



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-321/83-19 and 50-366/83-19

Licensee: Georgia Power Company
P. O. Box 4545
Atlanta, GA 30302

Docket Nos.: 50-321 and 50-366

License Nos.: DPR-57 and NPF-5

Facility Name: Hatch 1 and 2

Inspection at Hatch site near Baxley, Georgia

Inspector: Walter W. Hansberry
for R. R. Marston

1 Aug 1983
Date Signed

Accompanying Personnel: T. R. Decker

Approved by: G. R. Jenkins
G. R. Jenkins, Chief
Emergency Preparedness Section
Emergency Preparedness and Material
Safety Branch
Division of Emergency Preparedness
and Materials Safety Programs

8/2/83
Date Signed

SUMMARY

Inspection on July 5-8, 1983

Areas Inspected

This routine, unannounced inspection involved 50 inspector-hours on site in the areas of Emergency Preparedness.

Results

Of the areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *T. V. Greene - Deputy General Manager
- *R. W. Zavadoski - Manager Health Physics and Chemistry
- S. C. Ewald - GPC Power Generation Engineer
- J. M. Diluzio - GPC Senior Health Physicist
- *W. H. Rogers - Health Physics Superintendent
- *C. E. Belflower - QA Site Manager
- D. F. Moore - Manager, Training
- *P. E. Fornel - Regulatory Compliance Supervisor
- *T. R. Collins - HP Lab Supervisor
- *R. C. Houston - Senior QA Field Representative
- J. D. Bennett - Health Physics Training Supervisor
- B. E. Brown - Senior Regulatory Specialist
- T. J. Kirkham - Onsite Emergency Coordinator

NRC Resident Inspector

- *P. Holmes-Ray

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 8, 1983, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Training

The inspector reviewed the Radiological Emergency Plan, Implementing Procedures HNP-200, Licensed Plant Personnel Training and Retraining, HNP-201, Radiological Emergency Response Training, and HNP-206, Non-Licensed Departmental Training. Training records were also reviewed. These included lesson plans and outlines, attendance sheets and individual records. The records showed training for Emergency Response Facility staffs and other plant response personnel, such as Radiological Emergency Teams and Fire Brigade; Corporate Staff; and offsite support groups, such as Fire Departments, ambulance, and medical personnel. Radiation Management Corporation provides the emergency training for ambulance and medical personnel, and critiques medical exercises and drills.

The program appeared to be adequate and to meet the goals of the REP.

The records of drills and exercises were also reviewed. The inspector determined that drills and exercises were conducted at the frequencies specified in the REP.

The inspector had no further questions in this area.

6. Audits

The inspector reviewed the annual audits of the licensee's Emergency Preparedness Program. The audits were available for at least the past five years and also included audits of the annual emergency exercise. The inspector also reviewed the corrective action tracking and followup system.

The audits appeared to adequately cover the Emergency Preparedness program and the tracking and followup system appeared to be adequate. The audits are conducted in accordance with GPC Procedure, QA-05-01, Field Audits.

The inspector also reviewed GPC Procedure QA-05-13, NRC Open Items Control, and reviewed the licensee's system for tracking NRC items.

The inspector had no further questions in this area.

7. Emergency Detection and Classification

The inspector reviewed the REP and Implementing Procedures, and determined that the initiating conditions for classifying emergencies were consistent between the two and also consistent with the initiating conditions in NUREG-0654, Appendix 1. The Emergency Alarm Levels are based on specific plant conditions, parameter levels, or trends. The Procedures also make provisions for disposition of non-essential site personnel during an emergency.

Section J of the licensee's Radiological Emergency Plan states, "In the initial (notification) message, sheltering will be recommended for the populace within the plume exposure pathway EPZ for all General Emergencies and for those Site Area Emergencies where the release of radioactive material is substantial. The recommended protective actions in followup messages will be based upon dose projections and field measurements." The REP further states that the tables in EPA-520/1-75-001 will be used as guidelines in determining the recommended actions to offsite officials. Emergency Implementing Procedure HNP-4854 provides more specific guidelines for protective action recommendations. Table 1 provides very general recommendations based on exposure pathway and time after initiation of the emergency. Table 2 provides recommendations based on the projected dose (whole body or thyroid) to the population. These recommendations do not differentiate based on position in the EPZ (upwind or downwind, distance from plant).

10 CFR 50.47(b)(10) requires, in part, that guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, be developed and in place. In NUREG-0654, Section II.J. Protective Response, Criterion 7 provides further guidance that each licensee shall establish a mechanism for recommending protective actions to the appropriate State and local authorities. It specifies that recommendations will be based on the EPA guidelines and NUREG-0654, Appendix 1. Under the Example Initiating Conditions: General Emergency, of Appendix 1, several notes are included which specify protective action recommendations for various core and containment conditions. These notes have been organized, and a flow chart constructed and published in IE Information Notice 83-28.

The licensee's REP and Implementing Procedures do not make provisions for protective action recommendations based on actual or projected core or containment status specified in NUREG-0654, Appendix 1, and as discussed in IE Information Notice 83-28. The inspector stated that this constituted an emergency plan deficiency (50-321, 366/83-19-01). The licensee stated that these bases for protective action recommendations will be added to the REP and at least one applicable Implementing Procedure by September 8, 1983.

The REP does not make provisions for an annual review of EALs with State and local agencies as required by 10 CFR 50, Appendix E, Part IV.B. A licensee representative stated that these reviews are conducted and agreed to insert the requirement in a Corporate Emergency Procedure by July 31, 1983, and to document these reviews in the future (50-321, 366/83-19-02).

The licensee's classification procedures were reviewed and determined to include the four classes specified in 10 CFR 50, Appendix E, Part IV.C. The procedures appear to be useable for prompt and correct classification by licensee personnel. A selection of the Emergency Operating Procedures and Annunciator Response Procedures were reviewed and were found to cross reference the user to the classification procedures.

Implementing conditions in the classification procedure were compared to the range of control room instrumentation. The implementing conditions were found to be within the range of the instruments' range with the exception of the river water levels. The river water level implementing conditions were signaled by alarms at levels only slightly outside the indicator range.

The inspector had no further questions in this area.

8. Emergency Worker Protection

Emergency Implementing Procedure HNP-4812, Emergency Exposure Guidelines, specifies that the Emergency Director can permit exposures in excess of 10 CFR 20 limits. The Shift Supervisor can act as Interim Emergency Director in the initial stages of an emergency, so there is capability to authorize emergency exposures available on site 24 hours per day. Table 1 of HNP-4812 specifies exposure guides for various tasks in Lifesaving and in

Non-Lifesaving situations. These guides are consistent with the EPA guidelines.

Protective apparel and equipment are kept in the warehouse and in several locations about the plant. Respiratory protection equipment is found in several emergency kits, and self contained breathing units with spare bottles are available at the control room and several other areas. Decontamination facilities and supplies are located in the Control Building and Radwaste Building. Decon showers and decon kits are located in the welding training building and the Environmental Building. Routine and emergency decontamination is done in accordance with Procedure HNP-8006, Decontamination.

High range survey meters are available in emergency kits and through Health Physics. The inspector noted that high range dosimeters in the emergency kits were 10 rem or 20 rem maximum range. The inspector stated that while these would be adequate in most cases, the REP had provisions for authorizing doses to 25 rem and 75 rem in some cases, so dosimeters should be available to cover these exposures. The licensee agreed to evaluate the situation and to ensure adequate dosimetry is available by October 1, 1983 (50-321, 366/83-19-03).

Procedure HNP-4866 specifies precautions and radiation protection under emergency conditions. Procedure HNP-4812 provides dose guidelines and limits for offsite support workers. HNP-4727 and related procedures define access control points to be established under emergency conditions. A 24 hour per day dose determination capability exists. If Panasonic TLDs are used, they can be read out at the plant. If other types are used, they must be flown to Eberline, and a readout is available within six hours.

The inspector had no further questions in this area.

9. Dose Calculation and Assessment

The inspector reviewed licensee procedures for dose calculation and assessment following an accidental release of radioactivity. A sample problem was given to licensee staff responsible for calculating offsite doses during an accident. Based on the results of this problem, the inspector stated that further training is needed. The licensee concurred and has agreed to further training by September 8, 1983 (50-321, 366/83-19-04).

In reviewing the procedures, the inspector noted a caveat that calculated thyroid doses may be different from those generated by the state by a factor of 3 to 300. Discussions with the licensee indicate that the differences are well known and understood by both the licensee and state technical staffs.

It was noted that the results of the computer dose calculations were printed out as several matrices, one of which indicated the protective action recommendations associated with the doses calculated for that particular sector. This seemed to be a useful tool and a benefit to the protective action decision making process.

The inspector had no further questions in this area.

10. Closeout of Open Items

Licensee representatives stated that if the OSC becomes uninhabitable, an alternate OSC would be established in the Simulator Training Building. In addition, this building would be used to provide work space and facilities for corporate, contractor, and non-licensee augmentation personnel. Based on the above findings, the previously identified improvement items in this area (50-321, 366/81-30-10 and 50-321, 366/81-30-18) are closed.

The inspector verified installation of High Range Monitors in the Main Stack, Reactor Building Vents, and Containment through discussion with licensee representatives, inspection of control room indicators, and review of Procedure HNP-7450. The inspector also reviewed Procedures HNP-7411 and 7412, which provide for high level noble gas sampling if gaseous effluent monitors are off scale or inoperable. Based on the above findings, the previously identified improvement items in this area (50-321, 366/81-30-20 and 50-321, 366/81-30-13) are closed.

The inspector observed the meteorological parameter indicators and recorders in the control room and the torus water temperature recorders and determined that there is no problem in determining correct readings. Based on the above findings, the previously identified improvement item in this area (50-321, 366/81-30-21) is closed.

The inspector noted that the seismic readouts in the control room are alarms only. The implementing conditions in the classification procedures are expressed in "g" units. Procedure HNP-1-2092 provides conversions. Based on the above findings, the previously identified improvement item in this area (50-321, 366/81-30-22) is closed.

The inspector reviewed the emergency operating procedures and fire protection procedures. The procedures now include specific action sections and, where appropriate, specify classification of the incident or refer to a specific Emergency Implementing Procedure. Based on the above findings, the previously identified improvement item in this area (50-321, 366/81-30-27) is closed.

The inspector verified that Procedure HNP-4832 makes provisions for labeling and disposition of post accident samples. The previously identified improvement item in this area (50-321, 366/81-30-38) is closed.

Emergency Exposure Guidelines are provided in Procedure HNP-4812. In emergencies, abort dose rates should be specified in the RWP. Abort dose rates are specified in specific procedures, HNP-4826 and 4831, which are used to obtain samples or remote monitor readings. The previously identified improvement item in this area (50-321, 366/81-30-41) is closed.

The inspector reviewed Procedure HNP-4853, Emergency Classification and Prompt Offsite Dose Assessment Based on Main Stack Effluent. The procedure appears to be easy to use. Training records were reviewed and showed that operators were trained on the procedure in late 1982. The previously

identified inspector followup item in this area (50-321/82-29-01 and 50-366/82-27-0i) is closed.