

March 21, 2002

Mr. John T. Conway  
Site Vice President  
Nine Mile Point Nuclear Station, LLC  
P.O. Box 63  
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION - NRC INSPECTION REPORT  
50-220/01-11, 50-410/01-11

Dear Mr. Conway:

On February 16, 2002, the NRC completed an inspection of your Nine Mile Point Nuclear Station, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on February 22, 2002, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based upon the results of this inspection, the inspectors identified three issues of very low safety significance (GREEN). The issues were determined to involve violations of NRC requirements. However, because of the very low safety significance and because the issues were entered into your corrective action program, the NRC is treating these issues as Non-Cited Violations (NCVs), consistent with Section VI.A.1 of the NRC Enforcement Policy, issued on May 1, 2000, (65FR25368). If you contest the 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 Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at the Nine Mile Point Nuclear Station.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and your ability to respond to terrorist attacks with the capabilities of the current design

basis threat (DBT). On February 25, 2002, the NRC issued an Order to all nuclear power plant licensees, requiring them to take certain additional interim compensatory measures to address the generalized high-level threat environment. With the issuance of the Order, we will evaluate Nine Mile Point Nuclear Station's compliance with these interim requirements.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document management system (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michele G. Evans, Chief  
Projects Branch 1  
Division of Reactor Projects

Docket Nos. 50-220  
50-410

License Nos. DPR-63  
NPF-69

Enclosure: Inspection Report 50-220/01-11, 50-410/01-11

Attachment 1 - Supplemental Information

cc w/encl: M. Wallace, President, Constellation Generation Group  
G. Wilson, Esquire  
M. Wetterhahn, Esquire, Winston and Strawn  
J. M. Petro, Jr., Esquire, Counsel, Constellation Power Source, Inc.  
J. Rettberg, New York State Electric and Gas Corporation  
P. Eddy, Electric Division, Department of Public Service, State of New York  
C. Donaldson, Esquire, Assistant Attorney General, New York  
Department of Law  
J. Vinqvist, MATS, Inc.  
W. Flynn, President, New York State Energy Research  
and Development Authority  
J. Spath, Program Director, New York State Energy Research  
and Development Authority  
Supervisor, Town of Scriba  
C. Adrienne Rhodes, Chairman and Executive Director  
T. Judson, Central NY Citizens Awareness Network  
R. L. Wenderlich, Senior Constellation Nuclear Officer

Distribution w/encl: H. Miller, RA/J. Wiggins, DRA (1)  
 M. Evans, DRP  
 T. Bergman, RI EDO Coordinator  
 E. Adensam, NRR (ridsnrrdlpmlpdi)  
 P. Tam, PM, NRR  
 D. Skay, PM, NRR (Backup)  
 G. Hunegs, SRI - Nine Mile Point  
 W. Cook, DRP  
 P. Torres, DRP  
 R. Junod, DRP  
 Region I Docket Room (with concurrences)

DOCUMENT NAME: G:\BRANCH1\NMPSTUFF\NMP0111.WPD

After declaring this document "An Official Agency Record" it **will/will not** be released to the Public. **To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy**

OFFICE	RI/DRP		RI/DRP	
NAME	GHunegs/WAC for		MEvans/MGE	
DATE	03/20/02		03/21/02	

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION  
REGION I**

Docket Nos: 50-220, 50-410

License Nos: DPR-63, NPF-69

Report No: 50-220/01-11, 50-410/01-11

Licensee: Nine Mile Point Nuclear Station, LLC (NMPNS)

Facility: Nine Mile Point, Units 1 and 2

Location: P. O. Box 63  
Lycoming, NY 13093

Dates: December 30, 2001 - February 16, 2002

Inspectors: G. Hunegs, Senior Resident Inspector  
B. Fuller, Resident Inspector  
P. Frechette, Physical Security Inspector  
J. Noggle, Senior Health Physicist  
C. Sisco, Operations Engineer

Approved by: Michele G. Evans, Chief  
Projects Branch 1  
Division of Reactor Projects

## Summary of Findings

IR 05000220-01-11, IR 05000410-01-11, on 12/30/01-2/16/2002; Nine Mile Point Nuclear Station, LLC; Nine Mile Point, Units 1 & 2. Emergent Work Control.

This inspection was conducted by resident inspectors and three region-based inspectors. The inspection identified three Green findings, all of which were Non-Cited Violations. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using IMC 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.

### A. Inspector Identified Findings

#### **Cornerstone: Initiating Event**

**Green.** The inspectors identified a Non-Cited Violation for the failure to have taken appropriate corrective actions for previous similar deficiencies involving the use of temporary test leads, in accordance with 10CFR50, Appendix B, Criterion XVI. The failure to have taken proper corrective actions directly contributed to the inadvertent trip of two reactor recirculation pumps during power operation on January 17, 2002, while workers were performing on-line service water pump motor testing with an alligator clip temporary test lead, which inadvertently contacted a grounding terminal in the power board.

This finding was of very low safety significance because, although the unit experienced a power transient, the transient was small and easily recoverable, as operators were appropriately trained to cope with transients of this nature. (Section 1R13)

**Green.** The inspectors identified a Non-Cited Violation for the failure to have followed established procedures for the troubleshooting, contrary to 10CFR50 Appendix B, Criterion V, Instructions, Procedures and Drawings and Administrative Procedure GAP-PSH-10, Troubleshooting and Testing Control Process. The failure to follow troubleshooting procedures resulted in the January 30, 2002, loss of power to the drywell and torus pressure transmitters.

This finding was of very low safety significance because the loss of the drywell and torus pressure indication in the control room was for a short duration and is not used for accident monitoring. (Section 1R13)

#### **Cornerstone: Mitigating System**

**Green.** The inspectors identified a Non-Cited Violation for the failure to have performed preventive maintenance on the Unit 1 emergency diesel generator (EDG) air start motors in accordance with 10CFR50, Appendix B, Criterion V and the EMD owners' group air start motor

## Summary of Findings (cont'd)

service life recommendations, which resulted in the failure of the 102 EDG to start on demand from the control room on January 29, 2002.

This finding was of very low safety significance because although the 102 EDG was inoperable, the 103 EDG and both 115 kV off-site power lines were available during the time the EDG was inoperable. (Section 1R14)

### B. Licensee Identified Violations

None

## Report Details

### **SUMMARY OF PLANT STATUS**

Nine Mile Point Unit 1 (Unit 1) began the inspection period at 100 percent power. On January 17, reactor recirculation pumps Nos. 11 and 12 tripped due to work associated with power-board maintenance. Power decreased to approximately 74 percent as a result of the pumps tripping. The pumps were restarted and Unit 1 was returned to full power within seven hours. The unit remained at full power through the end of the inspection period.

Nine Mile Point Unit 2 (Unit 2) began the inspection period at 100 percent power. On January 19, a planned power reduction to 55 percent was performed to remove the "B" feedwater pump from service and to place the "A" feedwater pump in service. The plant was returned to full power on January 20 and remained there through the end of the inspection period.

#### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

##### 1R04 Equipment Alignment

###### a. Inspection Scope

The inspector selected the Unit 1 103 emergency diesel generator (EDG) system to walkdown, while the 102 EDG was inoperable due to a failed air start motor. The walkdown included a control room review of safety related equipment powered from the 103 EDG, an EDG system walk down, and the review of deviation and event reports (DERs). The inspector also observed a test start of the 103 EDG performed to rule-out common cause failure of the EDGs.

The inspector selected the Unit 2 Division II EDG to walkdown, while the Division I EDG was out of service due to the EDG tripping on main and connecting rod bearing high temperature. The walkdown included a control room review of safety related equipment powered from the Division II EDG, an EDG system walk down, and the review of DERs. The inspector also observed a test start of the Division II EDG which was performed to rule out common cause failure of the EDGs.

###### b. Findings

No findings of significance were identified.

## 1R05 Fire Protection

### a. Inspection Scope

The inspectors conducted walkdowns of selected fire areas to determine if there was adequate control of transient combustibles and ignition sources. The condition of fire detection devices, the readiness of the sprinkler fire suppression systems and the fire doors were also inspected against industry standards. In addition, the passive fire protection features were inspected, including the ventilation system fire dampers, structural steel fire proofing, and electrical penetration seals. The following plant areas were inspected:

- Turbine building 261 foot elevation, after fire suppression system actuation on February 12 (Unit 1).
- High pressure core spray room, reactor building 175 foot elevation (Unit 2).
- Residual heat removal system Division I, North auxiliary bay (Unit 2).
- Residual heat removal system Division II, South auxiliary bay (Unit 2).

### b. Findings

No findings of significance were identified.

## 1R12 Maintenance Rule Implementation

### a. Inspection Scope

The inspectors reviewed performance based problems involving selected in-scope structures, systems, and components (SSCs) to assess the effectiveness of the maintenance program. Reviews focused on: (1) proper maintenance rule scoping, in accordance with 10 CFR 50.65; (2) characterization of failed SSCs; (3) safety significance classifications; (4) 10 CFR 50.65 (a)(1) and (a)(2) classifications; and, (5) the appropriateness of performance criteria for SSCs classified as (a)(2), and goals and corrective actions for SSCs classified as (a)(1). The inspectors reviewed the licensee's system scoping documents and system health reports. The following DERs were reviewed:

- NM-2002-482, Emergency service water (ESW) pump No. 12 tripped causing unplanned entry into limiting condition for operation (LCO), (Unit 1).
- NM-2002-366, Failure of EDG 102 to start during performance of surveillance test N1-ST-M4A (Unit 1).

### b. Findings

No findings of significance were identified.

## 1R13 Maintenance Risk Assessments and Emergent Work Control

### a. Inspection Scope

For selected maintenance work orders (WOs), the inspectors evaluated: (1) the effectiveness of the risk assessments performed before the maintenance activities were conducted; (2) risk management control activities; (3) the necessary steps taken to plan and control resultant emergent work tasks; and, (4) the overall adequacy of identification and resolution of emergent work and the associated maintenance risk assessments. The following WOs were reviewed:

- WO 01-02561-02-01, Service water pump (SWP) No. 11 on-line testing (Unit 1).
- WO 02-00927-00, EDG 102 air start motor replacement (Unit 1).
- WO 01-05929-12-01, Turbine building air conditioning (TBAC) controls (Unit 1).
- WO 01-06899-00, 12 ESW testing (Unit 1).
- WO 01-05929-06-01, Post-maintenance test TBAC vent supply (Unit 1).
- WO 02-00322-04, Inspect Division II EDG (Unit 2).

### a. Findings

#### .1 Inadvertent Trip of Reactor Recirculation Pumps (Unit 1)

Green. On January 17, 2002, workers were performing on-line motor testing of the No. 11 service water pump. A temporary test lead was connected to a grounding terminal in the power board using an alligator clip. The alligator clip came loose from the terminal and contacted the terminal below, which grounded the under-voltage relay for the Nos. 11 and 12 reactor recirculation pumps. The pumps tripped on under-voltage. The loss of the pumps resulted in a reduction of reactor recirculation flow, with a resultant reduction of reactor power to seventy-four percent of rated, as read on the average power range monitors (APRMs).

The licensee's investigation determined the cause to be management communication error, in that, policy guidance, management expectations and job performance standards were not well defined or understood by the responsible maintenance workers. For example, the work order did not contain operating experience concerning test lead usage, the pre-job brief for the work was inadequate (potential plant impact was not addressed), and precautions were not taken for the use of alligator clips to prevent unwanted contact with adjacent terminals. In the previous five years, at least seven DERs were initiated to document problems with the use of test leads. The most recent example, prior to this event, was in January 2001, as documented in DER NM-2001-51. Corrective actions for DER NM-2001-51 were also addressed in adverse trend DER NM-2001-69, which broadly addressed maintenance practices. These corrective actions included improving maintenance worker standards by employing error reduction techniques. However, the inspector determined that actions to address test lead usage were not well developed and

inadequate precautions for the use of test leads has continued to challenge plant operations.

The performance deficiency associated with this event was inadequate corrective actions which led to the tripping of two reactor recirculation pumps at full power. This finding is more than minor because it had an actual impact of tripping recirculation pumps which directly affects reactor power. The event was of very low safety significance because the actual consequence was minor.

The inspectors identified that the licensee failed to implement adequate corrective actions, in accordance with 10CFR50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants, Criterion XVI, Corrective Action. Specifically, corrective actions taken for previous similar deficiencies involving the use of temporary test leads were not adequate. However, because of the very low safety significance and because the issue has been entered into the licensee's corrective action program, it is being treated as a non-cited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (**NCV 50-220/2001-011-01**). This issue is in the licensee's corrective action program under DER NM-2002-209.

## .2 Fuse Pulled Without Authorization (Unit 1)

Green. On January 30, 2002, while performing troubleshooting to determine the cause of a loss of reactor building differential pressure indication, the supervisor assisting maintenance personnel decided to remove an AC power supply fuse, to assist in identifying the fuse. The supervisor removed the fuse, which was outside the scope of the written test control plan, causing the unplanned loss of drywell and torus pressure indication in the control room. The fuse was reinstalled and pressure indication was properly restored and verified.

The performance deficiency associated with this event was the failure to follow procedures and led to the unplanned loss of control room indication for drywell and torus pressure. This finding was more than minor because the unauthorized work resulted in the actual loss of drywell and torus pressure monitoring equipment function. The event was of very low safety significance because the effected equipment was not used for accident monitoring (no applicable Technical Specifications) and was promptly restored to service. 10CFR50, Appendix B, Criterion V, Instructions, Procedures and Drawings, requires, in part, that activities affecting quality be accomplished in accordance with documented procedures appropriate to the circumstances. Contrary to Criterion V and Administrative Procedure GAP-PSH-10, Troubleshooting and Testing Control Process, a short duration loss of power to drywell and torus pressure transmitters occurred due to the improper removal of an AC power supply fuse during system troubleshooting. However, because of the very low safety significance, and because the issue is in the licensee's corrective action program, this event is being treated as a non-cited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (**NCV 50-220/2001-011-02**). This issue is in the licensee's corrective action program under DER NM-2002-393.

## 1R14 Personnel Performance During Non-Routine Plant Evolutions and Events

### .1 Emergency Diesel Generator Failure to Start (Unit 1)

#### a. Inspection Scope

The inspector observed the licensee's response to the failure of the 102 emergency diesel generator (EDG) to start. The inspector monitored the troubleshooting of the 102 starting air system, observed the successful start of the 103 EDG (which was started to rule out common cause failure mechanisms), and observed maintenance work to replace components on the 102 EDG. The inspector also interviewed the EDG system engineer and Technical Support Manager concerning preventive maintenance.

#### b. Findings

Green. On January 29, 2002, the Unit 1 102 EDG failed to start from the control room as part of routine monthly surveillance N1ST-M4A. The licensee entered a seven-day shutdown LCO per Technical Specification 3.6.3c. The licensee attempted two more starts of the engine over the next several hours as part of the troubleshooting plan to determine the cause of the failure to start. The problem was isolated to a failed air start motor, one of two identical units, which are used to crank the engine during the starting sequence. Both air start motors were replaced. The 102 EDG was started successfully from the control room, per N1-ST-M4A, as the post-maintenance test. The 102 EDG was declared operable and the LCO exited.

Unit 1 has two Electromotive Division (EMD) diesel generators which provide AC power to safety related equipment in the event of a loss of off-site power. The EMD diesel generator owners' group, of which the licensee is a member, had established a recommended service life of fifty start cycles for the air start motors. The licensee's preventive maintenance procedure for the EDGs did not direct maintenance personnel to rebuild or replace the air start motors prior to exceeding the recommended service life of the motor. Additionally, tracking of the number of motor start cycles was not being performed to determine the necessary maintenance.

The performance deficiency associated with this event was an inadequate preventive maintenance procedure which led to the failure of the 102 EDG to start. The finding was greater than minor because it had the actual impact of causing the EDG to fail to start. The EDGs are the mitigating system for loss of off-site power initiating event. However, this event was of very low safety significance because the 103 EDG and both 115 kV off-site power lines were available during the time the 102 EDG was inoperable. 10CFR50, Appendix B, Criteria V, Instructions, Procedures and Drawings, requires in part, that activities affecting quality be prescribed by procedures appropriate to the circumstances. Contrary to Criteria V, the preventive maintenance schedule for the EDGs was not appropriate to the circumstances, in that the schedule specified a refueling outage periodicity (24 months) for inspection and replacement of the air start motors, without regard for the owners' group specified lifetime of 50 start cycles between inspections and

overhaul. However, because of the very low safety significance, and because the issue is in the licensee's corrective action program, this issue is being treated as a non-cited violation, consistent with Section VI.A.1 of the NRC Enforcement Policy (**NCV 50-220/2001-011-03**). This issue is in the licensee's corrective action program under DER NM-2002-366.

.2 Fire Event in Turbine Building (Unit 1)

a. Inspection Scope

The inspector observed licensee response to a fire event in the Unit 1 turbine building. On February 12, 2002, an overheated turbine building ventilation heater caused the actuation of the fire suppression system on the 261 foot elevation of the turbine building. Operators and fire brigade members investigating the source of the smoke and water identified that when turbine building ventilation, which had been running in fast speed, was downshifted to slow speed, the ventilation heaters remained energized. The heater elements, which had recently been installed, overheated due to decreased airflow. The excess heat and resultant smoke triggered the fire detection system which, in turn, actuated the fire suppression system in the turbine building. When the dry pipe fire suppression system pressurized, a flanged fitting for a sprinkler head in the northwest corner of the turbine building started leaking. The inspector verified that the fire suppression system was repaired and properly restored to its standby configuration. The inspector also verified the ventilation system was properly repaired and returned to service.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed operability evaluations affecting risk significant mitigating systems, to assess: (1) the technical adequacy of the evaluation; (2) whether continued system operability evaluations were warranted; (3) whether other existing degraded systems adversely impacted the affected system or compensatory measures; (4) where compensatory measures were used, whether the measures were appropriate and properly controlled; and, (5) the degraded systems' impact on TS limiting condition for operations. The following licensee documents were reviewed:

- DER NM-2002-548 Emergency condenser thermal stratification limit exceeded (Unit 1).
- DER NM-2002-519 Feedwater flow transmitter as-found calibration out of tolerance (Unit 1).

- DER NM-2002-173 Failure of No. 11 feedwater high pressure coolant injection (HPCI) level controller (Unit 1).
- DER NM-2002-169 Division I EDG tripped on main and connecting rod bearing high temperature (Unit 2).

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed post-maintenance testing (PMT) procedures and associated testing activities for selected risk significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness, consistent with the design and licensing basis documents; (4) test instrumentation had current calibrations, range, and accuracy for the application; (5) tests were performed, as written, with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and (8) equipment was returned to the status required to perform its safety function. The following tests and activities were reviewed:

- N1-ST-M4A, Emergency Diesel Generator 102 and Power Board 102 Operability Test (Unit 1), (PMT for the 102 EDG air start motor replacement).
- N1-ST-Q13, Unit 1 Emergency Service Water Pump Operability Test, (PMT for ESW Pump 12 breaker replacement).
- N2-OSP-EGS-M@001, Unit 2 Emergency Diesel Generator Monthly Surveillance Test, (PMT for main and connecting rod bearing high temperature).

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed performance of surveillance test procedures and reviewed test data of selected risk significant SSCs to assess whether the SSCs satisfied Technical Specifications, Updated Final Safety Analysis Report (UFSAR), and licensee procedural requirements; and to determine if the testing appropriately demonstrated that the SSCs

were operationally ready and capable of performing their intended safety functions. The following tests were witnessed:

- N2-OSP-EGS-M@001, Diesel Generator and Diesel Air Start Valve Operability Test - Division I (Unit 2).
- N2-ISP-TIP-R001, Traversing Incore Probe (TIP) Explosive Charge Detonation Test (Unit 2).

a. Findings

No findings of significance were identified.

**2. RADIATION SAFETY**

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas

a. Inspection Scope

High radiation work controls were observed on February 12, 2002, during the replacement of an instrument tap manifold in the spent fuel pool heat exchanger room in Unit 1. High radiation key control, room access controls, and radiation protection technician coverage of the work were observed. Radiation work permit No. 61 and the applicable area survey were reviewed. Alarming dosimeter setpoints were reviewed with respect to applicability to the expected dose rates and work area dose rates were independently verified by the inspector. Criteria used for this review included 10CFR20 and Technical Specification high radiation area access control requirements.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls

a. Inspection Scope

A review of the ALARA plans and dose estimates for the March 2002 Unit 2 refueling outage was performed. This included a review of historical plant trends and current operating chemistry parameters associated with shutdown plant piping dose rates. An additional chemistry parameter review was initiated due to potential dose rate changes associated with noble metal chemistry modification implemented at the beginning of the current fuel cycle. Information reviewed included:

- Historical Unit 2 outage plant piping dose rate trend data. This data was reviewed to assess projections of piping dose rates for the March 2002 refueling outage.
- Chemistry reactor water sample results were reviewed since March 2000 for cobalt 60 and zinc concentrations. This data was reviewed against current General Electric (GE) and Electric Power Research Institute (EPRI) guidance.

The ALARA plans for the Spring 2002 Unit 2 refueling outage were also reviewed. As part of this review, the following highest exposure outage task estimates were reviewed:

- drywell in-service inspection.
- refueling floor and reactor pressure vessel activities.
- drywell under vessel control rod drive and nuclear instrument replacement activities.
- drywell safety relief valve maintenance.
- drywell recirculation flow control valve maintenance.
- drywell set-up, closure, and minor maintenance.
- drywell snubber inspection.

The accuracy of the exposure estimates was evaluated relative to information and criteria contained in the following documents and site interviews:

- ALARA pre-job reviews and exposure estimates for the above stated drywell outage tasks.
- Applicable Unit 2 outage task dose history.
- Interviews with four Unit 2 ALARA radiological engineers.

b. Findings

No findings of significance were identified.

**3. SAFEGUARDS**

Cornerstone: Physical Protection

3PP1 Access Authorization Program

a. Inspection Scope

The below listed activities were conducted to determine the effectiveness of the licensee's behavior observation portion of the personnel screening and fitness-for-duty programs as measured against the requirements of 10 CFR 26.22 and the licensee's Fitness for Duty Program documents.

- Five supervisors representing the engineering, security central maintenance, quality services, radiation protection and radiation protection calibration

departments were interviewed, on January 10, 2002, regarding their understanding of behavior observation responsibilities and the ability to recognize aberrant behavior traits.

- Two Access Authorization/Fitness-for-Duty self-assessments, two semi-annual Fitness for Duty performance data reports, an audit, and event reports and loggable events for the four previous quarters were reviewed between January 9 and 10, 2001.
- Five individuals who perform escort duties were interviewed to establish their knowledge level of those duties on January 10, 2002.
- Behavior observation training procedures and records were reviewed on January 9, 2002.

b. Findings

No findings of significance were identified.

3PP2 Access Control

a. Inspection Scope

The below listed activities were conducted to verify that the licensee has effective site access controls and that equipment designed to detect and to prevent the introduction of contraband (firearms, explosives, incendiary devices) into the protected area as measured against 10 CFR 73.55(d) and the Physical Security Plan and Procedures, were operable.

- Site access control activities, at both personnel access points, were observed, including personnel and package processing through the search equipment during peak ingress periods on January 8-11, 2002.
- On January 9, 2002, testing of all access control equipment at both personnel access points was observed, including: metal detectors, explosive material detectors, and X-ray examination equipment.
- The Access Control event log, an audit, and three maintenance work requests were also reviewed.

b. Findings

No findings of significance were identified.

#### 4. OTHER ACTIVITIES (OA)

##### 4OA1 Performance Indicator (PI) Verification

Cornerstone: Safeguards

###### a. Inspection Scope

The inspector reviewed the licensee's programs for gathering, processing, evaluating, and submitting data for the Fitness-for-Duty, Personnel Screening, and Protected Area Security Equipment Performance Indicators. The review included examination of the licensee's tracking and trending reports, personnel interviews and security event reports for the performance indicator data collected between the 1st quarter of 2001 and the 4th quarter of 2001.

###### b. Findings

No findings of significance were identified.

##### 4OA2 Problem Identification and Resolution

###### .1 Prioritization and Evaluation of Issues

###### a. Inspection Scope

One sample of the licensee's corrective action process was reviewed with respect to the adequacy of root cause analysis. DER NM-2001-1007, initiated on March 18, 2001, identified that at the beginning of the Unit 1 Spring 2001 refueling outage, radiation levels in the drywell were three to four times higher than radiation levels measured during the during previous refueling outages. The review of this event report was limited to the root cause analysis, as the corrective actions and implementation strategy were still under development by the licensee at the time of the onsite inspection.

The review included: the subject root cause analysis; nuclear engineering report No. NER-1A-022, "Technical Cause Evaluation, NMP1 Elevated Recirculation Pipe Dose Rates Discovered During RFO16"; GE Nuclear Energy, October 2001 report, "Evaluation of Noble Metal and Cobalt Deposition on Reactor Internal Artifacts from Nine Mile Point 1"; GE Nuclear Energy September 18, 2001, letter from L. Beale to G. Inch, regarding dose rate modeling for Nine Mile Point Unit 1; EPRI October 9, 2001, draft report, "Nine Mile Point 1 Drywell Dose Rate Evaluation Study". In addition, interviews were conducted to further clarify the technical basis of the root cause analysis. Interviews were conducted with the Unit 1 ALARA Supervisor, the chemistry health physics engineer, the supervisor of analysis services, the engineering project manager, as well as, the contracted project engineers pursuing corrective action development.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

(Closed) LER 50-410/1999-014, Supplement 2, "Missed Technical Specification ASME Section XI Surveillance Testing." The details of this event and the original LER were described in NRC Inspection Report No. 50-410/1999-08. This supplement extended the completion date of corrective actions because the original corrective actions were not comprehensive. This LER is closed.

(Closed) LER 50-410/2000-013, Supplement 1, "Reactor Coolant Recirculation System Primary Containment Isolation Valves not Tested as Required by Technical Specification 4.0.5." The details of this event and the original LER were described in NRC Inspection Report No. 50-410/2001-02. This supplement contained additional information identified as a result of correction actions associated with the original LER. This LER is closed.

(Closed) LER 50-410/2000-007, Supplement 1, "Plant Outside Design Basis due to Single Failure Susceptibility of Service Water and Emergency Core Cooling Systems." The details of this event and the original LER were described in NRC Inspection Report No. 50-410/2000-07. This supplement corrects the description of the service water system response during a loss of offsite power concurrent with a loss of coolant accident and provided a status of corrective actions. This LER is closed.

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. J. Conway, Site Vice President, and other members of licensee management at the conclusion of the inspection on February 22, 2002. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

**ATTACHMENT 1**a. Key Points of ContactLicensee

J. Conway, Site Vice President  
 R. Dean, Manager Unit 2 Engineering  
 L. Hopkins, Unit 1 Plant General Manager  
 S. Minihan, Unit 2 Operations Manager  
 B. Montgomery, General Manager Nuclear Engineering  
 M. Peckham, Unit 2 Plant General Manager  
 B. Randall, Manager Unit 1 Engineering  
 D. Topley, Unit 1 Operations Manager

NRCb. List of Items Opened, Closed and DiscussedOpened and Closed

50-220/2001-011-01	NCV	Inadequate corrective actions led to tripping of two reactor recirculation pumps at full power.
50-220/2001-011-02	NCV	Removal of AC supply power fuse was not performed in accordance with an approved troubleshooting procedure.
50-220/2001-011-03	NCV	Preventive maintenance schedule for EDGs not appropriate to the circumstances.

Closed:

50-410/1999-014-02	LER	Missed TS ASME Section XI surveillance testing.
50-410/2000-013-01	LER	Reactor coolant recirculation system primary containment isolation valves not tested as required by TS.
50-410/2000-007-01	LER	Plant outside design basis due to single failure susceptibility of service water and emergency core cooling systems.

c. List of Documents Reviewed

Plant Access/Fitness for Duty General Employee Training TECH-GET-PAT-WHT-3-0/3-2, Rev. 4, January, 2001.

Audit Report 01009, Security and Fitness for Duty, February 21, 2001

Self-Assessment Report CM3-01-1, FFD, December 2001

Semi-annual FFD Performance Data, July 1, 2001 - December 31, 2001

Semi-annual FFD Performance Data, January 1, 2001 - June 30, 2001

Nine Mile Point Physical Security Plan

d. List of Acronyms

ALARA As Low As Reasonably Achievable

APRM Average Power Range Monitor

ASME American Society Mechanical Engineers

DER Deficiency/Event Report

EDG Emergency Diesel Generator

EMD Electromotive Division

EPRI Electric Power Research Institute

ESW Emergency Service Water

GE General Electric

ISI In-Service Inspection

LCO Limiting Condition for Operation

LER Licensee Event Report

NCV Non-Cited Violation

NMPNS Nine Mile Point Nuclear Station

NRC Nuclear Regulatory Commission

PI Performance Indicator

PM Preventive Maintenance

PMT Post-Maintenance Testing

SDP Significance Determination Process

SSC Structures, Systems and Components

SWP Service Water Pump

TBAC Turbine Building Air Conditioning

TS Technical Specifications

UFSAR Updated Final Safety Analysis Report

Unit 1 Nine Mile Point Unit 1

Unit 2 Nine Mile Point Unit 2

WO Work Order