executive Review Board Processes into Standard Human Resources Processes

The Assessment Team reviewed the plan for the transition of ERB processes and functions to other site groups and discussed that plan with the Vice President – Nuclear Assessment, the SCWE Group Lead, personnel from Human Resources, and various line management personnel. The basis for this transition is that the ERB has generally functioned successfully for more than a year, and has served to train site management, including contractor management, to prevent retaliation in connection with discipline and other personnel actions, and to take action to address

potential chilling effects. The plan is to ensure that ERB functions continue to be performed by the line management and the Human Resources department, which are the groups normally responsible for personnel actions.

The transition plan is detailed and includes specific information on the functions to be transferred and who will perform them once the ERB as an entity is discontinued. Under the plan, the line management and Human Resources personnel involved in personnel actions will continue to perform a specific review of whether the proposed actions involve retaliation or have the potential to create a chilling effect, using documentation and screening processes similar to those currently used by the ERB. The plan includes training for Human Resources personnel who will perform these functions, but there may be a need for broader training of management and communication to the site at large.

Discussions with some Human Resources personnel, Communications personnel, and some line managers indicated some uncertainty as to parts of the plan, and identified a need to demonstrate greater ownership of the plan and the associated ERB functions going forward.

Recommendation 4.8 – Vigorously implement change management practices for the transition of ERB functions to the line organization and Human Resources, including proactive stakeholder involvement, training, and communications regarding these changes. Coordinate these efforts with change management associated with the transition of other SCWE Group functions. See Recommendation 3.5 above.

5.0 Performance Measures, Surveys, Direct Observations, and Other Methods Used to Evaluate SCWE

Overall Conclusion for This Assessment Area

The Assessment Team determined that methods used by PSEG to evaluate the SCWE at Salem/Hope Creek are comprehensive and intrusive, and collectively enable identification and response to emergent SCWE issues. The Team based this conclusion on the assessment activities and results presented in Sections 5.1 through 5.6 below.

5.1 Performance Metrics Used to Evaluate SCWE

PSEG has established a set of 17 performance metrics designed to assess site performance with respect to SCWE. The metrics cover each of the four Pillars of SCWE, and cover such matters as numbers of concerns raised as a measure of willingness to raise concerns, CAP backlogs, work backlogs and equipment performance as measures of problem identification and resolution, numbers of concerns reported to ECP as a measure of the effectiveness of alternative means for raising concerns, and measures of ERB results to gauge management effectiveness in detecting and preventing retaliation and addressing chilling effects. Where appropriate, performance targets have been established for each metric, and most of these targets are sufficiently challenging and in line with industry strong performance. In appropriate cases, specific thresholds have been established at which action should be taken in response to declining trends. In other cases, the reasons for the change in the metric need to be evaluated prior to determining

whether action is warranted. The metrics are compiled on a quarterly basis and formally reviewed by senior station management each quarter. In general, these metrics are consistent with those used at other nuclear power stations that have metrics for evaluating SCWE, and are appropriate.

Overall, these metrics show a generally improving trend, and in that regard are consistent with the results of the 2005 and 2006 Synergy surveys and with the interviews conducted during this Peer Assessment. The Synergy survey results are included in the metrics packages during the quarters in which those surveys are conducted.

Recommendation 5.1.1 – Consider adding to ECP metrics included in the SCWE metrics package a breakout of concerns into categories, such as Management-related, Fitness for Duty, Contractor, or Human Resources, to permit a better understanding of any trends.

Recommendation 5.1.2 – Consider an ECP metric that compares the number of internally raised concerns to NRC allegations.

Recommendation 5.1.3 – The goal established for Condition Reports Overdue appears too lenient, in view of the fact that extensions of due dates are permitted. Consider revising this goal to zero.

5.2 Surveys and Interviews Used to Evaluate SCWE

The Team examined surveys and interviews used to evaluate SCWE. These included:

- The 2003, 2005, and 2006 Synergy survey reports.
- The results of the 2006 Hope Creek mid-cycle INPO Safety Culture survey.
- Questions and results from interviews of site personnel conducted by the SCWE Communications Team during October 2005 through March 2006.
- The procedure for exit interviews of personnel leaving employment at Salem/Hope Creek.

These survey and observation tools have evaluated virtually all aspects of SCWE, including the willingness to raise concerns, knowledge of SCWE elements and methods for raising concerns, management responsiveness to concerns, CAP and Work Management programs, the potential for retaliation or chilling effects, safety as a priority vs. cost and schedule, alternative means for raising concerns, and feedback regarding concerns.

The Synergy surveys are probably the most well-known and widely used organizational culture surveys in the nuclear industry. PSEG has used these surveys consistently since 2003 to gauge progress in improving the safety culture (including SCWE) at Salem/Hope Creek. These surveys are very comprehensive, utilize a well-developed and proven methodology, and permit comparison to industry norms, as well as trending to identify areas of improvement or decline. They provide a consistent baseline for gauging progress in SCWE.

The 2006 Hope Creek INPO mid-cycle Safety Culture survey also examined a variety of SCWE attributes, including personnel willingness to raise issues, management engagement in corrective action, effectiveness of problem resolution, Operations control of operational decisions, and management reinforcement of safety. Over 190 people responded to this survey.

SCWE Communications Group surveys have repeatedly examined various aspects of the SCWE at Salem/Hope Creek. More than 500 survey contacts were made during October 2005 through March 2006. These surveys covered knowledge of SCWE elements, communications with management, knowledge of alternative means for raising concerns, and other SCWE topics.

Based upon these reviews, the Peer Assessment Team concluded that there are adequate survey and assessment tools being used to evaluate the SCWE at Salem/Hope Creek and to identify problems and adverse trends in SCWE performance.

5.3 Direct Observations Used to Evaluate SCWE

Members of the Assessment Team discussed with site supervisors and managers their role in monitoring SCWE at Salem/Hope Creek. Team members also reviewed results of observations conducted under the Proactive Assessment of Organizational and Workforce Factors (PAOWF) program during January and February 2006. The PAOWF is a program under which site management and supervision observe and document behaviors that affect organizational success. Topics included for observation under the PAOWF include: Be Safe, Value Team, Take Ownership, Recognize Success, SCWE, Leadership Effectiveness, Work Management, CAP, and Housekeeping. The Assessment Team determined that the PAOWF provides an appropriate means to directly observe and monitor behaviors related to SCWE.

The Team observed evidence that management is interested in and utilizes this data. For example, the Hope Creek Operations fourth quarter Department Roll-Up Meeting minutes reflected a good focus on improving the quality of field observations and providing additional data to facilitate utilization of the observations in evaluating performance.

5.4 Other SCWE Assessment Activities

The Assessment Team reviewed several assessments of various aspects of SCWE programs and performance that were conducted during the past year. These included:

- An April 2005 Focused Self-Assessment of the ECP.
- A July-August 2005 Audit of the CAP.
- An August-September 2005 Focused Self-Assessment of SCWE.
- A November 2005 Self-Assessment of PI&R.
- A January 2006 Focused/Cross-Functional Self-Assessment of Hope Creek Operational Excellence.

With the exception of the July-August 2005 Audit of the CAP and the January 2006 Focused/Cross Functional Assessment of Hope Creek Operational Excellence, each of these assessments was also followed by an NRC inspection. With respect to the April 2005 Focused

Self-Assessment of the ECP, the NRC concluded that this was a "critical and comprehensive" self-assessment. With respect to the August-September Focused Self-Assessment of SCWE, the NRC concluded that it was an effective assessment and that its results were generally consistent with the NRC's own inspection results, but that the assessment did not fully explore workers views on progress in the CAP and Work Management programs, did not review all major work groups, and did not review input to the CAP. The results of the subsequent NRC PI&R Inspection were generally consistent with the results of the November 2005 PI&R Self-Assessment.

Each of these self-assessments had a particular focus. Collectively, however, they examined:

- Willingness of employees to raise concerns.
- Effectiveness of problem resolution processes.
- Adequacy of alternative methods for raising concerns.
- Effectiveness of management in detecting and preventing retaliation and chilling effects.

Each of the assessments was based upon applicable recognized industry and NRC guidance and standards, and were conducted by personnel experienced in the areas assessed. The assessment teams in each case included industry peers. Each assessment identified areas for improvement. Overall, and in combination with other assessment activities such as surveys, performance metrics, direct observations, the EPG, the ERB, and the MPG, these assessments successfully evaluated various aspects of the SCWE at Salem/Hope Creek.

In addition to these specific assessments, Salem and Hope Creek senior management also have the ability to monitor site SCWE through the periodic Compliments and Concerns (2Cs) meetings. In these periodic meetings, groups of station personnel, typically including a mix of 15-20 MAST, bargaining unit, and contractor personnel, meet with the Salem or Hope Creek Vice President to discuss compliments and concerns. These meetings have included specific discussions of SCWE-related issues.

5.5 Use of Lessons Learned and Benchmarking

Salem and Hope Creek have used a variety of opportunities to benchmark and incorporate lessons learned from other nuclear stations. For example:

- The April 2005 ECP Focused Self-Assessment included industry peers on the assessment team.

- The July/August 2005 Audit of the CAP included an industry peer on the audit team.

- The August/September 2005 SCWE Focused Self-Assessment included industry peers on the assessment team.

- The November 2005 PI&R Focused Self-Assessment included industry peers on the assessment team.

- Similar processes from Millstone and FENOC were reviewed during the development and/or subsequent modification of the Salem/Hope Creek ERB process.

- SCWE metrics from other licensees were reviewed to validate the SCWE metrics being used by Salem/Hope Creek.

In addition, since the implementation of the Nuclear Operating Services Agreement with Exelon, nearly all site processes have been compared with and benchmarked against those used by Exelon. These specifically include CAP, Work Management, EPG, ERB, and ECP. In a number of those cases, Salem and Hope Creek have modified their processes to more closely model those used by Exelon or are planning to adopt the Exelon process in its entirety.

The Assessment Team believes that there has been appropriate use of benchmarking and peer participation in assessments in order to ensure that lessons learned from other facilities are incorporated at Salem/Hope Creek.

5.6 Nuclear Review Board Oversight of SCWE

Assessment Team members reviewed Nuclear Review Board minutes and spoke with NRB members. Based upon these activities, the Assessment Team determined:

- NRB minutes were concise, but not at the expense of capturing the concerns of the NRB. Issues were straightforwardly described and recommendations were clearly stated.

- The NRB clearly identifies the existence of gaps between Salem/Hope Creek performance and that of the industry.

- The NRB frequently meets with management, supervisory, and working level personnel to get input on ongoing issues and concerns.

- Issues identified by the NRB are captured in the CAP and/or NRB open actions or recommendations, as appropriate.

- The NRB clearly understands site SCWE issues and is involved in assessing and providing recommendations on how to address those issues.

Overall, the Assessment Team concluded that NRB oversight of SCWE is appropriate.

6.0 Effectiveness of Actions Taken Since January 2004 to Create Substantial and Sustainable Improvement in the Work Environment

Overall Conclusion for this Assessment Area

As noted in the preceding sections of this Report, the interviews, document reviews, and observations performed by the Assessment Team generally indicate that there has been substantial improvement in the SCWE at Salem/Hope Creek since January 2004. This improvement has been, in part, due to the specific actions taken and programs and processes established in response to previous assessments, surveys, and inspections of SCWE. As described in Sections 6.1 through 6.5 below, the deficiencies and issues in site SCWE noted in previous assessments, surveys, and inspections have generally been addressed. However, it is also the view of the Assessment Team that this improvement is due in large measure to the current management team, which is well-aligned and strongly focused on improving plant performance through accountability and a direct approach to identifying and correcting problems.

6.1 Implementation of Actions in Response to Previous Assessments, Surveys, and Inspections of SCWE

The Assessment Team reviewed previous significant assessments, surveys, and inspections regarding the SCWE at Salem/Hope Creek. These included (1) the February-April 2004 Independent Assessment Team (IAT) SCWE Assessment; (2) the March 2004 Utilities Service Alliance (USA) Safety Culture Assessment; (3) the January 2005 Synergy survey; (4) the August/September 2005 SCWE Focused Self-Assessment; (5) the October 2005 U.S. NRC SCWE Inspection; (6) the November 2005 PI&R Focused Self-Assessment; and (7) the December 2005 U.S. NRC PI&R Inspection.

The Assessment Team reviewed records of implementation of actions taken in response to the findings of these assessments, surveys, and inspections. In some cases, records of implementation of each item were examined. In some cases where previous assessments had examined implementation of actions and inspections, the Team relied upon the results of those previous assessments and inspections. The Team also relied upon compilations of information on corrective actions, discussions with responsible management, and data from performance metrics, surveys and interviews of site personnel to determine whether responsive action appeared effective.

6.1.1 Actions in Response to Independent Assessment Team SCWE Assessment

The IAT SCWE Assessment and the USA Safety Culture Assessment were performed in early 2004 and (with the 2003 Synergy survey) formed the basis for action plans later developed by PSEG to improve the SCWE at Salem/Hope Creek. These plans were described in a June 25, 2004 letter to the NRC, and describe three sets of actions: (1) actions to improve the CAP; (2)

actions to improve Work Management; and (3) actions to improve the SCWE. All of these actions were in turn incorporated into the 2004-2005 Business Plan for Salem/Hope Creek. The implementation of these actions was reviewed in detail in the August/September 2005 SCWE Focused Self-Assessment and in the September 2005 NRC SCWE Inspection. The August/September 2005 SCWE Focused Self-Assessment concluded that actions were taken to accomplish the commitments and other actions described in the action plan sent to the NRC in the June 25, 2004 letter. That assessment showed that, with limited exceptions, the actions described had been implemented, and that there had been improvement in the areas addressed by that plan.

The Assessment Team also reviewed a matrix which correlated the findings of the IAT SCWE Assessment, the USA Safety Culture assessment, and the 2003 Synergy survey to corrective actions and assessment results described in the August/September 2005 SCWE Focused Self-Assessment. Based upon that review, and the results of its own assessment activities, the Assessment Team determined that the problems described in Synergy Survey, the IAT SCWE Assessment, and the USA Alliance Assessment have generally been addressed.

6.1.2 Actions in Response to Utilities Service Alliance (USA) Safety Culture Assessment

See Section 6.1.1 above.

6.1.3 Actions in Response to January 2005 Synergy Survey

The Assessment Team reviewed the January 2005 Synergy survey and actions taken in response. Overall, the Assessment Team determined that the results of that survey were widely communicated to the site and that steps were taken to address groups in which the SCWE was considered weaker than across the site as a whole. However, as noted in the August/September 2005 SCWE Focused Self-Assessment and in the September 2005 NRC SCWE Inspection, actions to address those groups could have been taken more promptly, especially in particular groups such as Hope Creek Shift Operations. PSEG incorporated additional actions to address these specific groups in its Work Environment Improvement Strategy developed in August and September 2005.

6.1.4 Actions in Response to August/September 2005 PSEG SCWE Focused Self-Assessment

The Assessment Team reviewed the actions taken by PSEG in response to the August/September 2005 SCWE Focused Self-Assessment. Each of the recommendations from that Self-Assessment was entered into the Salem/Hope Creek CAP for resolution. In addition, the more significant items were included in the Salem/Hope Creek Work Environment Improvement Strategy.

Based on its review of implementation records,, the Assessment Team determined that PSEG addressed the recommendations of the August/September SCWE Focused Self-Assessment, with the following limited exceptions.

- It is not clear that problems with monitoring overtime use among non-hourly personnel were fully addressed. However, these problems do not appear to have affected SCWE. See Section 1.4.5 above.

- Although plans for improvement of the SCWE in specific departments were included in the Work Environment Improvement Strategy, line management ownership and implementation of those plans have been mixed. While actions were taken, the rigor and documentation of implementation varied. Results in these groups have shown overall improvement (for example, the number of Priority 1 organizations identified by the Synergy surveys declined from 11 in 2003 to 4 in 2005 to 2 in 2006), but some groups might have shown more improvement if plans had been more crisply implemented and reviewed for effectiveness.

Overall, however, as noted elsewhere in this Report, actions taken by PSEG appear to have resulted in continued improvement to the SCWE at Salem/Hope Creek.

Recommendation 6.1.4 – Additional management attention is required with respect to the follow-up of action plan execution related to SCWE. Action plans to address organizations viewed as having a SCWE less robust than the site as a whole must be vigorously implemented and appropriately tracked and documented.

6.1.5 Actions in Response to 2005 U.S. Nuclear Regulatory Commission SCWE Inspection

The Assessment Team reviewed the report of the September 2005 NRC SCWE inspection and records of implementation of actions in response to that inspection. The critical observations from that inspection were entered into the Salem/Hope Creek CAP for resolution. In general, actions taken by PSEG address the findings of the NRC SCWE inspection. Particular examples include:

- Security was added to the Work Environment Improvement Strategy as a group requiring focused attention. The results of interviews of Security personnel and discussions with management during this Assessment indicate that the SCWE among Security personnel has improved.

- Work management has been improved, and that improvement is generally perceived by site personnel. See Section 2.1/2.2 above.

- A higher priority was placed on improving the SCWE in the Salem and Hope Creek Operations groups. Both of these groups improved their SCWE ratings in the 2006 Synergy survey, and Salem Operations is no longer a Priority Level 1 or 2 group by industry norms. However, as noted in Section 6.1.4 above, further room for improvement exists (Hope Creek Operations, though showing improvement, is still Priority Level 1), and the crispness of implementation, documentation, and follow-up on these efforts could be improved.

- Continued efforts have been made to improve employee perceptions of the ECP and confidence in ECP confidentiality. Interviews conducted during this Assessment and the results of the 2006 Synergy survey indicate that these efforts are generally succeeding.

- There has been a strong effort to communicate with personnel to ensure that they know their issues are being resolved. Both site-wide communications and the new CAP feedback mechanism have been utilized to communicate the resolution of issues, and Assessment Team interview results and Synergy survey results indicate greater confidence in site problem resolution and work management programs. However, communication has not succeeded in convincing a few particular groups that problems are being effectively resolved.

Recommendation 6.1.5 – A site-wide comprehensive communication strategy should include communications on SCWE issues. The effects of these communications, particularly on high-priority groups, should be monitored and followed up on.

6.1.6 Actions in Response to PSEG 2005 Problem Identification and Resolution Focused Self-Assessment

The Assessment Team reviewed the report of the November 2005 PI&R Focused Self-Assessment and records of implementation of corrective action in response to that assessment. The opportunities for improvement identified during that assessment were entered into the Salem/Hope Creek CAP for resolution. In general, the actions taken or planned appear to address the results of the assessment. Most of those actions have been completed, while others are due to be completed in the near term.

6.1.7 Actions in Response to December 2005 NRC Problem Identification and Resolution Inspection

The Assessment Team reviewed the report of the December 2005 NRC PI&R inspection. That inspection concluded that, in general, problems at Salem/Hope Creek are being properly identified, evaluated, and corrected. The inspection noted improvement since a previous NRC inspection in March 2005. Consistent with PSEG's November 2005 PI&R Focused Self-Assessment, the inspection also noted some weaknesses in the area of Problem Evaluation. The Assessment Team determined that the critical observations and findings of the NRC PI&R inspection have been entered into the Salem/Hope Creek CAP and are being addressed. In March 2006, the NRC determined that sufficient progress had been made to warrant closure of PI&R as a cross-cutting issue.

6.1.8 Actions in Response to 2006 Synergy Survey

Synergy reported the results of its January 2006 survey to PSEG while the Assessment Team was on site. An Assessment Team member attended the briefing of Salem/Hope Creek management by Synergy on the results of the survey, and other Assessment Team members reviewed the report of the survey results. The Team also reviewed site communications

regarding the Synergy survey results and discussed plans for addressing those results with responsible management. The Team determined that communications with site personnel regarding the 2006 Synergy survey results were prompt and informative, and utilized several modes of communication, including briefings, site newspaper articles, and e-mail. As of the time of the Assessment Team's review, plans for response to the survey results were still under development. Because Hope Creek Shift Operations repeated as a Synergy survey Priority 1 group in 2006, the Assessment Team examined the new plan for addressing issues in that group. The Team believes that the plan is thorough and comprehensive and, if vigorously implemented, should be effective.

6.2 Ability to Identify Problems Similar to Those Found by Previous Assessments

As noted in Sections 1.4.4, 4.3, 4.4, 4.7.1, 5.1, 5.2, 5.3, 5.4, 5.5, and 5.6 above, PSEG utilizes a variety of means to monitor and evaluate the SCWE at Salem/Hope Creek and to identify problems and trends. These include:

- SCWE metrics
- Synergy surveys
- SCWE group surveys and questionnaires
- Self-assessments
- the Executive Review Board
- the Executive Protocol Group
- the Management Protocol Group
- the Employee Concerns Program metrics and inputs
- the Employee Concerns Program exit interviews
- Department and Station Roll-up Meetings
- Proactive Assessment of Organization and Workforce Factors and Observations
- Compliments and Concerns (2Cs) meetings

Collectively, these methods are adequate to identify problems and trends in the SCWE at Salem/Hope Creek, and are more comprehensive and intrusive than methods used at most other nuclear stations. These programs have proven sufficient to enable identification of and response to emergent SCWE issues.

6.3 Appropriateness of Criteria and Thresholds Used to Assess Program Effectiveness

The Assessment Team reviewed the performance metrics related to SCWE, observed management meetings such as the EPG and the ERB in which SCWE issues and emerging trends were discussed and responded to, and reviewed minutes of those meetings. During these activities and discussions with management, the Team found that the Salem/Hope Creek management team is very sensitive and responsive to potential SCWE issues and trends, and responds at an appropriate level, not only to potential cases of retaliation or failure to report issues, but to indications of concern or reluctance on the part of personnel to raise concerns.

6.4 Processes for Addressing Metrics With Declining Trends

Salem and Hope Creek have several processes in place for addressing SCWE metrics with declining trends. These include:

- EPG meetings, which occur monthly or on an *ad hoc* basis in response to emerging issues.
- Monthly ECP briefings of senior management (Vice President level) on ECP issues and trends.
- Quarterly formal reviews of SCWE metrics with the senior management team, including the CNO.

In each of these forums, SCWE trends are discussed and any necessary responsive actions identified. The Assessment Team concluded that these processes are reasonable and provide adequate methods for addressing declining trends. The most significant adverse trends in the current SCWE metrics are Unplanned LCOs. Equipment causes for these Unplanned LCOs are on the station's Top Ten equipment issues list and are a top priority for resolution.

6.5 Comparison of Salem/Hope Creek SCWE with NRC Cross-Cutting Issues Criteria

The NRC intends to roll out its new Safety Culture initiative in July 2006. As part of this effort, the NRC has developed criteria for SCWE cross-cutting issues. The Assessment Team compared the current SCWE performance at Salem/Hope Creek with the new criteria for cross-cutting issues in SCWE, as described in the proposed revisions to NRC Manual Chapter 0305. The proposed revisions to Manual Chapter 0305 state that a substantive cross-cutting issue exists in the area of SCWE if the following criteria are met:

1. There is a green or safety significant inspection finding in the Plant Issues Matrix (PIM) for the current 12-month assessment period with documented cross-cutting aspects in the area of safety conscious work environment. Observations or violations that are not findings should not be considered in this determination, OR

2. The licensee has received a chilling effect letter, OR

3. The licensee has received correspondence from the NRC which transmitted an enforcement action with a severity level of I, II, or III and which involved discrimination.

Additionally, both of the following criteria must also be met in order to have a substantive cross-cutting issue on SCWE.

1. The associated impact on safety-conscious work environment was not isolated, AND

2. The NRC has a concern with the licensee's scope of efforts or progress in addressing the cross-cutting area performance deficiency.

Based upon the above criteria, the Assessment Team believes there is a reasonable basis to close the substantive cross-cutting issue in SCWE. In July 2005, Salem received a Green finding of more than minor significance with documented SCWE aspects (unperformed ERB reviews in early 2005). This finding will not clear until July 2006, after the agency's mid-year assessment. Accordingly, the first set of criteria for a substantive cross-cutting issue is still met. Whether the second set of criteria is met depends upon the NRC's evaluation of that finding and of overall progress in addressing SCWE issues. If the NRC concludes that the PSEG's scope of efforts and progress in addressing SCWE generally are acceptable, then it would be appropriate to conclude that the cross-cutting issue should be closed. Recent assessments, surveys, and inspections have reflected an overall and sustained improving trend in the SCWE at Salem/Hope Creek. Also, as determined by this Assessment and by the 2006 Synergy Survey, the criteria identified by the NRC in its July 28, 2004 letter to PSEG for exiting the SCWE cross-cutting issue (substantial, sustainable progress) have been met. Accordingly, unless some significant adverse SCWE finding or trend arises, there appears to be a basis for closure of the SCWE cross-cutting issue.

Attachments:

Attachment 1	Summaries of Experience of SCWE Peer Assessment Team Members
Attachment 2	Safety Conscious Work Environment (SCWE) Program Peer Assessment Plan, Rev. 1
Attachment 3	Information on Interview Methodology, Including Selection of Interviewees and Question Sets Used During Interviews
Attachment 4	Review of Corrective Action Program Inputs (Notifications) Regarding SCWE
Attachment 5	List of Recommendations

ATTACHMENT 1

Summaries of Experience of SCWE Peer Assessment Team Members

PSEG assembled a team of current and former senior industry managers and regulators to conduct a peer assessment of the Salem and Hope Creek Safety Conscious Work Environment (SCWE). The Team was comprised of the following individuals:

- William T. Cottle. Mr. Cottle is the Team leader and responsible for providing overall direction to the Team's activities. He has over 30 years experience in a variety of positions in the commercial nuclear power industry, retiring in 2003 as the Chairman, President and CEO of the STP Nuclear Operating Company. He had previously held executive positions in nuclear at Entergy Operations, Inc., and the Tennessee Valley Authority. Mr. Cottle is currently a member of the Board of Directors, FirstEnergy Corporation, and Chairman of the Board's Nuclear Committee. Mr. Cottle formerly served as a member of the Institute for Nuclear Power Operations (INPO) and Nuclear Energy Institute (NEI) Boards of Directors. He remains involved with INPO as a member of their Advisory Council. Mr. Cottle also served as Chairman for NEI's Nuclear Strategic Issues Advisory Committee. His career has afforded him the opportunity to acquire considerable experience in work environment issues at multiple sites.

- Carey E. Foy. Mr. Foy has 10 years of nuclear industry experience, retiring this year as the Manager, Employee Concerns Program (ECP), Entergy Nuclear South. While with Entergy, he developed and implemented Entergy Nuclear's Safety Culture and SCWE policies, served as the Entergy Nuclear Fleet Change Manager, and served as an INPO Adjunct Instructor for "ECP for Senior Nuclear Plant Managers." Mr. Foy is also a member of the Board of Directors of the Employee Concerns Program Forum.

- Barry R. Letts. Mr. Letts was formerly the NRC Field Office Director, Office of Investigations, Region 1, from 1992 through 2002, and served as a member of the agency's Discrimination Task Group, which reviewed and made recommendations regarding the NRC's handling of whistleblower discrimination complaints. Since leaving the NRC, Mr. Letts has conducted independent investigations into a broad spectrum of allegations and employee concerns, to include allegations of whistleblower retaliation, as well as having performed SCWE and performance assessments at a number of nuclear sites.

- Brian C. McCabe. Mr. McCabe has held a variety of positions of increasing responsibility over a more than 20 year career in the nuclear power industry, including more than 10 years with the NRC. He is currently the Corporate Regulatory Affairs Manager, Progress Energy, and serves on a Nuclear Energy Institute (NEI) task force on Safety Culture. Further, as a qualified Lead Assessor, he has participated in over two dozen team assessments, including two SOER 02-04 assessments (Safety Culture) at other facilities. While with the NRC, Mr. McCabe served on the staffs of the Executive Director for Operations (EDO) and Commissioner Merrifield, with broad and diverse responsibilities.

- Joseph J. Muth. Mr. Muth has over 28 years of nuclear power experience, most recently serving as the Manager of Shift Operations, and currently as the Manager of Operations Department Work Control and Outage, Energy-Northwest. In his current position, he provides strategic oversight to the development of the plant work week schedule, as well as to outage window development and planning. Mr. Muth has also had the collateral duty of developing and implementing a program to evaluate safety culture (SOER 02-04) for the USA/STARS Alliance. He is a charter member of the Alliance, which has performed 13 such evaluations, and he maintains an active NRC SRO license.

- Jeannie M. Rinckel. Ms. Rinckel has over 20 years of nuclear power experience. She is currently the Vice President, Fleet Oversight, FirstEnergy Nuclear Operating Company (FENOC), where she is responsible for FENOC's quality assurance assessments, quality control, independent assessments, supplier quality, and the Employee Concerns Program. Ms. Rinckel holds a SRO certification for Beaver Valley Unit 2 and a Reactor Engineer Certification for Perry; she is also a member of the American Nuclear Society.

- Andrew J. Vomastek. Mr. Vomastek is currently responsible for the Employee Concerns Program (ECP) at the Millstone Power Station, having managed that program for the past seven years. He also mentors several Employee Peer Group Committees that focus on Safety, Safety Culture and Human Performance. Mr. Vomastek has served as a member of the ECP Forum's Board of Directors and has participated in peer assessments of the ECP function and related work environment issues at various nuclear facilities.

- William E. Baer, Jr. Mr. Baer is an attorney with Morgan, Lewis & Bockius, LLP in Washington, DC. He has practiced in the nuclear industry for more than 20 years, during which time he has conducted investigations and provided legal advice in cases of alleged retaliation and with respect to other employee issues. Mr. Baer has also served as counsel to NRC licensees and individuals in conjunction with NRC 10 CFR 50.7 investigations and DOL Section 211 cases, and he has provided advice to companies on policies and procedures for the detection and prevention of retaliation and chilling effects and the maintenance of a SCWE.

ATTACHMENT 2

Safety Conscious Work Environment (SCWE) Program Peer Assessment Plan, Rev. 1

[see separate document]

FOCUSED SELF-ASSESSMENT PLAN, Rev. 1*

TOPIC: Safety Conscious Work Environment (SCWE) Program Peer Assessment

S-A Report #/SAP Tracking #: 80088733

Target Start Date: April 03, 2006 **Target Completion Date:** April 14, 2006

Basis: On January 28, 2004, the NRC informed PSEG of its interim findings arising out of the NRC's special review at the Salem and Hope Creek Generating Stations to assess the stations' environment for raising and addressing safety issues. On August 23, 2004, the NRC's Executive Director for Operations approved a Deviation from the NRC's Reactor Oversight Process Action Matrix to provide a greater level of oversight for the Salem and Hope Creek Generating Stations than would typically be called for. 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. Since early 2004, PSEG has been involved in a substantial effort to assess and improve the Safety Conscious Work Environment (SCWE) at the Salem/Hope Creek site. This assessment has been commissioned in order to determine the effectiveness of these efforts and to ensure that the improvement is substantial and sustainable.

Purpose: This assessment will independently determine the effectiveness of efforts at PSEG to make substantial, sustainable progress to improve the work environment at Salem and Hope Creek. The outside assessment team will consist of personnel from outside PSEG who have substantial experience in the areas assessed. Additionally, it will ensure that any remaining shortfalls, performance or programmatic, are identified and entered into the Corrective Action Program (CAP) for resolution.

Scope: The assessment will include; focus group interviews with targeted departments; observations of and discussions with Executive Review Board and Executive Protocol Group teams; individual interviews with staff, supervisors, and contractors; document reviews; and observations of the work environment with a focus on processes, program implementation, and related communication across all levels of station personnel.

Objectives:

1. Ensure personnel are willing to raise concerns and can do so without the fear of retaliation.

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* No substantive change to original plan. Corrects minor typos and inserts mistakenly omitted words.

2. Ensure that the site's problem identification and resolution processes (primarily the CAP and Work Management) are effectively addressing and correcting site issues.

3. Ensure alternate concern reporting mechanisms, such as the Employee Concerns Program (ECP), are available and effective for personnel to raise nuclear safety concerns.

4. Ensure that management is effective in detecting and preventing retaliation and addressing any chilling effects in response to concerns.

5. Verify that performance measures, surveys, direct observations, and other methods are used to effectively evaluate the SCWE at PSEG.

6. Determine if actions taken to address SCWE weaknesses identified in previous assessments and inspections since January 2004 have resulted in substantial and sustainable improvement changes in the work environment.

Activities (Verification Methods):

NOTE – Many of the areas described below have been subject to recent assessments, surveys, or NRC inspections. In cases where the Assessment Team concludes that the results of those previous efforts are reliable and currently relevant, the Assessment Team may rely upon those results as part of its evaluation. The Assessment Team will focus on determining whether areas previously found in need of correction have been effectively addressed.

1. Assess SCWE Pillar 1 – Personnel Willingness to Raise Concerns Without Fear of Retaliation

   1.1 Assess personnel willingness to raise concerns through focus group interviews of site personnel

      1.1.1 Assess personnel knowledge of right to raise concerns and methods for raising concerns

      1.1.2 Assess personnel willingness to raise concerns using particular methods

   1.2 Repeat Activity Step 1.1 for structured individual interviews of site personnel including Activity Steps 1.1.1 and 1.1.2

   1.3 Assess personnel willingness to raise concerns through review of performance metrics

   1.4 Assess attributes of SCWE supporting Pillar 1 (attributes based on applicable industry guidance)

      1.4.1 SCWE policy

      1.4.2 SCWE training (including review of 2006 training schedule)

      1.4.3 SCWE incentives

1.4.4 SCWE metrics, including Synergy Survey Results Comparison

1.4.5 Overtime controls

1.4.6 Contractor awareness

2. Assess SCWE Pillar 2 – Effectiveness of Site Problem Identification and Resolution Process (Primarily the Corrective Action Program) When Addressing Concerns

2.1 Assess effectiveness of site problem identification and resolution process through focus group interviews of site personnel in the departments identified in Activity Step 1.1

2.2 Repeat Activity Step 2.1 for structured individual interviews of site personnel

2.3 Assess effectiveness of site problem identification and resolution process through review of performance metrics

2.4 Assess attributes supporting Pillar 2 (attributes based on applicable industry guidance)

2.4.1 Prompt management notification of concerns

2.4.2 Prompt prioritization and review of concerns

2.4.3 Timely and appropriate resolution of concerns

2.4.4 Effectiveness of communications

2.4.5 Use of training

2.4.6 Resolution of long standing issues

2.4.7 Effectiveness of Work Management Processes

2.4.7.1 Observation of the Work Management Process Meetings

2.4.7.2 Observation of Scheduled Field Work

2.4.8 Management of CAP backlogs

2.4.9 Feedback to the concerned individuals

2.4.10 Supervisory/Management engagement, including supervisory responsiveness to concerns raised by employees

2.4.11 Appeal process for concerns

2.4.12 Assessments of PI&R processes

2.4.12.1 Observation of PI&R Process Meetings

3. Assess SCWE Pillar 3 – Availability and Effectiveness of Alternate Mechanisms, Such as an Employee Concerns Program, for Personnel to Raise Nuclear Safety Concerns

3.1 Assess availability and effectiveness of alternate mechanisms through focus group interviews of site personnel

3.2 Repeat Activity Step 3.1 for structured individual interviews of site personnel

3.3 Assess availability and effectiveness of alternate mechanisms through interviews with ECP and SCWE staff

3.4 Assess availability and effectiveness of alternate mechanisms through review of performance metrics

3.5 Assess the transition of current SCWE processes into the ECP processes

3.6 Assess attributes supporting Pillar 3 (attributes based on applicable industry guidance)

3.6.1 Accessibility

3.6.2 Independence/Accountability

3.6.3 Training/Communication on availability

3.6.4 Confidentiality

3.6.5 Tracking and closure of concerns

3.6.6 Feedback to concerned individuals

4. Assess SCWE Pillar 4 – Management Effectiveness in Detecting and Preventing Retaliation and Addressing Any Chilling Effect in Response to Concerns

4.1 Assess management effectiveness in detecting and preventing retaliation and addressing chilling effect through focus group interviews of site personnel

4.2 Repeat Activity Step 4.1 for structured individual interviews of site personnel

4.3 Assess Executive Protocol Group effectiveness in detecting and preventing retaliation and addressing chilling effects through observations and review of meeting minutes

4.4 Assess the station Plant Manager's Protocol Group effectiveness

4.5 Assess management effectiveness in detecting and preventing retaliation and addressing chilling effect through review of performance metrics

4.6 Assess management effectiveness in detecting and preventing retaliation and addressing chilling effect through a sample review of employee MARC files

4.7 Assess attributes supporting Pillar 4 (attributes based upon applicable industry guidance)

4.7.1 Assess involvement of senior management in employment actions

4.7.1.1 Observation of the Executive Review Board (ERB)

4.7.1.2 Observation of the Executive Protocol Group (EPG)

4.7.2 Assess the oversight of contractors

4.7.2.1 Oversight of contractor SCWE in general

4.7.2.2 Involvement in contractor cases of alleged discrimination

4.8 Assess the transition of the ERB processes into the standard Human Resource processes

5. Assess Performance Measures, Surveys, Direct Observations, and Other Methods Used to Evaluate SCWE

5.1 Assess performance metrics used to evaluate SCWE

5.2 Assess surveys and interviews used to evaluate SCWE

5.3 Assess direct observations used to evaluate SCWE

5.4 Review other SCWE assessment activities

5.5 Assess use of lessons learned and benchmarking

5.6 Review the Nuclear Review Board's (NRB) oversight of the SCWE

6. Assess effectiveness of actions taken since January 2004 to create substantial and sustainable improvement changes in the work environment

6.1 Assess implementation of actions taken to address SCWE issues identified in the following assessments:

6.1.1 Independent Assessment Team SCWE Assessment

6.1.2 Utilities Service Alliance (USA) Safety Culture Assessment

6.1.3 January 2005 Synergy Survey

6.1.4 2005 PSEG SCWE Focused Self-Assessment

6.1.5 Nuclear Regulatory Commission SCWE Inspection

6.1.6 PSEG PI&R Self Assessment

6.1.7 NRC PI&R Inspection Report

6.2 Assess ability to identify problems similar to those found by the previous assessments

6.3 Assess appropriateness of the criteria and thresholds used to assess SCWE program effectiveness

6.4 Assess implementation of licensee's processes to address SCWE metrics with declining trends

6.5 Compare Salem/Hope Creek SCWE to revised NRC cross cutting attributes

Team Composition:

1. **Team Leader:** William Cottle, Former CNO, South Texas Project
2. **Team Members:**
   a. Jeannie Rinckel, VP Fleet Oversight, FENOC
   b. Barry Letts, former Director, Region 1, NRC Office of Investigations (OI)
   c. Brian McCabe, Regulatory Affairs Manager, Progress Energy
   d. Bill Baer, Attorney, Morgan, Lewis & Bockius LLP
   e. Andy Vomastek, ECP Program Specialist, Millstone
   f. Joe Muth, Shift Manager, Operations, Columbia Station
   g. Carey Foy, former ECP Manager, River Bend

References:

1. NRC Inspection Manual 71152, Identification and Resolution of Problems
2. NRC web site, Best Practices to Establish and Maintain a Safety Conscious Work Environment
3. NRC: Policy Statement For Nuclear Employees Raising Safety Concerns Without Fear Of Retaliation
4. NRC Regulatory Issue Summary 2005-18, Guidance For Establishing and Maintaining a Safety Conscious Work Environment, August 25, 2005
5. Nuclear Energy Institute (NEI) 97-05, Nuclear Power Plant Personnel-Employee Concerns Program - Process Tools In a Safety Conscious Work Environment, Revision 2
6. Institute of Nuclear Power Operations (INPO) Principles for a Strong Nuclear Safety Culture, November 2004
7. NC.NP-PO.ZZ-0101(Q), Policy for Maintaining a Safety Conscious Work Environment (SCWE), Revision 1
8. PSEG Executive Protocol Group Procedure, EI-SH-100-1003, Revision 1
9. PSEG Executive Review Board Charter
10. Station Plant Manager's Protocol Group Charter
11. June 25, 2004, "PSEG Plan for Improving the Work Environment" letter to NRC, and July 30, 2004 NRC response to that letter
12. International Atomic Energy Agency (IAEA) IAEA-TECDOC-1321, Self Assessment of safety culture in nuclear installations, High and good practices
13. IAEA-TECDOC-1329, Safety Culture in nuclear installations, Guidance for use in the enhancement of safety culture
14. International Nuclear Safety Advisory Group, INSAG-4 Safety Reports Series 11, Developing Safety Culture in Nuclear Activities, Practical Suggestions to Assist Progress

15. INSAG-13, Management of Operational Safety in Nuclear Power Plants

16. INSAG-15, Key Practical Issues in Strengthening Safety Culture

Attachments:

None

Approved By: Dawn M Bergh **Date:** 4/13/06

Department Manager's Signature

ATTACHMENT 3

Information on Interview Methodology, Including Selection of Interviewees and Question Sets Used During Interviews

Method for Selecting Groups of Interviewees:

Groups were selected based upon whether SCWE issues had been identified in these groups during previous assessments and inspections. Due to outage activities ongoing at Hope Creek, the availability of some personnel was limited. Personnel for all but the Salem/Hope Creek Maintenance & Technical Training Groups were selected based on availability with the option given to the rest of the department for volunteering for interviews. In the case of the two training groups cited above, the selection encompassed the entire group.

Method for Selecting Individual Interviewees:

Specific management individuals selected by the team for interviews included:

William Levis
Thomas Joyce
George Barnes
Dennis Winchester
Jack Grant
Jim Clancy
Harlan Hanson
Joan Glunt
Carole Delvecchio
Skip Sindoni
George Gellrich
Security Managers (Karen Hoffman & William Ceravalo)
Paul Tetreault
Tom Lake
Mike Headrick
Steve Robitzski
Pete Tocci
Russ Coon
Bill Buirch
Bob Wegner

These interviewees were selected based on their management positions and/or their unique knowledge regarding SCWE issues. In addition, as the assessment proceeded, other interviewees were selected on this basis.

Other individual interviewees were selected through random sampling by organization (number depending on organization size). This was accomplished using the Fitness-For-Duty random selection process. The organizations represented included:

Human Resources
Salem 12hr./WIN Maintenance
Hope Creek 12.hr./WIN Maintenance
Fire Department
Quality Assurance
Security Contractor
Procurement Engineering
Information Technology
Yard Electrical Maintenance
Records Management
Salem/Hope Creek Warehouse
Emergency Planning
Hope Creek Shift Operations
Salem Radiation Protection
Hope Creek Radiation Protection
Salem Work Management
Hope Creek Work Management
Salem Engineering
Hope Creek Engineering
Salem/Hope Creek Projects
Salem Maintenance & Technical Training
Hope Creek Maintenance & Technical Training
Salem Chemistry
Hope Creek Chemistry
Finance/Business Operations
Salem/Hope Creek Security Administration
Nuclear Oversight
Environmental
Regulatory Assurance
Salem Outage Group
Salem/Hope Creek Communications

Interview Methodology

At the outset of all interviews, the interviewee(s) was informed of the purpose of the interview. They were also informed that although the results of their interviews would be summarized in a report, the Assessment Team would not attribute issues to individuals nor would the Team include information in the report that would facilitate identification of individual interviewees. Interviewees were also provided with the means to contact the Team at a later time if they wished to do so.

To ensure consistency, interviews of both groups and individuals were conducted using a standard set of questions. These questions included both "Yes/No" type questions to ensure the gathering of specific data, as well as more general questions designed to elicit explanations for the answers provided. Time was allowed for general discussion of the SCWE challenges known

to interviewees. Interviewees were specifically invited to discuss any other issues of concern to them.

The question sets used during the interviews covered all of the four Pillars of SCWE. Those question sets are attached. The same question sets were used for both individual and group interviews.

Salem / Hope Creek SCWE Peer Assessment Interview Questions

NOTE: Check off all applicable information

Interviewer(s): _____ **Date:** _____

INTRODUCTORY REMARKS (use separate sheet) ___

PROVIDE HANDOUT to interviewee(s) ___

INTERVIEWEE DATA: Group Interview ___ Individual Interview ___

Organization: Salem ___ Hope Creek ___ MAST ___

Bargaining Unit ___ Contractor ___

Name of Department/Work Group: _____

Number of Individuals Interviewed: _____

Level/Job Title(s) of Persons Interviewed: _____

_____

_____

_____

_____

1.0 Willingness to Raise Concerns

1.1 If you had a safety (nuclear or industrial) or quality concern would you report it?

Yes ___ No ___

1.1.1 How would you do so?

1.1.2 Why would you choose that particular method?

1.1.3 Is there any threshold or criteria that you apply when deciding whether to report and/or raise a concern?

1.2 Do you have any hesitancy or reluctance to raise such concerns?

Yes ___ No ___

1.2.1 If Yes, why do you feel that way?

1.2.2 Have you ever had a negative experience raising such a concern? (Details, including month/year)

1.3 Are you encouraged to raise such concerns?

Yes ___ No ___

1.3.1 By whom?

1.3.2 How is that encouragement communicated?

1.4 How receptive is your immediate supervision to the raising of concerns?

Very Receptive ___ Receptive ___ Not Receptive ___

1.4.1 How receptive is department management?

Very Receptive ___ Receptive ___ Not Receptive ___

1.4.2 How receptive is station management?

Very Receptive ___ Receptive ___ Not Receptive ___

1.5 Do you think station personnel are more willing, about the same, or less willing to raise safety, quality, or compliance concerns than they were a year ago?

More Willing ___ Less Willing ___ About the Same ___

1.5.1 What accounts for any changes in that regard?

1.5.2 Are you more willing, the same, or less willing than you were a year ago to raise such concerns?

More Willing ___ Less Willing ___ About the Same ___

Why?

2.0 Effectiveness of the Problem Identification and Resolution Process

2.1 Does the Corrective Action Program (CAP) generally address actual or potential nuclear safety and quality concerns in a timely manner?

Yes ___ No ___

2.1.1 If not, why do you believe that to be the case?

2.1.2 Does it address other types of concerns (industrial, administrative, etc.) in a timely manner?

Yes ___ No ___

2.1.3 If there is a difference between how those types of concerns are addressed, why do you believe that exists?

2.2 Does the CAP appropriately prioritize actual or potential nuclear safety and quality issues?

Yes ___ No ___

2.2.1 If No, in what respect does it fail to do so?

2.2.2 Is the CAP currently more effective, similarly effective, or less effective than it was a year ago at resolving long-standing equipment issues?

More Effective ___ Less Effective ___ About the Same ___

2.3 Does station management ensure that problems entered into the CAP get addressed?

Yes ___ No ___

2.3.1 If No, what, in your view, are the chief barriers to the resolution of problems?

2.4 Is the station's Work Management program effective in maintaining equipment and getting it fixed?

Yes ___ No ___

2.4.1 If No, why not?

2.5 Does station management demonstrate the value they place on the importance of the CAP to the overall success of the station?

Yes ___ No ___

2.5.1 If No, what do you think is the reason?

2.5.2 If Yes, how do they do so?

3.0 Availability and Effectiveness of Alternate Mechanisms, such as the ECP, for Personnel to Raise Nuclear Safety and Quality Concerns

3.1 Do you believe the ECP is sufficiently visible and known to the workforce?

Yes ___ No ___

3.2 Are you aware that safety and/or quality concerns can be reported anonymously or confidentially through the ECP?

Yes ___ No ___

3.3 Do you believe that the ECP has a sufficiently high degree of management support?

Yes ___ No ___

3.3.1 What management actions have demonstrated that support?

3.4 Are you confident that issues or concerns reported through the ECP will be thoroughly investigated and appropriately resolved?

Yes ___ No ___

3.5 Are you confident that issues or concerns reported through the ECP will be treated in a manner that maintains confidentiality?

Yes ___ No ___

3.5.1 Are you aware of any instances within the past year in which confidentiality of an ECP concerned individual was breached?

Yes ___ No ___

3.5.2 If Yes, please explain the circumstances.

3.6 Would you be willing to use the ECP if you felt that using your management chain or other avenues of problem resolution were unsuccessful?

Yes ___ No ___

3.6.1 If No, why not?

4.0 Management Effectiveness in Detecting and Preventing Retaliation and Addressing any Chilling Effects

4.1 Are you aware of any incidents or events within the past year that have had the affect of discouraging personnel from raising safety and/or quality concerns?

Yes ___ No ___

4.1.1 Please describe the nature of the event or incident.

4.1.2 Was management aware of the event/incident and its potential impact on the work environment?

Yes ___ No ___

4.1.2.1 If Yes, what did management do in response?

4.2 Are you aware of anyone who feels that they have been retaliated against within the past year for raising safety or quality concerns?

Yes ___ No ___

4.2.1 If Yes, please describe the circumstances.

4.2.2 Was management made aware of the concern regarding retaliation?

Yes ___ No ___

4.2.2.1 If Yes, how did they become aware and what did they do in response?

4.3 Are you aware of any instances within the past year in which a safety or quality concern was not reported because of a fear of retaliation by the individual who had the concern?

Yes ___ No ___

4.3.1 If Yes, please describe the circumstances.

4.4 Are you aware of your legal rights to report nuclear safety and quality concerns to either management or the NRC without being retaliated against for doing so?

Yes ___ No ___

4.4.1 How are those rights advertised and promoted at the station?

4.5 Do you believe management is more effective, equally effective, or less effective today than one year ago at detecting and preventing retaliation?

More Effective ___ Equally Effective ___ Less Effective ___

4.5.1 What is the basis for your feelings in this regard?

5.0 Additional Information

5.1 Do you believe that the appropriate personnel are involved in operational decision making?

Yes ___ No ___

5.1.1 If No, what changes should be made?

5.2 Do you believe that, in general, the station applies conservative decision-making, versus production or schedule driven decision-making in response to safety related issues and/or events?

Yes ___ No ___

5.2.1 If No, please provide examples.

5.3 Any other issues?

ATTACHMENT 4

Review of Corrective Action Program Inputs (Notifications) Regarding SCWE

The Salem/Hope Creek Corrective Action Program (CAP) database was searched for the period September 2005 to April 11, 2006, for the following key words:

- SCWE
- Employee concern
- Retaliation
- Risk taking
- Production over safety
- Slow corrective action
- Risk
- Hostile
- Schedule pressure
- Reluctant
- Lack of action
- Intimidation
- Inadequate corrective action
- Frustrated
- Fear
- Culture
- Conscious
- Inadequate
- Time pressure
- Schedule and safe operation

As a result of this search 122 Notifications or associated Orders were reviewed by the peer assessment team in an effort to identify any significant issues trends that may negatively impact the station's ability to maintain a safety conscious work environment (SCWE). The universe of 122 identified Notifications included repetitive ones that were found in more than one search category. Subsequently, additional searches were performed using the words "harass" and "afraid." These searches identified only one additional Notification more recent than mid-2004.

Conclusion

No significant issues or definitive trends were observed that appeared to having a direct and negative impact on the stations' SCWE and were not otherwise identified during the Assessment Team's other assessment activities. The most repetitive theme observed throughout this review centered on Notifications that involved some aspect of the Work Management program, covering such issues as ineffective work and scheduling planning, poor communications, the unavailability of resources at key times in scheduled work evolutions, and poor attendance/participation at Work Management meetings. This is consistent with the information developed from the Peer Assessment team's interviews, which reflects that, although many

people perceive that the Work Management program as has shown improvement in its ability to fix longstanding equipment issues and reduce maintenance backlogs, there remains room for significant continued improvement in the program.

ATTACHMENT 5

List of Recommendations

Recommendation 1.2.2 – Management should place continued strong focus and communication on the need to report and resolve industrial safety issues, specifically including workplace injuries. Communication on this topic should clearly reinforce that discipline and other personnel actions are taken because personnel have not followed safety rules, not because they report injuries.

Recommendation 1.4.1 – The SCWE Policy and the ERB Charter and process should be reviewed and revised as necessary to ensure consistency in discussing ERB review of personnel actions. The ERB Charter should be revised to clearly define what actions constitute Immediate Management Actions that are exempt from prior ERB review, but which must be reviewed by the ERB within five working days. The SCWE Policy, ECP documents, and the ERB Charter should be reviewed and revised to apply generally to "safety and quality" concerns.

Recommendation 1.4.2.1 – Correct the language in the SCWE module in General Employee Training to eliminate the possibility that it might be misconstrued to imply that discipline may be imposed because a mistake was reported.

Recommendation 1.4.2.2 – Consider requiring all managers and supervisors (including temporary upgrades) to receive SCWE training (beyond the training module in the General Employee Training) within a specified time of being appointed to a supervisory position.

Recommendation 1.4.3.1 – Revise the SCWE section in performance evaluation forms to more specifically align it to behaviors that encourage personnel to raise concerns without fear of retaliation. Ensure that SCWE competencies continue to be appropriately addressed in personnel evaluations following transitions associated with the PSEG/Exelon merger.

Recommendation 1.4.3.2 – Consider creating a process for providing senior management with periodic information on the use of site recognition programs as a vehicle for rewarding positive SCWE behaviors.

Recommendation 1.4.6 – Ensure follow-up and response to any instances in which contractors fail to acknowledge and agree to the SCWE requirements set forth in PSEG's April 2006 letter to contractors.

Recommendation 2.4.3 – Consider training, coaching, or other actions to drive the ISC to take a more critical look at issues when assigning priority level.

Recommendation 2.4.6 – Ensure that the "Excluded List" is periodically reviewed by management to ensure that items on the list have the appropriate priority, are evaluated for aggregate impact, and are timely addressed.

Recommendation 3.3 – Change management practices should be rigorously implemented as the SCWE Group Lead departs and any further changes to the ECP are made. See also Recommendation 3.5 below.

Recommendation 3.5 – Vigorously implement strong change management practices, including up-front participation by stakeholders and implementation of necessary communications or training, in connection with any changes to the SCWE Group. Ensure that this change management is closely coordinated with change management for transition of functions of the ERB. See Recommendation 4.8.

Recommendation 3.6.1 – If drop boxes are to be used to capture potential safety concerns, they should be checked very frequently.

Recommendation 3.6.4.1 – Continue to reinforce reasonable expectations for confidentiality of ECP investigations in communications with site personnel.

Recommendation 3.6.4.2 – Consider whether the practice of referring certain investigations to line management is consistent with expectations of confidentiality.

Recommendation 3.6.5 -- Consider additional training/guidance for ECP staff members on systematic approaches to analysis and documentation of ECP cases, and handling of cases involving contractor personnel issues.

Recommendation 4.7.1.1 – The ERB Charter permits after-the-fact review of personnel actions in cases where an "Immediate Management Action" is necessary. However, this term is not specifically defined. To prevent confusion and abuse, this term should be defined in the ERB Charter and other appropriate training, policy, and guidance documents.

Recommendation 4.8 – Vigorously implement change management practices for the transition of ERB functions to the line organization and Human Resources, including proactive stakeholder involvement, training, and communications regarding these changes. Coordinate these efforts with change management associated with the transition of other SCWE Group functions. See Recommendation 3.5 above.

Recommendation 5.1.1 – Consider adding to ECP metrics included in the SCWE metrics package a breakout of concerns into categories, such as Management-related, Fitness for Duty, Contractor, or Human Resources, to permit a better understanding of any trends.

Recommendation 5.1.2 – Consider an ECP metric that compares the number of internally raised concerns to NRC allegations.

Recommendation 5.1.3 – The goal established for Condition Reports Overdue appears too lenient, considering that extensions of due dates are permitted. Consider revising this goal to zero.

Recommendation 6.1.4 – Additional management attention is required with respect to the follow-up of action plan execution related to SCWE. Action plans to address organizations viewed as having a SCWE less robust than the site as a whole must be vigorously implemented and appropriately tracked and documented.

Recommendation 6.1.5 – A site-wide comprehensive communication strategy should include communications on SCWE issues. The effects of these communications, particularly on high-priority groups, should be monitored and followed up on.