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JUN 23 2009

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

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RECEIVED
REGULATORY

**SUSQUEHANNA STEAM ELECTRIC STATION
PPL SUSQUEHANNA LLC WORK ENVIRONMENT
IMPROVEMENT PLAN
PLA-6528**

**Docket Nos. 50-387
and 50-388**

*Reference 1) PLA-6489, Mr. W. H. Spence (PPL) to Mr. S. J. Collins (USNRC),
"Supplement to NRC Request to Address Work Environment Issues
at Susquehanna Steam Electric Station," dated March 13, 2009.*

The purpose of this letter is to provide an update to the Susquehanna Steam Electric Station Work Environment Improvement Plan.

PPL has completed the significant actions and met the associated milestones as described in the original plan attached to Reference 1. These actions include completion of a root cause analysis and several assessments of the work environment. As a result, we have been able to assess the current health of the work environment at SSES. The updated work environment improvement plan is attached.

PPL will continue to operate both Susquehanna units safely. PPL is committed to addressing our work environment issues by following, monitoring and continually evaluating and updating the plan. The work environment improvement plan will continue to evolve as we learn from implementation of the plan's actions. The day-to-day active management, monitoring and support of a strong nuclear safety culture and the implementation of this plan are strategies to ensure the long-term sustainability of our strong nuclear safety culture at Susquehanna.

The actions described in the Attachment to this letter do not meet the criteria of new regulatory commitments. As such, there are no regulatory commitments contained in this letter. However, PPL fully intends to implement the actions outlined in this letter.

If you have any questions or need further information, please call Mr. Terry Harpster at (570) 220-7478.

A handwritten signature in black ink, appearing to read 'W. Spence', with a long horizontal flourish extending to the right.

William H. Spence

Attachment: Susquehanna Steam Electric Station Work Environment Improvement Plan

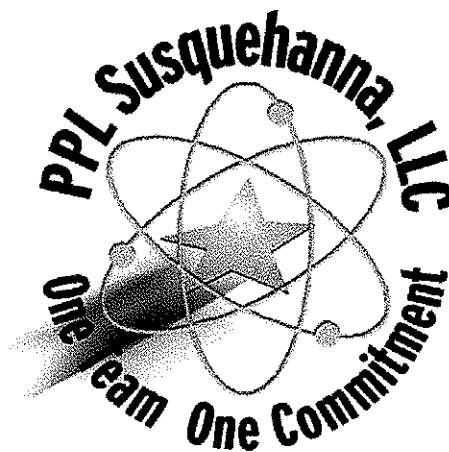
Copy: Mr. R. R. Janati, DEP/BRP
Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector
Mr. B. K. Vaidya, NRC Project Manager

ATTACHMENT to PLA-6528

**Susquehanna Steam Electric Station Work
Environment Improvement Plan**



The Susquehanna Steam Electric Station Work Environment Improvement Plan



Discussion of Changes

- Editorial updates throughout the plan.
- Added discussion to Background section to reflect the results of the Work Environment Root Cause Report.
- Added an assessment of the Health of the Work Environment - June 2009.
- Added summaries of the work environment assessments completed since March 2009, along with the root cause report that were used as the key inputs to this version of the plan. The assessment are:
 - - Organizational Effectiveness Oversight Panel Focus Group Interview
 - Quality Assurance (QA) Safety Culture and SCWE Assessment Activities
 - ECOT Assessment of the Work Environment Metrics
- Updated the status of actions and added descriptions of actions throughout the plan.

Introduction

PPL is committed to ensuring that Susquehanna (SSES) is a high performing organization with a healthy safety culture. We believe that sound leadership is the key to achieving these goals. Details of the actions we have taken and our continuing plans to address work environment issues are outlined in this plan.

In 2008, SSES and its employees celebrated 25 years of safe and reliable operation of Unit 1. Unit 2 recently completed a continuous run that began at the end of its 2007 refueling outage. The record run ended in April 2009 when it was taken out of service for the 2009 refueling outage after 723 consecutive days of operation, the second longest run ever by a nuclear generating unit in the United States. As a team, SSES employees safely operated and maintained Unit 2 on line at an average capacity factor of over 99.1% of its licensed power level for the entire two years. In May 2009, Unit 2 was successfully returned to service after one of the more complex refueling outages in plant history.

SSES employees take pride in the work they perform to safely operate and maintain the plant. This is attributed to the strong work ethic of the station's skilled and dedicated workforce, a workforce that has achieved designation of the station as a "Star" site in the Occupational Safety and Health Administration's Voluntary Protection Program in recognition of their industrial safety efforts.

Over the past several years, PPL has invested in the material condition of the plant. We have undertaken several major projects, including replacement of the Unit 1 and Unit 2 steam dryers and high-pressure turbines, to maintain and upgrade the plant so that it can continue to provide a safe, reliable source of electricity for our region for years to come.

At the same time that these projects were under way, many organizational and operational changes occurred that affected the SSES workforce. In some cases, the changes led to an erosion of workforce trust in the station leadership team. This became evident in 2008 with an increased number of concerns expressed to the NRC.

On February 27, 2009, PPL provided an outline of our ongoing actions to address these work environment issues (PLA-6486). On March 13, 2009, PPL issued the initial version of this plan (PLA-6489). Significant actions (root cause and work environment assessments) planned to be completed prior to June 30, 2009, have been completed before the due date delineated in the plan. As a result, the plan has been updated.

This document is a "living" plan that will continue to be adjusted based on what is learned as we move forward. The day-to-day active management, monitoring and support of a strong nuclear safety culture and the implementation of this plan are strategies to ensure the long-term sustainability of a strong nuclear safety culture at SSES.

Background

Between 2002 and the end of 2006, SSES measured an improving or consistent SCWE. During the early part of this period, PPL invested heavily in improving the station culture by enhancing communications and engagement with the general work force. This included extensive efforts to build leadership capacity in the station management team and teamwork in the station workforce. Station leadership changes since 2004 resulted in a focus on improving core competencies, improving work force accountabilities and implementing industry best practices.

In late 2006, PPL completed a full-scope work environment survey by an independent third party that concluded SSES had a strong Nuclear Safety Culture and continued to make progress in improving the overall organizational culture, work environment and leadership team. SSES's Nuclear Safety Culture and General Culture and Work Environment were ranked in the first quartile of the nuclear industry. Leadership, Management and Supervisory skills and practices were ranked in the second quartile. The survey indicated opportunities existed to continue the improvement through focused efforts in Maintenance and Health Physics. PPL developed action plans and implemented corrective actions through 2007 to address the identified work environment issues.

The NRC performed independent inspections throughout 2007, which indicated that the actions to address work environment issues appeared appropriate. The NRC annual allegation program trend reports noted some improvement in the work environment through 2006 and 2007. Beginning in late 2007, the management actions of some leaders negatively affected the organization.

In early 2008, some leadership decisions impacting compensation practices and work schedules were implemented with a less than effective change management process. This adversely affected the workforce perception of the leadership team.

Also in early 2008, communications to the work force regarding changes to the implementation of event and accountability review boards were less than adequate.

As a result, the general workforce perception of the boards varied widely. While these boards had been a valuable tool at SSES and other utilities, the lack of good change management resulted in concerns among the SSES workforce.

To address the decline in the general work environment and a lack of workforce trust in the leadership team, an improvement plan was created in August 2008. Initial corrective actions were focused in three areas: change management, communications, and the relationship of senior management to the workforce.

Assessments of the work environment were completed in the months that followed. The assessments indicated that employees will raise nuclear safety concerns and do not hesitate to utilize the various avenues for raising those concerns, including allegations. However, those assessments did confirm that the changes noted above had adversely

affected the work environment. Trust between the work force and leadership had eroded, leading to a decline in teamwork and effective communications.

To emphasize PPL's commitment to addressing the issues, a work environment team, led by a vice president independent of the station, was formed in January 2009 reporting to the chief nuclear officer. The team has consulted with industry oversight organizations to benefit from the lessons learned from prior experience with similar work environment issues and provides development and implementation support for this plan.

An independent Organizational Effectiveness Oversight Panel also was formed, reporting to the chief nuclear officer. The Panel is independently assessing the scope, implementation, and effectiveness of actions being taken to improve the organizational effectiveness of SSES. The members are a former PPL chief nuclear officer, a former NRC regional administrator, a consultant who is chairman of the SSES Review Committee, and the PPL vice president of human resources.

A root cause analysis of the work environment issue was completed and the report finalized on May 29, 2009. This effort was undertaken to provide a comprehensive understanding of the direct and underlying causes of the work environment decline and to recommend actions to restore employee trust and assure a strong nuclear safety culture at Susquehanna. The root cause team finalized the report one month prior to the planned completion date.

A broad-based group of Susquehanna employees and industry-recognized subject matter experts were brought together to perform this analysis. The team composition was intentionally comprehensive, providing a representative vertical and horizontal cross-section of Susquehanna personnel. The 18 member RCA team included 13 Susquehanna members and 5 industry subject-matter experts. The Susquehanna members included bargaining unit members, individual contributors, supervisors and managers, new and long-term employees, all from various work groups and locations.

The assessment process was structured, detailed and comprehensive, encompassing a cross-section of all levels and disciplines in the organization. Data collection and analyses included, but were not limited to:

- Focused, structured interviews with more than 100 personnel who represented a vertical and horizontal cross-section of Susquehanna.
- Two focus group sessions with a cross-section of the workforce – one with supervisors and the other with workers.
- 2008 Independent third-party SCWE Survey statistics and comments.
- Trend data illustrating the fluctuation in the numbers of Employee Concern Program contacts.
- Susquehanna Review Committee meeting minutes.
- NRC Inspection Reports.
- ARs, CRs and allegations during the past five years.
- Independent review of Susquehanna's cultural change events since 1996.
- Organizational culture summary.

The analysis concluded that the vast majority of Susquehanna personnel are willing to raise concerns and escalate concerns, and are capable of and willing to use the existing internal processes to raise concerns.

The analysis resulted in the identification of the following root causes:

- Management actions related to implementation of certain labor and personnel decisions, as well as some performance and production issues, negatively impacted the work environment.
- Organizational structure and reporting relationships reduced independence and effectiveness of oversight groups regarding GWE/SCWE issues.
- Management missed opportunities to detect and act on early indications of a decline in GWE/SCWE.

Corrective actions to address the root causes and causal factors were developed and have been entered into the corrective action program.

A detailed communication plan is in the process of being implemented that will provide all SSES employees an overview of root cause teams activities, conclusions and actions.

Health of the Work Environment - June 2009

As prescribed by the plan submitted in March 2009, several important formal assessment activities have been completed. Anecdotal feedback also has been obtained through implementation of the less-formal interactions.

These show that improvement has been made since spring of 2008 and that the workforce in general has sensed an improvement. Actions have been taken with several key actions completed prior to the planned due dates.

The workforce has expressed an increased willingness to raise concerns using normal problem resolution processes (action request process, using supervisors and management to help with concern resolution) and has expressed that they would raise safety concerns. However, some indicated they may not raise lower-level issues. Metrics indicate that action requests are being generated in 2009 at a rate comparable to 2008.

Regarding management effectiveness at resolving concerns using normal problem resolution processes: metrics and interviews indicate that the effectiveness and efficiency of the action request process needs improvement.

Personnel interviews have provided feedback similar to the metrics regarding actions being judged to have less-than-adequate actions taken and that some actions are not being closed in a timely manner. A management review committee has begun daily

monitoring of the action request process. Overdue "correct condition" and "prevent recurrence" actions are trending lower.

The effectiveness of alternate concern resolution processes has shown improvement as evidenced by a lower number of allegations (January through April 2009 - 6 in 2009 compared to 18 in the same time last year) and a significantly lower number of labor grievances (January through April 2009 - 12 in 2009 compared to 78 in the same time last year).

The number of employee concerns program contacts (January through April 2009 - 42 in 2009 compared to 51 in 2008) and concerns (January through April 2009 - 7 in 2009 compared to 8 in 2008) are slightly lower than a year ago. These numbers are consistent with feedback information obtained through interviews, NRC inspection feedback, and the root cause team report, which all indicate that some in the workforce lack confidence in these processes and that some prefer using the NRC allegation process.

General work environment metrics and feedback obtained from NRC and interviews indicate the issues with alignment are improving. Communications have been cited as improved via use of Susquehanna Focus articles, Grapevine articles and formal and informal meetings between management and employees where issues are being openly discussed. Several potential work environment impact changes have been successfully implemented utilizing the change management process. Interactions between the SSES and bargaining unit leadership have been occurring regularly and constructively.

Actions are being taken to address the areas of weakness. For example, in the area of alternate concern resolution processes, an anonymous AR process and a concerns hotline have been implemented. Also, a full-time ECP representative located at SSES, who will proactively engage the workforce, is in the process of being established.

Improvements have been noted, but weaknesses exist that warrant continued attention and aggressive action. This plan is designed to continue the improving trend.

Summaries of the assessments completed since March 2009 and used as input for this version of the plan follow.

Organizational Effectiveness Oversight Panel Focus Group Interview Results

Focus group interviews have been performed by the Independent Organizational Effectiveness Oversight Panel. The interviews were conducted and a report finalized on May 29, 2009, prior to the planned completion date of June 30, 2009.

A total of 43 employees representing a broad range of station departments and roles participated. Operations, Maintenance, Radiation Protection and Engineering were represented in all sessions.

Each session was conducted using a structured set of interview questions. The discussions were facilitated to gain broad, open discussion. Essentially all

participates were actively involved and a wide range of views were expressed. Some of the key conclusions are:

- Employees expressed a broad range of responses to questions concerning the current work environment and SCWE. Most employees said that the work environment at Susquehanna has improved and many provided examples of specific changes. Some employees, particularly in Operations and Health Physics, expressed continuing concern with the work environment and noted that the actions being taken are either ineffective or are progressing too slowly. Some employees also expressed concern about the sustainability of the changes.
- Most employees do not have a broad understanding of actions planned to improve the work environment. While most could cite specific changes, there was not a clear view of the overall plan, limiting employees' ability to judge its adequacy.
- Several employees expressed the need for greater involvement in defining the improvement plan and in developing specific actions. Nearly all employees could explain various methods for raising safety or regulatory concerns and stated that they would pursue safety concerns using one or more of the existing methods. No employees expressed reluctance to raise a safety issue.
- Thirty percent of focus group participants rated the resolution of safety questions as "less than acceptable," citing problems they experienced with various aspects of the SSES processes. The most common concerns are with the prioritization of issues in the AR screening process, delays in completing actions, inadequate control for closing actions and verifying that the actions effectively addressed the original concern.

Quality Assurance (QA) Safety Culture and SCWE Assessment Activities

The quality assurance organization (QA) assessed nuclear safety culture and SCWE during the 2009 refueling outage period. QA utilized the 2009 version of the Nuclear Safety Culture Assessment Survey Questions from the INPO/USA Assessment plan to pulse the workforce (468 workers) and spur discussion. Draft NEI 09-07, Revision 0 "Fostering a Strong Nuclear Safety Culture," was used for the data analysis. This analysis was issued on June 5, 2009, prior to the planned completion date of June 30, 2009.

Worker response to Principle 1 - Everyone is Personally Responsible for Nuclear Safety indicated the strongest positive result, rated as a Strength, with the number of Agree answers over 75% of the responses. Worker response to Principle 3 - Trust Permeates the Organization indicated a good result with the number of Agree answers over 50% of the responses and rated as a Strength as well. Principle 8 - Nuclear Safety Undergoes Constant Examination was excluded from the final analysis because there was not enough response data collected for those questions. The remaining 5 principles were rated Acceptable.

ECOT Assessment of the Work Environment Metrics

The SSES Employee Concerns Oversight Team has begun monthly reviews of the SCWE and GWE metrics and the information provided by internal and external assessments and oversight committees. The metrics are reviewed and "roll-up" assessments for each of the four pillars of a SCWE and the general work environment are determined along with an assessment of the overall health of the work environment. This assessment process is evolving as the ECOT gains insights and adjusts the metrics and their assessment perspectives. Several reviews of the data have been completed.

To date these reviews have resulted in identification of corrective action program enhancement actions related to communication, training and originator feedback.

The ECOT review has concluded that the health of the work environment is improving as compared to the 2008 refueling outage and that an increased willingness to raise concerns has been observed. Several areas for improvement have been identified. Two have to do with the corrective action program identification threshold and rigor/quality of corrective action program action closure. Also, the work force lacks confidence in the alternate resolution processes. The March 13 Susquehanna Work Environment Improvement Project (WEIP) Plan contains actions such as the anonymous AR, concerns hotline and location of a full time ECP representative at SSES who will proactively engage the workforce. These are expected to improve the confidence in the alternate concerns processes; therefore, the ECOT has not identified the need for any additional actions at this time. Overall, the ECOT has concluded that the overall health of the work environment continues to need improvement.

All of the above activities were performed within the framework of the March WEIP Plan. The key learning and actions identified by these assessments have been integrated into the work improvement actions and this plan.

NRC has also performed an inspection that reviewed the adequacy of the action plan's progress in addressing SCWE issues to preclude a chilled work environment at Susquehanna through the first quarter of 2009. The inspectors conducted focus group interviews and individual interviews of managers and senior managers, and observed plant activity meetings and small group interviews. No findings of significance were identified. No individuals indicated to the inspectors that they would not raise a nuclear safety concern nor did any individuals indicate that they were aware of anyone that would not raise nuclear safety concerns. However, the inspectors determined that several negative perceptions about the safety conscious work environment continue to exist among a significant portion of the workforce.

Plan Overview

The goal of this plan is to create a high performing organization characterized by sound leadership, healthy accountability, and a healthy safety culture. This plan organizes the actions into key attributes for improvement; the actions to be taken and milestone dates. This plan includes the actions to be taken to assess and monitor the work environment to determine that the expected improvements in the work environment are being realized and will be sustained.

The key attributes are:

- Leadership
- Leadership Relationship with the Workforce
- Change Management
- Communications
- Work Environment Oversight
- Alternate Concern Resolution Processes
- Corrective Action Program Enhancements
- Station Health Evaluations
- Training
- Work Force Recognition
- Evaluation of the health of the work environment
- Metrics to be used to monitor effectiveness of our actions

The attributes are interrelated. Success of this plan will only be achieved through rigorous and timely implementation of the key attribute actions.

Key Attributes

Leadership

Assessments identified that a plan of action was necessary for further development of the leadership team, to build leadership capacity in the station management team, and to improve teamwork.

PPL is now implementing a leadership development program that embodies the following elements:

- Assessments of each leadership team member, both as an individual contributor and team member. These have been completed.
- Creation of development plans and coaching based on the assessments. The individual development plans are being developed and coaching is in progress.
- Creation of an Independent Organizational Effectiveness Oversight Panel, which will independently assess the scope, implementation, and effectiveness of actions being taken to improve the organizational effectiveness of SSES. The panel is established and functioning.
- Leadership team-building efforts have been initiated.

- A standard approach to integration of new leaders.

Leadership development will include refresher training on the attributes of a healthy nuclear safety culture using the Institute of Nuclear Operators (INPO) "Principles for a Strong Nuclear Safety Culture." The objective of this training will be to influence the values and behaviors of the leadership team to provide a continuous framework for a healthy nuclear safety culture. These principles are:

- Everyone is personally responsible for nuclear safety
- Leaders demonstrate commitment to safety
- Trust permeates the organization
- Decision-making reflects safety first
- Nuclear technology is recognized as special and unique
- A questioning attitude is cultivated
- Organizational learning is embraced
- Nuclear safety undergoes constant examination

Another area of leadership development will be based on the leadership expectations and attributes using the INPO "Leadership Fundamentals to Achieve and Sustain Excellent Station Performance." This training will embody the six attributes which industry has identified in high performing organizations.

- Core Values
- Vision and Plan for Excellence
- Effective Leadership Team
- Engaged Employees
- Healthy Accountability
- Effective Processes and Structures

These values and behaviors are attributes PPL is using in the ongoing selection of its chief nuclear officer.

The expectations, attributes, behaviors, and associated goals will be incorporated in assessing the performance of the station leaders going forward. Leadership team building and development efforts, based on the individual and team assessments, is focused on the leadership team's responsibility to define strategy, vision, roles, responsibilities, and accountability, and to achieve alignment throughout the organization.

A comprehensive fully integrated staffing plan will be developed that assesses the needs of the organization and then identifies the actions that will support the organizations needs. A fully integrated workforce plan will result that addresses succession, training, and internal and external hiring. This plan will be completed by the end of the third quarter 2009.

These actions will result in current and future SSES leadership teams who have the leadership skills to ensure a sustained healthy nuclear safety culture and excellent plant performance.

Leadership Relationship with the Workforce

The SSES leadership team is taking actions to address the issues that contributed to the erosion of trust, teamwork and alignment of the leadership team and workforce.

PPL has modified the review process for events based on benchmarking. This has resulted in the replacement of the event review boards with a human performance assessment process. The functions of the accountability review board are being replaced. The call-off sick process that was implemented during the 2008 refueling outage has also been modified. Station leadership has worked with bargaining unit leadership to address how the scheduled time-off (ST) days will be handled for outage and non-outage periods. Modifications have been implemented to the first-line supervisor pay practices to make them consistent throughout PPL.

Mid-level managers, who have previously held operating licenses at SSES, are engaging Control Room personnel regularly to ensure that work environment issues are being proactively addressed.

Station leaders are attending the opening sessions of training courses to reinforce the station values and expectations regarding nuclear safety and a constructive work culture.

Leadership team members are touring plant areas to observe work, communicate directly with employees in their workplaces, and otherwise constructively engage the workforce.

Meetings between bargaining unit leadership and the leadership team have been reestablished to improve communications, alignment and enhance issue resolution processes. Meetings between management and bargaining unit stewards in maintenance, operations and health physics are being held.

Second-line and first-line supervisor meetings are being conducted. The meetings promote alignment and provide organizational focus areas to a broad population of second lines in a direct and interactive environment. They provide a feedback opportunity to the leadership team and also provide a routine forum for supervisors to work together in a collaborative environment to address issues important to the working level. The goal of this effort is to continue to build alignment and teamwork throughout the organization.

The Employee Concerns Oversight Team (ECOT) will be reviewing proposed employee discipline actions to assess the potential impact on the work environment. A subset of the team will also be tasked to ensure fairness and consistency of employee discipline. The change management process will be used to implement and communicate the establishment of this process by the end of the third quarter 2009.

The objective of these actions is to foster a work environment where all levels of the organization are comfortable raising and addressing concerns in a constructive respectful manner. The organization will resolve issues as a team and all levels of the organization will be aligned with respect to the mission, vision, and values.

Change Management

Change management is another key area for improvement. The lack of effective change management was a key contributor to the dissatisfaction with changes such as the implementation of Event and Accountability Review Boards, changes to the overtime pay policy for first-line supervisors and management personnel, the ST day (time-off) policy for the spring 2008 refueling outage, the call-off-sick policy, and organizational changes. Adequate consensus and alignment were not achieved, and the changes were not well understood, communicated, or accepted by the entire management team or bargaining unit.

While a change management guideline was available for use on the SSES website, the guideline was not consistently used. The lack of consistent use of change management is an underlying cause that resulted in the perception that the leadership team did not value employee input or appreciate the impact that the changes would have on employees.

SSES has benchmarked industry change management practices and used the information to develop a procedure that incorporates a graded approach to change management. The revised process incorporates additional management oversight for changes that could have a significant effect on the workforce. PPL established a change management champion who will monitor, coordinate, serve as an expert resource, and generally assist with administration of the process.

Other corrective actions we are taking that will institutionalize the change management process at SSES are:

- Provide training to the management team on the use and application of the change process. This will be complete by the end of August 2009.
- Assess implementation, and identify successes and areas for improvement in the change management processes. This will be completed by the end of the third quarter 2009.

Communications

Some leadership team decisions and events in 2008 resulted in a lack of alignment and trust by the work force. This was caused, in part, because of less than effective communications. The team relied heavily on print and electronic communications and did not use face-to-face communications as often and as effectively as needed.

As a result, numerous actions have been taken, including:

- Increased face-to-face interactions, e.g., in the meetings described in the **Leadership Relationship with the Workforce** section above.
- Face-to-face communication between the leadership team and the workforce in all hands meetings, SCWE review meetings and key activity rollouts.
- Feedback and dialogue meetings with the workforce.
- Quarterly All Hands Meeting for the entire station.
- Susquehanna Focus articles have been created to provide frequent communication to station personnel on issues of interest.
- A Grapevine communication has been created to discuss rumors.
- Work environment-related audio messages at South Gate House entrance portals.
- Highly visible communication centers in areas where people gather to provide reinforcement of key communications.
- Communication of the role and responsibility of ECOT to the workforce.
- Numerous Station Focus and Grapevine articles have been published communicating trends and status of the work environment initiatives.
- A Work Environment web site providing up-to-date status of work environment issues has been established.

Other corrective actions that we are or will be taking, in addition to continued implementation of the above actions are:

- Communication of the status of work environment trends and status of the work environment initiatives regularly to the workforce.
- Provide communications training for the station leadership team. This will be complete by the end of the third quarter 2009.
- Emphasize the use of appropriate communication in accordance with the Change Management Process that explains the "who, what, when, where, why and how."
- Issuance of periodic communications that will remind the workforce of the processes that can be used to raise concerns, their responsibility to raise concerns, and assurances that no one will be retaliated against for raising an issue. The initial communication was implemented in the first quarter 2009. During the second quarter, the message was reinforced in communications about the new Concerns Hotline.
- Complete a survey to assess the effectiveness of communications. This will be completed by the end of the third quarter 2009.

Future communications will be monitored, evaluated and adjusted to be sure they are as effective as possible.

Work Environment Oversight

Several organizations have a role in the monitoring and oversight of SCWE/GWE. These organizations were not as effective as they could have been, possibly due in part to the reporting relationships of these organizations and their charters. The organizations include:

- Employee Concerns Oversight Team (ECOT)
- Quality Assurance (QA)
- Nuclear Regulatory Affairs (NRA)
- Susquehanna Review Committee (SRC)

The organizational structure will be reviewed to ensure that these organizations are organizationally aligned with the correct degree of independence. Changes based on this review will be made as deemed warranted by July 31, 2009.

The ECOT most directly provides the work environment oversight role.

A number of factors contributed to the ECOT not being effective in identifying the decline in the work environment at the station. For example, the previous change management process did not require changes that could impact the work environment to be reviewed by the ECOT. The ECOT's scope did not include the GWE. The ECOT was too narrowly focused, and sufficient metrics were not available to identify trends and portray an accurate picture of the work environment.

SSES benchmarked industry work environment oversight practices and used the information to revise the ECOT process. The change management process now requires ECOT review of changes that could have an impact on the work environment. The ECOT procedure has been revised to expand the ECOT scope to include GWE. Further enhancements are planned. The current scope, membership, and alignment of the work environment oversight structure are under review. This will be completed by the end of the second quarter 2009.

Detailed metrics have been created and are being reviewed on a monthly basis to assess the health of the work environment.

Until the reassessment is completed and changes implemented, the ECOT is meeting no less frequently than monthly and is reviewing the SCWE and GWE metrics and information provided by internal and external assessments and oversight committees at monthly.

Since March, the ECOT has maintained the "top ten" work environment issue list. This list is used as a tool to communicate recommendations to management and the workforce of the highest priority work environment issues. With completion of the 2009 refueling outage, maintenance of this list has been reassigned to the first-line and second-line supervisors. These management personnel are closest to the issues and

thus better able to identify the issues for inclusion on the list. This use of the "top ten" work environment issues list will be monitored by the ECOT.

PPL will ensure that the activities described above are integrated into the appropriate programs and processes to ensure sustainability.

The Susquehanna Review Committee is an off-site review committee responsible for providing a comprehensive and independent oversight of SSES-related activities pertaining to safety (e.g., nuclear, radiological, environmental or industrial) and any matters that could affect safety. The SRC is expected to be watchful for trends that are not obvious to the day-to-day observer. The SRC reports to and advises the Chief Nuclear Officer. Nuclear Safety Culture, SCWE and GWE issues were not specifically reviewed prior to October 2008. The SRC meetings will be periodically attended by members of the PPL executive management team to provide oversight and directly obtain SRC insights.

Although it is not an oversight body, NRA is to provide insights concerning NRC regulatory and inspection themes, trends in enforcement issues and provide an aggregate review of NRC interactions regarding SSES. There were missed opportunities for documented reporting of these insights, trends, and reviews in the corrective action process. Actions will be taken to revise procedural direction to assure feedback provided by NRC is provided to NRA and entered into the corrective action program.

Alternate Concern Resolution Processes

Before July 2008, PPL utilized two employee concern representatives as the primary concern resolution option for SSES employees. The Employee Concerns Program (ECP) in 2006 and 2007 was deemed to be an effective means for employees to raise and resolve concerns.

In July, two changes were made. An additional alternate employee concern resolution option was created and the reporting relationships were changed.

The additional alternate employee concern resolution option was created by establishing an Ombuds position at SSES. This resulted in having no employee concerns representative located at SSES. The primary goal of the Ombuds position is to resolve concerns at an early stage and to approach work-related conflicts constructively without resorting to more formal dispute mechanisms. Based on the number of contacts made with the Ombuds since the position was established in July 2008, we have concluded that it is an effective alternate means of resolution of employee concerns.

The ECP representatives reported to the chief nuclear officer prior to July. When the Ombuds position was created, the ECP representative and Ombuds were reassigned to the general manager-nuclear support. Industry benchmarking indicates that a direct reporting line to the Site VP or CNO is the standard. Without this direct path to the

highest levels of the organization, some personnel may have been reluctant to raise concerns utilizing these avenues.

Several actions have been taken or are being taken to increase the ability of the workforce to raise concerns. A new process, anonymous condition reports, has been implemented and communicated to the workforce. This process will be monitored by the ECOT.

A toll-free telephone hotline service, provided by a third-party vendor, has been established that will allow the workforce to confidentially and anonymously report and receive responses to concerns. The toll-free hotline has been used successfully by a large number of other nuclear utilities. This service is in addition to PPL Corporation's existing ethics hotline. This process will also be monitored by the ECOT. This service was implemented over a month before the planned completion date of June 30, 2009.

The ECP representative has established an additional office at SSES to increase visibility and availability. This office is in addition to the existing office located in Allentown. In addition, PPL has evaluated the effectiveness of the current ECP and Ombuds processes. Based on this evaluation, PPL has begun the process of re-establishing a full time ECP representative at SSES. One key change from current practice will be that this person will proactively engage the workforce to identify and help resolve issues.

Corrective Action Program Enhancements

As a result of benchmarking, an enhancement to the Corrective Action Program was identified, and the process now includes both SCWE and GWE trend codes. These trend codes have now been developed and applied to issues identified in the Corrective Action Program. They allow tracking, trending and analysis via metrics of issues related to the work environment. The metrics are discussed below.

A daily Management Review Committee (MRC) has also been established. This committee has been created to screen Corrective Action Program issues, which could be potential work environment issues, and to assess the overall health of the Corrective Action Program. The program is also being revised to address feedback mechanisms to the action request originator and actions are being taken to increase communications and the knowledge base of the workforce on the corrective action programs proper use, effectiveness, and issue prioritization features.

Station Health Evaluations

SSES maintains a station health evaluation and equipment reliability process that focuses on the health of programs, systems, structures and components important to plant safety and critical equipment reliability. Issues related to non-critical support equipment such as non-safety related plant cranes, general area lighting, or station elevators are not within the scope of the station health process. However, these types of issues are important to the work environment and have not always been resolved in a manner acceptable to the workforce. PPL will evaluate the use of the plant focus top ten list and determine if it

should be incorporated into the station health evaluation process since it is designed so that various site organizations select the initiatives to ensure work environment improvements are visible and addressed. This evaluation will be completed by the end of the second quarter 2009.

Training

Safety Conscious Work Environment Refresher Training has been provided to managers and supervisors to address their role in the work environment and their responsibility in the resolution of employee issues and concerns. The training reinforced the expectation that safety will not be compromised for production.

PPL will reevaluate the content and frequency of Safety Conscious Work Environment Refresher and other relevant training based on the lessons learned in implementing these initiatives. This evaluation will be completed by the end of the third quarter 2009.

Analyses will also be performed to assess training needs related to the bargaining unit contract, the new quick hit assessment process, communicating nuclear safety concerns and supplemental workers.

Workforce Recognition

A renewed emphasis has been placed on recognizing workforce achievements.

A celebration of SSES's 25th anniversary was held in September 2008 under the theme, "SSES Nuclear Professionals Safely Producing Electricity for 25 Years." On February 19, 2009, SSES Unit 2 exceeded its previous continuous-run record. Various recognition events were held for employees to celebrate this achievement. A celebration also was held to commend design engineering, plant modification and electrical maintenance employees involved in the installation of a new stair landing. The employees were recognized for raising this personnel safety concern and for completing this work in a safe and timely manner. On June 18, 2009, a station celebration was held to recognize the Unit 2 record run of 723 days and the successful completion of the unit's refueling and maintenance outage.

A team of employees will be established to evaluate the effectiveness of the corporate and SSES policies and practices regarding workforce recognition. This evaluation will be completed by the end of the second quarter 2009.

Evaluation of the Health of the Work Environment

Assessments have been conducted to determine if the actions taken and planned will ensure resolution of the work environment issues. These assessments included benchmarking to determine how similar issues were resolved at other facilities. Other activities included: a safety conscious work environment survey performed by an independent outside consultant; activities facilitated by an independent third-party consultant with operations, maintenance, and health physics personnel to ensure we understood their issues; a root cause analysis of the work environment issues; focus

group interviews by an expert independent panel; and assessment of the roles and responsibilities of the work environment oversight function.

The quality assurance organization (QA) has incorporated data gathering and analysis regarding nuclear safety culture and SCWE into its routine assessment and audit activities. QA will modify templates for both types of activities to include a "generic element" to interview personnel with regard to safety culture, SCWE, and general work environment. These interviews will include specific questions derived from industry guidance (INPO Principles for a Strong Nuclear Safety Culture, NRC documents RIS 2005-18 and 2006-13). Analysis of the responses will be performed using tools such as that developed by the Utility Service Alliance for use during its Safety Culture Assessments. A periodic summary of the results will be included in the routine Station Summary Reports issued by QA and will be provided to the ECOT. The first summary was issued prior to the planned completion date of 6/30/2009.

The ECOT is reviewing metrics monthly to assess the health of the work environment.

INPO will be performing an evaluation of SSES in September 2009.

A full-scope work environment survey by an independent third party will be performed once the revised plan has had time to have an impact on the work environment. This survey will be completed by December 31, 2009.

Metrics to be used to monitor effectiveness of our actions

SCWE indicators have been created and grouped to allow assessment of each of the four pillars of SCWE. We also have created metrics to assess the general work environment (GWE) that are based on the types of issues that have been identified through diagnostics completed thus far. The indicators are being assessed monthly by the ECOT along with perspectives provided by internal and external assessments and oversight committees. The assessment will result, as necessary, in recommendations to the chief nuclear officer and the senior leadership team. A description of the metrics to be evaluated for each group is as follows:

Workforce willingness to raise concerns through the normal problem resolution process - This group of metrics trends how often the action report system is used and the types of work environment issues that are identified.

Management effectiveness at resolving concerns through the normal problem resolution process - This group of metrics trends resolution of work environment and corrective action program issues.

Effectiveness of the alternate resolution processes - This group includes trends associated with use of the employee concern, ombuds, NRC allegations, anonymous condition reports, concern hotline issues and bargaining unit grievance processes. The effectiveness and timeliness of concern closure will also be measured.

Management effectiveness at detecting and preventing retaliation - This group of metrics includes trends associated with proposed workforce discipline actions.

General work environment - This group of metrics includes trends associated with change management, communications, workforce relationship issues, and resource.

Conclusion

The actions described in this plan, many of which already have been taken or are currently in process, focus on constructive leadership, improved relationships with the workforce, and increasing confidence in our commitment to a healthy Safety Culture and to a Safety Conscious Work Environment. The initiatives include enhancing the Corrective Action Program, revitalizing our change management program, increasing the effectiveness of our employee communications, and enhancing the confidence of our employees in their ability to effectively raise and resolve concerns.

This work environment improvement plan will continue to evolve as we incorporate additional diagnostic activities and the lessons learned from those activities, benchmarking, or other sources.

We understand and value a healthy nuclear safety culture and the principles and values it embodies. We will continue to operate the SSES units safely. We are committed to addressing our work environment issues by following, monitoring and continually evaluating and updating this action plan. The day-to-day active management, monitoring and support of a strong nuclear safety culture and the implementation of this plan are PPL strategies to ensure the long-term sustainability of a strong nuclear safety culture at SSES.