

ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket No.: 70-1257  
License No.: SNM-1227  
Report No.: 70-1257/97-01  
Licensee: Siemens Power Corporation (SPC)  
Facility: Siemens Power Corporation  
Location: Richland, Washington  
Dates: January 6-10, 1997  
Inspector: C. A. Hooker, Senior Fuel Facility Inspector  
Approved By: Frank A. Wenslawski, Chief  
Materials Branch  
  
Attachment: Supplemental Inspection Information

## EXECUTIVE SUMMARY

### Siemens Power Corporation NRC Inspection Report 70-1257/97-01

This routine announced inspection included aspects of management organization and controls, operator training and qualification, operations review, followup on licensee events, and followup on an open item from a previous inspection.

#### Management Organization and Controls

- The licensee's management controls and staffing appeared adequate for current licensed activities (Section 1).
- The licensee was adequately implementing its procedure control program and procedures effectively communicated management's expectations of conducting operations safely (Section 1.2).
- The licensee's self assessments appeared effective in identifying and correcting deficiencies (Section 1.3).

#### Operator Training and Qualification

- The licensee was adequately implementing its training programs. Operators appeared adequately qualified for their assigned work stations and sufficiently knowledgeable of the respective safety requirements (Section 2).

#### Plant Operations/Engineering

- The licensee was providing adequate design reviews of the new Dry Conversion Facility (Section 3.1).
- With the exception of the violation described below, the inspector concluded that the new additions/modifications were being installed in accordance with the licensee's ECN process (Section 3.2).
- The licensee took appropriate action and response to a fire at its Product Development Test Facility (PDTF) and resultant partial loss of site power. Plant conditions were adequately evaluated prior to restart of operations (Section 3.3.1).
- The licensee's Incident Investigation Board (IIB) assigned to review a fire at the PDTF did not adequately address the root cause as to why the controller for two newly installed air sampling vacuum pumps was not connected to emergency power as designed (Section 3.3.1).
- A violation of Safety Condition S-1 of the license was identified, where the licensee did not follow its engineering change notice process during the installation of two new air sampling vacuum pumps (Section 3.3).

## Report Details

### Summary of Plant Status

By letter dated November 15, 1996, the NRC approved Siemens license for a 5-year term. The new license was issued in accordance with a newly updated license renewal application dated October 28, 1996, and subsequent revised pages submitted by letter dated November 11, 1996.

The plant was operating both of its wet chemical conversion lines and the current dry conversion process. Fuel pellet manufacturing, fuel rod fabrication, and fuel bundle assembly operations were also in progress. Ongoing construction consisted of continuing with the new Dry Conversion Facility (DCF) and an addition to the Lagoon Uranium Recovery (LUR) process. At the beginning of the inspection, the licensee was in the process of restarting the Solid Waste Uranium Recovery (SWUR) incinerator following several months of shutdown, however, the incinerator was subsequently shut down due to an over-pressurization event.

## **1 Management Organization and Controls**

### **1.1 Organization and Staffing**

#### **a. Inspection Scope (88005)**

The inspector reviewed the licensee's organization, qualification for staffed positions, defined responsibilities, and staffing.

#### **b. Observations and Findings**

The inspector noted that there had been no changes in the licensee's organizational structure the past year. Defined responsibilities and qualifications of management and other staffed positions were consistent with those described in Chapter 2, Part I of the license. Responsibilities and authority for plant safety were also adequately described in licensee's safety standards.

During the past year, one of the three qualified criticality safety specialists of the Criticality Safety Component (CSC) terminated employment. The licensee had recently filled this vacant position with an individual of lesser experience who was in a qualification training phase. Although the CSC was operating with reduced qualified staff, current staffing appeared adequate for implementing the safety requirements of the license. Due to new facility additions, the radiological safety supervisor had been authorized to fill one newly vacant health and safety technician (HST) position and add two additional HSTs to his staff.

c. Conclusions

The inspector concluded that the licensee's organization with defined responsibilities, qualification of personnel, and staffing levels were adequate to implement the technical and safety programs for plant operations.

1.2 Procedure Control

a. Inspection Scope (88005)

The inspector reviewed and discussed procedural controls with the safety and operations personnel. Selected safety standards, operating procedures, engineering procedures, and health physics procedures were also reviewed relative to the licensee's review and approval process.

b. Observations and Findings

Safety standards and licensee procedures were prepared, reviewed, and approved in accordance with Figure 1-2.3, "Approval and Responsibility Matrix," Part I of the license. Procedures were periodically reviewed and revisions to incorporate changes in operations appeared timely. Temporary document revisions (TDRs) were made to operating procedures when circumstances warranted immediate changes. The inspector noted that TDRs were issued in accordance with Quality Assurance Procedure No. 5, "Temporary Document Revisions and Interim Procedures," until the effected procedure could be revised and appropriately approved. Operator training was appropriately incorporated in the TDR process. The inspector also noted that revisions to operating procedures were provided to senior operators for review and comment.

c. Conclusions

The inspector concluded that the licensee was adequately implementing its procedure control program. The licensee's safety standards and procedures also effectively communicated management's expectations of conducting operations safely.

1.3 Internal Reviews and Audits

a. Inspection Scope (88005)

The inspector reviewed licensee Health and Safety Council (H&SC) reports, and internal audits and inspections for the past 6 months. The audits and inspections reviewed included monthly H&SC committee safety inspections of housekeeping and industrial safety, monthly criticality safety audits by the CSC, monthly radiological safety audits, and quarterly inspections of the environmental program.

b. Observations and Findings

The inspector noted that the licensee's internal audit and inspection programs were consistent with Section 2, Part I of the license. Membership of the H&SC and items reviewed by the committee was consistent with that described in Section 2.3.1, Part I of the license. Monthly H&SC meetings adequately included the review of investigations, any Startup Council meetings, all routine safety audit reports and issues, abnormal events, and safety data trending.

The licensee's commitment tracking system was defined in Administrative Procedure, AP-1, "Manufacturing Regulatory Commitment Tracking." This system tracks licensing action response matters, incident investigation and abnormal event actions items, Corrective Action Requests from Quality Assurance or customer audits, responses/commitments to NRC Confirmatory Action Requests, and regulatory agency required responses/action items. The licensee's commitment tracking system continues to be an effective management tool for tracking and closure of regulatory or licensee identified action items.

c. Conclusion

The inspector concluded that the licensee's audit program appeared effective in identifying deficiencies and corrective actions appeared adequate to prevent recurrence.

**2 Operator Training and Qualification**

a. Inspection Scope (88010)

The inspector reviewed the licensee's general employee training (GET) program for all plant personnel, and the training and qualification program for operators in chemical conversion, ceramics, and the HSTs. The inspector also reviewed selected operator training records, reviewed ongoing work activities during facility tours, and held discussions with operators to view their understanding of the safety requirements of their job assignment.

b. Observations and Findings

The inspector noted that new employees, contractors, and office personnel continued to receive training that included the basics of radiation protection, criticality safety, hazardous chemical safety, fire protection, emergency requirements, and security. Personnel assigned to work with radioactive materials received additional GET in each of these topic areas prior to working without an escort. In 1996, the licensee implemented a new computerized interactive laser video training program for portions of the GET. The new interactive program covered training in the areas of criticality safety, radiation safety, and respiratory protection. Upon completion of the formal classroom training, each individual is

tested as to their knowledge of the material presented. Personnel were provided annual refresher training consistent with their work assignment.

The inspector noted that plant operations was in the process of revising its operator work station training and qualification guides. The new training and qualification guides were being revised to better define specific job assignments and associated procedures an individual must be knowledgeable of before being qualified for assigned task. The licensee's records showed that these individuals had completed necessary tests on the applicable procedures for their assigned tasks, on-the-job-training, and demonstration of functional area knowledge prior to unaccompanied assignment to a task. The inspector noted that prior to the restart of the SWUR incinerator, the respective operators had been adequately trained on recent revisions to the incinerator operating procedures. The inspector also noted that selected operators were being rotated to the new DCF for them to become knowledgeable of the equipment and assist in the development of operating procedures.

Based on discussions held with operators and the HST staff and observations during facility tours, the inspector did not identify any cause to suspect the qualification of personnel performing their assigned task or the lack of knowledge of plant safety requirements.

c. Conclusions

The licensee was adequately implementing its training programs. Operators appeared adequately qualified for their assigned work stations and sufficiently knowledgeable of the respective safety requirements.

3 **Plant Operations/Engineering**

3.1 DCF

a. Inspection Scope (88020)

The inspector toured the DCF with cognizant licensee personnel to observe and discuss the installation of process systems. The inspector also discussed and reviewed the licensee's management of the engineering and design control process for this new facility. Specific procedures and documents reviewed were:

- Engineering Procedure EMF-858, No. 1.7, "Design Document Approval."
- Engineering Procedure EMF-858, No. 1.13, "Engineering Change Notice (ECN)."
- Dry Conversion, Design Review Package #5 (powder preparation system).

b. Observations and Findings

Related to the installation of process equipment, the licensee had divided the process into four functional areas (conversion, powder preparation, HF-acid and off-gas, and miscellaneous) that will be covered by a respective ECN for approval of startup testing. Comments and/or concerns from the design review meetings in preparation for the ECNs were being documented with each design review package. The licensee was also maintaining a running list of all comments/concerns resolved and those to be addressed to ensure these matters would be adequately addressed prior to any startup testing.

Since none of the systems had been completed, there were no functional or acceptance tests for review during this inspection. Also, the licensee had not finalized its documentation for placement of the criticality monitoring system's detectors. The licensee was cognizant of the need to finalize this evaluation prior to the interjection of any special nuclear material into this facility. The inspector observed that all major components (autoclaves, dry conversion reactor units, calciners, and blenders) of process equipment had been placed in the facility. Installation of auxiliary processing equipment was in progress. During a tour of the facility the inspector brought to the attention of the licensee, inadequate barricading of floor openings above the blending room. During a subsequent tour, the inspector noted that this matter had been corrected.

c. Conclusions

The licensee's design reviews appropriately included members of the safety department, plant operations, and engineering management. No construction concerns were identified that would have a negative impact on the safety of planned plant operations.

3.2 Other Facility Additions and Modifications

a. Inspection Scope (88020)

The inspector reviewed and discussed other facility additions/modifications with the appropriate responsible project engineer. These new projects involved construction of a new building for the existing LUR facility and new solids processing facility, a new modular low-level radioactive waste shredding and uranium recovery facility, and a new mop powder dissolution system. The inspector also toured the LUR facility and the area where the new mop powder processing equipment was being installed. Specific documents reviewed included:

- ECN No. 5423C, "LUR/Solids Processing Facility," issued July 23, 1996.
- ECN No. 4797C, "Mop Powder Dissolver/Filter," issued December 5, 1996.

- Criticality Safety Evaluation Request, "Uranium Recovery from Wet Waste and Filter Media," dated December 6, 1996.

Selected drawings related to the above documents were also reviewed and discussed with the respective project engineer. No criticality analyses had been completed at the time of inspection.

b. Observations and Findings

LUR Facility

The construction of a new pre-engineered 110 ft. by 65 ft. metal building was in progress for the existing LUR process and new solids waste addition. Previously, the LUR facility was not enclosed and only operated during the warm weather season. The licensee had also shut down the facility in 1992, following NRC inspection findings that there was no HEPA filtering system or effluent sampling of an off-gas system used for a temporary dissolution process related to mop powder processing operations. The new facility will be provided with heating and ventilation system, a HEPA filtered exhaust system, and a room air and effluent sampling system. The purpose of this new addition is for the licensee to effectively process the liquids and solids in the lagoon system, consistent with an enforceable consent-decree between the SPC and the State of Washington to have this facility in operation in 1998 for ultimate lagoon closure. During a tour of the LUR facility, the inspector noted that the exterior walls and roof were attached, however, considerable interior building construction had not been completed. No concerns were identified by the inspector at this stage of the project.

MOP Powder Dissolution Process

The mop powder dissolution and uranium recovery process has undergone several evolutions of temporary, labor intensive processing methods. This new process was being designed as a permanent process to replace an interim process being used in the basement of the Engineering Laboratory Operations Building. During a tour of the new system, the inspector noted the licensee was in the early stages of installing the new process equipment. No concerns were identified at this phase of the project.

Modular Low-Level Waste Processing Facility

The licensee contracted with a vendor to build this facility and run the process onsite under SPC's license. This new facility will consist of four modular units equipped with processing equipment that will be assembled onsite as one processing facility. The purpose of the new facility is to process the licensee's backlog of wet waste items (mop heads, filter cartridges, rags, etc.), pre-filters, and HEPA filters contaminated with nitric acid, ammonium fluoride, ammonium nitrate, and other chemicals that makes the waste classified as dangerous waste under the

State of Washington Dangerous Waste Regulations. The new process is intended to render the waste as non-dangerous so that it can be disposed of as normal low-level radioactive waste or incinerated at the SWUR facility. At the end of operations, the facility will be removed from the licensee's site, but may be re-installed for similar operations. The licensee expected the new facility to be delivered in the near future. After the new facility has been placed onsite, the CSC will complete the criticality safety analysis and startup testing is to be performed under the licensee's ECN process.

c. Conclusions

The inspector concluded that the new additions/modifications were being installed in accordance with the licensee's ECN process.

3.3 Miscellaneous Operational Items

3.3.1 Review of Operational Events (90712 and 88020)

(Closed) Licensee Event Report (LER) No. 31438: Electrical fire and partial power outage. On December 11, 1996, the licensee notified the NRC of the event for informational purposes in that the situation did result in temporary suspension of certain licensed activities in the primary production facility. The inspection included a review of this event.

At 3:54 p.m. on December 10, 1996, an apparent phase-to-phase short between two 480 volt 3-phase transformer leads in a junction box to the PDTF caused a brief fire and partial loss of electrical power affecting several buildings onsite. The fire was contained in a power junction box mounted on the rear exterior wall of the PDTF and a small area of insulation on the interior wall of the PDTF. The loss of electrical power terminated the fire energy source and the remaining fire was extinguished within five minutes. The City of Richland Fire Department arrived on site at 4:09 p.m., confirmed that the fire was extinguished, performed smoke removal of the PDTF, restored access to the PDTF, and departed at 7 p.m. The City of Richland utilities service isolated the damaged electrical power supply to the PDTF and by 6 p.m. an orderly power restoration was initiated by Siemens with normal power restored to the uranium dioxide (UO<sub>2</sub>) building by 6:05 p.m.

The PDTF is used for conducting hydraulic flow and seismic tests involving single fuel elements containing special nuclear material of up to 5 w/o U-235. Such testing was not in progress and no special nuclear material was present in the PDTF at the time of the fire. The PDTF did contain test assemblies containing either depleted or natural uranium. These test assemblies were not affected by the fire.

The electrical power outage resulted in complete loss of electrical power to certain office buildings and ancillary facilities and a partial loss of electrical power to the main UO<sub>2</sub> building. The partial loss of electrical power to the UO<sub>2</sub> building resulted

in a loss of the Line 2 conversion process equipment, the dry conversion pilot equipment, ventilation supply fans, and the  $\text{UO}_2$  building air sampling system vacuum pumps (ASSVPs). The process exhaust systems remained operable through either normal power or emergency power as designed, thus maintaining negative pressure containment of the facility and conversion area process equipment. However, the ASSVPs did not operate on emergency power as designed. Orderly shutdown of all process operations was performed. Process operations did not restart until normal electrical power was restored and the licensee had evaluated plant conditions and verification that the ASSVPs were operable.

From the discussions with cognizant licensee personnel and the review of selected documents the inspector verified that there were no personnel injuries, no release of radioactive material from any onsite facility, and no negative impact on personnel exposures. Since the fire did not extend beyond 15 minutes, involve radioactive material, and there was no apparent effect on a safety system that could potentially lead to a release of radioactive material, the event did not provide cause for the licensee to activate its emergency plan. Also, the inspector did not identify any concerns relative to the licensee's determination that this event was not reportable. The licensee also appropriately assigned an IIB to review the causes of the event.

The inspector concluded that the licensee's response to and actions taken during the event appeared appropriate. Plant conditions were adequately evaluated prior to restart of operations.

#### Licensee's Investigation

The licensee's IIB finalized and issued its report on January 8, 1997. The IIB determined that the electrical short and fire was most likely caused from wet damaged insulation. Due to the degree of damage at the junction box, the licensee could not make a positive conclusion as to the cause. The junction box was installed by a contractor and had been inspected by the City during an expansion of the PDTF in 1993. The failed conductors were not restrained in the junction box and flexing during use (power supply to a 200 horsepower hydraulic pump) caused the insulation of the conductors to wear at the entrance "Myers" hub in the junction box or on the sides of the box. The damaged insulation allowed moisture to contact the conductor and caused a short circuit to develop. The replacement installation included restraining the new conductors in the junction box with insulated clamps to prevent flexing, and installing a gasketed junction box and sealing all conduit penetrations into the box.

The licensee's IIB also identified several deficiencies as a result of the event. These deficiencies involved: (1) a temporary loss of the public address system (1-2 minutes) until the emergency power was on-line, (2) design and valving arrangement for obtaining timely backup cooling water to the sintering furnaces, (3) the Line 1 off-gas system having to be manually switched to emergency power

as opposed to an automatic transfer like other systems, and (4) the UO<sub>2</sub> building ASSVPs did not operate on emergency power as intended. Relative to the cause for ASSVPs not operating, the IIB determined that the control power for the pumps was not connected to emergency power as originally "envisioned." As a corrective action to this finding, the licensee rewired the ASSVPs control power to emergency power under an ECN (No. 5900S) which was completed on December 25, 1996. Following a loss of a City of Richland electrical substation and loss of site power (about 2-hours) on December 27, 1996, the on-line ASSVP automatically restarted on emergency power.

The inspector concluded that the licensee's investigation adequately addressed the cause of the event and actions to correct deficiencies appeared appropriate. Although the IIB identified that the controller for the air sampling vacuum pumps was not powered from the correct electrical source, the investigation did not surface that the ECN procedure was not followed, as discussed under "Engineering" below.

#### Engineering

Related to the ASSVPs not being operable during the December 10, 1996, event, the inspector pursued the matter further to evaluate the cause and made the following observations:

- ECN No. 5533L, "UO<sub>2</sub> Vacuum Air Sample Pump Upgrade," was issued on April 18, 1996, to replace three existing ASSVPs located inside of the UO<sub>2</sub> building with two higher capacity ASSVPs located on the roof of the UO<sub>2</sub> building. Two of the justifications included a 20 percent higher capacity for expanding the sampling system to the new DCF and to provide uninterrupted service with no reduction in air volumes for the UO<sub>2</sub> and DCF buildings. The work scope for the ECN provided a start date of June 1 and the work was completed on August 6, 1996. The ECN form and respective work scope also specified the performance of a functional test of the pumps prior to final approval of the ECN for acceptance of the modification.
- Drawing, EMF-610,583, "Air Sampling Vacuum Pump Replacement Control and Distribution," attached to the ECN provided details of the electrical wiring for the new system. Although the ECN did not specifically state that the system was to be connected to the emergency power distribution system, the inspector noted that the drawing (EMF-610,583) showed that the electrical power supply to the ASSVPs and the controller was from Motor Control Center (MCC-NE). Although not included with the ECN package, the inspector noted from another licensee drawing (EMF-604,223) that MCC-NE was supplied by the East Emergency Generator. Also, Section 10.2, "Utilities and Support Systems," Part II, "Safety Demonstration," of the license application (effective at the time and currently) describe the air

sampling vacuum system as being connected to the emergency power backup system with reference to MCC-NE.

- During the installation, the project engineer became aware that the electrical circuit depicted in EMF-610,583 for the ASSVPs' controller was connected to the incorrect side of the manual disconnects and time delay fuses for the vacuum pumps. Therefore, a field change was made to provide power to the controller from another available power source requiring less modification for the fix. This new power source only provided normal power and thereby eliminated emergency power to the controller. Although the field change was noted on the as-built drawing subsequently submitted at the completion of the job, the field change was not documented on the ECN when it was submitted for startup approval by the project engineer on August 6, 1996.

The inspector also noted that the ECN specified a functional test be performed for acceptance of the work. Although a functional test was purportedly performed for normal operations of the two pumps, the "Work Acceptance by Functional Test/ATP" block on the ECN form was not checked in the final acceptance and approval section of the ECN. The inspector considered that failure to provide this notation on the ECN was an administrative oversight, but was indicative of an inadequate final review of the ECN when it was signed for final acceptance. Relative to performing a functional test to include startup of the ASSVPs on emergency power, the licensee stated that such tests were not normally performed as it would require turning off normal power to other equipment in order to supply emergency power for these type of tests.

Safety Condition S-1 of SNM License 1227 (in effect at the time) authorized the use of licensed materials in accordance with the statements, representations, and conditions contained in Part I of the licensee's application dated July 1987 and supplements and revisions thereto.

Section 2.5, "Operating Procedures, Standards and Guides," Part I of the license application stated, in part, that the licensee is committed to controlling activities in accordance with Standard Operating Procedures, Company Standards and Policy Guides.

Item 2., Section 2.2, of the ECN procedure (EMF-858, No. 1.13) states, in part, that field changes done under an open ECN must be documented and included in the ECN file prior to startup approval.

The inspector concluded that during the installation of the ASSVPs, a field change was not appropriately documented in the ECN process which was considered as a violation of Safety Condition S-1 of the license (VIO 70-1257/9701-01).

### 3.3.2 Non-Reportable Operational Events (88020)

The inspector reviewed and discussed selected non-reportable operational events and related documents to evaluate the licensee's actions. Specific events and documents reviewed were:

- Criticality Safety Corrective Action Report (CSCAR) No. 96-043, "Line 2 Vapor Room," dated October 10, 1996, involving an operator that inadvertently pumped the first wash from an uranium hexafluoride cylinder to a wrong storage tank.

Internal letter, "Meeting Minutes Criticality Safety Violation Involving TK-6 Operation," dated October 14, 1996.

- Operations - Abnormal Event No. 3590/SWUR, "Pressurization of SWUR Incinerator," dated January 8, 1997.

Radiological Safety - Abnormal Event No. 97-1, "SWUR Furnace Pressurized," dated January 8, 1997.

Associated air sampling data and personnel survey forms.

- Operations - Abnormal Event No. Chemical 3510, "Vacuum Knockout Pot Hose Ignition," dated January 9, 1997, involving a vacuum hose igniting while being used to unplug a powder transfer line from the Line 1 calciner drop station, and subsequent oxidation of the powder "Burnback."

Radiological Safety - Abnormal Event No. 97-004, "Fire at Vac-Max Hose," dated January 9, 1997.

Associated air sampling data and personnel survey forms.

#### Observations and Findings

Regarding the CSCAR for the cylinder wash transfer to the wrong tank, the justification as to why an event or condition did not require reporting to the NRC under the provisions of NRC Bulletin 91-01 was adequately documented. Root cause for the event was appropriately identified and corrective actions appeared adequate to prevent recurrence.

Regarding the SWUR pressurization, this event occurred after the licensee had fed two test boxes of combustible material into the incinerator. The operators immediately restored the incinerator to a negative state and evacuated the area when smoke was observed coming from the incinerator. The facility was temporarily placed on breathing air by the area HST due to the potential of high carbon monoxide. The incinerator was shut down until the cause of the

pressurization could be identified and appropriate actions taken to correct the problem prior to restart. Although the matter was still under investigation, the licensee had some indication that the event may have been attributed to the off-gas flow control and a rapid feed/burn in the primary chamber. Room air samples during the event indicated elevated airborne concentrations requiring the use of half-masks. Data from subsequent air samples indicated normal low airborne concentration. No personnel contaminations occurred from the event. The inspector determined that the licensee had taken appropriate actions and was adequately evaluating the cause prior to any restart.

Relative to the vacuum hose fire, the fire was quickly extinguished with two shots from a dry chemical fire extinguisher, the event did not result in any damage except to the vacuum hose, no personnel contaminations occurred (operator using a full-face respirator for the task), and no high airborne radioactivity was generated. The licensee was adequately reviewing the incident.

#### **4 Facility Support (92702)**

(Closed) Violation 70-1257/9604-01: Failure to perform semiannual calibration checks on direct-reading pocket dosimeters maintained in emergency repositories. Based on discussions with cognizant licensee personnel, a review of related calibration records and review of the licensee's computerized preventative maintenance system, the inspector verified that the licensee had completed the corrective actions, as described in Inspection Report 70-1257/9604. The inspector noted that all of the dosimeters had been calibrated and incorporated in the licensee's preventative maintenance system. The licensee's actions appeared adequate to prevent recurrence.

#### **5 Radiological Control (92701)**

(Closed) Inspector Followup Item 70-1257/9601-01: Deficiencies in the licensee's maintenance work permit (MWP) and radiation job permit process (RJP). NRC Inspection Reports 70-1257/96-03 and 04 document the previous reviews of this matter. During this inspection (70-1257/97-01), the inspector noted that the safety group had revised the site-wide Radiation Work Procedure P91,1003, "Maintenance Operations," that specified the use of a RJP for non-routine jobs and a table of jobs that did not require a RJP. The safety department also generated a new site radiological operating procedure (EMF-1508,2.10, Radiation Job Permit) and a new radiological implementing procedure (EMF-1507,10.2, Radiation Job Permit). Based on the review of active MWPs and RJP's during facility tours and review of the new procedures, the inspector determined that the procedures provided adequate guidance and the licensee was adequately implementing its MWP and RJP programs. The inspector concluded that the licensee's actions appeared to adequately address this issue.

#### **Exit Meeting Summary**

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on January 10, 1997. The licensee acknowledged the findings presented.

Although proprietary information was reviewed during this inspection, such information is not knowingly described in this report.

## ATTACHMENT

### SUPPLEMENTAL INSPECTION INFORMATION

#### PARTIAL LIST OF PERSONS CONTACTED

##### Licensee

B. F. Bentley, Manager, Plant Operations  
J. B. Edgar, Senior Engineer, Licensing  
E. L. Foster, Supervisor, Radiological Safety  
D. C. Harris, Facility Engineer  
J. W. Helton, Manager, Plant Engineering  
W. A. Koglin, Engineer  
L. J. Maas, Manager, Regulatory Compliance  
C. D. Manning, Lead Criticality Safety Specialist  
J. J. Payne, Acting General Supervisor, Chemical Operations  
T. C. Probasco, Manager, Safety  
R. E. Vaughan, Manager, Safety, Security and Licensing  
G. N. Ward, Manager, Manufacturing Engineering

#### INSPECTION PROCEDURES USED

IP 88005: Management Organization and Controls  
IP 88010: Operator Training/Retraining  
IP 88020: Operations Review  
IP 90712: In-Office Review of Licensee Events  
IP 92701: Followup  
IP 92702: Followup on Corrective Actions for Violations and Deviations

#### ITEMS OPENED, CLOSED, AND DISCUSSED

##### Opened

70-1257/9701-01                      VIO    Failure to follow the ECN procedure.

##### Closed

70-1257/31438                      LER No. 31438 Information Report - Electrical Fire and Partial Loss of Power

70-1257/9601-01                      Deficiencies in the licensee's MWP and RJP process.

LIST OF ACRONYMS USED

ASSVP	air sampling system vacuum pump
CSC	Criticality Safety Component
CSCAR	Criticality Safety Corrective Action Report
DCF	Dry Conversion Facility
ECN	engineering change notice
GET	general employee training
H&SC	Health and Safety Council
HST	health and safety technician
IIB	Incident Investigation Board
LER	licensee event report
LUR	Lagoon Uranium Recovery
MWP	Maintenance Work Permit
PDTF	Product Development Test Facility
RJP	Radiation Job Permit
SWUR	Solid Waste Uranium Recovery
TDR	temporary document revisions
UO <sub>2</sub>	uranium dioxide