

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-293/86-02

Docket No. 50-293

License No. DPR-63

Priority --

Category C

Licensee: Boston Edison Company M/C Nuclear
800 Boylston Street
Boston, Massachusetts 02199

Facility Name: Pilgrim Nuclear Power Station

Inspection At: Plymouth, Massachusetts

Inspection Conducted: January 13-17, 1986

Inspectors: J. McFadden
FOR R. L. Nimitz, Senior Radiation Specialist

3-7-86
date

J. McFadden
J. R. McFadden, Radiation Specialist

3-7-86
date

J. Kronenberg
FOR J. L. Kronenberg, Reactor Engineer

3-7-86
date

Approved by: M. Shanbaky
M. M. Shanbaky, Chief, Facilities Radiation
Protection Section, EPRPB, DRSS

3/7/86
date

Inspection Summary: Inspection on January 13-17, 1986 (Report
No. 50-293/86-02).

Areas Inspected: Routine, announced inspection of the following:
implementation of improvement items identified in the Radiological Improvement
Program; radiological controls for fuel pool re-racking and removal of the
radwaste concentrator; and calibration and testing of area radiation monitors.
The inspection involved 117 inspector-hours onsite by two region based inspec-
tors and one NRC Headquarters based Reactor Engineer.

Results: The Radiological Improvement Program was being satisfactorily imple-
mented. Three violations were identified by the licensee during review of
concentrator work. The licensee took corrective action for these.

8603170227 860310
PDR ADOCK 05000293
G PDR

DETAILS

1.0 Individuals Contacted

1.1 Boston Edison

- *W. D. Harrington, Senior Vice President Nuclear
- *A. L. Orsen, Vice President, Nuclear Operations
- *C. J. Mathis, Station Manager
- *W. Deacon, Assistant to Senior Vice President Nuclear
- *T. Sowdon, Radiological Section Head

1.2 USNRC

M. McBride, Senior Resident Inspector

*denotes those individuals attending the exit meeting on January 17, 1986.

The inspector also contacted other personnel (licensee and contractor).

2.0 Purpose of Inspection

The purpose of the routine, announced radiological controls inspection was to review the following program elements:

- Licensee action on previous inspection findings
- Implementation of the Radiological Improvement Program
- Radiological Controls for re-racking of the spent fuel pool
- Radiological Controls for Removal of the Radwaste Concentrator
- Area Radiation Monitor (ARM) Testing and Calibration

3.0 Licensee Action on Previous Findings

3.1 (Closed) Follow-up Item: (50-293/85-07-02)

Licensee's close-out information for radiological occurrence reports (RORs) does not provide a description of 1) what corrective action was the basis for closure of the ROR or 2) what action was taken to prevent recurrence. Inspector review of this inspection also identified numerous closed RORs without a clear description of the basis for closure. The licensee acknowledged this and indicated the matter is being reviewed. Meetings were held with various licensee personnel to determine the extent and adequacy of corrective action taken

for these RORs. No apparent violations were identified. The licensee's action on this matter will be reviewed in conjunction with Radiological Improvement Plan Item No. 14.1-1 (NRC Follow-up Item 50-293/85-22-16).

3.2 (Open) Follow-up Item (50-293/85-13-05)

Licensee to include check-off list in radioactive waste shipping procedures to address verification of cask seal change-out. The licensee revised applicable procedures; however the revision does not ensure cask seal change-out at specific intervals and in accordance with the Certificate of Compliance requirements.

3.3 (Open) Follow-up Item (50-293/85-13-07)

NRC to review approved Radiological Controls Organization. The licensee established and approved a long term Radiological Controls Organization. The licensee described: group functional responsibilities; individual responsibilities; and organization responsibilities. A defined organization chart was established. The organization and responsibilities were not formally incorporated into any station approved procedures. In addition, Radiological Control Organization interfaces with other station groups and shared responsibilities were not described. The above matters remain open. Licensee representative indicated these matters would be reviewed.

3.4 (Closed) Follow-up Item (50-243/85-13-08)

Licensee to correct dose conversion factor contained in procedure No. 6.2-111. The licensee revised and reissued procedure 6.2-111 as PNPS SI-RP.2001. The licensee corrected the factor in the revision.

3.5 (Open) Follow-up Item (50-293/85-13-11)

NRC to review status of Traversing Incore Probe (TIP) and Radwaste Area Radiation Monitors. The licensee determined an area monitor is not needed in the Radwaste Segregation area. The licensee's Radiological Oversight Committee is currently reviewing the area radiation monitors in the TIP area.

3.6 (Closed) Follow-up Item (50-293/85-13-12)

Licensee to include videotape segment discussing procedure adherence into General Employee Training Program. The inspector selectively reviewed the tapes. The tape included discussion of the need to adhere to procedures.

3.7 (Closed) Follow-up Item (50-243/85-22-01)

Licensee to establish sampling and analysis program to detect radioactive contamination of the normally noncontaminated service air system. The licensee has established and is implementing a sampling and analysis program for the service air system.

3.8 (Closed) Follow-up (50-293/85-22-02)

Licensee to implement long term corrective action to improve procedure adherence. The licensee established Outage Management Group Instruction No. 11. This instruction describes the methodology to be used to improve intergroup communication and interface. However, the instruction does not provide clear guidance as to when intergroup meetings should be held. This matter will be reviewed during a subsequent inspection (50-293/86-02-01).

3.9 (Open) Follow-up Item (50-293/85-22-03)

Licensee to review facility design with respect to concerns identified in IE Bulletin 80-10, "Contamination of Nonradioactive system and Resulting Potential for Unmonitored/Uncontrolled Release to the Environment. The licensee had scheduled the review of his facility design to be completed in January 1986. The licensee has taken interim actions to address the bulletin concerns. The licensee's facility review is not yet completed but is planned for completion in January 1986.

3.10 (Closed) Follow-up Item (50-293/85-22-04)

Licensee to review and resolve status of a Radiological Oversight Committee member no longer independent of station organization. The licensee replaced the individual with an appropriately qualified individual independent of the station organization.

3.11 (Closed) Follow-up Item (50-293/85-22-06)

NRC to review licensee radiological controls for fuel pool work. The fuel pool work was reviewed during this inspection (See Section 5.1 of this report.) and inspection 50-293/85-32.

3.12 (Closed) Follow-up Item (50-293/85-22-07)

Licensee to ensure position responsibilities for positions of the new, long term Radiological Controls Organization were based on appropriate task analyses. Inspector review indicated task analyses were performed for all appropriate positions in the organization and that position responsibilities were based on the analyses.

3.13 (Open) Follow-up Item (50-293/85-22-09)

Licensee to develop and implement a program to ensure that personnel are trained in new procedures. Licensee established program procedure. Procedure does not ensure that personnel will be trained in safety significant procedure changes and new procedures in a timely manner. The licensee is reviewing the matter.

3.14 (Closed) Follow-up Item (50-293/85-22-14)

Licensee to approve RWP improvement plan. The plan was reviewed and approved by licensee Radiological Controls Management. The plan, with some revisions, was implemented.

3.15 (Closed) Follow-up Item (50-293/85-22-15)

Licensee to prepare plan and schedule for modification of the Main Control Point. The licensee has prepared a plan and schedule for modification of the Main Control Point. The implementation of the schedule will be reviewed during subsequent inspections.

3.16 (Open) Follow-up Item (50-293/85-32-23)

Establish Final RWP program. See item No. 13 (RIP Item 7.2.1-10) contained in the attachment to this report.

3.17 (Closed) Follow-up Item (50-293/85-32-25)

Consolidate radwaste storage areas. The licensee consolidated radwaste storage areas and defined acceptable locations for storage.

3.18 (Closed) Follow-up Item (50-293/85-32-26)

Provide enclosures for Radwaste. Licensee provided enclosures for Radwaste.

3.19 (Open) Follow-up Item (50-293/85-32-27)

Shield consolidated radwaste storage locations. Licensee shielded consolidated storage areas. However, procedures do not provide "trigger levels" requiring shielding of radwaste storage areas.

3.20 (Closed) Follow-up Item (50-293/85-32-28)

Licensee to approve the ALARA Section of the Radiation Protection Plan. The licensee's station manager approved the entire plan. The plan includes the subject ALARA Section.

4.0 Implementation of Licensee Commitments Presented to NRC in the Radiological Improvement Program (RIP)

4.1 General

The inspector reviewed the implementation of Radiological Improvement Program commitments presented to the NRC. The review was with respect to criteria and/or information contained in the following documents:

- Order Modifying Licensee, Notice of Violation, and Notice of Deviation (NRC Inspection No. 50-293/84-25 and 50-293/84-29), dated November 29, 1984.
- Letter (W. D. Harrington, Senior Vice President-Nuclear, Boston Edison, to T. E. Murley, Regional Administrator, NRC Region I), dated February 28, 1985, (BECo ltr No. 85-042),
- Licensee Completed Regulatory Requirement Analysis Forms (various) relative to Radiological Improvement Plan (RIP) Milestones,
- Licensee Radiological Activity Assessment Reports (RAAR) (various),
- Radiological Oversight Committee (ROC) Meeting Minutes (various),
- NRC Inspection Report No. 50-293/85-13, dated July 16, 1985, and
- NRC Inspection Report No. 50-293/85-22, dated October 7, 1985.
- NRC Inspection Report No. 50-293/85-32, dated December 31, 1985.

The purpose of this review was to determine if:

- the licensee met the commitments (i.e. milestones) specified in the Radiological Improvement Program (RIP);
- the material or actions taken/generated by the licensee satisfactorily met the commitments made to NRC in the RIP; and
- the material or actions taken/generated were properly implemented.

The following aspects of RIP implementation were noted and verified implemented:

- a tracking program was in place to identify milestones due;
- adequate management controls were in place to monitor implementation of milestones and initiate proper action when milestones were identified as potentially not being met;
- review was performed of the material or actions taken/generated to determine its adequacy prior to its acceptance and implementation.

4.2 Findings

The inspector reviewed a total of 33 commitments that were to have been completed by the licensee by December 31, 1985. The commitments reviewed are identified in the attachment to this report.

The review indicated the licensee satisfactorily completed his action on 21 of the commitments. Several commitments were left open due to the need for additional licensee action or NRC review. These are identified in the attachment to this report.

Based on the above review, the licensee is monitoring implementation of the RIP improvement items, and is meeting commitments provided to NRC Region I.

Within the scope of this review, the following was noted:

- The licensee's Senior Vice President-Nuclear is monitoring implementation of the Radiological Improvement Program.
- Radiological Oversight Committee members are touring the facility every two weeks. Findings identified during the tours are brought up and discussed at the ROC meetings. Action is initiated to resolve problems identified.
- A Radiological Assessor is touring the plant daily. Identified deficiencies are reviewed and brought to the attention of the appropriate group for resolution.
- The licensee has taken action to address procedure adequacy concerns identified during previous NRC inspections of this area. The licensee has taken action to 1) improve the technical adequacy of radiological controls procedures 2) stress attention to detail and 3) improve the overall quality of radiological controls procedures. The licensee is reviewing and revising (as appropriate), thirty-five previously established procedures to identify areas for improvement.

5.0 Radiological Controls

The inspector reviewed the implementation, adequacy, and effectiveness of Radiological Controls for the installation of high density fuel racks in the fuel pool and removal of the radwaste concentrator. The following matters were reviewed:

- establishment, adequacy, and implementation of appropriate procedures for the activities,
- adequacy and adherence to Radiation Work Permits,
- selection, qualification and training of personnel,
- implementation and adequacy of ALARA controls,
- external exposure controls
- internal exposure control
- radiological surveys
- items needing improvement identified in Inspection Report 50-293/85-32.

The evaluation of the licensee's performance in this area was based on discussions with personnel, review of appropriate documents and records, and observations by the inspector.

5.1 Fuel Pool Re-Racking (Radiological Controls)

Documents Reviewed

- 10 CFR 20, Standards for Protection Against Radiation
- applicable technical specifications
- applicable licensee procedures including:
 - Procedure No. 6.7-121, "Radiation Protection Requirements for Diving in Radiologically Controlled Areas,"
 - Temporary Procedure No. TP85-126, "ALARA Review for Diving in Support of Re-Rack Work,"
 - Temporary Procedure No. TP 85-119, "Operation of the Liquid Blasting Hydrolyzer,"

- applicable records including:
 - RWPs covering diving operations and top-side support work
 - In-pool survey maps of dive areas
 - Calibration records for underwater survey meters and alarming dosimeters
 - Dosimetry results for TLD badges and pocket dosimeters
 - Pre- and post-diving operations whole body counting results of divers
 - HP control point logbook for fuel pool re-racking
 - Radiological occurrence reports

Findings

Within the scope of the review, no violations or deviations were identified.

The licensee was providing generally acceptable radiological controls for diving operations.

The following item needing licensee attention was identified:

- Establish station wide controls to limit/control exposure to critical body parts.

A formal program to address this matter has yet to be developed. Licensee representatives indicated a station wide program to address this concern would be established. This matter will be reviewed during a subsequent inspection (50-293/86-02-02).

Within the scope of this review, the following was noted:

- The licensee performed extensive clean-up efforts in the dive areas of the spent fuel pool. The clean-up efforts resulted in an average dose rate of 20 mrem/hour in the areas.

Note: The re-rack job is about 75% complete. Total exposure received by divers is about 0.8 person-rem.

- The licensee performed an evaluation of the radiation fields in the dive areas. The evaluation provided data to support the adequacy of calibration of dose rate monitoring instruments used and personnel monitoring devices worn.

- The licensee established and implemented a diver bioassay program.
- The licensee established pre-dive check-lists for divers.
- The licensee provided appropriate training of personnel associated with diving activities.

5.2 Radwaste Concentrator Removal (Radiological Controls)

Documents Reviewed

- 10 CFR 20, Standards for Protection Against Radiation
- applicable technical specifications
- applicable licensee procedures including:
 - Temporary Procedure No. TP85-107, "Dismantling/Removal of Radwaste Concentrator and Associated Equipment,"
 - Temporary Procedure No. TP85-108, "Operation of the AP-1000 and AP-2000 HEPA Filter Units Including Filter Changeout,"
 - Station Instruction No. SI-RP.5002, "Use and Control of Portable Ventilation Units and HEPA Vacuum Cleaners,"
 - Station Instruction, SI-RP.7001, "Issue, Use, and Turn-In of Respiratory Equipment,"
 - Procedure No. 6.1-209, "Radiological Occurrence Reports,"
 - Station Instruction No. SI-RP.1100, "MPC-Hours Determination,"
 - Station Instruction No. SI-RP.0100, "ALARA Daily Exposure Review (ADER),"
- applicable records including:
 - radiological survey data
 - radiation work permits
 - personnel exposure data
 - ALARA review sheets
 - MPC-hour logs
 - radiological occurrence reports
 - breathing air quality data

Findings

Within the scope of this review no violations or deviations were identified.

During evaluation of airborne radioactivity samples collected in the concentrator room in early December, 1985, the licensee determined on or about December 9, 1985 that at least three samples had been inadequately evaluated. The licensee had failed to make dead time correction for the samples thus underestimating the total activity contained on air sample filter paper. This resulted in the gross beta-gamma air activity in the concentrator room to be underestimated by a factor of 2-3. Upon identification, the licensee performed the following:

- Work was halted in the concentrator room at that time.
- an evaluation of the adequacy of current respiratory protection devices used was initiated,
- Based on the evaluation of respiratory protection devices, a decision was made to change from full face (negative pressure) particulate respirator to full face air supplied equipment. The licensee's evaluation indicated that the protection factor (PF) (PF=50) of the full face negative pressure respirator had been exceeded.
- The licensee re-calculated and corrected previous personnel airborne radioactivity exposure results to incorporate the dead time correction. No significant exposure was identified.
- Radiological Controls personnel overseeing activities at the concentrator were instructed to inform supervisory personnel of air samples with apparent count rates in excess of 10^5 cpm. The licensee determined that no other current activities in the plant would result in airborne activities of the magnitude experienced in the concentrator room.
- On or about December 12, 1985, the licensee recommenced work in the concentrator room. Personnel were provided with full face air supplied equipment.
- On or about December 23, 1985, the licensee determined that the airline hose, which supplies air to the full face respirator from the pressure control station, was the incorrect hose for the NIOSH approval number. Consequently, this voided the approval of the respirator. The licensee halted work in the concentrator room. Several days later the licensee whole body counted the individuals who wore the full face air supplied equipment. No intake of radioactive material was indicated.

- The licensee reviewed all station respiratory protection equipment to identify similar problems. None were identified. The licensee revised appropriate procedures to clearly specify approved combinations of equipment.
- On January 10, 1986, the licensee issued interim written instructions to personnel to provide guidance as to correction factors to use to correct for counter dead times.

Inspection Evaluation

The inspector review of the licensee findings in the area of airborne radioactivity sample analyses and use of respiratory protection equipment indicated the following:

- Three apparent violations were identified by the licensee. These are:
 - Failure to perform surveys (i.e. evaluation of instrument dead time) required by 10 CFR 20.201 b to ensure compliance with intake limits of 10 CFR 20.103
 - Use of respiratory protection equipment whose protection factor is less than the ambient airborne radioactivity MPC-factor contrary to 10 CFR 20.103(c) (1)
 - Use of a non-NIOSH approved respirator/hose combination contrary to 10 CFR 20.103(c).
- The licensee implemented corrective action to address the violations. Based on review of these corrective actions, the licensee met the criteria of 10 CFR 2 Appendix A relative to non-issuance of a violation. The following matters remain unresolved and will be reviewed during a subsequent inspection (50-293/86-02-03):
 - final licensee evaluation of acceptability of current MPCs used relative to limiting nuclides and solubility. The licensee is currently using, reasonably conservative nuclides and solubilities.
 - licensee establishment of final program procedures for correction of detector dead times when counting samples. The licensee established interim guidance in the area.

Within the scope of the review, the following was noted:

- The licensee was using daily ALARA check sheets to provide control and oversight of personnel exposure received during the work. Work was suspended to review and resolve situations resulting in personnel receiving unnecessary exposure.
- The licensee was providing effective high radiation area access control.
- The licensee provided dosimetry for the backs of personnel. Evaluation of badge read-out results indicated the exposure of the backs of personnel was normally lower than that received by the front of the torso.
- The licensee evaluated and took action to control the exposure of personnel to pure beta emitters.

6.0 Area Radiation Monitoring System (Test and Calibration)

The inspector reviewed the adequacy and implementation of the testing and calibration program for the Area Radiation Monitoring System (ARMS). The following matters were reviewed:

- adequacy, establishment and implementation of procedures
- adequacy of calibration
- use of appropriate radiation sources.

The calibration and testing of the following instruments was selectively reviewed:

- New Fuel Storage Area ARM
- Traversing Incore Probe (TIP) ARM
- Control Room ARM
- Refuel Floor Area Exhaust Monitor
- Standby Gas Treatment Monitor

The review was with respect to criteria contained in the following:

- applicable Technical Specifications
- ANSI/ANS-HPSSC-6.8.1-1981, "Location and Design Criteria for Area Radiation Monitoring System for Light Water Nuclear Reactors"

- applicable licensee procedures including:
 - Procedure PNPS SI-RP.5001, "Radiological Protection Instrumentation Calibration Frequency," Revision 0
 - Procedure PNPS SI-RP.6100, "Use of the Technical Operations Model 682 Gamma Instrument Calibrator," Revision 0
 - Procedure PNPS SI-RP.6400, "Use of the G.E. Gamma Calibrator for the ARMs," Revision 0
 - Procedure PNPS SI-RP.6403, "Operation of the Model 570 Victoreen Condenser R-Meter," Revision 0
 - Procedure No. 2.2.62, "Area Radiation Monitoring System," Revision 6
 - Procedure No. 6.6-113, "Source Calibration," Revision 0
 - Procedure No. 6.5-160, "Calibration of Area Radiation Monitoring System,"
 - Procedure 6.5-170, "Calibration of Ventilation System Radiation Monitor Using ARM Type Sensor/Converter."

The evaluation of the licensee's performance was based on discussions with personnel, review of documentation, and observations by the inspector.

Findings

Within the scope of the review, no violations or deviations were identified.

The following matters needing licensee attention were identified. These matters will be reviewed during a subsequent inspection (50-293/86-02-04):

- The radioactive source used to calibrate ARMs has decayed. The dose rates from the decayed source are not high enough to verify calibration of the full range of the high range ARMs (maximum range 10R/hr).

The licensee has ordered a new source and is awaiting its arrival.

- The ARM in the New Fuel Storage Location is not being source calibrated due to its inaccessibility. Alarm set points are being properly set and operability (from the Control Room) is being checked.

The licensee indicated this matter will be reviewed.

- The ARM located at the TIP room appears to be positioned in a non-optimum location. The detector should be positioned to readily detect increased radiation levels in the TIP area.

Within the scope of this review, the following item for improvement was identified:

- Procedure No. 6.5.170 does not provide for recording of "as found" ARM reading. Review of "as found" data could provide indication of instrument problems between calibrations. Problem identification may necessitate changing of calibration frequency.

6.0 Exit Meeting

The inspector met with licensee representatives (denoted in Section 1) at the conclusion of the inspection on January 17, 1986. The inspector summarized the purpose, scope and findings of the inspection. No written material was provided to the licensee.

ATTACHMENT TO REPORT
 50-293/86-02
Status of Boston Edison Company's
Radiological Improvement Program (RIP)
 Commitments to be completed
 Between November 1, 1985 and December 30, 1985

<u>COMMITMENT</u>	<u>STATUS</u>	<u>NRC Comment</u>
1. 1.2.5 Develop an administrative procedure which describes the Radiological Control Group's policies and includes guidance to improve communication. The document should contain goals and objectives, policies, interface and key performance indicator (December 31, 1985).	Complete	The licensee addressed the commitment in his action to satisfy item 13.4. These matters are addressed in the Radiation Protection Plan.
2. 2.2.7-1 Develop and implement a program to ensure personnel are trained in new procedures (May 31, 1985).	Open	Licensee established procedure PNPS SI-RP.1001, "Radiological Protection Procedure Change Training." The procedure does not provide for timely training of personnel in health and safety significant procedure changes. (50-293/85-22-09 Remains Open)
3. 4.1.3-2 Develop guidance for assigning skin exposure (July 31, 1985).	Open	Licensee established procedure for determining skin dose. Procedure does not: <ul style="list-style-type: none"> • define/explain limitations of instruments • define acceptable instruments

- define/describe limitations of skin dose correction factor.
 - define "DPM"
- Follow-up Item (50-293/85-22-11) remains open.
- | | | | |
|----|--|----------|---|
| 4. | 5.2.4-1 Licensee to develop a non-radiological respiratory protection program. | Complete | The licensee established a procedure to control issuance and use of respiratory protection equipment for non-radiological uses. |
| 5. | 2.2.3-2 Develop Training Material for Radiological Controls Supervisory personnel. (December 31, 1985) | Complete | Licensee developed training program for Radiological Controls Supervisory personnel. |
| 6. | 2.2.5(a)(b)(c)-1 Expand Contractor Health Physics Training Program to include: site layout, site organization, site criteria and action levels. | Complete | The licensee developed a slide presentation of the site, expanded the current technician training program to address site criteria and action levels, and included the radiological controls organization in the training program. The site organization is presented in General Employee Training. |
| 7. | 3.1.3 (a)(b)(c)-2 A review of the first three months experience with the General Employee Training program is to be conducted. (November 30, 1985) | Complete | INPO performed a review of the General Employee Training Program. The program was subsequently certified by INPO. INPO comments and trainee comments were incorporated into the course. |

- | | | |
|--|----------|---|
| 8. 5.2.1 a-2 Evaluate the Use of Alarming CAMs. Modify Air Sampling Program as appropriate (December 31, 1985). | Open | Licensee performed an review (June 30, 1985) which indicated CAMs not needed. Radiological Oversight Committee (ROC) currently reviewing this matter. Revolution of this matter by ROC will be reviewed during a subsequent inspection (50-293/86-02-05). |
| 9. 5.2.2-1 Develop and implement an expanded engineering control program. Incorporate applicable methods into training and procedures. (December 31, 1985) | Open | Licensee to provide information showing incorporation into training and procedures. (50-293/86-02-06) |
| 10. 6.2.1.b-1 Validate bench mark of whole body counter using sources (one month following receipt of sources). | Open | Licensee performed bench work. However, procedures for phantom not approved (50-293/86-02-07). |
| 11. 7.1.7 Require that responsible Health Physics Supervisors assure that RWPs have adequate and current surveys (November, December 1985) (on-going). | Complete | On-going. Implemented by Radiological Assessor and Radiological Oversight Committee Reviews. |
| 12. 7.2.1 through 10, Item 2 Approve plan for improving the RWP program at Pilgrim Station (July 31, 1985). | Complete | The licensee established an RWP improvement plan. The plan was approved by Radiological Controls Management. The plan was implemented. This closes item 50-293/85-22-14. |

- | | | |
|--|----------|---|
| 13. 7.2.1 through 10, Item 3
Established a restructured
RWP program (September, 1985)
(Referred to October 15, 1985). | Open | Review of final program
and procedure identified
the following matters
needing licensee atten-
tion (50-293/85-32-23). |
| | | <ul style="list-style-type: none"> • RWP issuance for: <ul style="list-style-type: none"> - combined estimated exposure - welding - use of compressed air • Definition of minimum lead time for issuance • Procedure not clear regarding use of attached forms • Incorporation/interface with ALARA program • RWP Suspension • Sign in of workers and their responsibilities • Radiological Conditions which preclude use of an Extended RWP |
| 14. 7.3.3-2 Prepare plan and schedule for modification of the Main Control Point (May 31, 1985). | Complete | The licensee prepared a plan and schedule for modification of the Main Control Point. The licensee's plans will provide for improvements at the access control point. |
| 15. 7.4 Procure, install and turnover airborne effluent monitoring equipment for the Trash Compactor Facility (December 31, 1985). | Complete | Licensee procured and installed equipment. Licensee has yet to verify capability of monitor to collect representative samples (50-293/86-02-08) |

- | | | |
|---|----------|---|
| 16. 8.1.2-2 Consolidate Current radioactive waste storage areas (September 30, 1985 deferred). | Complete | Licensee consolidated radwaste storage areas. Approved areas are described in procedure This closes item 50-293/85-32-25. |
| 17 8.1.3-3 Provide enclosure to protect radioactive waste stored outside (September 30, 1985 deferred). | Complete | Enclosure provided. This closes follow-up item 50-293/85-32-26. |
| 18. 8.1.4-4 shield consolidated radwaste storage areas (September 30, 1985 deferred). | Complete | Consolidated areas shielded where necessary. No "trigger" levels identified requiring shielding of areas currently not shielded. Item (50-293/85-32-27 remains open). |
| 19. 8.1.5 Radwaste Shipping Procedures will be reviewed, revised and approved as necessary (November 30, 1985). | Complete | Licensee reviewed and revised radwaste shipping procedures. |
| 20. 9.1.1-6 Approve ALARA Section of Radiation Protection Program documents (September 30, 1985) | Complete | The entire Radiation Protection Program document was approved by the Station Manager The document included the ALARA Section. (This closes follow-up item 50-293/85-32-28.) |
| 21. 9.1.2 Establish ALARA Committee with appropriate BECO personnel (November 30, 1985) | Complete | Committee established. Charter described in procedure NOP 83RC1. |
| 22. 9.1.7 ab-1 complete systematic review of PNPS for systems and components that could benefit from ALARA consideration. | Open | Review complete. Criteria for review not provided (50-293/85-32-30). |

- | | | |
|--|----------|--|
| 23. 9.2.1 through 4-1
Develop an ALARA
Training Program to
accomplish the following
objectives: | Complete | A contractor developed
a program for the
licensee. Course
material was not pro-
vided to the inspector.
Also no schedule for
initial course presen-
tation and subsequent
presentations was pro-
vided (50-293/86-02-09). |
| <ul style="list-style-type: none"> • Demonstrate Management's
desire and commitment
to improving the radio-
logical controls program
at PNPS; • Help formulate a more
positive "can do" attitude; • Help formulate better worker
habits with respect to radio-
logical controls; and, • Sensitize all levels of
personnel to the benefits
to be derived from actively
implementing ALARA principles
in their everyday work habits. • Develop specialized training
for crafts with emphasis on
the following: <ul style="list-style-type: none"> - Mockups; - Special tooling; - Radwaste minimization; - ALARA; and, - Contamination control. | | |
| 24. 10.1.4 Order equipment as
appropriate to improve
facilities and methodology
for the issuance and control
of health physics instru-
mentation (September 30, 1985). | Complete | Licensee obtained
and provided instrument
lockers. No other
equipment was needed. |
| 25. 10.1.6 Obtain storage
space and racks for the
Radiological Groups instru-
ments and calibration
equipment (Based on results
of review conducted per
Item 10.1.4). | Complete | See comment for
Commitment 10.1.4. |

26. 11.1-2 Develop, maintain and implement new and existing Radiological Group Procedures in accordance with the Procedure Improvement Plan (December 31, 1985). Open
- The licensee has revised and reissued the majority of his radiological controls procedures. The licensee is currently addressing NRC and INPO identified procedure deficiencies. The licensee is re-reviewing approximately 35 procedures. This commitment remains open pending:
- 1) licensee correction of identified procedure deficiencies, and
 - 2) review, revision (as necessary) of identified procedures.
27. 11.7-1 Review and revise current Radiological Controls procedures which affect a similar process to ensure that the same action levels are used for identical activities. Review current procedures to correct any deficiencies (December 31, 1985). Open
- The licensee is currently reviewing and revising procedures to address self-identified, NRC-identified and INPO-identified deficiencies. In addition, the licensee is currently re-reviewing approximately 35 previously issued procedures to identify and correct any deficiencies. This area remains open pending: licensee action on item 11.1-2 (50-293/86-02-10).
28. 12.1 and 12.2 (milestone 4) Approve Plan for Control of Radioactive Material and authorize recommended facility modifications Open
- The licensee reviewed and approved the Radioactive Materials Control Program. No facility modifications were identified requiring authorization.

(November 30, 1985).

The following matters remain open:

- 1) formal incorporation of the program into the station procedure program
- 2) resolution of need for Radioactive Material Control Program Manager
- 3) verification that procedures are in place to implement the program (50-203/86-02-11).

- | | | | |
|-----|--|----------|---|
| 29. | 13.3.1-1 Develop and publish goals for the Radiological Controls Group (August 31, 1985) | Open | Licensee currently establishing goals and goals program. Item 50-293/85-32-34 remains open. |
| 30. | 13.3.1-2 Develop goals for individuals within the Radiological Group (November 30, 1985) | Complete | Licensee met with appropriate individuals within the radiological controls organization to establish goals for them. The goals were developed around the individuals capabilities and expectations. |
| 31. | 13.3.7 Implement a personnel development program that is in concert with the functional responsibilities of the personnel. | Complete | See Commitment 13.3.1-2. In addition, the licensee has established training programs based on performance of a Task Analysis of each position. |

- | | | |
|--|----------|---|
| 32. 13.4-2 Develop and approve a Radiation Protection Plan (December 31, 1985). | Complete | <p>The licensee developed and approved a Radiation Protection Plan for Pilgrim Station. The plan was developed using the recommendation of NUREG-0761, "Radiation Protection Plan for Nuclear Power Station," Regulatory Guide 8.XX-Draft, "Standard Format and Content for Radiation Protection Program Descriptions for Nuclear Power Reactor Licenses", and INPO Guidelines for Radiological Protection at Nuclear Power Stations.</p> <p>The following matters remain open:
(50-293/86-02-12)</p> <p>verification that all elements of the described program have associated implementory procedures.</p> |
| 33. 14.1-1 Expand the current corrective action system to include a follow-up evaluation of significant events (July 31, 1985) | Open | <p>The following matters remain open:</p> <ul style="list-style-type: none"> • completion of additional procedures identified in licensee program review • provision of timely review of significant events • implementation of timely corrective action to prevent recurrence • documentation of corrective actions <p>Follow-up item 50-293/85-22-16 remains open.</p> |