U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Number: 50-397/93-15

Docket Number: 50-397

License Number: NPF-21

Licensee: Washington Public Power Supply System
P. O. Box 968
3000 George Washington Way
Richland, Washington 99352

Facility Name: Washington Public Power Supply System
Nuclear Reactor Facility, Unit 2 (WNP-2)

Inspection at: WNP-2 site near Richland, Washington

Inspection Conducted: June 28, 1993 - July 2, 1993

Inspectors: T. Burdick, Region III, Team Leader
P. Morrill, Region V (June 30 - July 2, 1993)
T. Sundsmo, Region V
J. Lynch, NRR (contractor)
D. Schultz, NRR (contractor)

Approved by: P. J. Morrill 8-9-93
P. J. Morrill, Chief Date
Operations Section

Summary

Inspection on June 28 to July 2, 1993 (Inspection Report No. 50-397/93-15)

Areas Inspected:

This announced inspection, using the methods of NUREG 1220, Training Review Criteria and Procedures, Revision 1, as described in Inspection Procedure 41500, Training and Qualification Effectiveness, examined the licensee's implementation of a systems approach to training (SAT). The inspectors focused on:

- Non-licensed operator and chemistry technician training programs
- Licensed operator training programs
- Management corrective actions
- Training department staffing

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Results

General conclusions and Specific Findings:

The inspection team found that training was being conducted using a systems approach to training (SAT). However, training staffing was insufficient without extensive overtime to accommodate the current training workload along with ongoing program accreditation commitments, training personnel turnover, and management changes. This appeared to have led to prioritization of work in which immediate needs superseded long range tasks. (Sections 3.c.(1), 4.c.(6) and 5.b.)

Management used quality assurance and other internal audits to identify training program problems. However, the corrective action tracking and follow-up were not always effective. (Section 4.c.(1))

Line management has demonstrated increased involvement in the licensed operator requalification program. However, there was little indication that other training programs received significant line management attention. (Sections 2.c.(1) through 2.c.(4))

The inspectors observed that operator performance of Emergency Operating Procedures (EOPs) and evaluation techniques used by the training department evaluators had significantly improved over the last two years. (Section 3.b.)

Summary of Violations and Deviations:

The licensee failed to maintain a continuous two year requalification training plan for the current two year training cycle (1993-94) contrary to 10 CFR 55.59(c).1. Neither the 1991-92 nor the 1993-94 two-year plans were approved by licensee management. Contrary to the licensee's procedures, a planned deviation from the 1993-94 plan was not reviewed by the Plant Operations Committee. (Section 3.c.(1))

The licensee failed to initiate a plant evaluation report to track and document an audit finding in January 1993 which identified the lack of an approved operator requalification training program for the periods 1991-92 and 1993-94 as required by the procedure and contrary to 10 CFR 50, Appendix B, Criteria XVI. (Section 4.c.(1))

Summary of Open Items:

No open items were identified or closed in this report.

Details

1. Persons Contacted:

Licensee Contacts:

A. L. Oxsen	Deputy Managing Director
*J. V. Parrish	Assistant Managing Director, Operations
*G. C. Sorensen	Regulatory Programs Manager/Supply System
*J. C. Gearhart	Director, Quality Assurance
*J. Swailes	Plant Manager
*J. W. Baker	Nuclear Training Manager
*J. D. Cantrell	Acting Nuclear Training Manager
*G. O. Smith	Operations Division Manager
*W. D. Schaefer	Operations Manager
*J. Engbarth	Administrative Auditor
*D. L. King	Operations Training Development Manager
T. Love	Chemistry Manager
D. Werlau	HP/Chemistry/GET Manager
*D. A. Bennett	Chemistry Supervisor, Operations
*L. D. Morrison	Supervisor, Radwaste Processing
*R. G. Devall	Quality Assurance Engineer
*S. Bruce	Lead Requalification Simulator Training Specialist
*P. M. Taylor	Operations Liaison
T. Dezember	Support Shift Supervisor
L. Mayne	Chemistry Operations Supervisor

Additional licensee managers, supervisors, trainers, and employees were interviewed during the course of this inspection.

NRC Contacts:

R. Barr	Senior Resident Inspector
*D. L. Proulx	Resident Inspector
J. W. Clifford	Project Manager, WNP-2, NRR

*Denotes individuals present at the exit meeting.

2. Non-licensed Operator and Chemistry Technician Training Programs (41500)

a. Scope

An inspection of the WNP-2 Non-licensed Operator and Chemistry Technician Training Programs was conducted from June 28 to July 2, 1993. The training inspection was conducted in accordance with the guidance of NUREG 1220, Revision 1.

Interviews were conducted with a sample of sixteen licensee personnel including managers, supervisors, trainers, operators, and chemistry technicians. A sample of records were reviewed and direct observation of ongoing training was conducted during a control room simulator session for equipment operators. This simulator training focused on diesel generator electrical operations.

b. Summary

The inspectors concluded that both programs were conducted using a systems approach to training. No violations or deviations were identified in these areas. Weaknesses identified were:

- Management did not communicate performance expectations directly to non-licensed employees.
- Management did not appear to be actively involved in non-licensed training programs.
- There was no formal feedback process to non-licensed personnel that assured closure of recommendations from students.

One strength observed was the training matrix recently developed for equipment operators providing a two year detailed plan for continuing training.

c. Evaluation Details

(1) Procedural Compliance and Self-Checking

Both equipment operator instructors and equipment operators (EOs) indicated that the training on policies and management expectations associated with procedural compliance, self-checking, and configuration management were difficult to accomplish. One instructor interviewed felt that the emphasis given to these subjects by senior management attendance at the training sessions for licensed operators was good, but the lack of such senior managers at similar training for non-licensed operators was detrimental. Three instructors interviewed felt that these topics were among the weakest areas of training for non-licensed operators.

Based upon the interviews and the examination of EO training (Section 2.c.(2)), the inspectors concluded that procedural compliance and self-checking needed greater emphasis to non-licensed operators. The presence of senior managers during training of licensed operators appeared to have improved training effectiveness. Similar involvement of line management in EO training on self-checking and procedural compliance appeared appropriate.

The Operations Manager responded to the inspectors' concerns by stating that he would attempt to provide more face-to-face communications with equipment operators during training.

(2) Equipment Operator Training Program

The inspectors found no Operations Department involvement in the establishment or modification of Equipment Operator training. The Nuclear Training Program (Technical Training Manual, TTM 1.0., Section 3.0, Program Requirements), prescribed that, "line management is ultimately responsible for the overall quality of their training programs ....", and that "Line management ownership in training is defined as taking an active role in the content and conduct of their training programs." TTM 1.0, Section 3.0, Program Requirements, paragraph 3.1, Line Management, requires line management ownership in training of the organization's employees. Further, line and training management were required to continuously monitor the conduct of training to assess quality and provide guidance and direction for continuing training activities. The inspectors stated that although this facility procedure was not a regulatory requirement, line management should address the deficiency.

The inspectors reviewed the Equipment Operator Training Matrix that specified each cycle's training content, EO training announcements, and interviewed Equipment Operator Training Specialists. The inspectors noted a Training Department strength in that EO training specialists had recently prepared a complete EO Training Matrix for a two year cycle. This matrix identified priority subjects to be taught on a continuing basis, and married the seven week training cycle of the EOs with the seven week cycle of the SROs/ROs. This permitted training of the crews together as much as possible. The matrix addressed appropriate systems and administrative requirements, and promoted parallel systems training to both groups. Prior to the start of each training cycle, the Training Department prepared an announcement to the Operations Department concerning the content of the subsequent cycle, location, dates, etc. Based upon the inspector's interviews, the EOs considered the course to be good.

However, as described above, the inspector found that Operations had not provided input for the course content to assure the department's needs were fulfilled. As a consequence, the curriculum was constructed based only on trainer experience.

The inspectors concluded that the implementation of the equipment operator (EO) training program by the Training Department was a strength. At the same time, the inspectors concluded the Operations Department should become more actively involved in developing and managing the training of its employees.

The licensee stated that they will consider periodic operations and training staff meetings to discuss EO curriculum issues similar to periodic meetings on SRO/RO issues.

(3) Equipment Operator Errors

The inspectors observed that several events related to clearances, valve status, and breaker lineups had recently occurred due to improper Equipment Operator (EO) performance. For example:

o	5/6/93, PER 293-0507	Danger tags were incorrectly hung on DG2-SM8 breaker and associated fuses instead of SM8-DG2.
o	5/12/93, PER 293-0570	Valve EDR-V-158B was inadvertently opened instead of EDR-V-159B, improperly transferring tank EDR-TK-4B contents to a condensate storage tank.
o	6/18/93, PER 293-0900	Valves CRD-V-102/1031, V-103/1031, and V-105/1031 were found closed when they were supposed to be open. They were not properly positioned during performance of hydraulic control unit lineup in accordance with PPM 2.2.1.

The inspectors reviewed procedural adherence and clearance order training received by the equipment operators to determine if the training provided was adequate. EO Initial Training in EO applicable procedures was a self-paced module. The module specifically addressed the subjects of procedural adherence, including when procedures had to be physically present during task performance, and the principles of "self-checking" and its associated acronym, "STAR" - Stop, Think, Act, and Review. EO Initial Training also included a four hour classroom course on "EO Good Practices" which focused on "Conduct of Operations". A section of the instruction specifically addressed "Procedure Compliance"; a learning objective specifically addressed the subject of verification techniques to be used when specified by valve and breaker line-up checklists.

Similar subjects were present in the EO continuing training curriculum, and included specific subjects such as 82-EBB-

0501-LP, Danger Tag Clearance Orders, which included learning objectives such as, "State the requirements for independent verification ....", "Describe how to perform an independent verification", "...a simultaneous verification", etc.

Based on the content of the training materials and lesson plans used to train EOs, the inspectors determined that materials were adequate to convey the requirements to the trainees. Student evaluations adequately tested retention. The inspectors found that training was adequate prior to the time the EOs entered the work environment.

As a consequence, the inspectors concluded that recent (1992 - 1993) EO errors in valve and breaker alignments did not appear to be related to inadequate training conducted by the Training Department.

(4) Chemistry Technician Self-Checking

Self-checking principles had been taught to the chemistry technicians. The inspectors found that a requirement for self-checking was not included in Administrative Procedure 1.3.58, Conduct of Chemistry. It was stated by the Chemistry Supervisor that in the conduct of chemistry procedures, verbatim compliance was required in order to obtain proper results, and that through the use of such quality control processes such as blind standards and independent checks, the quality of the results was assured. The inspectors observed that support of self-checking principles by chemistry management for the implementation of procedures appeared appropriate to ensure a uniform approach by the technicians.

This issue was discussed with the new (two months tenure) Chemistry Manager, who indicated that she would evaluate the concern.

(5) Feedback to Equipment Operators and Chemistry Technicians

The inspectors' review of course critique documents for licensed operator, equipment operator, and chemistry technician training identified that the operators frequently made constructive comments with regard to the training program. However, no formal mechanism existed to feedback to the operator making the suggestion the disposition of the suggestion. Some feedback was made by discussions or meetings following training cycles. The inspectors observed that a more formal feedback mechanism may encourage additional constructive criticism of the training program by the operators.

3. Licensed Operator Training Program (41500)

a. Scope

Evaluation of the licensed operator training program was performed by review of training program documentation and records, interviews with the licensee's staff, and direct observation of simulator training. Interviews with approximately 15 members of the licensee's staff from the Operations and Training Department, both management and operators, were conducted following the guidelines of NUREG-1220, Training Review Criteria and Procedures, Revision 1. Training department documentation reviewed by the inspectors included:

- The licensed operator task lists (RO and SRO),
- Checklists for required annual training (RO and SRO),
- Draft two year training plans for 1991-92 and 1993-94,
- Selected lesson plans,
- Requalification training attendance records (record of actual training),
- Weekly requalification training feedback forms from licensed operators and Training Update System (TUS) requests for training,
- Recent licensee audits and self assessments of the training department,
- Training department procedures and memoranda documenting program implementation, and
- Graded examinations taken by the initial license class.

b. Summary

The inspectors concluded that the licensed operator training program was being conducted in a systematic manner. Significant programmatic weaknesses that were identified during this inspection included:

- Implementation of draft (unapproved) two year training plans,
- Changes to the draft training plans without appropriate management reviews,
- Ineffective tracking of, and adherence to identified program requirements and commitments, and
- Training department staffing levels that appeared insufficient to perform the work that had been assigned to the department (Section 5).

The inspectors observed that, notwithstanding these weaknesses, operator performance of Emergency Operating Procedures (EOPs) and evaluation techniques used by the training department evaluators had significantly improved over the last two years.

c. Evaluation Details

(1) Licensed Operator Requalification Program Approval

The inspectors observed that Technical Training Manual 5.3.2, IV.C.4, WNP-2 Licensed Operator Requalification Program Description, required an approved two year program plan in accordance with LTI 4.8, Licensed Operator Requalification Training Cycle Content. At the end of June 1993, there was no two year training plan in place for the training cycle which started in January 1993. Licensee procedures did not state who was responsible for plan approval. A draft two year plan had been prepared in April 1993. However, at the beginning of the NRC inspection no plan had been finalized or approved. The approved two year plan would define the licensed operator requalification (LORQ) program.

The lack of an approved two year plan was also an audit finding identified by United Energy Services Corporation in January 1993, with a commitment by the Training Department to issue the plan by March 1993. During the first three months of the 1993-94 two year period (training cycles 93-1 and 93-2), the training performed did not correspond to the material present in the draft plan. Failure to maintain a continuous requalification program is a violation of 10 CFR 55.59(c).1. (Violation 50-397/93-15-01).

The licensee acknowledged that the plan had not been approved, and provided the inspectors with a revised, approved, two year training plan prior to the Exit Meeting. Licensee personnel also committed to establish administrative procedures to provide for requalification plan review and approval.

(2) Unapproved Changes to the Licensed Operator Requalification Training Program

The inspectors observed that Technical Training Manual (TTM) procedure 5.3.2, WNP-2 Licensed Operator Requalification Program Description, required that revisions to the licensed operator requalification program must be approved by the Plant Operations Committee (POC). The inspectors found that the POC had not approved the two year plan, or deviations from the plan (such as the training conducted in training cycles 93-1 and 93-2). The inspectors stated that this was a weakness in the licensee's awareness of management requirements for operator training. The licensee representatives acknowledged the NRC observation.

(3) Selection and Tracking of Training Topics

The licensee used a task list as a check-off to ensure all the essential items planned for operator requalification training were accomplished. However, the inspectors observed that no formal evaluation was performed for the importance of tasks on the task list. Selection of tasks for annual training was based on the professional judgement of the people developing the task list.

The inspectors examined records of completed training to check whether the program plan had been implemented. The inspectors compared actual training conducted in 1991 and 1992, to the training that was scheduled. Review of the draft 1993-1994 Two Year Training Plan identified that Emergency Operating Procedure (EOP) training for Revision 4 (Phase II) was substituted for the draft plan topics in cycles 93-1 and 93-2 without any provisions to include those topics at a later date. For Training Cycle 93-3, the following generic fundamentals were scheduled to be taught either by lecture or in the simulator:

- Reactor kinetics and neutron sources,
- Fission product poisons, and
- Reactor operational physics during start-up.

There was no documentation that documented that these topics had been included in either lecture or simulator training sessions.

A similar comparison for the period October 4, 1991 - December 3, 1992 (1991-1992 Two Year Training Plan) identified the following deficiencies:

- The plan had been promulgated, but similar to the 1993-94 plan, there was no record that it had been approved in a formal manner.

- The following classroom topics were scheduled to be presented, but the records of the Training Cycles completed did not document that the material was presented:

  - Control Air System (CAS)
  - Containment Instrument Air (CIA)
  - Containment Nitrogen (CN)

  There was no documentation available to show that these topics had been rescheduled.

The licensee concurred that the training topics identified above were neither conducted as scheduled nor rescheduled

during the 1991-92 training cycle. However, these topics were scheduled in the 1993-94 training plans.

The inspectors concluded that the method used to select training topics for the two year plan, and the program's administrative controls to ensure that the plan was properly implemented did not always ensure consistent, systematic program implementation.

(4) Training Attendance

The inspectors examined documentation of licensed operator plans and attendance at requalification training to determine if personnel were consistently receiving planned training. The examination was performed by (1) selecting a sample of individual training plan items which were listed in training cycle schedules, (2) reviewing lesson plans to determine if the planned items were taught, (3) checking attendance sheets to verify individual attendance at regular and make-up training for these items, and (4) checking qualifications of instructors and trainees for accuracy in the licensee's data base. No discrepancies were noted. However, the licensees' tracking system was complex and hindered retrieval of information. Licensee personnel acknowledged the inspector's criticism of the tracking system.

(5) Scenario Quality

Simulator scenarios properly listed expectations and performance criteria for crews undergoing training, including emergency classifications. The inspectors reviewed several Licensed Operator/STA Requalification and Training Simulator Scenarios and concluded that the scenarios were constructed in accordance with the BWROG Simulator Scenario Development Guideline and NUREG 1021, Licensed Operator Examiner's Standards.

One scenario required the Shift Manager (SRO) to make an Unusual Event emergency declaration and (as conditions deteriorated) a subsequent Alert declaration. At the proper points in the scenario, the proper classifications were called for in accordance with PPM 13.1.1, (EPIP) Classifying the Emergency. This appeared to be a very effective method to exercise emergency event classification.

(6) Simulator Scenario Observation

Simulator training appeared to be conducted in an effective manner, and to have led to significant improvements in operator performance. Observation of training and evaluation scenarios identified that operator communications

and control were good, evaluation of operator actions was thorough and accurate, and management involvement was both dynamic and positive. The inspector observed a decision by the Operations Liaison and Operations Manager that the selected evaluation scenario was too similar to the warm-up scenario run previously. This resulted in substitution of another scenario that effectively tested the week's training topics, but was sufficiently different so that evaluation of operator actions was objective.

4. Management Corrective Action for Identified Deficiencies

a. Scope

A selection of previous 1992 and 1993 Quality Assurance and other audit findings were reviewed for adequacy of corrective action, tracking, and completion.

b. Summary

While most areas reviewed indicated adequate management control, corrective actions for one identified training program problem was ineffective. The licensee did not take effective corrective action to identify or comply with its licensed operator requalification program requirement to approve the two-year training schedules.

Out of ten audits reviewed, the adequacy of one audit dealing with training on industry events was questioned, in that it appeared a more complete audit would have made further follow-up by the Training Department unnecessary.

Two examples of documentation changes which should have been made for industry events training were identified.

c. Evaluation Details

(1) Tracking of Special Audit Findings For Requalification

The lack of a two year licensed operator requalification training plan was identified during a special internal audit in January, 1993. A report by United Energy Services Corporation (UESC), Update Report on Technical Training Effectiveness Review, dated January 27, 1993, page 7, identified that, over a year earlier, the previous UESC training review report (item # 2.3.1) had identified that an approved two year training plan for licensed operators did not exist for 1991-92 and that during the current audit there was no approved two year plan for 1993-94.

In response to this audit finding, licensee personnel stated that the Training Department had agreed to have the 1993-94

plan in place by March, 1993. A draft plan was prepared in April 1993, but was not approved by licensee management. The inspectors reviewed the requirements of TTM 5.3.2, Licensed Operator Requalification Program, and determined that a two year plan was required to be implemented in accordance with TTM 5.3.2, IV.C.4. The plan was approved for implementation on July 2, 1993, after the NRC identified this issue.

WNP-2 Administrative Procedure PPM 1.3.15, Plant Problems - Plant Problem Reports, stated in part that PPM 1.3.15 was written to meet 10 CFR 50 Appendix B, Criterion XV and XVI. PPM 1.3.15 also stated that a Problem Evaluation Report (PER) was a document used to formally communicate the existence of a plant problem to plant management for action. It could be initiated by anyone knowledgeable of an existing or potential plant problem which requires resolution.... The PER was the first level of problem evaluation and corrective action. The failure to prepare a PER to document the lack of an approved plan for 1993-94, is a violation of 10 CFR 50, Appendix B, Criterion XVI. (Violation 50-397/93-15-03).

(2) QA Audit Finding - Training Attendance of Non-licensed Personnel

In 1992 the Licensee had identified poor attendance at non-licensed engineering staff training. To determine if there was a training attendance problem with licensed operators the inspector interviewed management and reviewed records for all licensed staff members' attendance at requalification training during the 1992 and 1993 calendar years. No significant evidence of absences were identified. The inspector concluded that licensed operator training attendance was not a problem.

(3) QA Audit Finding - Instructor Refresher Training

In 1992 refresher training was not planned and scheduled for simulator instructors due to the transfer of the responsible instructor. The Training Department rescheduled this activity to begin in March 1993 and to be completed by July 1, 1993. The inspector interviewed the Manager, Training and Engineering Support and reviewed training records. The inspector determined that refresher training was completed as of July 1, 1993 for simulator instructors.

(4) QA Audit Finding - Written Examination Grading

Errors in licensee written exam grading were identified by the licensee both in the licensed operator initial and requalification training programs. A sampling of 1993

examinations from both programs were regraded by the inspector with no discrepancies identified.

(5) QA Audit Finding - Industry Events Training

In June 1993 a licensee audit of Operating Event Reviews (OERs) found that numerous Significant Operating Event Reports (SOERs) were not being properly trained upon. Based on the June 1993 audit and previous NRC findings related to licensee training on industry events, the inspectors examined the adequacy of the licensee's OER program management and the training given to the operators.

The inspectors examined training and processing of Operating Event Reviews (OERs) based on a sample of OERs that appeared most safety significant, to determine if training action on the items was adequate. Licensed Training Instruction (LTI) 2.1, Training Update System Tracking Procedure, provided the methodology for processing outside documents received by training, including OER items. Other items reviewed by the inspector included plant modifications, procedure changes, and instrument set-point changes. Each item examined that received a "Needs Analysis" by a training specialist was documented on an appropriate form which included the required action.

Although the licensee was properly administering and training on the OERs examined, the inspectors observed two errors which were discussed with the licensee. The inspectors observed that the Nuclear Boiler Instrumentation system description was not revised or referenced to reflect the adverse affect of non-condensable gasses on level indication. The up-date lecture lesson plan 82-ROT-0193-L1 for this topic appeared incomplete in that it did not provide clear questions and answers to verify operator comprehension. Although extensive training of this topic was documented, the inspectors concluded that the two documents described above were not complete.

The inspector observed that the June 1993 audit of the training department concerning OERs stated that numerous SOERs were not being presented to the appropriate audience in accordance with Training Department instructions. The inspectors performed an assessment of whether applicable trainees had attended OER training, and found by sampling that the trainees had actually attended the training. To verify the training on OERs, the inspector reviewed SOER 88-1, Instrument Air System Failures, Needs Analysis Actions and found that the first lesson plan was prepared in July 1989 and delivered in subsequent training cycles. The subject material was moved into the system lesson, Control and Service Air System (82-EAS-2701-LP, dated 3/15/93), and

appeared on the current cycle schedule for the appropriate audience. The NRC inspectors questioned why the audit had concluded that appropriate industry events training had not been given when it had been given. Licensee quality assurance and training personnel stated that the audit had concluded with the adverse finding due to the time needed for additional research by the training department to determine if the training had been given.

Based on the inspections described above, the inspectors concluded that the Operational Event Review (OER) program and implementation were adequate.

(6) Facility Identified Changes to the Task List

Approximately 180 self-identified, new tasks for reactor operators and senior reactor operators had recently been identified by the licensee.

The Training and Engineering Support group performed a training program evaluation of the licensee's reactor operators, senior reactor operators, and continuing training for licensed personnel in late 1992. A conclusion of that report was that task identification and task analysis was not being formally performed and that a disparity existed between required tasks and tasks to which the operators were trained. As a consequence of the finding the licensee embarked on a task identification program. For reactor operators approximately 300 new tasks were identified. Many (120) of the added tasks (to an existing list of 736) were duplications in some way. These tasks were evaluated, documented and deleted. The resulting new task list was published as Revision 21 on 22 April 1993.

Of the approximate 180 added tasks, 70 tasks were totally new, confirming the conclusion of the program evaluation. Many of these tasks were routine operations or administrative items, but some were accident or emergency tasks such as (RO-0759-A-RRC), Operate Reactor Recirculation System in Single Loop from both Pumps in Fast, or (RO-0982-A-MS), Manually Open Safety Relief Valves. Other tasks could be accident precursors if improperly performed such as (RO-0882-N-FPC), Drain Fuel Pool Cooling System. Similar task issues were found in the SRO task list.

The inspectors observed simulator training conducted on operation of the recirculation system in single loop from both pumps in fast (new task) in a session on July 1, 1993. While this task did not have all data fields (such as frequency, reference, or setting (method) for performing the training) incorporated in the new task list, training was being conducted.

The inspectors also observed that a new task concerning local operation of the diesel generators was being taught to equipment operators in simulator training. The inspectors were told by license instructors that all of the safety significant items from the newly added tasks were being covered.

As noted above, the task analysis information data fields such as frequency, reference, or setting (method) for performing the training on the 180 new tasks was generally not available. As a consequence of adding the newly identified tasks, the "master" database of RO and SRO tasks contained a significant number of absent data fields. While the inspectors did not find any new tasks which were incorrectly scheduled or had an inappropriate methodology, they observed that lack of complete data fields in the task lists placed additional burden on the training instructors and developers. Based on current training department staffing levels, training on the added tasks may not be complete until the end of the 1993-1994 training cycle.

When questioned by the inspectors regarding the training priority of the new tasks, the licensee agreed to review the listing of new tasks and prioritize them such that high priority tasks will be incorporated into training promptly. Completion of task analyses and incorporation of all new tasks were scheduled to be completed during the 1993-94 training cycle.

5. Training Department Staffing and Oversight

a. Scope

An evaluation of the Training Department operations training staffing and effectiveness of management oversight was conducted by reviewing supply system records and by conducting interviews with management and working level personnel. The records reviewed included cost expenditures, budget reviews, personnel qualification reports, new hire reports, organization charts, and internal transfer documentation.

b. Summary

The inspectors concluded that the Training Department was understaffed by several people. Licensee management stated that the Training Department had staffing problems in 1991 and 1992, but had difficulty recruiting qualified personnel. During the last six months the licensee had begun to recruit and hire necessary personnel. Current staffing appeared acceptable.

Staffing levels were not increased to account for high turn-over rates or for high overtime levels. Twenty-eight people had left

the department since 1991 (about 50% annual turnover). Training department overtime had averaged 20%.

The shortage of qualified trainers and developers may have had an adverse impact on the licensee's ability to complete activities such as the timely submittal of operator license renewal requests, the completion of the two year training plans, or the tracking of deferred training. (Sections 3.c.(1), 3.c.(2), and 3.c.(3))

(c) Evaluation Details

(1) Late Submittal of License Renewal Requests

During this inspection, the licensee overlooked submitting a timely request for license renewal for 8 operators. The NRC did not receive the request for renewals thirty days before expiration, and called the facility to determine if they had been sent. The facility reported that they had not been tracking renewals for operators' licenses. After completion of this inspection, the facility submitted the renewal applications. Region V processed the renewals before the licenses expired. During the inspection the inspectors pointed out that this example demonstrated the need for the Supply System to establish and maintain more adequate management controls in the training area.

(2) Organization Changes

The inspector observed that over the last two years at least four major changes occurred in the licensed operator training staff and/or management. The organization was reorganized three times and there were three different Training Managers. The individuals responsible for operations liaison, initial operator training, and requalification training were changed during the last year. The current organization combined requalification and initial training into one group and established a training program development group. This organization also eliminated one level of supervision which existed prior to January 1993. The inspector concluded that the organization appeared to provide better focus on specific tasks.

(3) Overtime

Based on a review of resource expenditure documents, the inspector determined that for the last year the licensed operator training personnel average overtime was slightly more than 20%. Generally the overtime appeared evenly distributed over the period examined. The inspector concluded that this was an indicator that resources were insufficient for the tasks assigned.

(4) Staff Turn-over

The inspector examined individual work assignments for operator training administration and development. Based on the licensee's staffing plans, the Operator Training branch had twelve instructor/evaluator positions, an operation liaison, an STA coordinator, and a branch manager. One of the twelve instructors was scheduled to go to INPO in August 1993 for two years, one was going to become the EOP coordinator, one worked on the new simulator project, and one was assigned to train equipment operators. Five of the fifteen people in the branch were hired in 1993. The Operations Training Development branch had five developer positions, one administrative position, and the branch manager. One developer was involved with the new simulator. Three of the seven people in the branch were hired in 1993.

Over the last two years approximately twenty-eight individuals left the operator training organization. Since the organization had twenty eight positions, this was an average of 50% turnover each year.

In response to these observations, the licensee stated that they had hired an additional instructor who would arrive in August, had brought in two contractor instructors, and were planning to ask for two more contractors to work in program development. Until January 1993, the Supply System had difficulty recruiting qualified personnel for the training department. Recent recruiting efforts were much more successful.

The inspector concluded that the licensee's staff turn-over was higher than normal and that staffing levels were not increased to account for the high turn-over.

6. Follow-up of Prior Inspection Concerns (50-397/92-27)

a. Operations Liaison

In September 1992, an NRC inspector found that the operations liaison staff person was not certified as a training evaluator, even though he conducted evaluations. This was not consistent with the standards imposed on the other training staff evaluators.

During the current inspection the inspector found that the operations liaison was a qualified evaluator. The person filling this position was required to complete a training course (approximately one week) and training qualification equivalent to that required of other training instructors. Direct observation of the Operations Liaison in simulator training and evaluation roles identified that he was capable of performing both roles effectively. This issue is closed.

b. Consistency of Initial and Requalification Training

In September 1992, an NRC inspector found that there was no process to ensure that the training and evaluation skills developed for the operator requalification program instructors were transferred to the initial operator program instructors.

In the current inspection the inspector found that all instructors for both initial and requalification programs had been assigned to one work group. Placing instructors in one work group facilitated both initial and requalification training programs sharing lessons learned. This issue is closed.

7. Exit Meeting (30702)

The inspectors met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on July 2, 1993. The inspection team summarized the scope and findings of the inspection activities. The licensee acknowledged the inspection findings. The team also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the team during the inspection. The licensee did not identify any such documents or processes as proprietary.