

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-219/79-25

Docket No. 50-219

License No. DPR-16 Priority -- Category C

Licensee: Jersey Central Power & Light Company
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

Facility Name: Oyster Creek Nuclear Generating Station

Meeting at: USNRC, Region I, King of Prussia, Pennsylvania

Meeting conducted: June 5, 1979

Prepared By: R.L.Nimitz
Ritz, Radiation Specialist

5/27/80
date signed

date signed

date signed
5/27/80
date signed

Approved by: G. H. Smith
G. H. Smith, Chief
Fuel Facilities and Materials Safety
Branch

Meeting Summary:

Enforcement Meeting on June 5, 1979 (Report No. 50-219)

Special meeting convened by Region I management to discuss NRC concerns relating to NRC Radiation Protection Inspection No. 50-219/79-07. The meeting was held to discuss licensee immediate corrective actions and long term plans for improving the licensee's Radiation Protection Program.

DETAILS

1. Attendees

Jersey Central Power and Light Company (JCP&L)

J. T. Carroll, Jr., Oyster Creek Station Manager
I. Finfrock, Vice President, Generation
A. N. Tschaechl, General Electric
D. W. Turner, General Electric

U.S. Nuclear Regulatory Commission

B. Grier, Director
J. Allan, Deputy Director, Region I
L. Briggs, Reactor Inspector
E. Brunner, Chief, Reactor Operations and Nuclear Support Branch
R. Keimig, Reactor Projects Section No. 1, RO&NS Branch, Region I
D. Neely, Radiation Specialist, Region I
G. Smith, Chief, Fuel Facilities and Materials Safety Branch, Region I

2. Background

As a result of written allegations received by the Region I Office of Inspection and Enforcement (OIE), a special Radiation Protection Inspection was conducted April 18-20, 1979 to review these allegations. Region I OIE Report 50-219/79-07 details the findings of this inspection.

Based on the findings of this special inspection, Immediate Action Letter No. 79-04 was issued to the licensee on April 25, 1979 to confirm implementation or immediate corrective actions for these findings.

The Immediate Action Letter confirmed the following:

- A qualified corporate Health Physics (HP) manager and additional qualified HP supervisors would be assigned to the site by May 15, 1979;
- A comprehensive plan to upgrade the HP program with a plan implementation schedule would be submitted by June 1, 1979;
- Additional radiation protection training for workers and those providing health physics coverage would be initiated no later than June 1, 1979 and;
- A report of a personnel contamination incident, which occurred on March 16, 1979, would be submitted by May 9, 1979.

The meeting, discussed in the following paragraph, was convened to express NRC concern over the inspection findings, to determine the status of the immediate action letter items, and to review corrective actions described in the licensee reply dated February 5, 1979 to a NRC Notice of Violation enclosed with a letter to the licensee dated January 12, 1979.

3. Meeting Summary

NRC Region I Director, B. H. Grier, opened the meeting by expressing strong concern over the quality of the Radiation Protection Program at Oyster Creek as evidenced by Special Radiation Protection Inspection No. 50-219/79-07.

The findings of this inspection were presented to the licensee management. Region I management also presented the following items which required additional licensee management attention:

- The need for a procedure detailing when to wear protective clothing;
- The need for additional licensee emphasis in the area of contamination control practices;
- The need for improvement in the airborne radioactivity sampling program;
- Additional licensee emphasis on the necessity for frisking properly; and
- Greater emphasis on housekeeping at the Oyster Creek Facility.

Following the presentation of these findings, Region I management requested a summary of the status of the immediate action letter items.

The licensee representatives presented the status of the immediate action letter items which included the submittal of a comprehensive action plan with an implementation schedule (attached) for upgrading the Radiation Protection Program at the licensee's Oyster Creek Nuclear Generating Station.

4. Concluding Remarks

Regional management indicated the upgrade plan as presented if implemented properly, would serve to improve the licensee's present Radiation Protection Program.

Licensee representatives requested a similar meeting be held in approximately one month. This meeting would be held to provide NRC Region I with a status of implementation of the upgrade plan for the Oyster Creek Radiation Protection Program. Region I management concurred with this request.



GENERAL ELECTRIC
INSTALLATION & SERVICE ENGINEERING DIVISION

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1. Inches to centimeters

WORK SCHEDULE

| | |
|-----------|-------------------------------|
| CUSTOMER: | Jewelry Central Plaza & Light |
| LOCATION: | Orlando Circle |

GENERAL ELECTRIC

INSTALLATION & SERVICE ENGINEERING DIVISION

2 - Contamination Control Plan



WORK SCHEDULE

CUSTOMER: Oyster Creek

LOCATION: Health Physics

| 6/1/79 | 6/11 | 6/18 | 6/25 | 7/2 | 7/9 | 7/16 | 7/23 | 8/6 | 8/13 | 8/20 | 8/27 | |
|--|---|---|--|---|--|--|--|--|---|---|---|--|
| Locate floors & walls of most of Reactor building | Identify floor areas available. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | Identify available chain or lead bricks. | |
| Tools: Station hoppers on shift and storage space avail 6/1/79 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | 1. Not in shift. By 6/13, mesh screens & scissor lift ability 1.0 ton | |
| Donne protective cloth, systems to formalize P.C. tool control & laundry types, disinfect per reuse clothing). | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | Change clothes, use new method. | |
| a. Formalize P.C. tool control & laundry types, disinfect per reuse clothing). | 1. Keep all P.C. within out-of-service after use. | 1. Keep all P.C. within out-of-service after use. | 2. Change unhexed material, provide instruction slips. | 2. Change unhexed material, provide instruction slips. | 3. Implement above 1 & 2 in station workshop. | 3. Implement above 1 & 2 in station workshop. | 4. Train employees. | 4. Train employees. | 5. Stop practice of stacking containers at W office. | 5. Determine guidelines for lab-out use. | 6. Determine guidelines for lab-out use. | |
| Improve contamination control | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | Implement job preplanning. | |
| c. Prevent spread of contam. In work area | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | 1. Train employees & WIP staff. | |
| d. Prevent spread of contam. To other areas | 2. Require fast job cleanup in WIP System. | 2. Require fast job cleanup in WIP System. | 2. Provide additional materials where P.A. (Kraft paper), plastic sheet. | 2. Provide additional materials where P.A., hexite material. | 3. Provide additional barriers to isolate long term contaminated areas (e.g. around 100A tanks). | 3. Provide additional barriers to isolate long term contaminated areas (e.g. around 100A tanks). | 4. Provide additional barriers to isolate long term contaminated areas (e.g. around 100A tanks). | 4. Provide additional barriers to isolate long term contaminated areas (e.g. around 100A tanks). | 5. Make lowision to periodically clean within out-of-service zones. | 5. Make lowision to periodically clean within out-of-service zones. | 6. Remove all out-of-service zones from clean areas. | 6. Remove all out-of-service zones from clean areas. |
| e. Transfer of contaminated objects on site | 7. Transfer of contaminated objects on site. | 7. Transfer of contaminated objects on site. | 8. Remove contaminated objects on site. | 8. Remove contaminated objects on site. | 9. Remove contaminated objects on site. | 9. Remove contaminated objects on site. | 10. Remove contaminated objects on site. | 10. Remove contaminated objects on site. | 11. Remove contaminated objects on site. | 11. Remove contaminated objects on site. | 12. Remove contaminated objects on site. | |

GENERAL ELECTRIC

3. Internal Position Control
Page 1 of 3

INSTALLATION & SERVICE ENGINEERING DIVISION



CUSTOMER
LOCATION
WORK SCHEDULE

| | 6/1/76 | 6/4/76 | 6/7/76 | 6/10/76 | 6/13/76 | 6/16/76 | 6/19/76 | 6/22/76 | 6/25/76 | 6/28/76 | 7/1/76 | 7/4/76 | 7/7/76 | 7/10/76 | 7/13/76 | 7/16/76 | 7/19/76 | 7/22/76 | 7/25/76 | 7/28/76 | |
|--|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--|
| 1. Att. & aligning monitor(s) | | | | | | | | | | | | | | | | | | | | | |
| a. Continuous air monitor(s) | | | | | | | | | | | | | | | | | | | | | |
| b. Increase frequency of samples | | | | | | | | | | | | | | | | | | | | | |
| c. Load test/monitor: (1) u. the 10 panels | | | | | | | | | | | | | | | | | | | | | |
| d. Radiosonde | | | | | | | | | | | | | | | | | | | | | |
| e. Photo use of charcoal paper | | | | | | | | | | | | | | | | | | | | | |
| f. Photo ratio meter/IRI samples | | | | | | | | | | | | | | | | | | | | | |
| g. Property of radionuclides samples | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 2. Air Sample Analysis | | | | | | | | | | | | | | | | | | | | | |
| a. Gross total count (mg C^{14}) 1E/100 | | | | | | | | | | | | | | | | | | | | | |
| b. Isotope Analytic analysis | | | | | | | | | | | | | | | | | | | | | |
| c. Low temperature control | | | | | | | | | | | | | | | | | | | | | |
| d. Radiological source delivery | | | | | | | | | | | | | | | | | | | | | |

GENERAL ELECTRIC

Internal Inspection Control

Page 2 of 3

INSTALLATION & SERVICE ENGINEERING DIVISION



CUSTOMER _____
LOCATION _____

| | WORK SCHEDULE | 1/24 | 1/23 | 1/22 | 1/21 | 1/20 | 1/19 | 1/18 | 1/17 | 1/16 | 1/15 | 1/14 | 1/13 | 1/12 | 1/11 | 1/10 | 1/9 | 1/8 | 1/7 | 1/6 | 1/5 | 1/4 | 1/3 | 1/2 | 1/1 | 1/0 |
|--|---|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Refrigerator protection circuit | Bleeds 1/24 Rep. from oil fridge Refrigerator Pent. 1/24 1. Load test P.D. Spec. class Refrigerant Refrigerant area report 1/24 Welded 1/24 | Refrigerant 1/24 Rep. from store and all other locations Laboratory oil 1/24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Remove 1/2 face mask from site | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Re-adhesive sealant 1/24 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. Paintbrushes | Painting substrate substrate substrate substrate | Painting substrate substrate substrate substrate | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. Storage of 5000 oil bottles | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. Perform plant site leakages | Refrigerant leak from 1/24 | Refrigerant leak from 1/24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. Formalizing FWD, MRO, Lecture | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. Facial masksmiths | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. Perform filter visual testing | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. Miniature laboratory equipment use | | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL ELECTRIC

1. Internal Division Control
Page 3 of 3

INSTALLATION & SERVICE ENGINEERING DIVISION

WORK SCHEDULE
CUSTOMER: _____
LOCATION: _____



| | 6/2/79 | 6/11 | 6/18 | 6/25 | 7/2 | 7/9 | 7/16 | 7/23 | 7/30 | 8/6 | 8/13 | 8/20 |
|-------------------------|-------------------------------|-----------------------------------|---|---|--|--|--|--|--|--|--|--|
| 4. Biomass program | Review decision facilities | Revisit decision facilities | White Pines Anchorage Forest present | White Pines Anchorage Forest present | Alaska Anchorage Forest present |
| a. Formalize guidelines | | | | | | | | | | | | |
| b. Mobile body counter | | | | | | | | | | | | |
| c. On program | | | | | | | | | | | | |

GENERAL ELECTRIC

INSTALLATION & SERVICE ENGINEERING DIVISION

4. Routing & Labeling
Page 1 of 1

WORK SCHEDULE

CUSTOMER:
LOCATION:



| | 6/17 | 6/18 | 6/19 | 6/20 | 6/21 | 6/22 | 6/23 | 6/24 | 6/25 | 6/26 | 6/27 |
|---|--|--|--|--|--|--|--|--|--|--|--|
| 1. Consolidate "Customer Relocations" Material" contains labels | Print Labels Print material Print material Print material Print material Print material | Print Labels Print material Print material Print material Print material |
| High Radiation Areas | | | | | | | | | | | |
| A. Considered in Rel. Area | | | | | | | | | | | |
| 2. Outside radioactive materials areas | Scrub existing area Decontamination diary | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. | Class I table and baffle barrier at 10 ft. G. |
| 3. Miscellaneous | | | | | | | | | | | |
| 4. Miscellaneous | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material | Print labels Print material Print material Print material Print material |

GENERAL ELECTRIC
INSTALLATION & SERVICE ENGINEERING DIVISION

WORK SCHEDULE

5. Health Physics Instruments

CUSTOMER
LOCATION:



| | 6/21/79 | 6/21 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 | 6/20 |
|--|--|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1. Change the basic dose rate Instrument from PICA to R2A | See expense report | | | | | | | | | | | | | | | | | | |
| 2. Personal contamination Institutes a. Tool and Tool results | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 3. Personal contamination Instruments b. Portable Cd packed | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 4. Portable dose instruments | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 5. Instrument quality of [unclear] detectors (self-readers) | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 6. Dose check source for dose rate instruments | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 7. Evaluate minimum detectable level for gross counters | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 8. Calibration and rate meters | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 9. Centralize off partly | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 10. Change instrument calibration responsibility to instrument dep Leveraging 1/2 of records | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |
| 11. Up audit with review check | Planned order file Shard and tool instruments Metal calibration instruments | (4* 60 day summary) | | | | | | | | | | | | | | | | | |

GENERAL ELECTRIC

6. Training Page 1 of 2

INSTALLATION & SERVICE ENGINEERING DIVISION



WORK SCHEDULE

CUSTOMER:
LOCATION:

| | 6/1/79 | 6/1/79 | 6/10/79 | 6/12/79 | 6/13/79 | 6/14/79 | 6/15/79 | 6/16/79 | 6/17/79 | 6/18/79 | 6/19/79 | 6/20/79 | 6/21/79 |
|---|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Radiation Worker Training | | | | | | | | | | | | | |
| a. Provide additional training for radiation workers; low level dose-effect controversy, exposure control techniques, contamination control techniques, self monitoring - new H.P. procedures | | | | | | | | | | | | | |
| b. Upgrade radiation worker orientation. | | | | | | | | | | | | | |
| Prepare lesson guide - revised schedule book training and pretest/exposure training booklet. | | | | | | | | | | | | | |
| Develop radiation orientation booklet. | | | | | | | | | | | | | |
| Evaluate instructor and change if appropriate. | | | | | | | | | | | | | |
| Health Physics Technician and Group Supervisor Training | | | | | | | | | | | | | |
| a. NPS technical training | | | | | | | | | | | | | |
| b. Practical factor training | | | | | | | | | | | | | |
| 1. Help weaknesses | | | | | | | | | | | | | |
| 2. Implement practical factors as basis | | | | | | | | | | | | | |
| Radiological Engineering Training | | | | | | | | | | | | | |
| a. Identify candidate for position Identify any weakness | | | | | | | | | | | | | |
| b. Provide training | | | | | | | | | | | | | |
| 1. Rad engineering | | | | | | | | | | | | | |
| 2. Systems training | | | | | | | | | | | | | |
| 3. Alternate site outage R.P. familiarization | | | | | | | | | | | | | |

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INSTALLATION & SERVICE ENGINEERING DIVISION

1. Industry & exposure estimate
accounting

WORK SCHEDULE

2. Customer:
LOCATION:

| | 6/1/29 | 6/1/30 | 6/1/31 | 6/1/1 | 6/1/2 | 6/1/3 | 6/1/4 | 6/1/5 | 6/1/6 | 6/1/7 | 6/1/8 | 6/1/9 | 6/1/10 | 6/1/11 | 6/1/12 | 6/1/13 | 6/1/14 | 6/1/15 | 6/1/16 | 6/1/17 | 6/1/18 | 6/1/19 | 6/1/20 | 6/1/21 | 6/1/22 | 6/1/23 | 6/1/24 | 6/1/25 | 6/1/26 | 6/1/27 | | |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|--|
| 1. Telephora TID report 14 Institute cumulative exposure | Received & better | Review & better | 6/1/31 | 6/2/1 | 6/2/2 | 6/2/3 | 6/2/4 | 6/2/5 | 6/2/6 | 6/2/7 | 6/2/8 | 6/2/9 | 6/2/10 | 6/2/11 | 6/2/12 | 6/2/13 | 6/2/14 | 6/2/15 | 6/2/16 | 6/2/17 | 6/2/18 | 6/2/19 | 6/2/20 | 6/2/21 | 6/2/22 | 6/2/23 | 6/2/24 | 6/2/25 | 6/2/26 | 6/2/27 | | |
| 2. Log cards & last draft | 2A: equipment and tool | 2B: equipment and tool | 2C: equipment and tool | 2D: equipment and tool | 2E: equipment and tool | 2F: equipment and tool | 2G: equipment and tool | 2H: equipment and tool | 2I: equipment and tool | 2J: equipment and tool | 2K: equipment and tool | 2L: equipment and tool | 2M: equipment and tool | 2N: equipment and tool | 2O: equipment and tool | 2P: equipment and tool | 2Q: equipment and tool | 2R: equipment and tool | 2S: equipment and tool | 2T: equipment and tool | 2U: equipment and tool | 2V: equipment and tool | 2W: equipment and tool | 2X: equipment and tool | 2Y: equipment and tool | 2Z: equipment and tool | 2AA: equipment and tool | 2BB: equipment and tool | 2CC: equipment and tool | 2DD: equipment and tool | | |
| 3. Record P.D. changes & test at guard house | Set standard standard | Set standard standard | Set standard standard | Set standard standard | | |
| 4. Evaluate parallel exposure existing line systems | has exposure control | has exposure control | has exposure control | has exposure control | | |
| 5. Standardize approvals for issuing NRC Form 5's | Discrepancy procedure | Discrepancy procedure | Discrepancy procedure | Discrepancy procedure | Discrepancy procedure | |
| NOTE: Discrepancy procedure evaluation fully completed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL ELECTRIC**INSTALLATION & SERVICE ENGINEERING DIVISION**

8. Radiation Work Preparation
9. Alaska

WORK SCHEDULE

CUSTOMER: _____
LOCATION: _____

| | 1/1/72 | 1/2 | 1/3 | 1/4 | 1/5 | 1/6 | 1/7 | 1/8 | 1/9 | 1/10 | 1/11 | 1/12 | 1/13 | 1/14 | 1/15 | 1/16 | 1/17 | 1/18 | 1/19 | 1/20 | 1/21 |
|---|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1. Radiation control rod driven assembly | Evaluate modern power plants | Review feasibility |
| 2. LID requirement | Evaluate relevant laws | Review feasibility |
| 3. Alaska high radiation areas | Identify 4 hazard areas | Review feasibility |
| 4. Eliminate reading liquid scintillation detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector | Review detector |
| 5. ALARA corrective statement | Mitigation | Review feasibility |
| 6. Removal written ALARA process | GW2 ALARA guidelines to MWD standards | Review |
| 7. Isotope HP surveys of normally unshielded hi rad areas | Chamber calibration | Review |
| 8. Shielding time spent in hi rad areas | Shielding to 1A | Review |
| 9. Isotope hydroxer on site | Isotope exposure reduction procedure with no襯板 | Review |
| 10. Radioisotopic exposure limits | Set exposure controls | Review |
| 11. Shielding | No lead sheet or polyurethane sheet and aluminum foil valve isolation in socket initially installed in handsealing | Review |
| 12. Line flushing | Use handsealing | Review |
| 13. Molting extensible leads | No insulation | Review |
| 14. Beta slot tape | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review |
| 15. ALARA planning guide on Ref | Set storage centers | Review |
| 16. Radiation monitoring techniques | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review | Review |

GENERAL ELECTRIC
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10. Incident report no. _____

WORK SITE/REF. # _____
CUSTOMER _____
LOCATION _____



Private guidelines for investigation & reporting of accidents
when required by 10 CFR 20.402-4(b)
should include:
Investigation for cause
Cause(s)
Incident report
Should identify
Specific causes
Temporary corrective actions
taken at time
Permanent corrective action
Each cause should be thoroughly
analyzed

6/4

6/10

6/25

6/10

6/25

GENERAL ELECTRIC

INSTALLATION & SERVICE ENGINEERING DIVISION



11. Health Physics procedures,
routines, guidelines, and
instructions.

WORK SCHEDULE

CUSTOMER:
LOCATION:

- Refile Health Physics procedures.
6/11/79
- Procedures required in this plan.
6/11/79
- Review and revise remaining
H.P. procedures.
6/25/79
- Delete unnecessary Station
H.P. procedures.
7/2/79
- Write instructions.
7/9/79
- Refile survey schedules for
routines.
7/16/79
- Write incident investigation
guidelines.
7/20/79
- Write procedure.
7/27/79
- Refile procedure.
8/3/79

GENERAL ELECTRIC

INSTALLATION & SERVICE ENGINEERING DIVISION

12. Environmental Monitoring
and
13. Radioactive Shipments

WORK SCHEDULE



CUSTOMER:
LOCATION:

| | 6/7/79 | 6/10/79 | 6/13/79 | 6/16/79 | 6/19/79 | 6/22/79 | 6/25/79 | 6/28/79 | 7/1/79 | 7/4/79 | 7/7/79 | 7/10/79 | 7/13/79 | 7/16/79 | 7/19/79 | 7/22/79 | 7/25/79 | 7/28/79 | 8/1/79 | 8/4/79 | 8/7/79 | 8/10/79 | |
|---|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|---------|--|
| A. Environmental Monitor 109 | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Evaluate present program | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Evaluate QA of program | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Clean up RPA | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| B. Radioactive Shipments | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Curie content estimation for package(s) | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Curie estimate on cask shipments. | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Evaluate shipping papers. | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL ELECTRIC
INSTALLATION & SERVICE ENGINEERING DIVISION

14. Cost Control

WORK SCHEDULE

CUSTOMER:
LOCATION:



| | 6/1/79 | 6/11/79 | 6/19/79 | 6/25/79 | 7/2/79 | 7/9/79 | 7/16/79 | 7/23/79 | 7/30/79 | 8/6/79 | 8/13/79 | 8/20/79 | 8/27/79 |
|--|---|-------------------------|---------|---------|--------|--------|---------|---------|---------|--------|---------|---------|---------|
| IP Management staffing | Evaluate needs | Evaluate qualifications | | | | | | | | | | | |
| Computerized IP records | Evaluate needs | | | | | | | | | | | | |
| IP Tech. efficiency is low. | On the job training by Q. Supervisor | | | | | | | | | | | | |
| Improve procedures | Improve procedures | Improve training | | | | | | | | | | | |
| Improved equipment evaluation | [Additional procedure] | | | | | | | | | | | | |
| Convene with other BAR's, especially Instn., repair shops. | | | | | | | | | | | | | |
| Test equipment prior to purchase. | | | | | | | | | | | | | |
| Learning objective of equipment prior to purchase. | | | | | | | | | | | | | |
| Duplicating of paperwork | Evaluate need of duplicate work | | | | | | | | | | | | |
| Contractor whole body counting very expensive. | See broader schedule. | | | | | | | | | | | | |
| Too many contractor IP Technicians used during outage. | Intake interviewing to determine number of technicians has resulted | | | | | | | | | | | | |
| | little better quality and faster work | | | | | | | | | | | | |
| | technicians for outage. | | | | | | | | | | | | |

GENERAL ELECTRIC

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15. **Model I Inspection**

**WORK SCHEDULE**

**CUSTOMER
LOCATION**

- 1. Follow IP tracking/prioritization

- 2. Perform emphasis on IP procedure violation corrective action

- 3. Follow up of health physics concern thru chain of command

| 6/1/79 Initial Visit | 6/11 Initial Visit | 6/18 Initial Visit | 1/2 Initial Visit | |
|--|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|
| [initial project is by station and location] | | | | | | | | | | | | | | | | | | | | | |