

August 13, 2001

EA-01-210

Mr. Oliver D. Kingsley, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
200 Exelon Way, KSA 3-E  
Kennett Square, PA 19348

SUBJECT: LIMERICK GENERATING STATION - NRC INSPECTION  
REPORT 50-352/01-05, 50-353/01-05

Dear Mr. Kingsley:

On June 30, 2001, the NRC completed an inspection at your Limerick Generating Station Units 1 and 2. The enclosed report documents the inspection findings which were discussed on July 6, 2001, with Mr. W. Levis and other members of your staff.

This 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 procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the inspectors identified three issues of very low safety significance (Green). Two of these issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as Non-Cited Violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these Non-Cited Violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the Limerick facility.

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Sincerely,

/RA/

Mohamed Shanbaky, Chief  
Project Branch 4  
Division of Reactor Projects

Docket Nos.: 50-352; 50-353  
License Nos: NPF-39; NPF-85

Enclosure: Inspection Report 50-352/01-05, 50-353/01-05

Attachments: (1) Supplemental Information

cc w/encl:

J. J. Hagan, Senior Vice President, Exelon Generation Company, LLC  
W. Bohlke, Senior Vice President - Nuclear Services  
J. Cotton, Senior Vice President - Operations Support  
J. Skolds, Chief Operating Officer  
G. Hunger, Chairman, Nuclear Review Board  
M. Gallagher, Director - Licensing, Exelon Generation Company, LLC  
J. Benjamin, Vice President - Licensing and Regulatory Affairs  
W. Levis, Vice President - Limerick Generating Station  
R. C. Braun, Plant Manager, Limerick Generating Station  
K. Gallogly, Manager, Experience Assessment  
Chief - Division of Nuclear Safety  
Secretary, Nuclear Committee of the Board  
E. Cullen, Vice President, General Counsel  
Correspondence Control Desk  
Commonwealth of Pennsylvania

Distribution w/encl: (via e-mail)

- H. Miller, RA/J. Wiggins, DRA
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- D. Dambly, OGC
- B. Sheron, NRR
- D. Holody, ORA
- R. Urban, ORA
- S Figueroa, OE
- M. Shanbaky, DRP
- D. Florek, DRP
- J. Talieri, DRP
- A. Burritt, DRP - Senior Resident Inspector
- R. Haag, OEDO
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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos: 50-352; 50-353  
License Nos: NPF-39, NPF-85

Report No: 50-352/01-05, 50-353/01-05

Licensee: Exelon Generation Company

Facility: Limerick Generating Station, Units 1 & 2

Location: Evergreen and Sanatoga Roads  
Sanatoga, PA 19464

Dates: May 13, 2001 thru June 30, 2001

Inspectors: A. Burritt, Senior Resident Inspector  
B. Welling, Resident Inspector  
S. Barr, Reactor Inspector

Approved by: Mohamed Shanbaky, Chief  
Projects Branch 4  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000352/2001-005, IR 05000353/2001-005, on 5/13-6/30/2001, Exelon Generation Company, Limerick Generating Station, Units 1 and 2. Maintenance Risk Assessments and Emergent Work Control, and Operability Evaluations.

This inspection was conducted by resident inspectors and a regional reactor inspector. The inspection identified three Green findings, two of which were non-cited violations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 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/index.html>.

### A. Inspector Identified Findings

#### Cornerstone: Mitigating Systems

- **Green.** The inspectors identified a Non-Cited Violation of 10 CFR 50.65 (a)(4) for failure to assess risk prior to performing maintenance activities. Exelon did not assess the risk of performing a Unit 2 reactor core isolation cooling system test concurrent with other scheduled work.

This finding was of very low safety significance because Exelon did not perform work on systems that should have been protected while the reactor core isolation cooling system was unavailable, there was no loss of safety function, and the reactor core isolation cooling system was returned to service within the allowed outage time of the technical specifications. (Section 1R13)

#### Cornerstone: Barrier Integrity

- **Green.** The inspectors identified a finding of very low safety significance (Green) because both Unit 2 safeguard piping fill pumps were inoperable for the feedwater containment leakage mitigation safety function for approximately eight days. The 2B safeguard piping fill pump was inoperable because a surveillance test procedure that required a sampling of oil was inadequate and likely caused a low oil level condition that rendered the pump inoperable. This is a non-cited violation of 10 CFR 50 Appendix B, Criterion V, "Procedures." This issue was identified after inspectors questioned a less than adequate operability determination for the 2B pump. During the same time period the 2A safeguard piping fill pump was inoperable because the feedwater fill stop valve in the system was closed rather than open.

This finding was of very low safety significance because there was no actual open pathway in the physical integrity of the reactor containment. (Section 1R15)

- **Green.** The inspectors identified a finding of very low safety significance (Green) because station personnel did not properly address the operability of an apparent

## Summary of Findings (cont'd)

adverse trend of premature relay failures. Operators did not perform a timely re-evaluation of operability when testing information identified a potential common failure mechanism. The subsequent operability review also did not consider several important aspects such as the impact on the containment isolation safety function and the need to shorten some system test intervals.

This finding was of very low safety significance because there was no actual open pathway in the physical integrity of the reactor containment. (Section 1R15)

### B. Licensee Identified Violations

A violation of very low significance was identified by Exelon and was reviewed by the inspector. Corrective actions taken or planned by Exelon appeared reasonable. This violation is listed in section 4OA7 of this report.

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## Report Details

### Summary of Plant Status

Unit 1 began this inspection period operating at 100% power and remained at or near that power level except for planned testing and control rod pattern adjustments.

Unit 2 began this inspection period operating at 100% power. On June 26, an automatic reactor shutdown occurred due to a main turbine trip and generator lockout. The Unit 2 reactor was taken critical on June 28, and was returned to 100% power on June 29, 2001.

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

Initiating Events, Mitigating Systems, Barrier Integrity [Reactor - R]

##### 1R04 Equipment Alignment (71111.04)

###### a. Inspection Scope

The inspectors performed a partial walkdown on the Unit 1 high pressure coolant injection (HPCI) system while the reactor core isolation cooling (RCIC) system was inoperable for planned maintenance. The inspectors used piping and instrumentation diagram 8031-M-055. The inspectors reviewed valve positions, electrical power availability, and equipment deficiencies. The inspection verified the alignment of critical portions of HPCI while the RCIC system was out of service.

###### b. Findings

No findings of significance were identified.

##### 1R05 Fire Protection (71111.05)

###### a. Inspection Scope

The inspectors toured high risk areas at both Limerick units to assess Exelon's control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures. The inspectors reviewed the respective Pre-Fire Action Plan procedures and Section 9A of the Updated Final Safety Analysis Report. The fire areas included:

- 1D safeguards battery room (fire area 3)
- Control structure elevation 239' corridor (fire area 7)
- U2 cable spreading room (fire area 23)
- U2 HPCI room (fire area 57)
- U2 4 kV switchgear rooms (fire areas 12, 13, 14, and 15 )
- U1 D14 emergency diesel generator (EDG) cell and U1 EDG access corridor (fire areas 82 and 124)



b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)a. Inspection Scope

On June 19, 2001, the inspector observed a licensed operator requalification simulator evaluation (as found scenario) to assess licensed operator performance and the evaluator's critique. The inspector referred to applicable off-normal plant procedures and emergency operating procedures.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)a. Inspection Scope

The inspectors reviewed Exelon's actions with respect to the Maintenance Rule for the following equipment performance problems. The inspectors reviewed associated maintenance action requests (AR) and corrective action documents (PEPs).

- Unit 2 HPCI valve (F105) failure to open (AR A1314845)
- 1B residual heat removal (RHR) minimum flow valve failure to close (AR A1318280)
- "C" Toxic gas analyzer spiking/calibration problems
- 2C reactor feed pump failure to trip (A1306172)
- Reactor protection system, turbine control valve fast closure pressure switch failed to actuate (PEP I0012494)
- "B" feedwater loop outboard primary containment isolation valve (2F074B) air operator failed to actuate (AR A1315133)

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation (71111.13)a. Inspection Scope

The inspectors reviewed Exelon's risk management and risk assessments as required by 10 CFR 50.65 (a)(4) of the following emergent and planned maintenance activities. The inspectors reviewed the Sentinel on-line risk assessment results, risk management activities, work control center planning and scheduling, and emergent work-related activities.

- 1B RHR and "B" RHR service water system outages
- Unit 2 reactor core isolation cooling (RCIC) system outage
- Unit 2 division I inverter failures due to a 125 VDC electrical system ground during battery maintenance

b. Findings

The inspector identified a finding of very low safety significance (Green), that is also a non-cited violation of 10 CFR 50.65 (a)(4), because Exelon performed a surveillance test on the reactor core isolation cooling system (RCIC), which rendered the RCIC system unavailable, without having performed the required on-line risk assessment.

On June 5, 2001, Exelon performed a technical specification required Unit 2 RCIC system logic system functional test without having performed an on-line risk assessment prior to the test. Exelon staff had not recognized that the test rendered the RCIC system unavailable. After the test was completed, Exelon evaluated the risk when RCIC was unavailable and identified that for several hours the overall plant risk crossed the threshold to Exelon's next higher risk category (yellow).

Exelon procedure AG-CG-43, "Guideline for the Performance of System Outages," requires that for this yellow condition, risk management actions be performed such as identifying associated protected equipment and minimizing work in areas that could affect redundant systems or affect event initiators (such as plant trips). Exelon did not perform these risk management actions because station personnel were not aware of the higher risk associated with the RCIC testing.

The failure to perform a risk assessment prior to the Unit 2 RCIC test that rendered RCIC unavailable is more than a minor issue in that it created a credible impact on safety. The credible impact on safety was that work could have been performed on equipment that should have been protected (i.e. high pressure coolant injection system) while RCIC was unavailable and thus creating a loss of high pressure injection function for a loss of normal feedwater initiating event. This finding affects the mitigating system cornerstone because RCIC is a high pressure injection source mitigating system. This finding was determined to be of very low safety significance (Green) by the Reactor Inspection Findings for At-Power Situations SDP, because Exelon did not perform work on systems that should have been protected while RCIC was unavailable, there was no loss of safety function, and RCIC was returned to service within the allowed outage time of the technical specifications.

10 CFR 50.65 (a)(4) requires, in part, that before performing maintenance activities (including surveillance tests) the licensee shall assess and manage the increase in risk that may result from the proposed maintenance activities. The failure to assess and manage the risk associated with testing of the Unit 2 RCIC is a violation of 10 CFR 50.65 (a)(4) and is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A. of the NRC Enforcement Policy, issued on May 1, 2000 (65FR25368). This issue is documented in Performance Enhancement Program (PEP) report I0012676. **(NCV 05000353/2001-005-01)**

1R14 Personnel Performance Related to Non-Routine Plant Evolutions and Events (71111.14)a. Inspection Scope

The inspectors observed and reviewed licensed operator performance in the control room during two non-routine events: a control rod drift event on June 15, and an unplanned reactor scram which occurred on June 26.

On June 15, at 10:50 a.m., the control room operators received a “rod drive control system (RDCS) inoperable” alarm for Unit 2. Exelon determined that a transponder card for rod 22-19 had failed. When operators bypassed the rod and reset RDCS, the rod drifted fully into the core. The inspector observed the control room operators’ response to the event and their compliance with applicable procedures and technical specification action statements. The following documents were reviewed:

- Performance Enhancement Program (PEPs) I0011523, I0012721
- Off Normal Procedure ON-104, “Control Rod Problems”
- Operational Transient Procedure OT-104, “Unexpected/Unexplained Positive or Negative Reactivity Insertion”

On June 26, Unit 2 experienced an automatic reactor shutdown at approximately 1:40 p.m. due to a main turbine trip and generator lockout. The inspector responded to the control room and observed licensed operator performance of emergency operating procedures and plant recovery procedures. In assessing operator performance and procedural compliance, the inspector reviewed the following documents:

- Trip Procedure T-100, “Scram/Scram Recovery”
- Trip Procedure T-101, “RPV Control RC/Q; RC/L; RC/P”
- General Plant Procedure GP-11, “Reactor Protection System - Scram Reset”
- General Plant Procedure GP-3, Appendix 2, “Maintaining Hot Shutdown”

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)a. Inspection Scope

The inspectors reviewed the technical adequacy of operability evaluations associated with the following plant equipment conditions:

- 2B safeguard piping fill pump low oil level (AR A1319480)
- Replacement of a 2A RHR system snubber with a snubber that had not been properly maintained or tested.
- Adverse trend of premature failures associated with normally energized Agastat relays
- Unit 2 division 1 inverter failures due to a 125 VDC electrical system ground

during battery maintenance

The inspectors reviewed the applicable action request documents and corrective action documents (PEPs I0012658 and I0012723), discussed the issue with plant operations and engineering staff, and referred to applicable technical specification action statement requirements and the Exelon Nuclear Operations Manual Chapter 11.1, "Operability."

b. Findings

2A RHR Snubber and U2 Inverter

No findings of significance were identified.

Inoperable Safeguard Piping Fill Pumps

The inspectors identified a finding of very low safety significance (Green) because both Unit 2 safeguard piping fill pumps were inoperable for the feedwater containment leakage mitigation safety function for approximately eight days. The 2B safeguard piping fill pump was inoperable because a surveillance test procedure that required a sampling of oil was inadequate and likely caused a low oil level condition that rendered the pump inoperable. This is a non-cited violation of 10 CFR 50 Appendix B, Criterion V, "Procedures." During the same time period the 2A safeguard piping fill pump was inoperable because the feedwater fill stop valve in the system was closed rather than open.

On May 18, 2001, an equipment operator found a degraded 2B safeguard piping fill pump. The operator identified that the bearing oil level was below the level of the sight glass and the constant level oil bubbler was not making up to the bearing cavity. Operators initiated a maintenance action request and added oil to raise the level in the bearing sight glass. The inspector noted that the senior reactor operator declared the pump operable without considering the as-found condition and other factors such as whether the bearing may have been degraded due to the low oil level, or whether there were potential deficiencies with the oil bubbler.

In response to inspector questions, Exelon personnel investigated the senior reactor operator's operability declaration. Exelon determined that when the operators took an oil sample from the pump on May 10, during surveillance test procedure ST-6-052-233-2, "B Loop Core Spray Pump Valve and Flow Test," they likely caused the low oil level condition. Exelon concluded that the surveillance test procedure was deficient, because it did not require the operator to check the sight glass level after taking the oil sample. Maintenance technicians inspected the oil bubbler and found that it was improperly set, so that the bubbler would not make-up until level was below that necessary for sufficient lubrication. Operations and engineering personnel performed an operability review based on this new information, and they concluded the original, as-found operability determination was incorrect and the pump was inoperable from May 10 to May 18.

The safeguard piping fill pumps perform two safety-related functions. First, the pumps help ensure that the emergency core cooling system discharge pipes remain full of

water. Secondly, the pumps provide a post-loss of coolant accident (post-LOCA) containment leakage mitigation function. They are part of the feedwater fill system which prevents the release of fission products through the feedwater containment isolation valves after a LOCA by providing a water seal.

Following this investigation, on June 16, 2001, Exelon discovered that the other Unit 2 safeguard piping pump was inoperable during the same time period. Operations personnel found the 2A safeguard fill pump feedwater fill stop valve (52-2065A) closed instead of its required position of open, rendering the 2A pump inoperable for the feedwater fill function. Exelon identified that a tagging instruction error following a maintenance activity on April 16, 2001, caused the valve to be mispositioned. Therefore, the 2A valve mispositioning coupled with the 2B train performance issues led to a loss of the entire post-LOCA feedwater leakage mitigation safety function for the period of May 10 to 18, 2001.

The inspectors determined that the improper initial operability evaluation and the clearance and tagging instruction error constituted human performance cross-cutting issues. The clearance and tagging error is being dispositioned as a licensee identified violation in section 4OA7 of this report.

An inadequate surveillance test procedure for the 2B safeguard piping fill pump, combined with a mispositioned valve on the 2A safeguard piping fill system, caused a loss of the feedwater containment leakage mitigation function for eight days. The loss of the feedwater containment leakage mitigation function is more than a minor issue because it had a credible impact on safety in that the feedwater fill system was not capable of performing its containment barrier integrity safety function following a LOCA for the period May 10 to May 18, 2001. This issue affects the Barrier Integrity cornerstone because it affected the integrity of reactor containment in that the feedwater fill system was not capable of assuring that a water seal was maintained for the feedwater water containment isolation valves in the event of a LOCA. This loss of function was determined to be of very low safety significance (Green) by the Reactor Inspection Findings for At-Power Situations SDP, because the finding did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere and there was no actual open pathway in the physical integrity of the reactor containment.

The inadequate surveillance test procedure, ST-6-052-233-2, constituted a violation of 10 CFR 50 Appendix B, Criterion V, "Procedures." This violation is being treated as a non-cited violation consistent with Section VI.A. of the NRC Enforcement Policy. This violation is in Exelon's corrective action program as PEP I0012658. **(NCV 05000353/2001-005-02)**

#### Agastat Relays

The inspectors identified a finding of very low safety significance (Green) because station personnel did not properly address the operability of an apparent adverse trend of premature relay failures. Operators did not perform a timely re-evaluation of operability when testing information identified a potential common cause failure

mechanism. The subsequent operability review also did not consider several important aspects such as the impact on the containment isolation safety function and the need to shorten some system test intervals.

On April 30, 2001, Exelon engineers initiated PEP I0012575 to address a potential adverse trend associated with normally energized Agastat relays failing after being in-service for about two years. The apparent trend was associated with contacts that close when the relays are de-energized. The PEP documented performance problems with relays associated with HPCI and RCIC. Exelon performed an operability evaluation for other similar relays used in risk significant plant systems. The initial operability determination concluded that the other relays were operable based on engineering judgement without knowledge of the failure mode. In early June, failure analysis information identified a potential common cause of the relay failures. The failures were attributed to oxidation on the relay plunger and potentially insufficient spring tension that caused increased contact resistance.

Generic Letter 91-18, and the associated Exelon operability determination procedure NOM-C-11.1, "Operability," establish guidelines to address the scope and timing of operability determinations. These guidelines address the need to review and revise an initial operability determination when new or additional information becomes available. These guidelines also discuss reasonable time frames for addressing operability. The inspectors identified that Exelon did not perform the operability assessment within a reasonable time frame (24 hours) following the identification of the relay failure mechanism. Following a discussion with the inspectors in mid June, Exelon performed the operability determination; however, this was more than a week after the identification of the failure mechanism and well beyond the Exelon guidelines for timeliness.

The inspector evaluated Exelon's subsequent formal operability determination, documented on June 16, and found that it did not consider important areas such as if redundant containment isolation valves were impacted by suspect relays. Additionally, confirmatory testing was not performed to support the engineering judgement used to determine the relays and associated systems remained operable. The inspector determined additional testing was warranted since the cause of the relay binding would appear to worsen with time and previous test results would not adequately predict future relay performance until the next normally scheduled test.

The inspectors determined that the improper operability evaluation error constituted a human performance cross-cutting issues.

In summary, Exelon did not properly address operability for a risk significant population of relays when a failure analysis identified a potential common cause failure mechanism with premature relay failures. This finding is more than a minor issue because it had a credible impact on safety in that a possibly new common mode failure mechanism was identified, impacting multiple independent safety-related systems or trains, and was not properly addressed. This issue affects the Barrier Integrity cornerstone because the suspect relays remaining in-service are primarily associated with the containment isolation capability. This potential loss of containment isolation capability was determined to be of very low safety significance (Green) by the Reactor Inspection

Findings for At-Power Situations SDP, because the finding did not represent a degradation of the barrier function of the control room against smoke or a toxic atmosphere and there was no actual open pathway in the physical integrity of the reactor containment. This issue is in Exelon's corrective action program as PEPs I0012575 and I0012832. **(FIN 05000353/2001-005-03)**

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed post-maintenance testing and reviewed the test data for the following:

- Unit 1 RCIC barometric condenser vacuum pump packing replacement
- Unit 1 HPCI system outage recovery
- Unit 1 HPCI steam admission valve relay replacement

The inspectors referred to testing procedures and work order documents, including:

- Work order C0193620, RCIC barometric condenser vacuum pump packing leak
- ST-2-055-810-1, "HPCI System Response Time Testing"
- Action Request Number A1324094
- ST-6-055-230-1, "HPCI Pump, Valve and Flow Test"

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed and reviewed the results of several scheduled equipment surveillance tests, including:

- ST-6-092-314-1, D14 generator slow start operability test run
- ST-2-055-102-2, Unit 2 HPCI logic system functional test
- ST-6-049-230-1, Unit 1 RCIC pump valve and flow test
- ST-2-049-102-2, Unit 2 RCIC logic system functional/simulated automatic actuation testing

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the temporary plant modifications that supported continued operability of the systems listed below. These reviews were performed to determine whether the temporary changes adversely affected system or support system availability, or adversely affected a function important to plant safety. The inspectors reviewed the associated system design bases, including the Updated Final Safety Analysis Report (UFSAR) and Technical Specifications, and assessed the adequacy of the 10 CFR 50.59 safety evaluation screenings. The inspectors also assessed configuration control of the temporary changes by reviewing selected drawings and procedures to verify that appropriate updates had been made and in compliance with Exelon procedures. The inspectors compared the actual installations against the temporary modification documents to verify that the implemented changes were consistent with the approved documents. The inspectors reviewed selected post-installation tests results to confirm that the actual impact of the temporary changes had been adequately verified by test. The following temporary modifications and documents were included in the review:

#### Temporary Modifications

Temporary installation of high efficiency particulate air (HEPA) fan units in the 1A reactor water clean-up pump and isolation valve compartment prior to removing the plant heating team system from service, in order to prevent high delta-temperature conditions.

#### Procedures and Documents

- Engineering Change Request (ECR) LG 01-00444
- Action Request Numbers A1266365, A1305220, A1322410

#### b. Findings

No findings of significance were identified.



#### 4. OTHER ACTIVITIES [OA]

##### 4OA1 Performance Indicator Verification (71151)

The inspectors reviewed the accuracy and completeness of the supporting data for the following Limerick performance indicators:

- Unplanned scrams (April 2000 through March 2001)
- Unplanned scrams with loss of heat sink (April 2000 through March 2001)

##### b. Findings

No findings of significance were identified.

##### 4OA6 Meetings, Including Exit

##### .1 Exit Meetings

The inspectors presented the inspection results to Mr. Levis and other members of station management on July 6, 2001. The inspectors asked whether any materials examined during the inspections should be considered proprietary. No proprietary information was identified.

##### .2 Annual Assessment of Safety Performance

On June 26, 2001, the NRC met with Exelon, in the Limerick Energy Information Center in Linfield, PA, to discuss the NRC's annual assessment of the safety performance of the Limerick Generating Station. The meeting was open to the public. A copy of the slides can be found in ADAMS (Ascension Number ML011800425).

##### 4OA7 Licensee Identified Violations

The following finding of very low significance was identified by the licensee and is a violation of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a Non-Cited Violation.

<u>NCV Tracking Number</u>	<u>Requirement Licensee Failed to Meet</u>
----------------------------	--------------------------------------------

NCV 05000353/2001-005-04	Technical Specification 6.8.1 requires that written procedures be established, implemented and maintained for the activities listed in Appendix A of Regulatory Guide 1.33. The activities include equipment control (e.g., locking and tagging). On or about April 16, 2001, equipment control procedures were not followed, causing the 2A safeguard piping fill pump to be inoperable for the feedwater fill containment leakage mitigation function.
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Attachment 1

**SUPPLEMENTAL INFORMATION****KEY POINTS OF CONTACT**Exelon Generation Company

J. Armstrong	Director - Engineering
R. Braun	Plant Manager
E. Callan	Director - Maintenance
W. Levis	Site Vice President
W. O'Malley	Senior Manager - Operations
J. Stone	Director - Outage Management
J. Tucker	Senior Manager - Plant Engineering

**ITEMS OPENED, CLOSED, AND DISCUSSED**Opened/Closed

NCV 05000353/2001-005-01	Failure to perform a risk assessment for RCIC test
NCV 05000353/2001-005-02	Inadequate surveillance test procedure associated with 2B safeguard piping fill pump
FIN 05000353/2001-005-03	Operability determinations for relay failures
NCV 05000353/2001-005-04	Failure to follow clearance and tagging procedures for 2A safeguard piping fill pump

**LIST OF ACRONYMS USED**

AR	action request
ECR	engineering change request
EDG	emergency diesel generator
HEPA	high efficiency particulate air
HPCI	high pressure coolant injection
kV	kiloVolt
LOCA	loss of coolant accident
NCV	non-cited violation
NOM	Nuclear Operations Manual
OT	Operational Transient
PEP	Performance Enhancement Program
RCIC	reactor core isolation cooling
RDCS	rod drive control system
RHR	residual heat removal
RPS	reactor protection system
RPV	reactor pressure vessel
SDP	significance determination process
UFSAR	Updated Final Safety Analysis Report