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May 8, 1990

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Systematic Assessment of Licensee Performance
(SALP) Update

As discussed with the NRC staff during the Oyster Creek Mid-Salp review meeting held October 31, 1989 in King of Prussia, PA, Attachment I includes a summary of initiatives and accomplishments at Oyster Creek. We are committed to continuing to upgrade and improve performance in all areas and recognize that much remains to be done. However, we believe the actions taken or underway are appropriate and reflect commitment of management and resources to achieve desired improvements in the functional SALP areas.

We anticipate that this will assist you in your SALP review of the Oyster Creek Nuclear Generating Station.

Sincerely,

P. R. Clark

P. R. Clark
President, GPUN

PRC/BDEM:jc
(Salp90-1)

cc: Mr. Thomas Martin, Administrator
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OYSTER CREEK PLANT OVERVIEW

GPUN would like to emphasize initiatives undertaken which are people-oriented programs that have resulted in improvements in all areas. Included among the significant and substantive initiatives are organization changes, teambuilding efforts, resolution of long-standing bargaining unit items, and personnel development activities.

ORGANIZATIONAL CHANGES

° Reassignment of Maintenance, Construction and Facilities Division functions to the Plant Division and new Site Services Division.

  - Plant Division responsibilities now include conduct of maintenance outages.

TEAMBUILDING EFFORTS

° Reviewed existing performance standards and embarked on drafting new standards addressing:

  - Radiological controls
  - Industrial safety
  - Procedure improvement
  - Housekeeping
  - Operations

° A Radiation Performance Committee comprised of management and bargaining unit personnel was established.

° Efforts of the Industrial Safety Committee have resulted in:

  - Implementation of Safety Incentive Awards Program.
  - An all-time record for consecutive days without a lost-time accident was set.
  - Only 1 lost-time accident in the past 8 months (over 1.5 million hours and about 250 days).

° An Employee Recognition Program was established with the following results:

  - A joint bargaining unit and management selection committee was formed.
  - Individual/team awards are made quarterly.
  - Excellent participation/acceptance has been noted.

- Established a Professionalism Program to improve professionalism, resolve NRC people-related concerns and apply INPO Principles of Professionalism.
  - This was a collaborative bargaining unit and management effort.
  - Employee involvement in development and ownership is emphasized.

- Teambuilding Training
  - Teamwork and leadership training has been provided to nearly all managers and supervisors.
  - Inter-department and intra-department sessions are conducted to promote effectiveness.
  - Managers and supervisors are currently being trained in the principles promoted by W. Edwards Deming.

RESOLUTION OF LONG-STANDING BARGAINING UNIT ITEMS

- An Operator Progression Program which resolves long-standing arbitrations, resource planning problems and training inefficiencies was established. The program provides for:
  - Developing a nuclear plant operator job sequence.
  - Use of Plant Operator Selection System (POSS) Test as a screening device.
  - Screening of entry level personnel to control room operator (CRO) level.
  - Forming an Academic Review Board.
- Maintenance Progression Program
  - This program is currently close to resolution of long-standing mechanical maintenance advancement issues.

PERSONNEL DEVELOPMENT INITIATIVES

- Increased participation by managers as INPO Evaluation observers and peer evaluators was emphasized during the SALP period with the following participants:
  - Five senior managers (1989).
  - Three mid-level managers (1989).
  - Additional managers are being rescheduled for 1990.

° Participation in the INPO Plant Manager Program included:

- Deputy Director (1989).
- Plant Engineering Director (1990).

° Cross-Training/Development

- Rotated Operations Manager and Radwaste Manager.
- Established a senior manager position in Plant Engineering which was filled by a senior manager from Technical Functions.
- A Plant Engineering senior manager was enrolled in License Training.
- 46 employees are enrolled in the University of Maryland Degree Program.
- 2 SRO's are enrolled full-time in a degree program.

Many of the initiatives noted above, and those discussed in the functional SALP areas, (Attachment 1) are supported by detailed action plans in the station Plan for Excellence. These action plans provide valuable visibility/focus and accountability which are key in our quest to achieve excellence in all phases of operations.

Functional Area: Operations

It is appropriate to identify the following in the Operations area:

- A six shift rotation was achieved as of February 5, 1990. In addition, the following staff positions were filled during the SALP period:
  - Two (2) new Group Shift Supervisors (for a total of 7)
  - Two (2) SROs were transferred to Operations to become Group Operating Supervisors (GOSs)
  - Eleven (11) CROs were licensed and qualified
  - Nine (9) new Equipment Operators were qualified
  - One (1) new Radwaste Shift Supervisor was qualified (for a total of 6)
  - Nine (9) new Radwaste Operators were qualified

- An SRO Licensed Training Coordinator position was established in mid-1989.

- Our Operator Resident Student Program in which licensed Operations employees attend college full time in order to earn a technical (engineering, etc.) degree is continuing successfully. We currently have two (2) SRO Licensed GOS's enrolled and two (2) more are expected to be enrolled this fall. The first graduate is expected in May, 1990.

- The Operator Concern Program was established during this SALP period and is being utilized as a communications tool. Thus far, over 70% of those submitted have been responded to and closed. This program has gained widespread acceptance by SROs, CROs, NLOs, Chemistry personnel and others.

- A certification program has been developed for all milestone evolutions including restart and refuel.

- Action plans have been developed for all major evolutions including power ascension, power descension, drywell inspections and other significant system operations.

- Management coverage has been intensified during startup.

- Our plant labelling program is well underway and is expected to be 75% complete by 5/1/91. Thus far, 12 out of 112 systems have been labeled using 5,450 labels out of an estimated 60,000.

- The Plant Operations Department now chairs the Plan of the Day meeting. This meeting prioritizes all maintenance requests with emphasis on the "Full Deck" concept.

- During this SALP period, improvements have been noted in AOG operability (99% this cycle vs 90% prior cycle) and reactor water quality (0.075 us/cm this cycle vs 0.110 us/cm prior cycle).

Operations

- During this SALP period, our efforts to improve root cause determination through the critique process using INPOs HPES approach has succeeded in improved quality of critiques, improved timeliness of critiques and greater worker participation. Actions resulting from the critique are tracked to completion.

- Considerable attention has been directed toward minimizing the number of locked-in alarms on control room panels, with the goal of achieving a "black board". The number of alarms locked-in on a daily basis continues to be low and the "black board" goal was achieved several times during the SALP period.

Functional Area: Radiological Controls

It is appropriate to identify the following in the Radiological Controls area:

° The Plant and Support Divisions have taken a more aggressive role in Radiological Controls. Several initiatives have been undertaken to reduce collective personal radiation exposure and increase management and worker sensitivity to the importance of Radiological Controls. Examples of these initiatives are, Radiological Performance Task Force, Radiological Improvement Plan, and Drywell Exposure Reduction Program. These initiatives have resulted in an increased involvement from senior management to the radiation worker in radiological control issues. In addition, added resources and commitment have been dedicated toward (1) improved radiological worker training, (2) undertaking plant modifications, (3) performing an extensive chemical decontamination, and (4) development of an ALARA initiative to reduce collective radiation exposure. Additional actions are under way to reduce personal and clothing contamination.

° A revised procedure for Locked High Radiation Area Control has been implemented. As a result, the Oyster Creek plant has not experienced a locked high radiation area violation since August 1989. GPUN recognizes that significant changes in training, planning, control of work and attitudes are needed, and that real meaningful changes take time to effect.

° The Radiological Controls Department plans to add additional personnel with technical health physics backgrounds to the Radiological Engineering staff. As part of that change, we have created an ALARA Engineering group within the Radiological Engineering section. This group will be devoted to review of work requests and job orders for ALARA significance. The following is a partial listing of the group's accountabilities:

- Evaluate all proposed work for radiological significance
- Incorporate ALARA actions into job packages
- Provide prompt notification to and coordinate with the Radiological Controls Field Operations section regarding developing work in radiologically controlled areas
- Develop dose estimates for planned work
- Track radiological performance on individual jobs at a high level of detail
- Coordinate with production departments (e.g., Maintenance, Site Services and Contractor) to ensure adequately prepared work crews for radiological work
- Perform in-field work site evaluations of work crew performance to improve radiological work practices

- Evaluate work activities and techniques so as to develop methods for short and long term dose reduction (e.g., tools, work practices, training aids, surveillance techniques, remote technology)

- Maintain statistical data on work group radiological parameters

- Conduct on-the-job training in radiological practices and techniques for assigned work groups

- Prepare ALARA reviews and post job debriefs

- Facilitate RWP requests and general coordination with Radiological Controls Field Operations

- Perform assessments of radiological performance of plant operations and maintenance activities to develop plans for dose reduction in their conduct

GPUN believes that the corner has been turned toward improved radiological performance and that the attitude of personnel toward radiological control accountability has significantly improved. This is difficult to quantify other than by observation in the field. However, efforts to improve radiological controls performance continues as a high priority item.

Functional Area: Maintenance

In December, 1989, the Maintenance Organization was relocated from the MCF Division to the Oyster Creek Division.

It is appropriate to identify the following in the Maintenance Department:

- During the SALP period, efforts have been successful in reducing the corrective maintenance backlog from 562 to 452 job orders, (a 19.6% decrease). In addition, Material Non-Conformance Reports (MNCR's) have been reduced from 60 to 3 and Quality Deficiency Reports (QDR's) have been reduced from 18 to 1.

- The following programs have been developed and implemented during the SALP assessment period:

  - Corrective Maintenance Performance Measurement System (CMPMS).
  - Extensive painting and "model space" program.
  - Procedural controls for field wiring deficiencies.

- Implementation of Root Cause Determination has been facilitated by utilizing:

  - Improved critique process.
  - HPES - root cause analysis process.
  - New "Lifted Leads" newsletter.
  - Major upgrade in reactor recirculation pump and seal procedures, test equipment, tools and training were used to enhance the quality of maintenance performed on recirculation pumps "A" and "D".

- The following changes have been implemented into our computerized data management system, Generation Maintenance System 2 (GMS2) database:

  - We have developed a GMS2 Users Manual.
  - We have revised administrative procedures to include GMS2 requirements.
  - Computer generated job orders have streamlined work control.
  - We have implemented electronic entry of equipment history.
  - We have implemented electronic entry of work requests, routing review and approval.
  - We have significantly improved the machinery history database, approximately 20,000 records have been inputted and approximately 40,000 records have been inputted into the component data base.
  - We have expanded GMS-2 system training to include over 900 users.
  - We have developed and implemented a comprehensive failure trending program.
  - Improvements have been made in planning and scheduling via GMS2.
  - GMS2 has been modified to support a new integrated scheduling program via GMS2-Project 2 computer interface.

Maintenance

- Improvements in Maintenance Training changes are noted in the following areas:

  - A new mechanical maintenance lab was established.
  - There was greater utilization of mock-ups.
  - The craft workers were directed to look beyond work boundaries.
  - The newly developed Mechanical Maintenance Technician Program graduated its first class of 10, and they are now in the work force.
  - A Calibration Lab Technician Training Program is under development.
  - A Fire Protection Technician Program is under development.
  - A Quality Maintenance Team (QMT) program is under development.
  - A newly developed Station Service Worker Training Program is being implemented.

- The following radiological work control changes were implemented during this assessment period:

  - The Reactor Building floor drains have been hydrolased to reduce radiation levels.
  - Maintenance supervisors now investigate RIR's, and skin and clothing contaminations, in addition to having an immediate management review performed.
  - A New Hepa Unit Control Program was instituted.
  - An improved contaminated tool control program using the latest INPO guidelines was instituted.
  - A plant walk-through Laser Video Disc System is in use by planners and maintenance crews.
  - A plant decontamination program was implemented.
  - An annual PM program was developed and implemented to maintain high radiation area door locks.
  - An advanced High Radiation Area Worker Awareness Training Program was developed.

These programs will continue to be expanded and enhanced as necessary for improved maintenance performance at Oyster Creek.

The Maintenance Department has implemented the following actions to address recommendations and concerns identified in the last SALP review of Oyster Creek.

- In order to increase communication between groups, the following actions were taken:

  - Increased formal and informal meetings, pre-job briefings, etc.
  - Improved feedback from critiques.
  - Additional training efforts were implemented.
  - A shift turnover procedure was developed for supervisors.
  - Greater use of computer tracking was implemented.
  - A procedure upgrade program was emphasized.
  - Use of a "steady state contractor" was emphasized.
  - Outage control improvements include use of an outage control center and implementation of a new plant modification control procedure.

Maintenance

- The following changes have been made to rework controls:

  - A program to track rework items has been in place since 1/1/89.
  - Site Services Division (SSD) and Maintenance rework are reported separately.
  - The Incident Critique procedure is used for root cause evaluation.
  - Action items are tracked as a result of root cause analysis.

It is appropriate to identify the following in the Plant Materiel Department:

- A significant Valve Maintenance Upgrade effort, was established and executed.

- The Nuclear Mutual Limited (NML) plan was revised and is being implemented to upgraded standards for maintaining the "Balance of Plant".

- The Development of Life of System Maintenance Planning has met the following milestones:

  - Development of Implementation Plan completed
  - Reliability Centered Maintenance Guideline completed
  - Industry (INPO et al) interest
  - Initiating integration with Plant Life Extension and Probabilistic Risk Assessment
  - Initiating integration with Root Cause efforts
  - Initiating Reliability Centered Maintenance Training
  - Integrating Utilization of Equipment Maintenance Plans with Maintenance Program

- Significant changes in the technical review and direction of major site maintenance (e.g., outage scope/project sponsorship) were implemented.

- Three system RCM evaluations and one major component (e.g., Main Steam, Reheat Steam, Extraction Steam and Recirculation Pumps) were completed.

- Two system RCM evaluations (e.g., RWCU and Condensate) are being developed.

- Reliability Centered Maintenance methods with Failure Trending and PM program are being integrated.

- Developed and implemented an Intake area Materiel Condition upgrade.

- The Plant Material Department is continuing to upgrade the PM Program for more effective use of resources and increased reliability (e.g., RCM application, standardization, work consolidation, increased monitoring, improved technical direction and improved safety review).

- Effective monthly vibration and lube oil monitoring programs are continuing.

Maintenance

- Development and implementation of the winter/summarization program is continuing.
- Major upgrades and simplification to Control of Maintenance and PM Program were developed and implemented.
- Compliance and upgrade to INPO's NPRDS reporting is continuing.
- A comprehensive Failure Trending process is being developed and implemented.
- A significant backfit of component history data base (approx. 20K records) is being accomplished.
- A comprehensive Materiel Condition Issues summary and tracking program is being developed and implemented.
- The Plant Materiel Department is initiating a major upgrade to plant Predictive Maintenance and equipment Performance Monitoring.
- The pre-startup Drywell Inspection has been upgraded.
- Developed and implemented the Unidentified Leak Rate Reduction program as part of the integrated outage workscope.
- Developed and executed the Integrated Outage Schedule for 1990 mini outages which proved extremely successful.
- A 6-shift look ahead schedule to coordinate outage work activities and site support organization was developed and implemented.
- Major upgrade of Recirculation Pump and Motor maintenance plan, including evaluation of potential vulnerabilities, improved procedures and logistics, improved monitoring and upgrade of seal design.
- An effective site execution of a quality maintenance plan was realized during Recirculation Pumps "A" and "D" events.
- An overhaul specification for Recirculation Pump Motors was developed.
- Increased use of system outage concepts to issue comprehensive work packages associated with plant maintenance was realized.
- Electronic job order processing system via GMS2 was implemented.
- The Plant Materiel Department is supporting enhanced Technical Staff and Management (TS&M) Training.
- The Plant Materiel Department supported development and is complying with the Plan for Excellence to meet plant Goals and Objectives for self-improvement and increased coordination.

Functional Area: Emergency Preparedness

It is appropriate to identify the following in the Emergency Preparedness area:

- Technical Support Management training, such as training in symptom based Emergency Operating Procedures is offered to TSC engineers. This was done to improve the level of expertise available to emergency management in the TSC. Training has been well received and is intended to be conducted periodically.

- "On the Job Training" (OJT) which is training given by Emergency Preparedness and Training Department staff members was initiated this assessment period. This training is given in the Control Room and other Emergency Response facilities and is intended to enhance team work and team spirit. This training involves such topics as Event Classification and making notifications. About 20 OJT sessions have been conducted thus far in 1990 and it is expected that an additional 20 will be conducted during the remainder of 1990. These sessions train ERO members in a "hands-on" manner and work towards development of team spirit. They have significantly improved ERO proficiency.

- The Emergency Preparedness section is heavily involved in the development of the OCNGS replica simulator. While this has taken significant resources from the section, it is felt to be well worthwhile in that the simulator will be designed and installed in a manner to support Emergency Preparedness drills. This will significantly improve the realism of the drill program.

- Siren availability during 1989 was 97%.

- GPUN would also like to note that neither the drills nor the inspections conducted during the assessment period identified any violations, deviations or unresolved items and that all items of improvement were quickly addressed and not repeated. At the close of the recent SALP period, there were no open items to be addressed.

Functional Area: Security

It is appropriate to identify the following in the Security area:

- The equipment in the Central Alarm Station (CAS) Secondary Alarm Station (SAS) and the North Gate was updated to improve operator efficiency.

- Concrete road barriers were purchased and strategically placed at various ingress roads should they be required.

- A ready room in the Main Gate Processing Center was designed and equipped with up-to-date response force equipment, radios and emergency equipment.

- The pistol range was redesigned to conform to the standards of the State of New Jersey; certification of the range was received on March 30, 1990.

- A duress alarm system was installed in both the Main and North Gate Processing Centers.

- New wiring and Perim Alert III sensors were installed on the Protected Area fenceline.

Functional Area: Engineering Technical Support

It is appropriate to identify the following in the Engineering/Technical Support area:

- In accordance with the previously established SALP Action Plan, two Design Basis Documents (DBD's) were completed by the third quarter of 1989, the documentation was finalized prior to the end of the year. These cover the Containment Spray System and the Automatic Depressurization System. As part of our continued action plan, GPUN will complete four (4) DBD's per year.

- Two Safety System Functional Inspections (SSFI's) were conducted, one for the Emergency Electrical Power System and one for the Auto Depressurization System. These SSFI's were conducted during the third and fourth quarter of 1989 and the documentation is being finalized. We plan to conduct four (4) SSFI's over the next two years.

- Work on the Oyster Creek Drawing Consolidation Project is proceeding on schedule, with the overall goal of converting approximately 750 drawings to computer-aided products by the end of 1990. The ongoing status of this work is being discussed with the NRC resident inspector on a quarterly basis.

- The Conventional Drawing Improvement Project will be finalized by May 31, 1990 and will include approximately 700 drawings.

- We have instituted the practice of holding engineering interface meetings on an approximately bi-weekly basis to review and improve the coordination of ongoing engineering activities and to enhance the overall interface between the site and home office technical personnel.

- Kickoff meetings are being held on selected projects to assure that the proper level of interaction and awareness is occurring between site and home office personnel involved in these modifications.

- In addition, a senior management meeting was held with the Vice President/Director Oyster Creek and his staff wherein the Technical Functions Department Directors presented the status of selected longer-term major programs and significant technical issues. It is planned that these meetings will be continued on a roughly semi-annual basis.

Functional Area: Safety Assessment/Quality Verification

Specific Area: Training

It is appropriate to identify the following in the Training Department.

- One general departmental self assessment and one specific self assessment in the Maintenance Training area were conducted in an effort to improve our training process.

- An integrated self improvement plan (Plan For Excellence) was developed and implemented in the Oyster Creek Training Department.

- Six of eight SRO candidates and 11 of 11 RO candidates successfully passed NRC License Exams. Oyster Creek continues to have a license exam success rate above the industry average.

- An automated Action Item Tracking System was established for the entire Training Department.

- Major increases were achieved in the level of site user group knowledge of the systematic approach to training process.

- Advanced simulator training scenarios were implemented in the operator requal training program at the 9 Mile Point Simulator which we will continue to use until our site specific simulator is delivered.

- Full development of exam bank material to support the new style NRC requal exam process was accomplished.

- A new burn pad to support hands-on fire protection training was constructed.

- Our target range was essentially reconstructed to increase its' usability and effectiveness in security training. The range is now certified by the State of New Jersey.

- Major increases were realized in the amount of equipment that we have available for hands-on maintenance training. Additionally major increases in on the job training and sign offs occurred in 1990.

- Major improvements in office and work areas of the Training Department were made in 1990 and a corresponding increase in morale has been observed.

Safety Assessment/Quality Verification

Specific Area: Training

- All training supervisors and managers completed Supervisory Development Training during this year.

- A significant amount of effective hands-on security training was achieved via joint training sessions led by our local police Special Tactics and Reconnaissance (STAR) Team.

- Major strides were made in the development of the following training programs:

  - Professionalism
  - Deming
  - Quality Maintenance Training (QMT)
  - Advanced Radiation Worker
  - Environmental Sampling Technician

- The following new training programs were implemented in 1990:

  - Enhanced GET
  - Fitness For Duty
  - Radiological Controls Seminar for Supervisors and Managers
  - Nuclear Mechanical Technician

- In conjunction with the University of Maryland a Nuclear Science Degree Program was established at the site.

- An automated training matrix management program was implemented in the Operator Training area.

Safety Assessment/Quality Verification

Specific Area: Quality Assurance (QA) Quality Control (QC)

It is appropriate to identify the following in the QA/QC Departments.

- QA Management has conducted Deming Management seminars for working groups and managers. This program promotes an increased awareness of the importance of quality in all activities.

- QA Management has conducted teamwork and leadership sessions with the Oyster Creek QA organization to promote better understanding and cooperation throughout the organization.

- Operations (OPS) QA personnel attended INPO observation techniques training and training in Root Cause Analysis (HPES).

- QA personnel have been scheduled and are attending the Technical Staff and Managers (TS&M) Training Program.

- QA has established a procedure simplification plan and scheduled an implementation date to reduce the number and improve quality of QAD procedures.

- OPS QA and Radiological Controls management have developed a specific checklist and established a monitoring schedule on Radiological Controls and Industrial Safety practices to trend targets for improvement in these areas.

- Procedures for commercial grade materials dedication have been upgraded to meet EPRI guidelines.

- QC inspectors have received rotational training in the QC programs area to broaden their overall knowledge of the O.C. Q.A. Mod/Ops Inspection Program.

- The recent reorganization within QA has provided, amount other things, an added emphasis on procurement related activities, which is a major quality concern in the industry.

- The recently revised and NRC-approved GPUN QA Plan allows for more flexibility in directing QA attention to areas of concern.

QA has implemented the following actions to address recommendations and concerns identified in our last SALP review of Oyster Creek.

- QC conducts MNCR review meetings with responsible plant personnel to review the open MNCR backlog to improve responsiveness to implementation of corrective action.

- QA has significantly strengthened the management escalation program for QA identified deficiencies.

- QA has established a definition for minor deficiencies and this definition is included in appropriate procedures.

- OPS QA monitors have received training in corrective action programs.