

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-286/82-02

Docket No. 50-286

License No. DPR-64 Priority -- Category C

Licensee: Power Authority of the State of New York

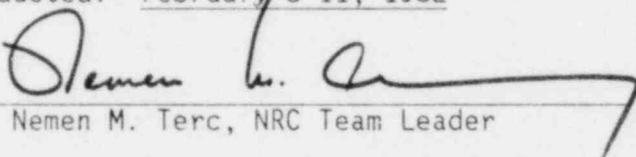
P. O. Box 215

Buchanan, New York 10511

Facility Name: Indian Point Nuclear Power Plant Unit 3

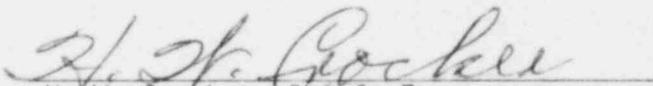
Inspection at: Buchanan, New York

Inspection conducted: February 8-11, 1982

NRC Personnel: 
Nemen M. Terc, NRC Team Leader

7/22/82
date

C. Sakenas, Radiation Specialist, NRC
T. Essig, Battelle NW Laboratories
W. Knox, Battelle NW Laboratories

Approved by: 
H. W. Crocker, Chief, Emergency
Preparedness Section

7/22/82
date

Inspection Summary: Inspection on February 8-11, 1982 (Report No. 50-286/82-02)
Areas Inspected: Special announced inspection follow-up of emergency preparedness items from a prior appraisal performed on May 11-20, 1981(Report No. 50-286/81-05).
The inspection involved 36 inspector-hours onsite by two regionally based inspectors and two NRC contractors.

DETAILS

1. Persons Contacted (present during exit interview)

J. Brons, Resident Manager
J. Brumfield, Information Officer
J. Gillen, Chemistry General Supervisor
W. Josiger, Superintendent of Power
L. Kelly, Assistant Operations Superintendent
L. Lomonaco, Assistant to Radiation & Environmental Services Superintendent
J. Perrotta, Radiation & Environmental Services Superintendent
J. Schivera, Licensing Coordinator
D. Vinchkoski, Shift Technical Advisor
In addition to the above, the auditors contacted other members of the licensee's staff.

2. General

During the period May 11-15, 1982, the NRC conducted an appraisal of the state of emergency preparedness for the Indian Point Station Unit #3. As a result of this appraisal, the NRC identified ten items requiring resolution in order for the licensee to achieve an adequate state of emergency preparedness. These findings were documented in a letter to the licensee dated November 19, 1981, and an Office of Inspection and Enforcement Inspection Report Number 50-286/81-05. In a letter to the NRC, dated December 22, 1981, the licensee committed to resolve all of the significant findings, and to consider all of the improvement items. The purpose of this inspection was to review the status of the licensee's actions in relation to resolving these items.

3. Licensee Action on Previous Inspection Findings

3.01 (Closed) 50-286/81-05-04

Development and implementation of an emergency response training program for qualifying individuals and groups who are selected for assignment to each of the various functional areas of activity, including:

- a. medical first-aid, onsite and offsite fire response organizations, post-accident sampling, the recovery organization, other augmentation personnel, and the new media;
- b. provisions for training affected individuals in major plan, procedure, facility, equipment or organizational changes; and
- c. the means to verify attendee performance against training objectives. (Appendix A, item 1)

The auditors verified that an expanded training program had been developed in procedure IP-1085 which met the intent of this finding.

This item is closed.

3.02 (Open) 50-286/81-05-07:

Provisions for sufficient space in the Emergency Operations Facility (EOF) and Alternate EOF to enable effective direction, coordination and evaluation of all licensee activities during emergency conditions. (Appendix A, item 2)

The auditors noted that the licensee made provisions for a temporary EOF in the Buchanan Service Center and for an alternate EOF in Consolidated Edison's Eastview Service Center (more than 10 miles from the site). Procedure IP-1040 indicated when evacuation from the EOF was needed, but failed to establish specific actions concerning transferring of the various functional areas of emergency response to organizational elements in other emergency facilities until the alternate EOF was properly activated.

This item will remain open until procedures specify the transfer of all functional areas of responsibility during the time of transit between the EOF and Alternate EOF, to ensure continuity of the emergency response.

3.03 (Open) 50-286/81-05-11:

Development of plans/schemes and procedures for handling, storing, transferring, analyzing and discharging post-accident liquid wastes. (Appendix A, item 3)

The auditors determined that the licensee expanded their liquid waste storage capacity to handle post accident liquid waste, and that a Memorandum of Understanding (No. 15) with Consolidated Edison permitted the transfer of post-accident liquid wastes to Indian Point No. 1. However, a scheme addressing locations and routes on a priority basis based on expected radiation levels, and personnel access was not available. In addition, sampling means have not been established.

This item will remain open until the intent of the finding has been adequately addressed.

3.04 (Closed) 50-286/81-05-12:

Provisions for communication and other equipment needed to operate the News Center consistent with its designated functions during a emergency as well as for security at the News Center. (Appendix A, item 4)

During the March 3, 1982 exercise, the auditors verified that the Verplanck News Center contained equipment as needed to fulfill its intended function (e.g. telephones, copiers, typewriters, etc.).

This item is closed.

3.05 (Open) 50-286/81-05-19:

Development of unambiguous Emergency Action Levels based on Control Room and plant instrumentation and conditions, including appropriate references between the Emergency Operating Procedures and the appropriate emergency classification in the Emergency Plan. (Appendix A, item 5).

The auditors verified that the licensee had expanded Table 4.1 (Initiating Conditions and Emergency Action Levels) and included plant instrumentation and conditions. The auditors noted, however, that procedure references to this table, contained the statement "for further classification", which indicated its optional nature. The licensee stated that the Plan Emergency Procedures (PEP)s would be revised to include a direct reference into the Emergency Plan classification procedure.

This item will remain open until the licensee revise PEPs to meet the intent of this finding.

3.06 (Closed) 50-286/81-05-20:

Provisions for making protective action decisions based on current and projected plant status and conditions, i.e., for accident situations in which minimal radiological releases have occurred, but plant status, as evidenced from instrumentation, is deteriorating. (Appendix A, item 6)

The auditors verified that new procedures included recommendations concerning protective actions based on plant conditions.

This item is closed.

3.07 (Closed) 50-286/81-05-23:

Provisions for communicating protective action recommendations based upon plant system parameters and/or radiological dose projections directly to the local offsite authorities responsible for implementing protective measures within the plume EPZ. (Appendix A, item 7)

The auditors verified the installation of direct telephone communications with local offsite authorities.

This item is closed.

3.08 (Closed) 50-286/81-05-26:

Revision of Procedure RE-HPP-3.4 to include: pre-task supervisory briefings concerning precautions and prerequisites to be observed based upon unusual plant radiological conditions expected and mission direction; provisions for communication (with designation of backup means) of data, including

transmittal of original data sheets to the organizational element responsible for assessment; provision of data sheets to assure recording of pertinent data relevant to the surveys; and provisions for labeling collected samples for future identification and analyses, and for a central collection point for such samples. (Appendix A, item 8)

The auditors verified that the new revision of procedure RE-HPP-3.4 (Emergency Health Physics Monitoring and Sampling) included: precautions, and prerequisites, communication methods, collection and transmittal of data.

This item is closed.

3.09 (Closed) 50-286/81-05-34:

Development of procedures for maintenance of security during emergency conditions. (Appendix A, item 9)

The auditors verified a newly approved Security procedure, included detailed information for security personnel during emergencies.

This item is closed.

3.10 (Open) 50-286/81-05-38:

Development and implementation of a program for dissemination of information to the public and the news media regarding the actions to be taken by individuals within the plume EPZ during an emergency. (Appendix A, item 10)

The auditors verified that the licensee had distributed information to residents of the EPZ regarding action to be taken during emergencies, but noted that posters and telephone book inserts had not been developed.

This item will remain open until the above action is completed.

3.11 (Closed) 50-286/81-05-01:

Clarification of the interface between the corporate and site emergency organizations as they pertain to the Plant Operations Manager (Appendix B, item 1)

The auditors verified that the emergency organization chart (figure 5-3 in the Emergency Plan) was revised to show that the Plant Operations Manager reports to the Emergency Director.

This item is closed.

3.12 (Closed) 50-286/81-05-02:

Provisions for an on-call TSC Manager at all times. (Appendix B, item 2)

The auditors verified that existing rosters included an oncall TSC manager.

This item is closed.

3.13 (Closed) 50-285/81-05-03:

Provisions of written agreements with contractors for health physics staff support for emergency conditions extending beyond 24 hours (Appendix B, item 3)

The auditors verified that the Institute for Resource Management had an agreement to provide health physics support to the licensee during an emergency.

This item is closed.

3.14 (Closed) 50-286/81-05-05:

Designation of emergency preparedness instructor selection and qualification criteria. (Appendix B, item 4)

The auditors reviewed Section 2.4 of procedure IP-1085, and the position description for Emergency Preparedness Instructors, and noted that selection and qualification criteria for instructors were adequate.

This item is closed.

3.15 (Closed) 50-286/81-05-06:

Provisions for dedicated communication links from the TSC to State and local government response agencies. (Appendix B, item 5)

The auditors determined that a phone link between the TSC and offsite authorities was not needed since, according to the Emergency Plan and Procedures, this function is performed either by the Shift Supervisor (from the Control Room) or the Emergency Director (from the EOF).

This item is closed.

3.16 (Closed) 50-286/81-05-08:

Re-evaluation of the primary coolant sampling and analytical facilities for adequacy assuming a 10 Ci/g primary coolant source term. (Appendix B, item 6)

The auditors verified that the licensee had conducted a study of the primary coolant source term and concluded that the dose rate for a 10 Ci/g sample would be 20 R/hr. Considering the sampling and handling time required, the whole body exposure would be within the guidelines of NUREG. 0737. The licensee estimated that under the most severe accident, a maximum concentration of 2.75 Ci/g would occur, and this could result in smaller exposure doses.

This item is closed.

3.17 (Closed) 50-286/81-05-09:

Provisions of appropriate shielding for transporting collected containment air samples to the radioanalytical laboratory and provisions for the storage/maintaining of the samples obtained. (Appendix B, item 7)

The auditors verified that the new revision of procedure RE-CS-042 included shield assemblies for particulate filter and iodine cartridges to minimize exposures during transporting and for storing post-accident samples.

This item is closed.

3.18 (Open) 50-286/81-05-10:

Determination of the representativeness of post-accident airborne effluent particulate sampling. (Appendix B, item 8)

The auditors noted that a study of the accident sampling system was pending.

This item will remain open until that study is completed.

3.19 (Open) 50-286/81-05-13:

Performance of an Engineering study of the existing ARM system to upgrade post-accident radiation level mapping capability and to extend the upper limit of detection. (Appendix B, item 9)

The auditors noted that an Engineering study of detection range of the existing ARM system was pending.

This item will remain open until the above action is completed.

3.20 (Closed) 50-286/81-05-14:

Justification of the positioning of meteorological instruments mounted on the primary tower or relocation of these instruments to conform to Regulatory Guide 1.23. (Appendix B, item 10)

The auditors inspected the meteorological tower and records and concluded that the instrument arm had been extended to conform to Regulatory Guide 1.23.

This item is closed.

3.21 (Closed) 50-286/81-05-15:

Determination of whether 15-minute averaged data from the backup meteorological tower reasonably represent information from the primary system (i.e., the site meteorology) and if not representative, appropriate modifications to assure representativeness of the backup tower data. (Appendix B, item 11)

The auditors verified that the the tower used for plant siting had been reactivated for use as back-up meteorological tower data.

This item is closed.

3.22 (Closed) 50-286/81-05-16:

Provisions for additional respiratory protection equipment for use during emergencies. (Appendix B, item 12)

The auditors verified that sufficient SCBA units were in place. In addition, a mutual assistance agreement with Consolidated Edison was made to provide additional SCBA units.

This item is closed.

3.23 (Open) 50-286/81-05-17:

Provision of direct means of communication other than land-line telephone (e.g., a radio system) from the EOF to offsite authorities to ensure capability of communicating protective action recommendations in the event that telephone systems are unusable. (Appendix B, item 13)

The auditors noted that the installation of a radio system as backup communication to offsite authorities was pending.

This item will remain open until the above action is completed.

3.24 (Closed) 50-286/81-05-18:

Revision of emergency procedure to incorporate the use of the New York State Police radio located in the control room. (Appendix B, item 14)

The auditors discussed this finding with the licensee and determined that an alternative solution, using a new Radio Network for communications with counties and state authorities, was adequate.

This item is closed.

3.25 (Closed) 50-286/81-05-21:

Provision of prepared messages for informing response groups State and local officials, during the initial notification sequence, of the emergency classification and any protective action recommendations based on current and projected plan status and conditions, as well as radiological dose projections. (Appendix B, item 15)

The auditors verified that messages indicating emergency classifications and protective action recommendations had been incorporated in notification procedure IP-1030.

This item is closed.

3.26 (Closed) 50-286/81-05-22:

Provisions for including pertinent railroad lines in the notification scheme. (Appendix B, item 16)

The auditors verified that the revision of procedure IP-1030 included provisions for notifying the railroads.

This item is closed.

3.27 (Closed) 50-286/81-05-24:

Data sheets which include provisions for recording the date and time of each survey, the names of the technicians, the duration of the meter readings, the instruments used by type and serial number, as well as air sample count times. (Appendix B, item 17)

The auditors verified that the revised procedure IP-1010 included: technicians' name, instruments used, date and time of survey.

This item is closed.

3.28 (Closed) 50-286/81-05-25:

Specification in Procedure IP-1005 and IP-1010 of the organizational element to whom collected data and the data sheets are to be provided for emergency assessment. (Appendix B, item 18)

The auditors verified that revised procedures IP-1005, 1010, and 1011 specified organizational elements that would to receive the data collected.

This item is closed.

3.29 (Closed) 50-286/81-05-27:

Provision of data sheets for post-accident primary coolant sampling in Procedure RE-CS-042, revision 2. (Appendix B, item 19)

The auditors verified that revised procedure RE-CS-042 included a data sheet for post-accident primary coolant sampling.

This item is closed.

3.30 (Closed) 50-286/81-05-28:

Revision of Procedure RE-CS-042, Rev. 2, to include: provisions/precautions for contamination control during post-accident sampling and analyses; provisions for analysis of above samples if primary analytical area has elevated radiation levels; provision of data sheets; and provisions for transmitting the data, as well as, the original data sheets to the organizational element responsible for assessment. (Appendix B, item 20)

The auditors verified that revised procedure RE-CS-042 included: data sheets, provisions for data transmission, and instructions for contamination control.

This item is closed.

3.31 (Closed) 50-286/81-05-29:

Revision of the post-accident sampling and analytical procedures to include provisions for: valving diagrams and schematics; checklists for assuring task completion; labeling, transporting, handling and storage of high activity samples. (Appendix B, item 21)

The auditors verified that revised procedure RE-CS-042 included: valving diagrams, schematics, checklists, and requirements for labeling, transporting and storing samples.

This item is closed.

3.32 (Closed) 50-286/81-05-30:

Revision of post-accident sample analytical procedures to include provisions for analyzing high activity particulate and iodine samples. (Appendix B, item 22)

The auditors verified that revised procedure RE-CA-300 included instructions for using the available collimator beam shield assembly to analyze high activity samples.

This item is closed.

3.33 (Open) 50-286/81-05-31

Revision of Procedure IP-1018 and other relevant procedures to detail the method by which the Emergency Director is to orchestrate the REMP sample collection and analyses, and to provide, as far as practical, for preplanned sample collection frequencies for various magnitudes and modes of activity releases following an accident. (Appendix B, item 23)

The licensee indicated that procedure IP-1018 was pending revision to incorporate the above findings.

This item will remain open until that action is completed.

3.34 (Closed) 50-286/81-05-32:

Modification of Procedure IP-1060 to include provisions: to ensure that all personnel leaving restricted areas or other areas suspected to be contaminated and individuals in assembly and reassembly areas are monitored for contamination; for maintaining records of all individuals checked for contamination; for special considerations for skin contamination with radioiodine; and for ensuring that collected data are provided to the organizational element responsible for radiation protection during emergencies. (Appendix B, item 24)

The auditors verified that revised procedure IP-1060 included instructions to: check individuals for contamination prior to leaving restricted areas; maintain records of individuals checked; and forward records to the Health Physics team leader.

This item is closed.

3.35 (Closed) 50-286/81-05-33:

Provision of specific instructions, guidance and criteria in IP-1020, IP-1022, and IP-1054 to ensure the proper instruments and techniques are used (Appendix B, item 25).

The auditors verified that revised procedure IP-1020 included guidance for priority concerning medical attention prior to decontamination, and that revised procedure IP-1054 required a health physics technician or a person trained in the use of survey instruments.

This item is closed.

3.36 (Closed) 50-286/81-05-35:

Procedural provisions for: development and review of ad hoc procedures for repair and corrective actions during emergencies; team practice of corrective actions to be performed prior to entry into high radiation areas; clarification as to how REA's are to be executed during accident conditions; and use of a

survey instrument for the team with a range sufficient to measure radiation fields of 1000 R/hr or more. (Appendix B, item 26)

The auditors verified that revised procedure IP-1025 addressed ALARA considerations and clarified the use of Radiation Exposure Authorizations during emergency conditions.

This item is closed.

3.37 (Open) 50-286/81-05-36:

Specification of specific criteria upon which the emergency classes will be downgraded and for entering the recovery mode. (Appendix B, item 27)

The auditors noted that a procedure specifying criteria for de-escalation had not been developed.

This item will remain open until the above action is completed.

3.38 (Closed) 50-286/81-05-37:

Provisions for notification of Federal, State and local officials and response organizations prior to entering a downgraded or recovery mode (Appendix B, item 28)

The auditors verified that revised Implementing Instructions included instructions to notify offsite authorities prior to entering a downgraded or recovery mode.

This item is closed.

3.39 (Closed) 50-286/81-05-39:

Verification and documentation that inventories of emergency equipment designated for common use for emergencies at Indian Point Unit 2 and Indian Point 3 are correct and that routine equipment operability checks are performed. (Appendix B, item 29)

The auditors reviewed equipment checklists and found that inventories were correct and that routine operability checks had been performed.

This item is closed.

3.40 (Closed) 50-286/81-05-40:

Provisions for dating "call-in rosters" to ensure that the current versions are properly distributed and in use. (Appendix B, item 30)

The auditors noted that means for updating "call-in rosters" were placed into effect.

This item is closed.

3.41 (Closed) 50-286/81-05-41:

Coordination of the interface between the licensee and NRC Region I through the Region I Emergency Preparedness Coordinator concerning the work space and communication needs of the NRC emergency response organization. (Appendix B, item 31)

The auditors verified that workspace and communications capability had been upgraded in the emergency response facilities consistent with the needs of the NRC emergency response organization.

This item is closed.

3.42 (Closed) 50-286/81-05-42:

Provision of a written agreement with Consolidated Edison concerning transfer of post-accident liquid effluents, if such transfers are considered as an option. (Appendix B, item 32)

The auditors verified that a written agreement was in place with Consolidated Edison for the transfer of liquid wastes to Unit 1.

This item is closed.

4.0 Exit Interview

On February 11, 1982 at the conclusion of the inspection, the Team met with persons listed in Paragraph 1 and the Team Leader presented the scope and findings.