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Dr. J. Nelson Grace  
Regional Administrator, Region II  
U.S. Nuclear Regulatory Commission  
Suite 2900  
101 Marietta Street, N.W.  
Atlanta, Georgia 30323

Dear Dr. Grace:

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250, 50-251  
Inspection Report 250/85-13 and 251/85-13

Florida Power & Light Company has reviewed the subject inspection report, and a response is attached.

There is no proprietary information in the report.

Very truly yours,

J. W. Williams, Jr.  
Group Vice President  
Nuclear Energy Department

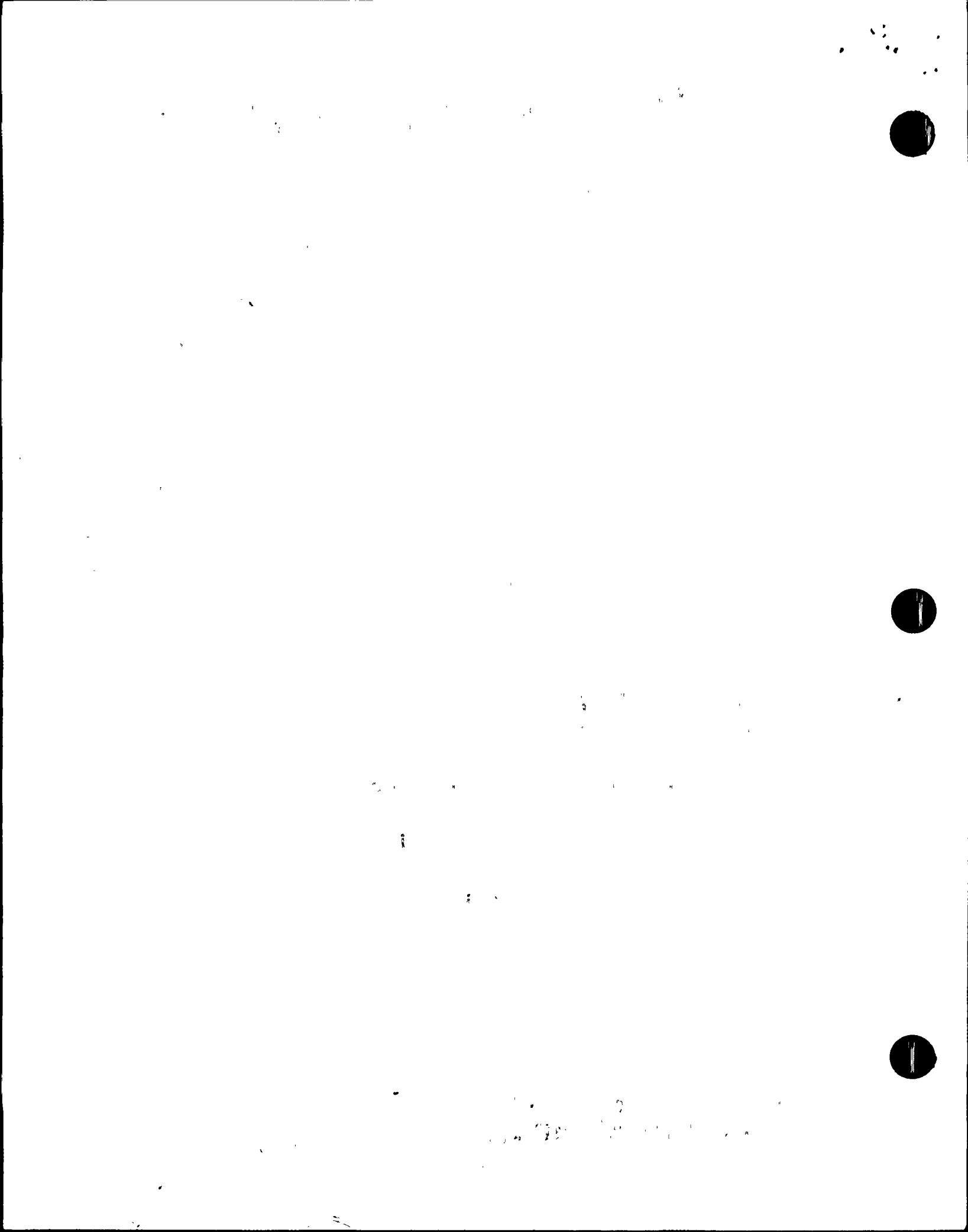
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cc: Harold F. Reis, Esquire

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## ATTACHMENT

Re: Turkey Point Units 3 and 4  
Docket No. 50-250, 50-251  
IE Inspection Report 250-85-13 and 251-85-13

### FINDING 1:

Technical Specification (TS) 6.8.1 requires that written procedures and administrative policies be established, implemented and maintained that meet or exceed the requirements and recommendations of sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of USNRC Regulatory Guide 1.33.

### FINDING 1a:

- a. ANSI N18.7-1972 and Appendix A of USNRC Regulatory Guide 1.33 specify that maintenance which can affect the performance of safety-related equipment shall be performed in accordance with written procedures or documented instructions appropriate to the circumstances.

Administrative Procedure (AP) 0190.10, dated May 18, 1984, Cleaning of Nuclear Safety-Related Systems and Components, section 8.1.1.5, requires that all openings in nuclear safety-related systems or components shall be protected from outside contaminants except when necessary to carry out required operations.

Contrary to the above, AP 0190.10 was not implemented in that:

- (1) During the overhaul of the 3A residual heat removal pump, open flanges in the safety-related component cooling water supply to the pump were not protected from foreign material contaminants.
- (2) During the removal of the reactor vessel head closure studs, the stud insert holes were not protected from foreign material contaminants.

Item 1.a.(1) above is a repeat of two previous violations: Violation 3.c of Inspection Reports 250/84-34 and 251/84-35; and Violation 2.b of Inspection Reports 250/84-22 and 251-84-23, Failure to Protect Safety-Related Components From Contaminants.

### RESPONSE:

- 1) FPL concurs with the finding.
- 2) a) The reason for the finding in Item 1.a.(1) was that no requirements for the protection of openings in component cooling water lines existed in the specific maintenance procedure for the disassembly and repair of the Residual Heat Removal (RHR) pumps.

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- b) The reason for the finding in Item 1.a.(2) was that the optional procedural recommendation to protect the reactor vessel stud top insert holes (partially threaded holes in the top of the reactor vessel studs used to measure elongation during stud tensioning) was not implemented just prior to stud detensioning.
- 3) a) The openings of disassembled component cooling lines were protected upon identification of the general requirement contained in Administrative Procedure (AP) 0190.10.  
b) Although the stud top insert holes were not covered, the reactor studs were removed from the reactor vessel and thoroughly cleaned prior to reinstallation.
- 4) a) A change to Maintenance Procedure (MP) 3207.2, "RHR Pump - Disassembly, Repair, Seal Replacement and Assembly", will be made to add a procedure step(s) which will require the protection of opened CCW lines from external debris and contamination.  
b) A requirement will be added to the Maintenance Procedure (MP) 1407.7 for the reactor vessel stud detensioning and removal, which will require that stud top insert holes be sealed with tape prior to stud detensioning.
- 5) a) Full compliance for Item 4.a above will be achieved by September 15, 1985.  
b) Full compliance for Item 4.b above will be achieved by September 1, 1985.

**FINDING 1b:**

- b. Appendix A of Regulatory Guide 1.33 recommends that activities involving radiation protection and contamination control be covered by written procedures.

Health Physics Administrative (HPA) Procedure O-HPA-002, dated December 14, 1984, Requirements for Entry and Work in RCA, section 5.2.15, requires that all personnel working in an area where a radiation work permit (RWP) is required shall read and comply with instructions, requirements and remarks listed on the RWP.

Contrary to the above, O-HPA-002 was not implemented in that:

- 1) On April 30, 1985, one individual, working in the Unit 3 spent fuel pool area, failed to comply with the protective clothing requirements of RWP 85-500 in that he did not wear a full hood while using a communications headset.
- 2) On May 14, 1985, one individual entered the Unit 3 charging pump room and failed to comply with the protective clothing requirements of RWP 85-014 in that he did not wear gloves.



RESPONSE:

- 1) FPL concurs with the finding.
- 2) a) The reason for the finding was that the Health Physics technician providing coverage for the spent fuel pit area was not fully aware of the special RWP requirement to wear a protective hood rather than a cap regardless of special circumstances, such as while personnel are wearing communication headphones.  
b) The reason for the incident was personnel oversight. The operator trainee involved failed to read and comply with the requirements of the Radiation Work Permit.
- 3) a) Both contract and FPL Health Physics technicians were counseled on this incident and on their responsibilities to ensure that all personnel comply with RWP requirements.  
b) The operator trainee involved was counseled on the incident and was required to complete a self-training exercise to enhance his awareness of RWP requirements. This trainee was not allowed to enter the RCA until his self-training assignment had been satisfactorily completed.  

The importance of strict compliance with RWP requirements was emphasized at a special training session for the Group 10 Reactor Operator and Senior Reactor Operator License candidates. In addition, a cautionary statement was placed in the night book of the Operations Supervisor Nuclear emphasizing the importance of compliance with RWP requirements.
- 4) a) Future Health Physics technician training classes will emphasize the technician's responsibilities and the importance of ensuring that all individuals comply with the RWP requirements.  
b) Since FPL considers the incident of Finding 1.b.(2) to be among a strictly limited number of such cases, the plant will deal with any future violations of RWP requirements on an individual basis. Because no programmatic deficiencies are involved, no further actions are deemed necessary at this time.
- 5) a) Full compliance for Item 3.a. above was achieved on June 18, 1985.  
b) Full compliance for Item 3.b. above was achieved on May 15, 1985.





FINDING 1c:

- c. Section 5.3.5.(2) of ANSI N18.7-1972, Performance of Maintenance, states that procedures should contain enough detail to permit the maintenance work to be performed safely and expeditiously.

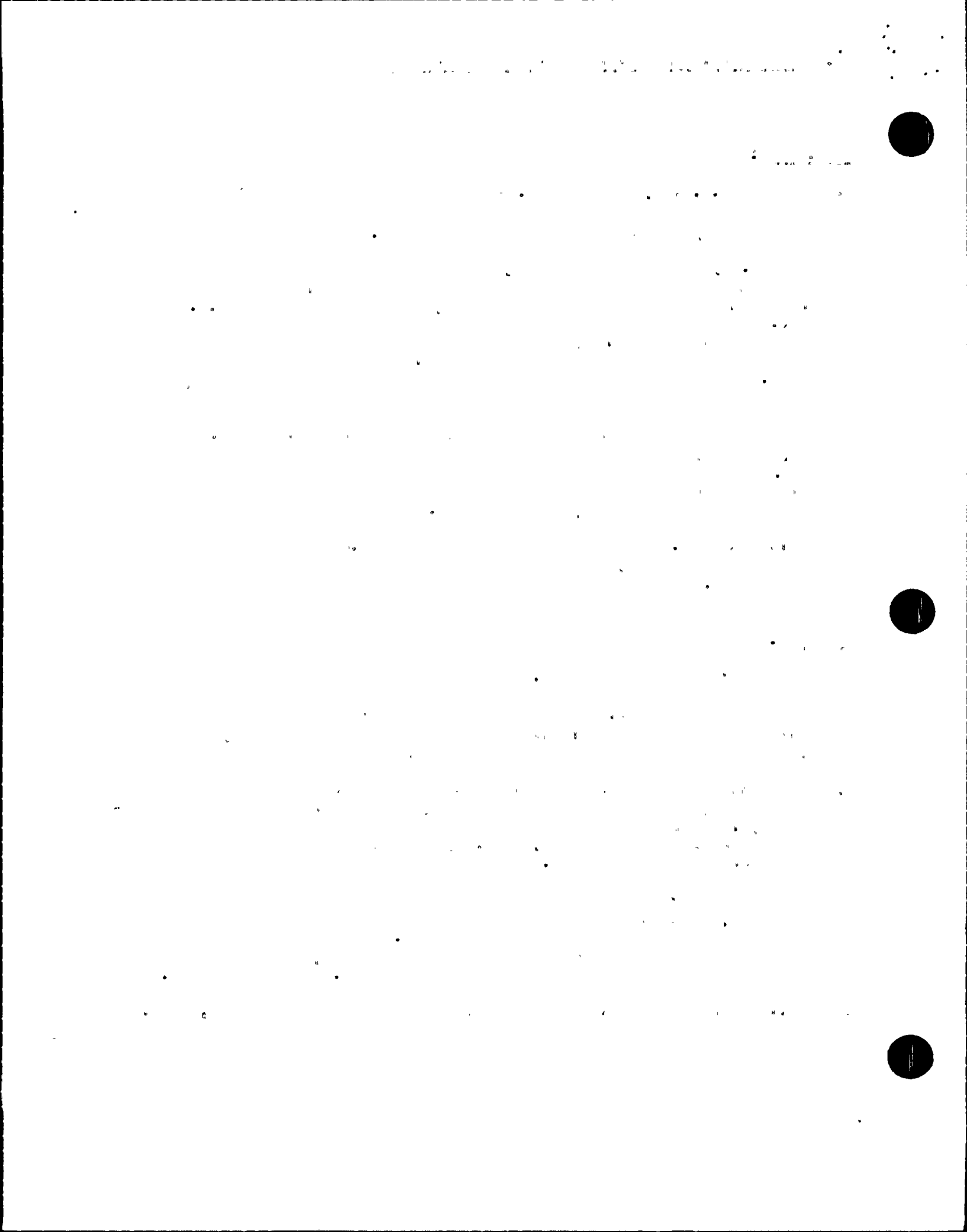
AP 103.11, dated April 17, 1985, Housekeeping, establishes guidelines for the control of work activities, equipment, material and environments which effect the cleanliness of the plant site. Section 8.5.1 of AP 103.11 requires that following the completion of a work activity or at the end of each shift, whichever is sooner, that all waste, debris, scraps and rags resulting from the activity shall be removed from the area. The equipment used shall be removed from the area or properly stored.

Contrary to the above, on May 8, 1985, section 8.5.1 of AP 103.11 was not implemented, since an accumulation of waste and debris generated during work in the Units 3 and 4 cask wash areas and the Unit 3 new fuel storage area was not removed at the end of the work shift. Equipment used in the cask wash areas was not properly stored.

This item (1.c) is a repeat of Violation 2.c of Inspection Reports 250/84-22 and 251/84-23, Failure to Perform Adequate Housekeeping Activities.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that the areas identified became congested with equipment and debris from the Unit 3 refueling outage, which were removed only as manpower became available.
- 3) The Units 3 and 4 cask wash areas and the Unit 3 new fuel storage area were subsequently cleaned to satisfactory standards. Maintenance Department personnel were counseled on the proper housekeeping requirements of Administrative Procedure (AP) 0103.11, which requires the cleanup of work areas after each work shift.
- 4) The Plant Manager - Nuclear will issue and distribute a memorandum to plant departments and to Backfit Construction delineating the specific housekeeping requirements of AP 0103.11. This correspondence will request that these departments discuss with their personnel the need to ensure that the housekeeping standards of AP 0103.11 are maintained.
- 5) Full compliance for Item 4 above will be completed by October 1, 1985.



FINDING 2:

10 CFR 50, Appendix B, Criterion XIII, as implemented by FPL Topical Quality Assurance Report (FPL-NQA-100A) Revision 6, TQR 13.0, Handling, Storage and Shipping, requires, in part, that measures be established to control handling of equipment in accordance with work and inspection instructions to prevent damage or deterioration.

FPL Quality Assurance Manual, Quality Procedure (QP) 13.1, Revision 4, delineates requirements for the handling of materials, parts and components at the plant site and implements the requirements of 10 CFR 50, Appendix B, Criterion XIII and ANSI N45.2.2-1972, Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants.

QP 13.1, section 5.4.2, Inspection of Equipment, requires that prior to use, handling equipment shall be inspected for acceptability. The equipment shall not be used if it fails to meet manufacturer's specifications, if it is frayed or deteriorated or if it contains contaminants that would be detrimental to the material being handled.

Contrary to the above, the licensee failed to establish methods to control the handling of material in accordance with work and inspection instructions to prevent damage, as required by QP 13.1, TQR 13.0, ANSI N45.2.2-1972 and 10 CFR 50, Appendix B, Criterion XIII. Work instructions were not established to assure the proper handling of equipment, consequently:

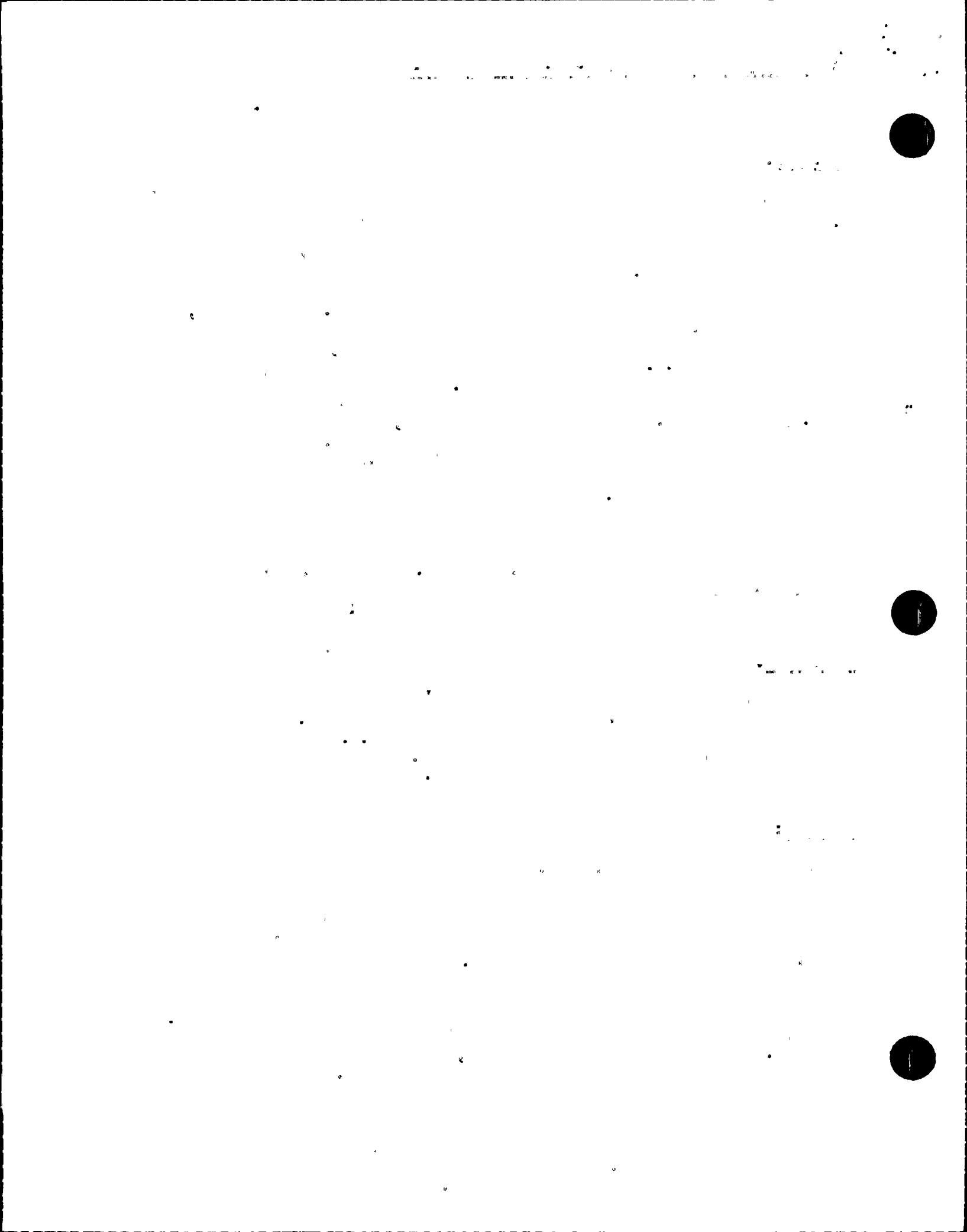
FINDING 2a:

- a. On April 29, 1985, a nylon rope was knotted and fashioned into a sling and used to hoist hafnium burnable poison assemblies. The knotted rope did not meet the quality standards of ANSI N45.2.2-1972 in that the knot was not certified to meet any standards. Factory manufactured slings were available for use and were not used.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that FPL plant personnel believed in their best judgment that the methods employed for the unloading of the hafnium assemblies were based on prudent and cautious practices designed to prevent damage to the poison inserts.

The finding was made in reference to the unloading of the Hafnium assemblies and to placing them into the New Fuel Storage Rack. To perform this operation a qualified black and yellow safety rope was used. According to the distributor, this rope has a working weight of 270 pounds and a breaking stress of 1700 pounds. The hafnium assembly weighs 85 pounds which was about 1/3 of the working weight of the rope. An Exxon recommended procedure for unloading the assemblies was written, and an Exxon Quality Control Inspector representative witnessed all evolutions of the Hafnium unloading and storage and was satisfied with the methods employed. Also present was a FPL Quality Control inspector for observation and receipt inspection.



- 3) Corrective Actions are identified in Item 4 below.
- 4) In accordance with Operating Procedure 16009.11, "On Site Unpacking, Inspection, and Manual Loading of Hafnium Vessel Flux Depression Assemblies", for future manual unloading of hafnium assemblies a nylon sling or equivalent sling rated at 200 pounds (minimum) will be used.
- 5) Compliance in accordance with Item 4 above will be achieved for the future handling of hafnium assemblies.

FINDING 2b:

- b. On April 29, 1985, an electric hoist in the Unit 3 new fuel storage room was used to lift hafnium burnable poison assemblies. The hoist contained contaminants in the form of grease which dripped on a poison assembly rendering the assembly temporarily unusable. The use of a hoist which could contaminate the safety-related material is contrary to ANSI N45.2.2-1972.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that existing procedural guidance was inadequate and did not address the receipt inspection criteria for poison assembly cleanliness.
- 3) Refer to the corrective actions completed as discussed under Item 3 of the FPL response to Finding 4.
- 4) Refer to the future corrective actions planned as discussed under Item 4 of the FPL response to Finding 4.
- 5) Full compliance for the corrective actions identified in Finding 4, Items 4.a and 4.b, will be achieved by October 31, 1985.



FINDING 2c:

- c. On May 9, 1985, nylon slings were used to hoist a section of safety-related pipe. One of the slings was frayed, worn and deteriorated which is contrary to ANSI N45.2.2-1972.

RESPONSE:

- 1) FPL concurs with the finding that one of the nylon slings was frayed and worn.
- 2) The reason for the finding was the FPL plant personnel believed in their best judgment that this nylon sling still retained an adequate margin of safety and was suitable for use, in spite of the worn appearance of the sling.
- 3) The subject nylon sling was removed from service. Upon removal from service the 3 inch wide sling was destructively tested by a laboratory to verify its safe working load rating of 3,000 pounds. The sling failed under straight tension with a force of 14,600 pounds.
- 4) To enhance the identification of worn or deteriorated rigging, the Maintenance Procedure (MP) 0736, "Heavy Load Handling", will be revised to incorporate additional criteria for the examination of rigging prior to use. This additional criteria was taken from the OSHA "Safety and Health Standards For General Industry".
- 5) Full compliance for Item 4 above will be achieved by September 15, 1985.

FINDING 3:

10 CFR 50, Appendix B, Criterion XV, as implemented by FPL Topical Quality Assurance Report Revision 6, TQR 15.0, Nonconforming Materials, Parts or Components, QP 15.2, Control of Nonconforming Materials, Parts or Components in Operating Plants and AP 190.13, dated August 2, 1984, Corrective Action for Conditions Adverse to Quality, require that corrective action be initiated for conditions adverse to quality.

Contrary to the above, the licensee failed to review nonconforming items for their acceptance, rejection, repair, or rework in accordance with documented procedures as required by 10 CFR 50, appendix B, Criterion XV, TQR 15.0, QP 15.2 and AP 190.13. On April 29, 1985, during a receipt inspection of hafnium burnable poison inserts, a Quality Control Inspector observed a condition adverse to quality in that grease was observed on one insert, and corrective action in accordance with approved plant procedures was not implemented. The insert was not rejected and was not segregated from noncontaminated inserts. The cleaning of the insert was not documented. The reinspection of the insert was not documented. These discrepancies are contrary to AP 190.13.





RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason for the finding was that inadequate procedural guidance existed to identify and initiate corrective actions for conditions which may have been adverse to quality. No inspection checklist had been developed for use by the Q.C. Inspector, and the procedure used did not adequately instruct the Q.C. Inspector in the criteria and corrective measures to be taken.
- 3) A Non-Conformance Report (NCR) was issued by the Plant Q.C. organization for the observed condition. FPL's Power Plant Engineering evaluated the NCR and concluded that the grease represented no hazard to the poison insert.
- 4) Q.C. Inspection checklists for separately delivered inserts will be developed as longterm corrective measures to address the inadequacies identified above. These checklists will include cleanliness criteria and corrective measures to address conditions which may be adverse to quality. Until the checklists are developed, no additional separately delivered inserts will be unpackaged or unloaded.
- 5) Full compliance for Item 4 will be achieved by October 31, 1985

FINDING 4:

10 CFR 50, Appendix B, Criterion VII, as implemented by FPL Topical Quality Assurance Report Revision 6, TQR 7.0, Control of Purchased Items and Services, requires that measures shall be established to assure that purchased material conforms to the requirements of applicable procurement documents. To this end, the FPL Quality Assurance Program incorporates the requirements of ANSI N45.2.2-1972, Packaging, Shipping, Receiving, Storage and Handling of Items for Nuclear Power Plants. QP 7.1 specifies that receipt inspections of nuclear fuel will be performed in accordance with site-specific procedures. Operating Procedure (OP) 16009.11, dated April 26, 1985, On Site Unpacking, Inspection, and Manual Loading of Hafnium Vessel Flux Depression Assemblies, specifies the minimum receipt inspection criteria for the hafnium poison inserts and implements the above criteria.

Contrary to the above, the licensee failed to include, in the established measures, provisions for examination of products on delivery, as required by 10 CFR 50, Appendix B, Criterion VII, TQR 7.0, QP 7.1 and ANSI N45.2.2-1972. Specifically, on April 29, 1985, during the receipt inspection of some of the hafnium poison inserts, OP 16009.11 did not address the following areas:

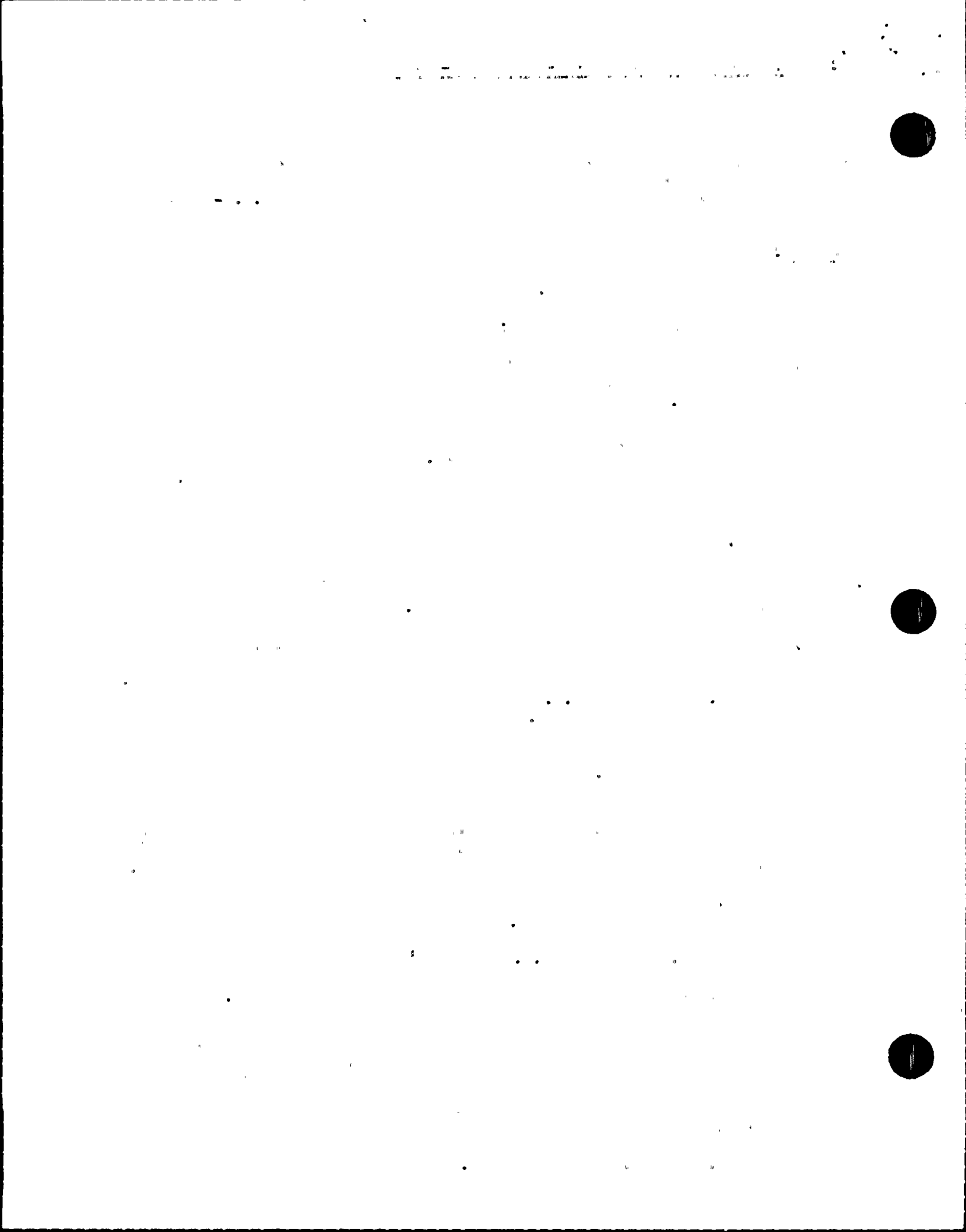
- a. Specific criteria were not established with which to determine that damage had not occurred to the inserts and that the inserts were sufficiently clean as required by ANSI N45.2.2-1972.



- b. The inspection procedure did not specify that the preliminary visual inspection determined if damage had been sustained due to fire, exposure, rough handling or tie down failure as required by ANSI N45.2.2-1972.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reasons for the finding were:
  - a) The procedure writer and reviewers failed to consider preliminary visual inspection of the package as being a necessary step in the procedure.
  - b) Steps in the procedure did address checking for damage and for ensuring cleanliness of the insert. However, the steps were vague and did not give the inspector or personnel specific guidance.
- 3) The following corrective measures have been taken:
  - a) FPL's Quality Assurance (QA) and Nuclear Fuel Departments have joined efforts to provide their assistance to the Plant Quality Control (QC) Department in improving the fuel and poison assembly receipt inspections at the plant site.
  - b) A Plant Q.C. Inspector has accompanied an FPL Q.A. auditor on a visit to the fuel supplier's fabrication facility for purposes of training and to evaluate ways to improve the plant receipt inspections. Additional Q.C. Inspectors may also make similar visits for the purposes of training.
- 4) The following additional corrective actions will be taken to avoid further violations are:
  - a) Nuclear Fuel Resources Department will provide the plant with a memo which will specify those requirements from the fuel and inserts procurement contract that the Q.C. Inspector needs to verify during receipt inspection to ensure contractual obligations have been met.
  - b) Quality Assurance will provide plant Q.C. with copies of their audits of the fuel vendors. These audits are FPL's primary means of ensuring that the fuel and inserts are being fabricated and properly inspected. The plant Q.C. Inspector's examination is a qualitative check for irregularities, obvious dirt or damage and not a detailed quantitative measurement of the inserts or fuel assembly.
  - c) Procedures and checklists for fuel and insert receipt inspection will be reviewed and/or developed to ensure that the inspector checks those items specified by Nuclear Fuel Resources, ensures that QA has not had any adverse findings which would impact acceptance of the shipment, clearly specify that the qualitative check for damage, dirt, or oil is an obvious visual type check and not a quantitative one. A step for preliminary visual inspection of the package prior to unloading will also be added.



- 5) Full compliance for Items 4.a and 4.c above will be achieved by October 31, 1985.

FINDING 5:

TS 6.8.1 requires that written procedures and administrative policies be established, implemented and maintained that meet or exceed the requirements and recommendations of sections 5.1 and 5.3 of ANSI N18.7-1972 and Appendix A of USNRC Regulatory Guide 1.33.

ANSI N18.7-1972, section 5.1.6.3, Scheduling of Maintenance, requires that maintenance be scheduled and planned so as not to jeopardize the safety of the reactor. Planning shall consider the possible safety consequences of concurrent or sequential maintenance, testing or operating activities. Equipment required to be operable for the mode in which the reactor exists shall be available, and maintenance shall be performed in a manner such that the license limits are not violated.

Contrary to the above, as of April 25, 1985, written procedures and policies were not established to implement the requirements of ANSI N18.7-1972, section 5.1, in that the "A" train emergency diesel generator was taken out-of-service for preventive maintenance at a time when its operation was required to support the reactor operating mode. Concurrent maintenance on the 3B 4160 Volt vital bus was not considered in planning the maintenance activity. Consequently, only one of two safety injection pumps, assumed to be operable in the safety analysis report and required for operation by the Technical Specifications, had both its normal and emergency power supplies.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason for the finding was due to personnel oversight during the planning stages for taking the "A" Emergency Diesel Generator out of service. While plant personnel did review the plant configuration against Technical Specification requirements, they did not immediately recognize the requirement that Unit 3 "B" train engineered safeguards equipment, associated with the redundant Emergency Diesel Generator, must remain operable while the "A" emergency diesel was removed from service.
- 3) The following corrective actions identified in LER 251-85-009 were taken:
  - a) Upon recognition of our non-compliance with Technical Specifications, the "A" emergency diesel generator was returned to service after a successful operability test.
  - b) An entry was made in the Operations Supervisor's book emphasizing the importance of ensuring the operability of the redundant train, of ESF equipment and associated power sources prior to removing an emergency diesel generator from service.



- c) Supervisory discussions were held with Plant Supervisors - Nuclear emphasizing the importance of ensuring the operability of the redundant train of ESF equipment and associated power sources prior to removing an emergency diesel generator from service.
  - d) Two maintenance procedures have been changed to provide guidelines for maintenance personnel to ensure communications with operations personnel are initiated prior to requesting a clearance for an emergency diesel generator.
  - e) Engraved nameplates have been installed on the main control boards cautioning operators to verify the operability of redundant ESF equipment prior to removing an emergency diesel generator from service.
- 4) The following corrective measures identified in LER 251-85-009 will be completed:
- a) The significance of the incident described in LER 251-85-009 will be discussed in the next operator requalification cycle.
  - b) Administrative Procedure (AP) 0103.4, "In-Plant Equipment Clearance Orders", and the clearance index book will be reviewed and revised to include a statement emphasizing the importance of ensuring the operability of the redundant train of ESF equipment and associated power supplies prior to removing an emergency diesel generator from service.
- 5)
- a) Full compliance for Item 3 above (except 3.d and 3.e) was achieved by May 31, 1985.
  - b) Full compliance for Items 3.d and 3.e above was achieved by June 28, 1985.
  - c) Full compliance for Item 4.a above will be achieved by September 20, 1985.
  - d) Full compliance for Item 4.b above will be achieved by October 9, 1985.





FINDING 6:

10 CFR 50.55a.(g) requires ASME Code Testing for Class 3 components. ASME Code, Section XI (1974 Edition), article IWD-1000 applies the requirements of Section IWD to Class 3 pressure-retaining components. IWD-2000 requires inspection of the components each inspection interval. IWD-2600 requires the visual examination to be conducted of the components during system tests for evidence of structural distress or corrosion.

Contrary to the above, during the system inservice testing for the Class 3 Intake Cooling Water (ICW) system on Unit 3 in December 1983 and on Unit 4 in May 1984, visual inspections for evidence of structural distress or corrosion were not conducted for piping and bolted connections which were located between the ICW pump discharge check valves and the header isolation valves.

RESPONSE:

- 1) FPL concurs with the finding.
- 2) The reason that visual inspections were not conducted on those portions of the ICW system below the intake structure decking was due to the fact that these sections of the ICW system were inadvertently identified as completely inaccessible.
- 3) A Plant Change/Modification, PC/M 85-38, was generated to perform an inspection of the Unit 3 ICW system which would provide early detection and correction of fouling, corrosion, and damage discovered in the system. This inspection was completed, repairs were made to correct deficiencies found, and the system was accepted by the plant.
- 4) a) Corrective actions applicable to subsequent 10-year code pressure tests will consist of the following:
  - (1) A detailed review of the pressure boundary will be conducted.
  - (2) A complete walkdown of the system will be conducted to ensure that the system test boundaries and inaccessible portions are properly identified.
  - (3) Verification of the test boundaries will be performed. Any discrepancies will be documented and resolved prior to the test.

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- (4) Procedures will be revised to incorporate applicable addition and addenda to the ASME code, as required to comply with the 2nd 10-year inspection interval. These procedures will incorporate the corrective actions identified above in Items 4.a(1), 4.a(2), and 4.a(3).
  - b) An inspection of the Unit 4 ICW system will be conducted.
- 5)
  - a) Full compliance for Item 3 above was achieved on July 24, 1985.
  - b) Full compliance for Item 4.a above will be achieved by March 1, 1986.
  - c) Full compliance for Item 4.b above will be achieved during the next Unit 4 refueling outage.

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