

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-397/87-18

Docket No. 50-397

License No. NPF-21

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

Facility Name: Washington Nuclear Project No. 2 (WNP-2)

Inspection at: WNP-2 Site, Benton County, Washington

Inspection Conducted: July 13-17, 1987

Inspectors:

G. M. Good
G. M. Good, Emergency Preparedness Analyst

8/6/87
Date Signed

S. Block
S. Block, Health Physicist

8/11/87
Date Signed

Approved by:

R. F. Fish
R. F. Fish, Chief
Emergency Preparedness Section

8/6/87
Date Signed

Summary:

Inspection on July 13-17, 1987 (Report No. 50-397/87-18)

Areas Inspected: Routine, unannounced emergency preparedness inspection in the areas of shift staffing and augmentation, knowledge and performance of duties (training) and follow-up on five open items identified during previous inspections. Inspection procedures 82205, 82206, 82701 and 92701 were addressed.

Results: No deficiencies or violations of NRC requirements were identified. Three of the open items identified during previous inspections were closed.

DETAILS

1. Persons Contacted

T. Chapman, Senior Health Physicist
R. Chitwood, Manager, Emergency Planning and Environmental Programs
(EP & EP)
Y. Derrer, Senior Training Specialist
M. Gant, Systems Engineer
J. Houchins, Emergency Planner
F. Klauss, Senior Emergency Planner
M. Lyon, Principal Health Physicist
D. Mannion, Senior Emergency Planner
R. Mogle, Senior Emergency Planner
G. Oldfield, Supervisor, Radiological Assessment
F. Quinn, Principal Scientist
P. Sutter, Supervisor, Central Training Supervisor

2. Action on Previous Inspection Findings

(Closed) Open Item (85-10-06): Improve the primary Emergency Dose Projection System (EDPS) dispersion model to include calculation of variable trajectories in time and space, to make diffusion estimates during calm wind conditions in order to limit plume travel during a given time interval and to accumulate doses. As of April 23, 1986, this item remained open pending a practical demonstration of the Meteorological and Unified Dose Assessment Center (MUDAC) staff's ability to make subjective modifications to the EDPS projected plume travel. In addition to the practical demonstration, inspection of this item included a review of training provided to the MUDAC staff and a review of the licensee's overall capabilities in this area. These reviews disclosed that training of MUDAC personnel had been enhanced in the area of meteorology and that provisions existed for continuous meteorological support for the MUDAC staff. Primary support will be provided by the licensee's meteorologist. Arrangements for a backup meteorologist have been established with the Department of Energy (DOE). It should also be noted that the licensee now has limited access to DOE's Emergency Response Detection System (ERDS) which utilizes MESORAD. For the practical demonstration, several members of the MUDAC staff were assembled. In order to ascertain the group's overall capabilities, the inspector asked questions about source terms, computers, meteorology, dose models and dose assessment. The group was then asked to solve several problems. The problems required the MUDAC staff to make radiological unit conversions that they would not normally have to make (i.e., plume microcuries/cubic centimeter concentrations rather than millirem/hour dose equivalent.) In addition, because the numbers were in units that were not compatible with the EDPS, the staff was constrained to use the backup microcomputer TRS-80 to perform the dose calculations. As a result of the practical demonstration, the inspector concluded that the staff had performed adequately, since they were working with unusual units. However, the practical demonstration disclosed that the working level MUDAC staff does not fully understand how the input data is computed to provide an output. Based on the licensee's overall capabilities, this item is considered



closed; however, the working level MUDAC staff would benefit from additional health physics related training so that they would be able to make some preliminary judgements regarding the veracity of the computer output. This item is considered closed.

(Closed) Open Item (86-26-01): The Startup Testing and Reporting (STAR) System may be programmed in error in that primary containment loss of coolant accident (LOCA) monitors A and B really apply to monitors E and F. Monitors E and F were incorrectly identified as A and B on both the MAIN D Prime Computer used in the simulator and the plant PRIME Computer System. The problem was corrected by modifying the description file. No programming changes were required. This item is considered closed.

(Open) Open Item (86-26-02): The effectiveness of the Operations Support Center (OSC) was hampered due to poor team briefings and debriefings. This item was identified during the licensee's 1986 annual emergency exercise. In an effort to correct this situation, the licensee contacted all OSC personnel via an Inter-Office Memorandum (IOM) to inform them of this matter, notified the Supervisor, Technical Training via IOM to ensure that briefing/debriefing procedures needed to be emphasized in training and revised certain Emergency Plan Implementing Procedures (EPTPs). Applicable EPIPs have been modified to provide for a "Team Briefer/Debriefer," who would be responsible for completing the briefing/debriefing forms. Additionally, these forms have been modified to require signatures from key individuals involved in the briefing/debriefing process. Licensee attention to this item is acknowledged; however, this item will remain open pending demonstration of the licensee's ability to accomplish these actions during the next annual exercise.

(Open) Open Item (86-26-03): The Fixed Nuclear Facility (FNF) Notification Form was not accurately or thoroughly completed. This item was identified during the licensee's 1986 annual emergency exercise. Based on this finding, the licensee was requested to consider the appropriateness of adding a step to the notification procedure which would require verification of information (echoing or repeating event narrative descriptions) transmitted verbally between the Control Room/Technical Support Center (TSC) and the Emergency Operations Facility (EOF) Communications Center. Licensee personnel determined that adding a step to the notification procedure was not necessary and expressed concern that valuable notification time would be lost if verbally transmitted messages were required to be repeated. It should be noted that security personnel are now being directed, in training, to repeat back these messages. This item will remain open pending demonstration of the licensee's ability to accomplish these actions during the next annual exercise.

(Closed) Open Item 86-26-04): Federal Emergency Management Agency (FEMA) and licensee identified problems with MUDAC. During the licensee's 1986 annual emergency exercise, MUDAC personnel experienced difficulties coping with the unmonitored release scenario. The central issue, which involved revising the calculational methodology such that field team information could be directly utilized, has been resolved. The TRS-80 microcomputer program has been revised to allow for direct input of plume

centerline radioactivity concentrations or dose rates as determined by environmental field teams. Applicable procedures have been revised and MUDAC personnel have completed training. This item is considered closed.

3. Shift Staffing and Augmentation

The inspector reviewed EPIP 13.14.5, "Emergency Organization," and verified that minimum onshift crews were consistent with Table 2 of Supplement 1 to NUREG-0737. The inspector also reviewed the licensee's latest (July 1987) quarterly, "Emergency Organization Assignment List and Training Requirements," and verified that assignments have been made in accordance with EPIP 13.14.5.

Methods used to notify and augment the onshift emergency staff were reviewed and discussed with EP & EP personnel. The licensee's newly acquired automatic dialer has been operational since July 1, 1987. The licensee has been conducting frequent notification drills (every two weeks) to troubleshoot problems. The drills have also familiarized the individuals in the emergency organization with their responsibilities upon being notified by the automatic dialer. Call trees will be maintained for backup purposes.

The advent of the automatic dialer is considered to be a significant improvement over the licensee's previous method for notifying offshift personnel. The automatic dialer has even allowed the licensee to reduce security manning in the EOF Communication Center from two security guards to one. There are approximately thirteen security guards who have been trained to operate the automatic dialer and perform offsite agency notifications. These security personnel provide exclusive coverage of the communication center.

No deficiencies or violations of NRC requirements were identified during this part of the inspection.

4. Knowledge and Performance of Duties (Training)

A review of the training program was conducted to ensure an effective emergency preparedness training program was established and maintained. This review included an examination of applicable training records, attendance sheets, lesson plans, procedures and other documentation. The inspector interviewed one emergency preparedness instructor and observed refresher training for Joint Information Center (JIC) personnel.

The computerized training report was examined to determine the training status of key emergency response personnel. The accuracy of the computerized report was verified by comparing training status with classroom attendance sheets. Training records were compared with the requirements of EPIP 13.14.7, "Emergency Training." The results of the examination showed that the emergency preparedness training program was being successfully implemented. There were, however, some inconsistencies noted between the training requirements and the training actually being provided. Refresher training courses in Respiratory Protection and Fire Brigade have not been included in EPIP 13.14.7..

Based on the results of the training records review, the EP & EP staff is encouraged to continue its liaison with the training organization.

The licensee's training organization has made some recent changes to the manner in which emergency preparedness training will be conducted. Training for each emergency center is provided by presenting the emergency scenario used in the previous annual emergency exercise. Participants are then asked questions which relate to the center's/ individual's response to the scenario events. Additionally, all Corrective Action Records (CARs) from previous exercises which affect the center are discussed during training.

In order to evaluate the new method of conducting training, the inspector observed refresher training for JIC personnel. The inspector found the new training to be effective and more relevant than the traditional classroom lecture. Participants appeared to be enthusiastic and motivated by the new method. The benefits of discussing the CARs appeared to be twofold; participants are apprised of past problems and they may see corrections to problems they themselves may have identified. The inspector concluded that these changes were innovative and noteworthy.

No deficiencies or violations of NRC requirements were identified during this part of the inspection.

5. Exit Interview

The inspector held an exit interview with the licensee on July 17, 1987, to discuss the preliminary findings of the inspection. The attachment to this report identifies the personnel who were present at the meeting. The licensee was informed that no deficiencies or violations of NRC requirements were identified during the inspection. The status of each of the previously identified open items (Section 2) was addressed and the findings described in Sections 3 and 4 were briefly summarized. The inspector complimented the licensee on the improvements made to the emergency preparedness training program.

ATTACHMENTEXIT INTERVIEW ATTENDEESA. Licensee Personnel

J. Baker, Assistant Plant Manager
G. Bouchey, Manager, Support Services
R. Chitwood, Manager, EP & EP
D. Feldman, Manager, Plant Quality Assurance/Quality Control
R. Graybeal, Manager, Health Physics/Chemistry
J. Houchins, Emergency Planner
F. Klauss, Senior Emergency Planner
D. Larson, Manager, Radiological Programs and Instrument Calibration
D. Mannion, Senior Emergency Planner
R. Mogle, Senior Emergency Planner
G. Oldfield, Supervisor, Radiological Assessment
P. Powell, Manager, Licensing
C. Powers, Plant Manager
G. Ray, Emergency Planner
G. Rhinehart, Supervisor, Health Physics, Chemistry and General Employee Training
P. Sutter, Supervisor, Central Training Services
M. Wuestefeld, Supervisor, Plant Technical

B. Other Personnel

W. Fitch, Executive Secretary, Washington State Energy Facility Site, Evaluation Council