Mr. D. R. Gipson Senior Vice President Nuclear Generation The Detroit Edison Company 6400 North Dixie Highway Newport, MI 48166

SUBJECT: FERMI INSPECTION REPORT 50-341/2000002(DRP)

Dear Mr. Gipson:

This refers to the inspection conducted on February 24 through April 1, 2000, at the Fermi 2 Facility. The enclosed report presents the results of this inspection

During the inspection, we noted that deficiencies were identified and properly placed into the corrective action program. Further, operator and plant response to the inadvertent closing of a main turbine high pressure stop valve and subsequent transient was effective. Organizational support for continued plant operations was also effective.

However, we are concerned with continuing human performance errors at Fermi 2 such as the two examples identified during this inspection. In the first example, an operator missed a procedure step and inadvertently transferred 1800 gallons of water to the radwaste surge tank, overfilling the tank and spilling approximately 2 gallons on the floor. Fortuitously, the spilled water was not contaminated. In the second example, maintenance personnel left the main steam isolation valve isolation logic in a one-half trip condition and unattended for 40 minutes without contacting the control room personnel. We noted, however, that you have appropriately placed these issues into your corrective action program.

Based on the results of this inspection, the NRC has determined that two violations of NRC requirements occurred. The violations involve failing to follow a procedure while preparing a filter demineralizer and failing to contact control room personnel before suspending a test on main steam isolation valve logic. These violations are being treated as Non-Cited Violations (NCVs), consistent with Section VII.B.1.a of the Enforcement Policy. These NCVs are described in the subject inspection report. If you contest the violation or severity level of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regularly Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region III, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

D. Gipson -2-

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC homepage, http://www.nrc.gov/NRC/ADAMS/index.html.

Sincerely,

Original signed by Mark Ring, Chief

Mark Ring, Chief Reactor Projects Branch 1

Docket No. 50-341 License No. NPF-43

Enclosure: Inspection Report 50-341/2000002(DRP)

cc w/encl: N. Peterson, Director, Nuclear Licensing

P. Marquardt, Corporate Legal Department

Compliance Supervisor

R. Whale, Michigan Public Service Commission Michigan Department of Environmental Quality Monroe County, Emergency Management Division

Emergency Management Division MI Department of State Police

D. Gipson -2-

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No: 50-341 License No: NPF-43

Report No: 50-341/2000002(DRP)

Licensee: Detroit Edison Company

Facility: Enrico Fermi, Unit 2

Location: 6400 N. Dixie Hwy.

Newport, MI 48166

Dates: February 24 through April 1, 2000

Inspectors: S. Campbell, Senior Resident Inspector

J. Larizza, Resident Inspector

Approved by: Mark Ring, Chief

Reactor Projects Branch 1

EXECUTIVE SUMMARY

Enrico Fermi, Unit 2 NRC Inspection Report 50-341/2000002(DRP)

This inspection included aspects of licensee operations, engineering, maintenance, and plant support. The report covers a 6-week period of resident inspection.

Operations

- High pressure turbine main stop valve 2 inadvertently closed during power operations, which caused a 10 percent power reduction. Operator and equipment response to the unplanned transient was effective (Section O1.1).
- Use of a previously marked procedure and inattention to detail caused an operator to
 miss a procedure step required to prepare the fuel pool cooling and cleanup
 demineralizer. Not performing this step caused an unexpected transfer of approximately
 1800 gallons of water into the radwaste surge tank, overfilling the tank and spilling about
 2 gallons of water onto the floor. One non-cited violation was identified (Section O1.2).

Maintenance

- Without contacting the control room, maintenance personnel took a 40-minute break and left a main steam isolation valve isolation logic in a one-half trip condition. This was caused by poor supervisory oversight of the job and lack of communication. One non-cited violation was identified (Section M1.2).
- Although the cause of the inadvertent reactor vessel level 8 actuation during the high pressure coolant injection surveillance test was indeterminate, the most probable cause was a defective level transmitter. The licensee properly notified NRC of the event (Section M1.3).
- The inspectors noted that maintenance personnel had erected a foreign material exclusion (FME) area without establishing an FME monitor to document items taken into the FME area. Inspectors concluded that the FME procedure provided poor guidance for implementing the FME program (Section M2.1).

Engineering

 Several configuration control issues involving the central component data base system, drawings and processing modifications existed at the plant. The inspectors concluded that the licensee had established sufficient programs and resources to correct the condition. The licensee effectively identified configuration control issues and monitored progress in resolving the issues (Section E1.1).

Plant Support

 Radiation protection personnel properly monitored maintenance activities and maintained monitoring equipment calibrated. Plant personnel were observed using the equipment effectively (Section R1.1).

Report Details

Summary of Plant Status

Unit 2 began this inspection period at 97 percent power. On March 10, 2000, power was reduced to 80 percent to perform rod pattern adjustments and power was returned to 97 percent. On March 18, power was reduced to 80 percent to withdraw the last four rods from the core and power was returned to 97 percent. On March 23, 2000, reactor power was reduced to 87 percent when the No. 2 high pressure turbine stop valve inadvertently drifted to the closed position. The high pressure turbine control valve remained closed and power maintained at 87 percent until April 1, when the plant was manually scrammed from 23 percent power to commence Refueling Outage 7.

I. Operations

O1 Conduct of Operations

O1.1 <u>Inadvertent Closure of High Pressure Turbine Stop Valve No. 2</u>

a. <u>Inspection Scope (71707)</u>

The inspectors interviewed personnel and reviewed operating and troubleshooting procedures associated with the inadvertent closure of high pressure main turbine stop valve No. 2.

b. Observations and Findings

On March 23, 2000, with the plant operating at 97 percent power, control room operators received annunciator alarms and detected the No. 2 turbine stop valve drifting closed. Power range nuclear instruments spiked to approximately 100 percent power before turbine bypass valves opened to lower main steam pressure to normal. Reactor engineers determined that reactor thermal power increased to about 97.5 percent during the event. Operators lowered reactor power to 80 percent. Plant response was normal.

Operators closed both the stop and control valves. Operators documented this event on Condition Assessment Resolution Document (CARD) 00-11405. Subsequent troubleshooting could not identify the source of the inadvertent valve closure. However, the licensee believed that a defective electronic card in the stop valve circuit caused the condition. To avoid an initiating event by continued troubleshooting activities, the licensee chose to raise power to 87 percent and operate at this level with both the No. 2 turbine main control and stop valves closed. The licensee planned further troubleshooting and repair activities during the next refuel outage.

c. <u>Conclusions</u>

High pressure turbine main stop valve No. 2 inadvertently closed during power operations, which caused a 10 percent power reduction. Operator and equipment response to the unplanned transient was effective.

O1.2 Overflow of the Fuel Pool Cooling and Cleanup (FPCCU) Precoat Tank

a. <u>Inspection Scope (71707)</u>

During conditioning (precoating) of the resin FPCCU filter demineralizer A, the FPCCU precoat tank overflowed. The inspectors reviewed Procedure 23.708, "Fuel Pool Cooling and Cleanup System," and CARD 00-14230 to determine the causes and consequences of the event.

b. Observations and Findings

On March 29, 2000, the radwaste operator performed Procedure 23.708, to precoat the FPCCU filter demineralizer A. The operator used a procedure that was previously marked with checks next to the procedure steps. Because step 6.4.2.8.a was checked, the operator thought he had performed the step to close filter demineralizer B (the filter demineralizer on hold) isolation valve. Consequently, he did not perform the step and started precoating filter demineralizer A.

Since the filter demineralizer B isolation valve was not closed, approximately 1800 gallons of water was sent to the radwaste surge tank, overfilling the tank and spilling approximately 2 gallons onto the floor. After the operator realized his error, he stopped the evolution. Radiation protection personnel surveyed the spilled water and did not identify the presence of radioactive contamination. The licensee initiated CARD 00-14230 to document the event.

The inspectors were concerned with the consequences from this human performance error that included the operator using a previously marked procedure, sending water to the wrong tank and spilling potentially contaminated water onto the floor.

Technical Specification (TS) 5.4.1.a., states that written procedures shall be established, implemented, and maintained for procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33, Section 7a.(1) requires procedures for collection, demineralizing and filtering radioactive liquid waste. Step 6.4.2.8.a of Procedure 23.708, "Fuel Pool Cooling and Cleanup System," which is a procedure used for collection, demineralizing and filtering FPCCU (liquid radwaste), required isolating filter demineralizer B before precoating filter demineralizer A.

Contrary to the above, on March 29, 2000, the radwaste operator missed conducting step 6.4.2.8.a of Procedure 23.708 to isolate filter demineralizer B while precoating filter demineralizer A. As a result, approximately 1800 gallons of water was inadvertently sent to the radwaste storage tank, causing the tank to overfill and spill approximately 2 gallons onto the floor.

This Severity Level IV violation is being treated as a Non-Cited violation (NCV) consistent with Section VII.B.1.a of the NRC Enforcement Policy (NCV 50-341/2000002-01(DRP)). This violation is in the licensee's corrective action program as CARD 00-14230.

c. Conclusions

Use of a previously marked procedure and inattention to detail caused an operator to miss a procedure step required to prepare the FPCCU filter demineralizer. Not performing this step caused an unexpected transfer of approximately 1800 gallons of water into the radwaste surge tank, overfilling the tank and spilling about 2 gallons of water onto the floor. One non-cited violation was identified.

O8 Miscellaneous Operations Issues (92902)

- O8.1 The Inspection Followup Items (IFIs) listed below were issued prior to the March 11, 1999, implementation of the NRC's new policy for treatment of Severity Level IV violations (Section VII B.1.a of the Enforcement Policy). The new Enforcement Policy allowed treatment of Severity Level IV violations as non-cited violations in accordance with Section VII.B1.a, and allowed closure of the violations provided these violations were placed in the licensee's corrective action program. Since IFIs are typically not enforceable issues and are of low significance, they are being closed out in this report. After review, the inspectors determined that the following IFIs were placed in the corrective action program and that no violations of regulatory requirements occurred:
 - IFI 50-341/97010-01 This item is in the licensee's corrective action program as Deviation Event Reports (DERs) 97-1227, -1215, -1207, and -1149 and CARD 97-11886.
 - IFI 50-341/97014-01 This item is in the licensee's corrective action program as CARD 98-10703.
 - IFI 50-341/97014-02 This item is in the licensee's corrective action program as CARD 97-11186.
 - IFI 50-341/98003-02 This item is in the licensee's corrective action program as CARDs 98-11641 and -11975.
 - IFI 50-341/98003-03 This item is in the licensee's corrective action program as CARD 00-12044.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. <u>Inspection Scope (62707)</u>

The inspectors observed all or portions of the following work activities:

- 44.010.033, "Reactor Protection System and Nuclear Steam Supply Shutoff System Drywell Pressure, Trip System A Functional Test,"
- 24.307.17, "Emergency Diesel Generator (EDG) 14 Start and Load Test,"
- 42.302.01, "Channel Functional Test of Division 1 4160 Volt Bus 64B UV Circuits,"
- Work Request (WR) 000Z994460, "Install New Exciter Panel in Diesel Generator Room 13," and
- WR 000Z000169, "Staging of Division 1 Batteries-Engineering Design Package 30405 on Third Floor of Turbine Building."

b. Observations and Findings

Qualified maintenance personnel used appropriate procedures and work instructions. Adequate supervision was provided for the activities. Noteworthy observations are described below.

c. <u>Conclusions</u>

The inspectors did not identify any findings during routine work activities.

M1.2 Performance of Main Steam Line Trip System Channel B Test

• Inspection Scope (62707)

During a test, Instrumentation and Control (I&C) personnel inserted a one-half isolation signal for the main steam isolation valve (MSIV) per a test procedure and took a lunch break without removing the isolation signal. The inspector reviewed the following procedures:

- Procedure 44.020.404 "Nuclear Steam Supply System Main Steam Line Flow, Trip System "B" Channel "B" B21-N086B Flow Loop Calibration / Functional."
- MWC03, Work Control Conduct Manual, Chapter 3, "Surveillance / Performance Package Control."
- CARD 00-13387, "Surveillance Stopped Temporarily with one-half MSIV Isolation initiated."

b. Observation and Findings

On March 20, 2000, I&C personnel conducted a surveillance test and initiated a one-half MSIV isolation signal per test Procedure 44.020.404. Due to a late start and delays with other activities in the control room, the I&C personnel stopped the test for a lunch break. The I&C personnel did not communicate to the control room personnel that a break was going to be taken with the logic in the one-half trip condition.

Approximately 40 minutes later, the operators questioned the status of the test and discovered that I&C had left the test with a one-half MSIV isolation logic initiated. The licensee initiated CARD 00-13387 to document the condition.

The inspectors were concerned with this human performance error in that maintenance personnel left the plant in an undesirable condition for 40 minutes, lacked communication with the control room, and lacked adequate supervisory oversight to prevent this condition.

10 CFR 50, Appendix B, Criterion V, states that activities affecting quality shall be prescribed by documented instructions and procedures of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions and procedures. Procedure MWC03, Work Control Conduct Manual, Chapter 3, "Surveillance/Performance Package Control," Revision 7, a procedure affecting quality, step 4.2.12 states in part that if performance of surveillance is stopped, the system must be returned to a configuration specified by either the nuclear shift supervisor or the nuclear assistant shift supervisor.

Contrary to the above, on March 20, 2000, the MSIV surveillance was stopped for approximately 40 minutes without the knowledge of control room personnel. This Severity Level IV violation is being treated as an NCV consistent with Section VII.B.1.a of the NRC Enforcement Policy (NCV 50-341/2000002-02(DRP)). This violation is in the licensee's corrective action program as CARD 00-3387.

c. Conclusions

Without contacting the control room, maintenance personnel took a 40-minute break and left an MSIV logic in a one-half trip condition. This was caused by poor supervisory oversight of the job and lack of communication. One non-cited violation was identified.

M1.3 High Pressure Coolant Injection (HPCI) System Surveillance

a. Inspection Scope (62707)

An inadvertent reactor water level 8 signal was received during a test of the HPCI system that rendered the system inoperable. The inspectors reviewed the event, the event notification, Procedure 44.030.254, "Emergency Core Cooling System - Reactor Vessel Water Level (levels 1, 2 and 8) Division 2 Channel D Functional Test," and CARD 00-11418.

b. Observation and Findings

On March 15, 2000, while conducting Surveillance Procedure 44.030.254, the HPCI system reactor vessel water level 8 turbine trip signal was inadvertently initiated. The level 8 signal trips the HPCI, reactor core isolation cooling system and the main turbines to protect the turbines from moisture carryover if reactor vessel water level is above 214 inches. Thirty-five minutes later, the licensee reset the trip and declared HPCI operable. The licensee made a 4-hour non-emergency notification to the NRC Operations Center per 10 CFR 50.72 (b)(2)(ii), "Emergency Safety Feature Actuation." A follow-up report (Licensee Event Report (LER) 341-00002) will be issued within 30 days per 10 CFR 50.73 (a)(2)(v), "Safety System Functional Failure." The licensee issued CARD 00-11418 to document this condition.

During the investigation, the licensee eliminated human error as the cause of the inadvertent actuation. The licensee suspected that a defective level transmitter (Rosemount Model 1253) caused a signal spike in the circuitry and the inadvertent level 8 actuation. The licensee scheduled replacement of the transmitter during the refueling outage.

c. Conclusions

Although the cause of the inadvertent reactor vessel level 8 actuation during the HPCI surveillance test was indeterminate, the most probable cause was a defective level transmitter. The licensee properly notified NRC of the event.

M2 Maintenance and Material Condition of Facilities and Equipment

M2.1 Foreign Material Exclusion (FME) Controls

a. Inspection Scope (62707)

The inspectors observed the FME controls implemented during the 18-month emergency diesel generator (EDG) 13 maintenance. The inspectors reviewed Maintenance Conduct Manual MMA 17, "Foreign Material Exclusion," and work request (WR) W84000100 to determine whether the requirements were implemented.

b. Observations and Findings

On March 15, 2000, the inspectors observed EDG 13 preventive maintenance per WR W848000100. Although the WR did not require an FME area (FMEA), maintenance personnel designated a roped-off area as an FMEA.

The inspectors noted that a compact disc (CD) player, CDs, tools, rags, clothing, bolts and wire were in the FMEA. The maintenance supervisor, who was overseeing the job, permitted playing the CD during the activity, which did not meet managements' expectations for maintenance conduct. The CD equipment was removed from the area. The maintenance crew was counseled on these expectations.

Since an FMEA was established, the inspectors requested to review the FME material control log, which documented all items brought into the FMEA. The maintenance supervisor informed the inspectors that the log was not required since an FME monitor, who controls access to the FMEA using the FME control log, was not assigned to the job. The maintenance supervisor stated that a drop log, which documents the recovery action to retrieve items inadvertently dropped into the EDG, and a close-out inspection was sufficient. After discussions with the inspectors, the supervisor removed the rope barrier.

The inspectors reviewed Procedure MMA 17. Procedure steps 4.1.1.1 through 4.1.1.3, required that an FMEA, and tool and material controls be established if debris could fall into an open system and impact system operability. However, Step 4.1.1.5, provided options to implement the FME monitor, remove loose objects (jewelry, pens, wallets), tape loose items (keycards, dosimeters etc.), or attach lanyards to equipment if these items were not easily retrievable.

The inspectors noted that the procedure provided unclear guidance for items identified in the FMEA during the EDG 13 job. The inspectors were concerned that the licensee was relying on a recovery action (drop log and close-out inspection) instead of a barrier (control of items into FMEA) to prevent items from entering into the EDG which may render the EDG inoperable. The inspectors reviewed one incident at another site (LER 50-368/92004) where maintenance personnel left an easily retrievable rag in an EDG fuel oil system and rendered the EDG inoperable.

After completing the maintenance, EDG 13 was started and passed the post maintenance test. The inspectors discussed these observations with the maintenance superintendent, who recognized that the FME procedure was weak. The licensee initiated CARD 00-15654 to document the concerns.

c. Conclusions

The inspectors noted that maintenance personnel had erected an FMEA without establishing an FME monitor to document items taken into the FMEA. Inspectors concluded that the FME procedure provided poor guidance for implementing the FME program.

M8 Miscellaneous Maintenance Issues (92902)

M8.1 Closure of Inspection Followup Items (IFI)

The IFI listed below was issued prior to the March 11, 1999, implementation of the NRC's new policy for treatment of Severity Level IV violations (Section VII.B.1.a of the Enforcement Policy). The new Enforcement Policy allowed treatment of Severity Level IV violations as non-cited violations in accordance with Section VII.B1.a, and allowed closure of the violations provided the violations were placed in the licensee's corrective action program. Since IFIs are typically not an enforceable issue and are of

low significance, they are being closed out in this report. After review, the inspectors determined that the IFI violation was placed in the corrective action program and that no violations of regulatory requirements occurred:

• IFI 50-341/97014-05 This item is in the licensee's corrective action program as CARD 97-10704.

III. Engineering

E1 Conduct of Engineering

E1.1 Configuration Control

a. Inspection Scope (37551)

The inspectors reviewed several CARDs that documented errors in the central component data base (CECO) system, which is used for maintaining the plant configuration. The inspectors interviewed the licensee to determine the scope of the configuration control problems and whether configuration control issues were being addressed adequately.

b. Observations and Findings

The inspectors noted several CARDs that identified configuration control problems regarding inaccurately documented component model numbers in CECO. These issues were identified through the following major licensee initiatives:

- the Bill-of-Materials (BOM) project, where the licensee performed document reviews, field walk downs and design change process reviews to validate component model numbers and incorporated corrections into CECO,
- correcting drawings and schematics during motor control center breaker replacement (DERs 97-042, -0514 and -0421, and CARDs 97-10165 and -11485 and LER 97-002),
- during an Updated Final Safety Analysis Report validation program regarding specific configurations of figures in the Updated Final Safety Analysis Report, and
- CARD 98-12558 that the licensee initiated to develop corrective action for enhancing a weak technical service request program.

Personnel conducting the BOM project evaluated approximately 21,000 (31 percent) of the total plant components. From this review, about 15,150 CECO discrepancies were identified. The model number discrepancies included the following: approximately 350 had wrong numbers in CECO; 1,800 had a blank or a comment in the CECO model field; 5,500 were incomplete (truncated data); and 7,500 had missing dashes or blank spaces. After a review, the inspectors considered 13,000 of these as administrative

errors. Nevertheless, the licensee corrected the errors. Because of funding constraints, the project completion has slowed. The licensee has not established a completion date or the scope of the equipment to be reviewed.

Further, a significant configuration control issue was documented on CARD 98-12558, which identified weaknesses in the technical service request program. These weaknesses created inconsistent reporting to engineers when approved replacement parts were installed on components. Consequently, CECO was not updated to reflect the proper component model numbers. The CARD resolution took approximately 5 years to complete. The licensee completed the corrective actions and closed the CARD at the end of the inspection report.

Another configuration control issue involved inaccurate information on plant drawings that caused difficulty in planning and completing work. This was prevalent 4 to 5 years ago. Currently, the licensee has issued an average of 150 to 160 drawing related errors per year. Programmatic drawing reviews have not been conducted. However, the licensee used the CARD process, the instrumentation and control data sheet program and the component labeling upgrade program to correct drawings on a daily basis.

The licensee has tracked correcting configuration control issues via plant support engineering configuration "health reports." These reports monitor the progress in resolving CARDs that addressed configuration control issues. Further, Quality Assurance (QA) personnel had initially tracked configuration control issues and reported to management (via QA reports and meetings) increasing trends in this area. Quality Assurance personnel still monitor configuration control issues, but the emphasis in tracking these issues has reduced because QA determined that the programs mentioned above adequately addressed the issue.

The Independent Safety Engineering Group (ISEG) Report 00-004 conducted internal reviews of CECO. The ISEG initiated eight CARDs recommending improvements to CECO. However, ISEG did not identify violations of Technical Specifications(TS) or regulatory requirements.

The inspectors reviewed several CARDs that identified configuration control issues on safety-related equipment. None of these issues caused a violation of regulatory requirements.

c. Conclusions

Several configuration control issues involving CECO, drawings, and processing modifications existed at the plant. The inspectors concluded that the licensee had established sufficient programs and resources to correct the condition. The licensee effectively identified configuration control issues and monitored progress in resolving the issues.

E8 Miscellaneous Engineering Issues (92903)

E8.1 Closure of Inspection Followup Items

The IFIs listed below were issued prior to the March 11, 1999, implementation of the NRC's new policy for treatment of Severity Level IV violations (Section VII.B.1.a of the Enforcement Policy). The new Enforcement Policy allowed treatment of Severity Level IV violations as non-cited violations in accordance with Section VII.B.1.a, and allowed closure of the violations provided these violations were placed in the licensee's corrective action program. Since IFIs are typically not an enforceable issue and are of low significance, they are being closed out in this report. After review, the inspectors determined that the following IFIs were placed in the corrective action program and that no violations of regulatory requirements occurred:

- IFI 50-341/96201-09 This item is in the licensee's corrective action program as DERs 96-1155 and 96-1039.
- IFI 50-341/97007-08 This item is in the licensee's corrective action program as DER 97-0994 and CARD 98-11671.
- IFI 50-341/98006-04 This item is in the licensee's corrective action program as CARDs 98-10616, -16665, 99-17724 and 00-10009.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 Radiation Protection Performance (71750)

During plant tours and maintenance observations, the inspectors noted radiation protection personnel properly monitored maintenance activities and maintained monitoring equipment calibrated. Plant personnel were observed using the equipment effectively.

F8 Miscellaneous Fire Protection Issues (92904)

F81. (Closed) LER (50-341/98003-00): Inadequate review of the dedicated shutdown system. The first revision on this LER was previously reviewed in Inspection Report 50-341/99005, Section F8.1. This item is closed.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on April 6, 2000. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- D. Gipson, Senior Vice-President, Nuclear Operations
- W. O'Connor, Assistant Vice-President, Nuclear Assessment
- P. Fessler, Plant Manager
- R. Libra, Director, System Engineering
- R. DeLong, Director, System Engineering
- J. Moyers, Director, Nuclear Quality Assurance
- N. Peterson, Director, Nuclear Licensing
- D. Cobb, Superintendent, Maintenance
- K. Hlavaty, Superintendent, Operations
- S. Stasek, Supervisor, Independent Safety Engineering Group
- L. Sanders, General Supervisor, Operations Training
- J. Plona, Manager, Technical
- A. Kowalczuk, Manager, Plant Support
- S. Booker, Work Control
- P. Smith, Licensing
- K. Howard, Plant Support, Engineering
- D. Williams, Radiation Protection
- S. Peterman, Engineer, Operations
- J. Pendergast, Principal Engineer, Licensing
- J. Flint, Licensing

NRC

- M. Ring, Chief, Reactor Projects Branch 1
- S. Campbell, Senior Resident Inspector
- J. Larizza, Resident Inspector

INSPECTION PROCEDURES USED

IP 375	51:	Onsite Engineering
IP 627	07:	Maintenance Observation
IP 717	07:	Plant Operations
IP 717	50	Plant Support
IP 929	02:	Followup - Engineering
IP 929	03:	Followup - Engineering
IP 929	04	Followup Plant Support

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>

50-341/2000002-01	NCV	Radwaste Storage Tank Overfill and Spill Due to Operator Error.
50-341/2000002-02	NCV	Radwaste Operator Left Plant in an Undesirable Condition without
		Knowledge of Control Room Personnel.

Closed

50-341/2000002-01 50-341/97010-01	NCV IFI	Radwaste Storage Tank Overfill and Spill Due to Operator Error. Determination of Past Operability Impact on Statements.
50-341/97014-01	IFI	TS Entered into Without Documentation.
50-341/97014-02	IFI	Adequacy of Load List Documentation.
50-341/98003-02	IFI	CCHVAC Design Deficiency/Lack of Portable Chlorine Detection Equipment.
50-341/98003-03	IFI	No Stipulation on Watch Scheduling for Two Operators With Respirator Restrictions.
50-341/2000002-02	NCV	Radwaste Operator Left Plant in an Undesirable Condition without Knowledge of Control Room Personnel.
50-341/97014-05	IFI	Non-Safety System Outage Impact Assessment.
50-341/96201-09	IFI	Evaluate Low Pressure Test Requirements for HPCI Pump.
50-341/97007-08	IFI	Evaluate HPCI/RCIC When Suction is Aligned to Suppression Pool.
50-341/98006-04	IFI	Additional EFA Justification for Tip Shear Valve Operability.
50-341/98003-00	LER	Inadequate Review of the Dedicated Shutdown System.

Discussed

none

LIST OF ACRONYMS USED

Bill of Materials BOM

Condition Assessment Resolution Document CARD

CD Compact Disc

Central Component Data Base CECO

DER **Deviation Event Report EDG Emergency Diesel Generator FME** Foreign Material Exclusion Foreign Material Exclusion Area **FMEA** Fuel Pool Cooling and Cleanup **FPCCU HPCI** High Pressure Coolant Injection I&C Instrumentation and Control

Inspection Followup Item ISEG Independent Safety Engineering Group

Licensee Event Report LER MSIV Main Steam Isolation Valve

NCV Non-Cited Violation

Nuclear Regulatory Commission NRC

Quality Assurance QΑ

Technical Specifications TS

WR Work Request

IFI