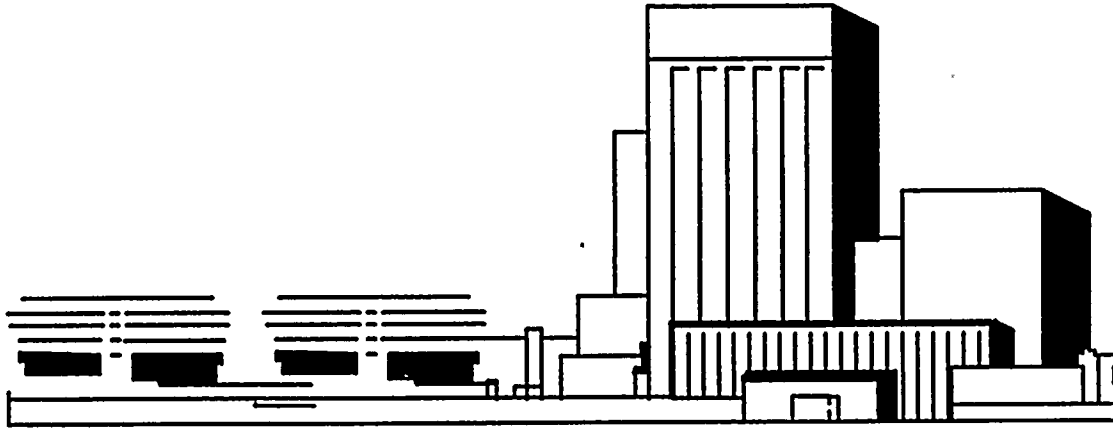


QUALITY DEPARTMENT AUDIT REPORT



WNP-2 EMERGENCY PREPAREDNESS PROGRAM

**Audit 299-007
April 15, 1999**

**Audit Dates: February 10 – March 17, 1999
Entrance Meeting: February 10, 1999
Exit Meeting: March 17, 1999**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
PURPOSE AND SCOPE.....	3
REPORT DETAILS	3
Section 1.0 Emergency Plan and Implementing Procedures.....	3
Section 2.0 Emergency Response Organization Training.....	6
Section 3.0 Readiness Testing (Drill Observations)	7
Section 4.0 Equipment and Facilities	9
Section 5.0 Interfaces with State and Local Governments.....	9
Section 6.0 Problem Identification and Resolution	10
Section 7.0 Dose Assessment Capabilities	11
Section 8.0 Personnel Qualifications.....	12
Section 9.0 Staffing Levels Emergency Response Organization	13
Section 10.0 FSAR Review	14
Appendix A Personnel Contacted during the Audit.....	15
Appendix B References.....	16
Appendix C Summary of Quality Recommendations, and Findings	18

EXECUTIVE SUMMARY

An independent audit of the WNP-2 Emergency Preparedness (EP) Program is performed at least once every 12 months as required by Title 10 of the Code of Federal Regulations (CFR), Part 50.54(t) and Operational Quality Assurance Program Description (OQAPD) Appendix III, Additional Quality Program Requirements. The audit team assessed specific areas as required by NUREG 0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants."

The audit team's efforts were complimented by the participation from three outside specialists. An EP specialist from Wolf Creek Nuclear Operating Station and an EP training specialist from Diablo Canyon Nuclear Facility served to broaden the overall experience base of the team. As well, a representative from the Oregon State Office of Nuclear Energy provided state agency expertise. The team's acknowledgement and thanks are extended to these individuals for their overall contribution.

The results of the audit found that activities associated with the WNP-2 Emergency Preparedness Program are implemented in accordance with governing regulations and are capable of protecting the health and safety of the public in the event of an emergency. The team noted improvements in Emergency Response Organization (ERO) team staffing levels and overall maintenance of personnel qualifications. Also, the current annual refresher-training format was recognized as a positive element. The Emergency Preparedness Organization demonstrates strong program ownership, is proactive in the identification and resolution of problems, and has established effective communication with off-site agency personnel.

Although the EP program is strong, some areas for improvement were identified. The team found the ERO drill performance adequate, however, inconsistencies in drill performance were noted. Also, some recurring areas for improvement identified in drill play have not shown improving trends. Additionally, the team discovered some minor procedural discrepancies primarily associated with the implementing procedures. Clarification of our License Basis Document (LBD) commitments relative to the station's meteorological capabilities is required. Overall, seven Problem Evaluation Requests (PERs) were initiated to address these issues.

Nine Quality Recommendations were offered to correct inappreciable errors in the implementing procedures or as suggested program enhancements.

In addition, six gold cards were issued during the course of the audit for commendable individual performance.

SA. Boynton, For
S. A. Boynton, Manager, Quality

K. M. Gunter
K. M. Gunter, Acting Supervisor, Quality Services

MS Collins
M. S. Collins, Audit Team Leader (ATL)

AUDIT TEAM

MS Collins	Audit Team Leader
JW Engbarth	Quality Programs
MK Laudio	Quality Services
JC Latta	Quality Services
SA Boynton	Quality
D Birk	Wolf Creek
M Snyder	Diablo Canyon
D Miggs	OR State Office of Energy

PURPOSE AND SCOPE

An independent audit of the WNP-2 Emergency Preparedness Program is required every twelve months by 10CFR 50.54(t) and the OQAPD Appendix III, Section 2.2.8 (f).

Specific areas assessed are described in 10CFR50 Appendix E and NUREG 0654, Section II.P.9 and include the following:

- Emergency Plan and Implementing Procedures
- Emergency Response Organization Training
- Readiness Testing - (Drill observation)
- Equipment and Facilities
- Interfaces with State and Local Governments

In addition, the following areas were included in the scope of this audit:

- Problem Identification and Resolution/Self Assessments
- Dose Assessment
- Personnel Qualifications
- Staffing Levels (Emergency Response Organization)

REPORT DETAILS

SECTION 1.0 *Emergency Plan and Implementing Procedures*

A review was conducted to determine if the Emergency Plan (E-Plan) Implementing Procedures (Volume 13 of the Plant Procedure Manual) satisfy the requirements of the WNP-2 E-Plan. Additionally, the review verified that the requirements of 10CFR50 Appendix E and NUREG 0654 were contained in the E-Plan. The review concluded that the WNP-2 Emergency Preparedness Program satisfies the regulatory requirements.

The E-Plan requires an internal review of the plan and an independent audit of the plan and implementing procedures every 12 months. An evaluation of the review process determined that the E-Plan has been updated as needed for the periods reviewed. E-Plan changes (two in 1995, two in 1996, one in 1997, and two in 1998) were verified from Revision 15 to current Revision 21. These changes are in accordance with the guidance in Plant Procedure Manual (PPM) 1.3.43, "Licensing Basis Impact Determination," regarding changes to the E-Plan. A review of previous audit reports concluded that appropriate areas were assessed, the audits were independent of Emergency Preparedness (EP) personnel, and the audits were performed within 12 months.

Appendix E of 10CFR50 states; "Licensees who are authorized to operate a nuclear power facility shall submit any changes to the E-Plan or procedures to the Commission, as specified in Section 50.4, within 30 days of such changes." The audit team found records of transmittal

for all reviewed E-Plan changes in Plant Files with the exception of Revision 18. Although related correspondence showed that the NRC had received this revision of the E-Plan, no record of transmittal or assigned Licensing number could be found. The audit team reviewed the submittal process as described in the Administrative Handbook and Administrative Service Instructions (ADSI), "Manual/Revision Package Processing and Distribution." The team found that the current process described for submittal of the E-Plan is not being followed. These submittal discrepancies resulted in a Quality initiated PER.

Quality Finding (PER 299-0517)

Current process for submitting revised E-Plan to the Nuclear Regulatory Commission (NRC) is not being followed. Unable to locate Revision 18 submittal letter in Plant Files.

A review of the WNP-2 E-Plan found that, although the E-Plan discusses the organizations required to respond to an emergency, it does not state when a facility is activated, what constitutes activation or what is necessary to declare the facility activated. The implementing procedures direct the managers to activate the centers when the main responsibilities can be performed, but the E-Plan does not describe what these responsibilities are. Non-specific information on facility activation could result in a reduction in effectiveness if implementing procedures are changed. A procedure change to reduce the number of persons required to activate the facility, which would not affect the E-Plan as written, could be viewed as a reduction in effectiveness. As a result, the team offers the following:

Quality Recommendation AU299-007-A

Assigned to: TC Messersmith

Due Date: June 14, 1999

Add words to the E-Plan on activation to prevent a possible reduction of effectiveness.

The team reviewed the E-Plan to verify the assigned duties and committed staffing resources were in alignment. The team found no discrepancies with the requirements of the E-Plan, however, a potential concern was identified. The E-Plan states that Equipment Operators perform as directed by the Control Room Supervisor or Fire Brigade Leader. Table 2-1 of the E-Plan has the Emergency Notification System (ENS) duties assumed by an Equipment Operator or other individual as designated by the Shift Manager. The E-Plan has no mention of the ENS duties under the position of Equipment Operator. To ensure duties are properly identified and aligned with committed resources, the team makes the following recommendation:

Quality Recommendation AU299-007-B

Assigned to: TC Messersmith

Due Date: June 14, 1999

Review the duties of the Equipment Operators and ensure the assigned duties coincide with E-Plan requirements.

During a review of the E-Plan and the implementing procedures, inconsistencies were identified in the references to the position of Corporate EP Officer. The E-Plan discusses the Corporate Emergency Preparedness, Safety and Health Officer (Corporate EP Officer) in Section 8.1, "Responsibilities for the Planning Effort," and PPM 13.14.8, "Drill and Exercise Program," discusses the Corporate Emergency Preparedness, Safety, and Health Officer. The E-Plan in later sections refers to the same position as the Corporate EP Officer. Due to the inconsistent references to this position, the team recommends the following:

Quality Recommendation AU299-007-C

Assigned to: TC Messersmith

Due Date: June 14, 1999

Revise the E-Plan and PPMs as necessary to provide a consistent reference to the position of Corporate EP Officer.

The team's review of the E-Plan requirements in conjunction with PPM 13.14.8, found discrepancies in the processes for approval and notifications of drills and exercises. E-Plan, Section 8.6, "Drills and Exercises," states, "The Corporate EP Officer is responsible for the planning, scheduling, and coordination of all emergency preparedness related drills and exercises. All exercises are subject to the approval of the Manager, Regulatory Affairs, the Plant General Manager, and the Vice President, Nuclear Operations." PPM 13.14.8, directs the Corporate Emergency Preparedness, Safety and Health Officer to schedule and coordinate the annual drill/exercise program with the following: Supply System WNP-2 Plant General Manager; Vice President, Nuclear Operations; and Vice President, Operations Support/Public Information Officer.

Additionally, Section 8.6 states, "The Corporate EP Officer will make every effort to notify the offsite emergency response organizations and agencies at least 180 days in advance of the scheduled date of the drill or exercise." PPM 13.14.8, does not provide this same requirement. The team found evidence this notification was being made as required by the E-Plan, however, the process was informal and not adequately described in the implementing procedure. Following discussions with the audit team the EP staff documented these procedural discrepancies in a PER.

Quality Finding (PER 299-0442)

E-Plan Implementing Procedure 13.14.8 does not accurately reflect requirements identified in the E-Plan.

The audit team reviewed PPM 13.14.9, "Emergency Program Maintenance," which identifies the activities necessary to maintain the current emergency preparedness program in accordance with commitments made in the E-Plan. Attachment 5.1, part 1.b states "DOE is contacted early in the review/revision process (E-Plan) and that their comments are solicited and considered for input into the process. Document this portion of the review." The team could not find documented evidence of this review. This issue was discussed with EP staff, which reviewed the procedure and identified additional discrepancies regarding performance of required reviews. EP documented these issues in the initiation of PER 299-0443.

Quality Finding (PER 299-0443)

Procedural requirements in PPM 13.14.9 relating to the E-Plan review have not been met.

SECTION 2.0 *Emergency Response Organization Training*

A review of the WNP-2 E-Plan (Rev. 21), the Qualification Directory, the Emergency Preparedness Training Course Catalog, and the Site-Wide Procedure on ERO concluded that appropriate training is offered for each identified ERO position. The training includes facility/ERO overview lessons as well as general training requirements for all ERO positions. Additionally, position specific and process training is offered for some ERO members. There are also provisions for annual refresher training.

Annual requalification training is provided for all ERO personnel. This training is provided by several means including mail-out material, classroom training and drills. For annual refresher training, the entire team is brought into the auditorium and presented with information regarding hardware and procedure changes, and lessons learned from in-house and industry operating experiences. Then the teams break out into their respective facilities and are asked to introduce themselves, explain their responsibilities in the center, describe their primary interfaces, and identify the support they expect from other members of the team. During interviews with ERO members, the audit team received overwhelming positive feedback of recent refresher training. The audit team considered the format for the annual team requalification classroom training to be a positive program element.

EP makes a concerted effort to have each new ERO member observe his/her position function during the performance of a drill. Then when appropriate, the new member will perform the position functions during a drill under the observation of an incumbent "coach". Then, in most cases, new members are ready to perform their position duties on their own. Based on discussions with personnel, the team concluded the initial training provided by EP does an adequate job of presenting the background information and the tools necessary to aid new members in performing their duties. However, most members didn't feel completely comfortable in their positions until they were able to actually participate on their own in a drill. This is reasonable and expected.

Training subjects for ERO personnel are currently selected based on the needs of the individual position, as documented in the Qualifications Directory and the EP Training Course Catalog. The Site-Wide Procedure SWP-EPP-01, "Emergency Response Qualifications and Training," states, "The program consists of a combination of classroom, hands-on, and in-the-field training based on a task analysis which used the systematic approach to training." However, the original task analysis/training database has not been maintained. Therefore, the audit team makes the following recommendation:

Quality Recommendation AU299-007-D

Assigned to: TC Messersmith

Due Date: June 14, 1999

Revise Program Content Description as described in procedure SWP-EPP-01 to accurately reflect current basis for EP Training Program.

The position of Trending Forecaster has recently been added to the ERO roster. Trending forecasters trained in Severe Accident Management Guidelines (SAMG) are expected to monitor and trend key plant parameters during severe accident situations and apply the Guidelines as conditions warrant. The trending forecaster works with other SAMG trained individuals, typically the engineering personnel and the facility manager within the Technical Support Center (TSC). The audit team found through interviews, that personnel were not confident that the training they had received would assure their ability to perform their duties if SAMGs were required. Individuals who had studied SAMGs in Operations training expressed confidence in their abilities. Of the four assigned trending forecasters, only one has participated in a drill where there has been a transition out of Emergency Operations Procedures into SAMGs. As a result the team makes the following recommendation:

Quality Recommendation AU299-007-E

Assigned to: TC Messersmith

Due Date: June 14, 1999

Survey SAMG trained individuals to determine if additional training is required

SECTION 3.0 Readiness Testing (Drill Observations)

The audit team observed performance of the Team C and A training drills conducted February 2, and February 23, 1999, respectively. Audit members were stationed at the Emergency Offsite Facility (EOF), Technical Support Center (TSC), Operations Support Center (OSC), and the Control Room (simulator). The audit team also observed the post-drill critique at each location. In both observed drills, the participants met the objectives of the drill. Specifically, the Plant was brought to a safe condition, fuel damage was mitigated, and the public's health and safety was protected. The overall assessment of both drills was that team performance was adequate.

However, the emergency organization has not established a pre-designated organization of controllers and evaluators to support drill performance. Currently, individuals assigned as drill controllers and evaluators are obtained by requesting volunteers or last minute drafting of personnel. This results in inconsistent set-up and conduct of the drill itself. The controllers are expected to coach players and keep the progress of the drill on track. On several occasions during drill play, it was noted the controllers failed to control the drill, which affected the performance of the team. One example, noted during the Team "A" drill, occurred when a controller told a field team that the Startup Transformer was back in service. This information was transferred to the control room. Since the drill scenario had not actually returned the transformer to service, there was confusion in the control room and delays in the field team activities. The miscommunication was ultimately corrected by the OSC controller.

Controllers are also expected to evaluate drill play and player performance. The team noted the controllers experienced difficulty in controlling while evaluating. Their comments were inconsistent and in some cases incomplete. This has resulted in lost opportunities for improvement. This is an issue that was identified in the 1998 E-Plan Self-Assessment. Although an EP improvement initiative action had been established, EP recognized the issue warranted more immediate attention. The EP staff initiated the following PER:

Quality Finding (PER 299-0445)

The lack of a pre-designated organization of controllers and evaluators results in inconsistent drill conduct and inconsistent and incomplete evaluations.

Drill Reports are issued shortly after conduct of the drill. These reports are appropriately detailed and capture most of the positive and negative attributes of drill performance. After Action Report comments and corrective actions are generated as a result of the drill. These reports are developed based on the observations of the evaluators, input from other observers, and feedback from drill participants.

The drill reports issued for the Team C and Team B drills were reviewed. The audit team noted similar areas for improvement during observations of Team A and C performance. Many of the issues detailed in the Drill Reports for Teams B and C were discussed in the training session for Team A. However, the same problems were evident during the conduct of the drill. The following have been recurring areas for improvement:

- Three-way communication
- Dispatch of OSC repair teams
- Release of Equipment Operators to the OSC
- Command and Control
- Establishment of repair team priorities

The lack of improvement from drill to drill is a concern. As a result, the EP staff initiated the following PER:

Quality Finding (PER 299-0517)

Areas for improvement identified during ERO training drills are not showing improving trends.

The Emergency Preparedness Manager is the leader of WNP-2's Contingency Plan for Year 2000 (Y2K). Currently, a Remediation Committee is identifying internal equipment and external events that require some type of overt action (e.g., reboot, and reset) to continue its function. The Contingency Manager has stated that a designated ERO team will be on call, as usual, should some unexpected plant event take place. However, at this point, there is no intention to activate any emergency center specifically for the purpose of addressing Y2K issues. The notification system and pagers have been identified as "Y2K inert." This means that the 2000 rollover will have no effect on the system. Interviews with EP personnel about

Y2K concerns for the dose protection computer systems found that one problem was previously identified. This issue has been addressed and a contingency plan is in place.

SECTION 4.0 *Equipment and Facilities*

The audit team assessed whether emergency facilities and equipment identified by NUREG 0696, "Functional Criteria for Emergency Response Facilities" described in the Final Safety Analysis Report (FSAR) have been adequately provided and maintained. This assessment determined that sufficient equipment and facilities are in place to support emergency response.

The team visited all ERO centers and determined that emergency response facilities are well equipped for emergencies. However, one concern regarding the various computers used to support ERO functions was identified. Problems with computers became evident during the drill held February 23, 1999. While all of the computers had been successfully tested just the week before, at least three in various centers had some difficulty in booting up or transmitting information. The majority of computers are older and extremely slow. In a follow-up by the audit team to this concern, EP explained that the computers are slated for replacement when the PRIME computer system is replaced. These actions are scheduled for later this year. No further action is warranted.

EPIP 13.14.4, "Emergency Equipment," lists all of the equipment used in the various ERO centers, requirements for preventive maintenance or verification of equipment operability and available forms. These activities reference PASSPORT work tasks. However, many of those tasks have been deleted and the PASSPORT screen does not explain how the task's performance is being tracked. Examples of such tasks are those that check emergency kits at the local area hospitals. These tasks were initially assigned PASSPORT activity codes KADLEC EMERG.KIT, KENNEWICK EMERG.KIT and LOURDES EMERG.KIT. These same activities are currently being tracked on PTL as 153967, 153968 and 153969 respectively. As a result of this disparity, the following PER was issued:

Quality Finding (PER 299-0393)

PPM 14.14.4, Rev. 26, Attachments 5.3, 5.5, and 5.7 contain references to obsolete PASSPORT activities and do not provide appropriate references to PTL.

SECTION 5.0 *Interfaces with State and Local Governments*

The WNP-2 E-Plan Section 4.3 and Plant Procedure Manual 13.1.1, "Classifying The Emergency," requires that agreements with off-site agencies be reviewed annually, with the latest revision reviewed by state and local government representatives. The audit incorporated a review of the established agreements between the Supply System and outside organizations for support of radiological emergencies at WNP-2. Letters of agreement were reviewed to evaluate their completeness and consistency with the WNP-2 E-Plan. Each of the agreements was found to be consistent with the WNP-2 E-Plan and generally complete. A few minor

discrepancies were brought to the attention of the emergency preparedness group. All of the agreements were found to be current.

The Benton and Franklin County Emergency Directors were interviewed to obtain an understanding of the working relationship between the Supply System and counties' emergency preparedness organizations. From these discussions, it was concluded that the Supply System emergency preparedness group maintains an effective relationship in supporting these off-site organizations. The Benton County Emergency Director noted that positive feedback was received from the local hospitals regarding the quality of training provided by the WNP-2 Emergency Preparedness group's Offsite Coordinator.

The Supply System provides a calendar on an annual basis to residents living within ten miles of WNP-2. It includes information about emergency notifications and instructions for taking appropriate protective actions. The Supply System also provides a quarterly newsletter called, "OPEN LINES," to residents within the same ten mile distance from the Plant. The Supply System makes emergency preparedness materials available at the Benton Franklin County Fair. In addition to the written material, the Supply System conducts an annual workshop to educate the news media about the WNP-2 Emergency Preparedness Program. The team found EP's efforts in providing information and education to the public to be satisfactory. As an enhancement to the current methods employed, the team makes the following recommendation.

Quality Recommendation AU299-007-F

Assigned to: TC Messersmith

Due Date: June 14, 1999

Include WNP-2 Emergency Preparedness Program information on the Supply System's web site.

SECTION 6.0 Problem Identification and Resolution

The PERs and recommendations resulting from the 1998 Emergency Preparedness Program audit were reviewed for effectiveness. Three PERs resulted from the 1998 audit. Two of the PERs have been completed and closed (PER 298-0191 and PER 298-0194). A review of the corrective actions associated with these PERs were implemented effectively and closure documentation satisfied the instructions on the Corrective Action Plans. There were no concerns with these PERs.

PER 297-0205, initiated as a result of the Emergency Preparedness Audit conducted during 1997 remains open. This PER documented "Instruction/Procedures do not exist which maintain the License Basis Requirements for non-power block facilities." The team found that four of the original five CAPs remain open with two additional CAPs developed to expand actions originally documented. The original actions have all been extended, some more than once. In January 1998, both Quality and Facilities personnel agreed that extensions of the CAPs were warranted to ensure full and effective implementation. Potential effects of the extended due dates are mitigated by CAP 5 which is an interim action for the Manager, Facilities and Support Services, (or designee) to review all Facility Service Requests (FSRs)

issued until CAPs 1 through 4 are completed. As such this action will be in place and ongoing until the other actions (original) have been completed.

Follow-up to this PER during the 1999 audit found that all CAPs are scheduled for completion in the second quarter of 1999. However, due to the overall time frame associated with the implementation of the scheduled corrective actions, the team recommends that Quality take the following action:

Quality Recommendation AU299-007-G

Assigned to: JW Massey

Due Date: June 14, 1999

Include a review of effectiveness of corrective actions for PER 297-0205 in the next Corrective Actions Program Audit.

Twelve recommendations were issued during the previous Emergency Preparedness Program Audit. At this time, only one of the recommendations remains open. Quality Recommendation AU298-008-B states, "Annotate Regulatory requirements and commitments in the Emergency Procedures in accordance with Site-wide Procedures (SWP) PRO-03, WNP-2 Procedures Writers' Manual." This action will be implemented as part of the biennial review, which is scheduled to be completed by December 30, 2000.

A search of the Plant Tracking Log (PTL) database was performed to identify PERs that were assigned to EP since January 1, 1998. Results found that PER resolutions and corrective actions were adequate, with no indications of repeat issues during 1998.

The EP organization performed two self-assessments during 1998. Self-Assessment 98-024 was performed in May 1998 to review implementation of the WNP-2 E-Plan. This assessment resulted in one PER and 56 recommendations. Currently, only one of the recommendations is open, with a completion date of March 31, 1999. The second EP self-assessment was performed to detail the emergency response actions taken during the Unusual Event (Rupture of FP-V-29D) at WNP-2 on June 17, 1998. All corrective actions resulting from this assessment have been implemented. The audit team found both EP self-assessments to be comprehensive and self-critical.

SECTION 7.0 Dose Assessment Capabilities

A review of the WNP-2's Dose Assessment Program was performed to assess whether key components were in place to ensure reliable and accurate dose projections. Additionally, the team observed the Meteorological Unified Dose Assessment Center (MUDAC) staff during the conduct of the ERO Team "A" Drill to assess dose projection personnel performance. The team found that although there were initial minor problems in dose projection systems operability, the systems functioned adequately and responsible personnel satisfactorily produced dose projection data using these systems. The team concluded that a satisfactory dose assessment program is in place, with individuals demonstrating their capability to provide accurate dose projections.

The WNP-2 meteorology tower and its backup systems provide real-time local meteorological data and are an integral part of providing accurate dose projections. A review of WNP-2's license basis documents found that they are not clear or consistent in addressing commitments to the backup systems for the primary Met Tower. These inconsistencies were discussed with Licensing, System Engineering, and Emergency Preparedness personnel. These discussions led to the initiation of a PER to document this problem.

Quality Finding (PER 299-0461)

Clarification of commitments in the area of meteorological monitoring as described in the FSAR and E-Plan is required.

WNP-2 computer-based dose projection programs consist of the Emergency Dose Projection System (EDPS), Quick Emergency Dose Projection System (QEDPS), and the Backup Emergency Dose Projection System (BEDPS). These are stand-alone systems, which have alternate power supplies and allow for data acquisition in the event of a power loss during an emergency. The audit team verified that these systems were in place, available, and capable of providing sufficient dose projections in a timely manner. It was also noted that these systems were similar to off-site dose projection systems with no obvious differences in dose projection data.

The audit team reviewed dose projections procedures 13.8.1, "Emergency Dose Projection Procedure," and 13.8.2 "Back-up Emergency Dose Projection Procedure" and their corresponding lesson plans to ensure consistency of dose projection training content. Results found that both procedures and lesson plans supply the necessary data for individuals to successfully operate dose projection programs. However, inconsistencies were noted in these documents primarily related to the standard characterization of stability classifications. Other less significant discrepancies were also noted. The team makes the following recommendation:

Quality Recommendation AU299-007-H

Assigned to: TC Messersmith

Due Date: June 14, 1999

Revise Lesson Plans and Dose Projection Procedures to ensure consistency with current ERO program and procedures.

SECTION 8.0 Personnel Qualifications

Per NUREG 0654, the WNP-2 E-Plan and SWP-EPP-01, refresher training is required on an annual basis for all ERO personnel. This is assured by entries for recurring training in the Personnel Qualification Directory (PQD) database, which is part of the PASSPORT system. The team found refresher training is tracked in the database and status is adequately monitored by Planners.

Although the Qualification Directory shows a list of courses required to gain initial qualification to any ERO position, it does not contain information or course numbers for

refresher training. The refresher training courses are, however, listed in PQD and in the Emergency Preparedness Training Course Catalog. The E-Plan lists both the Emergency Preparedness Course Catalog and the Qualification Directory as sources for training course requirements. Maintaining and updating both the catalog and directories to status qualifications has been time consuming and inefficient for EP personnel. For this reason, the team offers the following recommendation:

Quality Recommendation AU299-007-I

Assigned to: TC Messersmith

Due Date: June 14, 1999

Incorporate annual refresher training requirements into the Supply System Qualification Directories.

On the Local Area Network (LAN), in "General Information and Help" is a list of all the EP positions and the people assigned those positions. Lists are on the LAN for information only, and they are updated every calendar quarter. Although EP keeps the up-to-date list of EP personnel assignments on a Microsoft Access database, the staff uses PQD exclusively for tracking EP team qualifications. EP's ability to track and status team qualifications has improved from last year due to their transition from a local database to PQD.

Spot checks of the PQD database were performed by the team and compared with the SWP-EPP-01 to determine the number of currently qualified ERO personnel. Individual qualification requirements were evaluated by name and by qualification group. Based upon this review, the team concluded qualifications are being adequately maintained. This is a noted improvement from last year's EP audit findings related to personnel qualifications.

SECTION 9.0 *Staffing Levels Emergency Response Organization*

The WNP-2 ERO Personnel List, PQD, and PPM 1.3.1, "WNP-2 Operating Policies, Programs and Practices," were reviewed to determine if ERO staffing was adequate to respond to an emergency.

The audit team concluded that adequate personnel are available to staff the WNP-2 ERO within the required 60-minute limit. Those personnel tracked via the PQD are assigned to one of four ERO Teams who rotate through a two-week on-call period. In the event of an emergency or during the conduct of a Notification Drill, the EP staff initiates the alert using the Dialogic Automated Notification System (DANS). ERO team members respond using a telephonic code to indicate whether they are able to report for emergency duties. Shortages are identified and replacements are called in. By maintaining the four-team rotation now in effect, the emergency response is capable of being maintained for an extended period of time.

PER 298-0169 was written during the 1998 Emergency Preparedness audit to document the station's problems in meeting minimum on-shift ERO staffing requirements. The implementation of the associated corrective actions, in conjunction with other EP initiatives this past year, have been effective in correcting on-shift staffing level problems. Additionally,

EP has been effective in providing adequate depth of staffing for all positions (four per position). With few exceptions, the EP staff has been successful in identifying and qualifying personnel to maintain the ERO roster complete. Greater depth in staffing positions provides for more flexibility during emergency response situations.

SECTION 10.0 FSAR and Response to 50.54(f) Review

The Emergency Plan is an attachment to the FSAR and was reviewed extensively throughout this audit. There are no FSAR issues other than the one associated with the station's commitment to the back-up meteorological systems.

The WNP-2 response to NRC 50.54(f) letter was reviewed regarding Licensing Basis Impact Determinations and the FSAR revision process. No discrepancies were noted.

APPENDIX A - Personnel Contacted during the Audit

S Ackley	Specialist Training V	
TW Albert	Manager, Maintenance Support	
JD Arbuckle	Licensing, Technical Specialist VI	
SS Atkinson	Engineering, Technical Specialist V	
AS Barber	Supervisor Maintenance/Plant Support, Quality Services =	
SA Boynton	Manager, Quality =	
B Calvert	WNP-2 Program Manager/Benton and Franklin Counties	
LL Collins	Technical Support Specialist	
MS Collins	Technical Specialist VI, Quality Services = +	
DJ Dixon	Technical Support Specialist	
JW Engbarth	Acting Supervisor NDE/Corrective Action Program, Quality = +	
CA Fu	TSC Trending Forecaster	
RE Fuller	TSC Trending Forecaster	
SR Goodwin	Technical, Specialist VI, Quality Services	
KM Gunter	Technical Specialist VI, Quality Services = +	
MR Grindel	Principal Engineer	
M Henry	WNP-2 Program Manager Washington Department of Health (WA Health)	
T Hobbs	Benton County Emergency Director	
DB Holmes	Emergency Planner = +	
JP Ittner	Emergency Planner = +	
RE Jorgenson	Lead Emergency Planner = +	
AF Klauss	Emergency Preparedness = +	
JM Kohl	Technical Support Specialist	
AA Langdon	TSC Manager =	
DC Lemiere	Spec.SF/Hlth Sr.	
MJ Laudisio	Technical Specialist V, Quality Services =	
RD Madden	Technical Specialist VI, Quality Services	
SJ Martin	Admin Assistant III	
JW Massey	Technical Specialist IV, Quality Services +	
HL McMurdo	Technical Specialist	
KP Meehan	Emergency Planner = +	
T Messersmith	Corporate EP Safety Officer = +	
CM Moore	TSC Mechanical Engineer	
EB Norton	System Engineer	
DL Overman	Engineering, Technical Specialist VII/TSC Computer Engineer	
B Penwell	Coordinator Field SSC	
MA Peterson	Exercise and Training Coordinator Washington Emergency Management	
J Scheer	Franklin County Emergency Director	
B Sherman	Plant NRC Liaison	
C Van Hoff	JIC Manager	
LA Walli	Admin Assistant III	
DLWhitcomb	EOF Engineering Manager	
J Wood	Emergency Management Coordinator Washington Department of Agriculture (WA Agriculture)	
JE Wyrick	Supervisor, Quality Services	

Attended Entrance Meeting =

Attended Exit Meeting +

APPENDIX B – References

WA EMD's Integrated Fixed Facility Radiological and Chemical Protection Plan
WA Health's Response Procedures for Radiation Emergencies
WA Agriculture's Radiological and Chemical Emergency Procedures
Benton and Franklin Counties Fixed Nuclear Facility Emergency Response Plan
OR Energy's WNP-2/Hanford Emergency Preparedness Program Manual
WNP-2 Emergency Plan Revision 15 through 21
SWP-PRO-01 (Rev 2), "Description and Use of Procedures and Instructions"
PPM 1.4.1 "Plant Modifications"
EPI-13, (Rev 1) "Dialogic Automated Notification System"
EPI-01 (7/15/98), "Emergency Preparedness Group Operations"
SWP-TQS-01, "Training, Qualification and Simulators"
SWP-EPP-01, "Emergency Response Qualifications and Training"
SWP-CAP-01 "Problem Evaluation Requests (PERs)"
SWP-EPP-01, "Emergency Response Organization and Training"
WPPSS, DRILL AND EXERCISE MANUAL FOR WNP-2
NUREG 0654- Revision 1, Criteria for Preparation and Evaluation of Radiological Emergency Response plans and Preparedness in Support of Nuclear Power Plants
10CFR50.47, Emergency Plans
10CFR50.54, Conditions of Licenses
10CFR50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities
NUREG 0654, FEMA REP-1, Rev. 1; Criteria for Preparation and Evaluation of Radiological Emergency Response plans and Preparedness in Support of Nuclear Power Plants
WNP-2 Emergency Plan, Section 8
Qualification Directory Manual, Section 2.8, Emergency Response
IOM dated March 1, 1999 to Offsite Emergency Management Organizations,
Subject: Annual Training for Offsite Agencies
Quality Department Audit Report AU298-008, WNP-2 Training, Performance, and Qualification
Quality Department Audit Report AU298-008, WNP-2 Emergency Preparedness Program
PQD Scheduled Monthly Report, 02/3/99
1999 TEAM C TRAINING DRILL REPORT
1999 TEAM B TRAINING DRILL REPORT
Emergency Phone Directory, Emergency Response Organization List
Emergency Preparedness Training Player Training Handout (s)
Emergency Preparedness Training Program, Lesson Plan 82-EDP-0200-LP-RO,
Emergency Preparedness Training Program, Lesson Plan EP000222, Quick Emergency
Emergency Preparedness Training Course Catalog, Revision 5, dated 5/98
Self-Assessments 98-024,
Self-Assessments 98-0
WNP-2 Qualification Directory, Section 2.8, LEP Revision 11 (Vol. I)
PQD Report "DDIXON.BL_EP_QGCNT_QLCNT" dated 2/25/99
PTL Database

Volume 13 series of Emergency Plan Implementing Procedures

PASSPORT Predefined Database

PPM 1.3.43 Revision 12 "Licensing Basis Impact Determination"

PERs 298-0169, 298-0179, 298-0191, 298-0194, 298-0374, 298-0377

PERs 298-0454, 298-0558, 298-0712, 298-0729, 298-0751, 298-0804

PERs 298-0864, 298-0909, 298-0920, 298-0921, 298-0933, 298-1064

PERs 298-1173, 298-1281, 298-1280, 298-1296, 298-1302, 298-1439

PERs 298-1599, 298-1776, 298-2015

PERs 298-0772, 298-0955, 298-1149, 298-1165, 298-1361

Final Safety Analysis Report 52 and 53

NRC Inspection Manual, Inspection Procedure 82207, Dose Calculation and Assessment

NRC Inspection Manual, Chapter 2515/134, Licensee On-Shift Dose Assessment Capabilities

10CFR50.47, Emergency Plans

INPO 86-008, Dose Assessment Manual for Emergency Preparedness Coordinators
to Assess Plant Environs Conditions During and Following an Accident"

LCDN 97-109, Reformatted Section 2.3 Per FSAR Upgrade Project Style Guide

Regulatory Guide 1.97, "Instrumentation for Light-Water Cooled Nuclear Power Plants

Regulatory Guide 1.23, Revision 0, On-Site Meteorological Programs

Regulatory Guide, First Draft of Proposed Revision 1 of Reg Guide 1.23, 1980, On-Site
Meteorological Programs

Regulatory Guide, 2nd Proposed Revision 1 of Reg Guide 1.23, 1986, On-Site Meteorological
Programs

Memorandum of Understanding with Kadlec Medical Center

Memorandum of Understanding with Kennewick General Hospital

Memorandum of Understanding with Our Lady of Lourdes Medical Center

Memorandum of Understanding with Siemens Power Corporation

Memorandum of Understanding with Department of Energy, Richland Operations Office

Agreement for Use of Hanford Environmental Health Foundation's Emergency
Decontamination Facility

Contract with the State of Oregon

NRC Correspondence dated: October 7, 1983 and July 5, 1985

Supply System Correspondence dated: June 6, 1983 and January 19, 1984

Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

ANSI/AN 2.5 "Standard for Determining Meteorological Information at Nuclear Power Plants

EPA-520/1-95-001-A "Manual of Protective Action Guides and Protective Actions for Nuclear
Power

Incidents," 1990

NUREG 696, Functional Criteria for Emergency Response Facilities.

APPENDIX C – Summary of Quality Recommendations, and Findings

Quality Recommendation AU299-007-A

Assigned to: T. Messersmith

Due Date: June 14, 1999

Add words to the E-Plan on activation to prevent a possible reduction of effectiveness.

Quality Recommendation AU299-007-B

Assigned to: T. Messersmith

Due Date: June 14, 1999

Review the duties of the Equipment Operators and ensure the assigned duties coincide with E-Plan requirements.

Quality Recommendation AU299-007-C

Assigned to: T. Messersmith

Due Date: June 14, 1999

Revise the E-Plan and PPMs as necessary to provide a consistent reference to the position of Corporate EP Officer

Quality Recommendation AU299-007-D

Assigned to: T. Messersmith

Due Date: June 14, 1999

Revise Program Content Description as described in procedure SWP-EP-01 to accurately reflect current basis for EP training program

Quality Recommendation AU299-007-E

Assigned to: T. Messersmith

Due Date: June 14, 1999

Survey SAMG trained individuals to determine if additional training is required

Quality Recommendation AU299-007-F

Assigned to: T. Messersmith

Due Date: June 14, 1999

Include WNP-2 Emergency Preparedness Program information on the Supply System's web site.

Quality Recommendation AU299-007-G

Assigned to: JW Massey

Due Date: June 14, 1999

Include a review of effectiveness of corrective actions for PER 297-0205 in the next Corrective Actions Program Audit

Quality Recommendation AU299-007-H

Assigned to: T. Messersmith

Due Date: June 14, 1999

Revise Lesson Plans and Dose Projection Procedures to ensure consistency with current ERO program and procedures

Quality Recommendation AU299-007-I

Assigned to: T. Messersmith

Due Date: June 14, 1999

Incorporate annual refresher training requirements into the Supply System Qualification Directories.

Quality Finding (PER 299-0517)

*Current process for submitting revised E-Plan to the NRC is not being followed.
Unable to locate Revision 18 submittal letter in Plant files.*

Quality Finding (PER 299-0442)

Emergency Plan Implementing Procedure 13.14.8 does not accurately reflect requirements identified in the Emergency Plan

Quality Finding (PER 299-0443)

Procedural requirements in PPM 13.14.9 relating to Emergency Plan review have not been met.

Quality Finding (PER 299-0445)

The lack of a pre-designated organization of controllers and evaluators results in inconsistent drill conduct and inconsistent and incomplete evaluations.

Quality Finding (PER 299-0517)

Areas for improvement identified during ERO training drills are not showing improving trends.

Quality Finding (PER 299-0393)

PPM 14.14.4, Rev. 26, Attachments 5.3, 5.5, and 5.7 contain references to obsolete PASSPORT activities and do not provide appropriate references to PTL.

Quality Finding (PER 299-0461)

Clarification of commitments in the area of meteorological monitoring as described in the FSAR and Emergency Plan is required