October 15, 2001

Mr. Robert G. Byram
Senior Vice President and
Chief Nuclear Officer
PPL Susquehanna, LLC
Susquehanna Steam Electric Station
2 North Ninth Street
Allentown, Pennsylvania 18101

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION - NRC INSPECTION REPORT 50-387/01-09, 50-388/01-09

Dear Mr. Byram:

On September 30, 2001, the NRC completed an inspection at your Susquehanna Steam Electric Station Units 1 and 2. The enclosed report documents the inspection findings which were discussed on October 2, 2001, with Mr. B. Shriver, Vice President - Nuclear Site Operations, 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 selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, the NRC identified one violation that was evaluated under the significance determination process, and was determined to be of very low safety significance (Green). However, because of the very low safety significance and because this issue was entered into your corrective action program, the NRC is treating this issue as a Non-cited Violation, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, you should provide a response within 30 days of the date of this letter, 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, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Susquehanna Steam Electric Station.

Since September 11, 2001, the Susquehanna Steam Electric Station has assumed a heightened level of security based on a series of threat advisories issued by the NRC. Although the NRC is not aware of any specific threat against nuclear facilities, the heightened level of security was recommended for all nuclear power plants and is being maintained due to the uncertainty about the possibility of additional terrorist attacks. The steps recommended by the NRC include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with local law enforcement and military authorities, and limited access of personnel and vehicles to the site.

The NRC continues to interact with the Intelligence Community and to communicate information to PPL Susquehanna, LLC. In addition, the NRC has monitored maintenance and other activities which could relate to the site's security posture.

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 Publically Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (The Public Electronic Reading Room).

If you have any questions please contact me at 610-337-5209.

Sincerely,

/RA/

Mohamed Shanbaky, Chief
Projects Branch 4
Division of Reactor Projects

Docket Nos. 50-387, 50-388
License Nos. NPF-14, NPF-22

Enclosure: Inspection Report 50-387/01-09, 50-388/01-09

Attachment 1 - Supplemental Information

cc w/encl: B. L. Shriver, Vice President - Nuclear Site Operations
G. T. Jones, Vice President - Nuclear Engineering and Support
R. Anderson, General Manager - SSES Operations
R. L. Ceravolo, General Manager - SSES Maintenance
G. A. Williams, General Manager - Nuclear Assurance
G. D. Miller, Manager - Nuclear Plant Services
R. R. Sgarro, Supervisor, Nuclear Licensing - SSES
M. M. Golden, Manager - Nuclear Security
P. Nederostek, Nuclear Services Manager, General Electric
A. M. Male, Manager, Quality Assurance
H. D. Woodeshick, Special Assistant to the President
G. DallaPalu, PP&L Nuclear Records
R. W. Osborne, Vice President, Supply & Engineering
Allegheny Electric Cooperative, Inc.
Commonwealth of Pennsylvania
C. Markley, Pennsylvania Power & Light Company

Distribution w/encl: H. Miller, RA/J. Wiggins, DRA (1)
S. Hansell, DRP - SRI Susquehanna
M. Shanbaky, DRP
D. Florek, DRP
J. Talieri, DRP
R. Junod, DRP
D. Loveless, OEDO
E. Adensam, NRR
R. Schaaf, PM, NRR
L. Burkhart, PM, NRR (Backup)
G. Vissing, PM, NRR
Region I Docket Room (with concurrences)

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DATE	10/15/01		10/15/01	

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.: 05000387, 05000388

License Nos.: NPF-14, NPF-22

Report No.: 50-387/01-09, 50-388/01-09

Licensee: PPL Susquehanna, LLC

Facility: Susquehanna Steam Electric Station

Location: Post Office Box 35
Berwick, PA 18603

Dates: August 12, 2001 to September 30, 2001

Inspectors: S. Hansell, Senior Resident Inspector
J. Richmond, Resident Inspector
S. Chaudhary, Senior Reactor Engineer
J. Jang, Senior Radiation Specialist
J. Noggle, Senior Health Physicist

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

SUMMARY OF FINDINGS

IR 05000387-01-09, 05000388-01-09, on 08/12-09/30/2001, PPL Susquehanna, LLC; Susquehanna Steam Electric Station; Units 1&2. Event Follow-up.

The inspection was conducted by resident inspectors, a regional senior reactor engineer inspector, a regional senior radiation specialist, and a regional senior health physicist. The inspection identified one Green finding that was considered a non-cited violation. The significance of most findings are 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 web site at http://www.nrc.gov/NRR/OVERSIGHT/index.html.

A. Inspector Identified Findings

Cornerstone: Emergency Preparedness

- **Green**. The inspectors identified a non-cited violation for failure to follow and maintain the emergency plan as required by 10 CFR 50.54(q) and 10 CFR 50 Appendix E, "Emergency Planning and Preparedness."

  This violation was of very low safety significance because some inconsistencies between the Emergency Plan and emergency classification procedures resulted in the NRC receiving an event classification reference that did not agree with the actual event. (Section OA3.1)

Report Details

Summary of Plant Status

Susquehanna Steam Electric Station (SSES) Unit 1 was operated at or near full power for the report period, with exceptions for control rod pattern adjustments and main turbine control valve testing.

Unit 2 was operated at or near full power for the report period, with exceptions for control rod pattern adjustments, and main turbine control valve testing.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness

1R04 Equipment Alignments (71111.04)

.1 Partial System Walkdowns

a. Inspection Scope

The inspectors performed partial system walkdowns to verify system and component alignment and to note any discrepancies that would impact system operability. The inspectors verified selected portions of redundant or backup systems or trains were available while certain system components were out of service. The inspectors reviewed selected valve positions, electrical power availability, and the general condition of major system components. The walkdowns included the following systems:

- Unit 1 Control Rod Drive (CRD) System, with "A" CRD pump out of service for replacement and "B" CRD drive water filter out of service for filter change-out
- Unit Common Security System power sources and distribution

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors reviewed the Fire Protection Review Report to determine the required fire protection design features, fire area boundaries, and combustible loading requirements for the area examined during this inspection. The inspectors walked down this area to assess PPL's control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures. This area was the:

- Unit Common Emergency Service Water Pump House

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Re-qualification Training (71111.11)

a. Inspection Scope

On August 15, 2001, the inspectors observed licensed operator performance in the simulator to identify discrepancies and deficiencies in training and to assess licensed operator performance. The inspectors assessed the operators' adherence to Technical Specifications, emergency plan implementation, and the use of emergency operating procedures. The inspectors reviewed the ability of the simulator to model the actual plant performance. In addition, the inspectors observed two job performance measures.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

.1 Maintenance Rule Biannual Evaluation (71111.12B)

a. Inspection Scope

The inspector reviewed the periodic evaluations required by 10 CFR 50.65 (a)(3) for Units 1 & 2 to verify that structures, systems and components (SSCs) within the scope of the maintenance rule were included in the evaluations, and balancing of reliability and unavailability was given adequate consideration. The inspector reviewed the following reports and documentation:

- PPL's most recent periodic evaluation reports
- Maintenance Rule Self Assessment Report, dated July 17, 2001
- PLI-90457, "Maintenance Rule Periodic Assessment for 3rd Quarter 1998 through 4th Quarter 2000."
- Maintenance Rule Expert Panel Meeting Minutes Reports:
  - 2001-0801, PLI-90891
  - 2001-0523, PLI-90654
  - 2001-0516, PLI-90639
  - 2001-0509, PLI-90601
  - 2001-0314, PLI-90456
- Maintenance Rule Basis Documents for the following systems:
  - Nuclear Instruments (System 78)
  - Heating Ventilation and Air Conditioning (HVAC) (System 34)
  - Containment and Suppression (System 59)

The inspector selected the safety significant systems that were in a(1) status to verify that: (1) goals and performance criteria were appropriate, (2) industry operating experience was considered, (3) corrective action plans were effective, and (4)

performance was being effectively monitored. As of August 14, 2001, twelve SSCs were in an a(1) status. Except for the Process and Area Monitoring System (079, 170, 270), all other (a)(1) systems were safety related, and two of these systems (159 and 259) were risk significant. These twelve systems were in various stages of evaluation, monitoring, and corrective action. The inspector also reviewed PPL's assessment of the balance between reliability and availability for these systems.

The inspector performed a detailed review of the status, system health reports, and documentation for the following (a)(1) systems:

- Reactor Building HVAC, Units 1 & 2 (System 134 & 234)
- Containment and Suppression, Units 1 & 2 (System 159 & 259)
- Liquid Radwaste, Units 1 & 2 (System 169 & 269)
- Containment Atmosphere Control, Units 1 & 2 (System 173 & 273)
- Radiation Monitoring, Units 1, 2, & Common (System 179 & 279)
- Reactor Non-Nuclear Instrumentation, Unit 2 (System 280)

Additionally, status, system health reports, and documentation for the following risk significant (a)(2) systems were reviewed for the balance between reliability and availability:

- 125V DC, Unit 1 (System 102)
- Main Steam, Unit 1 (System 183)
- Station Instrument Air, Unit 2 (System 118)
- Reactor Protection System, Unit 2 (System 258)
- Nuclear Instrumentation, Unit 1 (System 178)

b. Findings

No significant observations or findings were identified.

.2 Maintenance Rule Quarterly Effectiveness (71111.12Q)

a. Inspection Scope

The inspectors evaluated the follow-up actions for selected system, structure, or component (SSC) issues and reviewed the performance of these SSCs, to assess the effectiveness of PPL's maintenance activities. The inspectors reviewed PPL's problem identification and resolution actions for these issues to evaluate whether PPL had appropriately monitored, evaluated, and dispositioned the issues in accordance with PPL procedures and the requirements of 10 CFR 50.65(a)(1) and (a)(2), "Requirements for Monitoring the Effectiveness of Maintenance." In addition, the inspectors reviewed selected SSC classification, performance criteria and goals, and PPL's corrective actions that were taken or planned, to verify that the actions were reasonable and appropriate. The following issues and documents were reviewed:

Equipment Issues

- Unit 2 Standby Liquid Control System (SLC) control room flow indicator (CR 324251)

- Unit 1 Reactor Core Injection Cooling (RCIC) System topaz inverter trip (CR 354600)
- Unit 2 Reactor Building Closed Cooling Water (RBCCW) “A” pump did not automatically start after a system low discharge pressure occurred during a planned pump swap (CR 357618)

Procedures and Documents

- Maintenance Rule Basis Documents for SLC, and RCIC
- System Health Reports for SLC, and RCIC
- NDAP-QA-0413, "SSES Maintenance Rule Program"
- EC-RISK-0528, "Risk Significant SSCs for the Maintenance Rule"
- EC-RISK-1054, "SSC Availability Performance Criteria for the Maintenance Rule"
- EC-RISK-1060, "Acceptable Number of Failures for Risk Significant SSCs"

b. Findings

No significant observations or findings were identified.

1R13 Maintenance Risk Assessment and Emergent Work (71111.13)

a. Inspection Scope

The inspectors reviewed the assessment and management of selected maintenance activities to assess the effectiveness of PPL's risk management for planned and emergent work. The inspectors compared the risk assessments and risk management actions to the requirements of 10 CFR 50.65(a)(4) and the recommendations of NUMARC 93-01 Section 11, "Assessment of Risk Resulting from Performance of Maintenance Activities." The inspectors evaluated the selected activities to verify whether risk assessments were performed when required and appropriate risk management actions were identified.

The inspectors reviewed scheduled and emergent work activities with licensed operators and work coordination personnel to verify whether risk management action threshold levels were correctly identified. The inspectors assessed those activities to evaluate whether appropriate implementation of risk management actions were performed in accordance with the following PPL procedures:

- NDAP-QA-1902, "Maintenance Rule Risk Assessment and Management Program"
- NDAP-QA-0340, "Protected Equipment Program"
- PSP-22, "Susquehanna Sentinel Program"
- SSES Team Manual
- TP-055-014, "CRD Pump Performance Curve"
- MT-GE-008, "480 Volt Circuit Breaker High Current Testing"

In addition, the inspectors compared the assessed risk configuration to the actual plant conditions and any in-progress evolutions or external events to evaluate whether the assessment was accurate, complete, and appropriate for the issue. The inspectors performed control room and field walkdowns to verify whether the compensatory

measures identified by the risk assessments were appropriately performed. The selected maintenance activities included:

- Unit 1 "A" CRD pump replacement
- Unit 2 "B" SLC pump motor breaker replacement and system quarterly flow test (WO 329646, SO-253-004, and CR 352347)
- Unit Common ESW System flow balance (TP-034-003)

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed selected operability determinations to assess the adequacy of the evaluations, the use and control of compensatory measures, compliance with the Technical Specifications, and the risk significance of the issue. In addition, the inspectors reviewed the selected operability determinations to verify whether the determinations were performed in accordance with NDAP-QA-0703, “Operability Assessments.” The inspectors used the Technical Specifications, Technical Requirements Manual, Final Safety Analysis Report (FSAR), and associated Design Basis Documents as references during these reviews. The issues reviewed included:

- Unit Common "C" EDG trip, on high bearing temperature (CR 353093)
- Unit 2 HV-241-F032B, feedwater stop check valve, steam leak (CR 352571)
- Emergency Response Organization pager activation failure (CR 350041)
- Unit 2 HV-241-F022B, main steam isolation valve (MSIV) stroke time (CR 351409)
- Unit 1 HV-141-F022C, MSIV limit switch inadvertent actuation (CR 350858)

Procedures and Documents

- SO-284-003, "Main Steam Isolation Valve Quarterly Exercising," dated 08/11/01
- SO-284-003, "Main Steam Isolation Valve Quarterly Exercising," dated 04/20/01
- SO-284-003, "Main Steam Isolation Valve Quarterly Exercising," dated 07/22/00
- ASME Inservice Inspection Relief Request No. 32 (1RR32-1), dated 03/96

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed portions of post-maintenance testing activities and reviewed selected test data. The inspectors assessed the adequacy of the test methodology, based on the scope of maintenance work performed, and evaluated whether the

acceptance criteria demonstrated that the tested components satisfied the design and licensing bases requirements. The specific issues reviewed included:

- Unit 2 "B" SLC pump motor, following replacement of 480VAC molded case breaker and starter maintenance (WO 329646)
- Unit 1 "A" CRD pump performance curve, following pump replacement (TP-055-014)
- Unit 1 & 2 Process Computer conversion constant change, to correct an error in the core thermal power calculation (RE-0TY-008 & CR 349191)

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors reviewed selected surveillance tests, test data results, and the applicable Technical Specification requirements. In addition, the inspectors observed the performance of portions of surveillance tests to verify whether the systems and components were capable of performing their design basis functions. The observed or reviewed surveillance tests included:

- Unit 1 MSIV full stroke surveillance test (SO-184-001)
- Unit 2 SLC system quarterly flow test (SO-253-004)

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY
Cornerstone: Occupational Radiation Safety

2OS3 Radiation Monitoring Instrumentation (71121.03)

m. Inspection Scope

In-plant permanent and portable radiation monitoring instruments important for protecting the occupational worker were selected and calibrations and operability checks of these instruments were reviewed. The Emergency Plan specified self-contained breathing apparatus (SCBA) equipment readiness and control room staff SCBA qualifications were also reviewed to ensure adequate respiratory protection was available and could be used in the event of an emergency.

Specific instruments and calibration records reviewed are listed below.

– Standby Gas Treatment System (SGTS) exhaust radiation monitor (2)

- Refuel floor high and wall exhaust duct monitors (4)
- Pretreatment off-gas radiation monitors (4)
- Turbine building vent exhaust SPING monitor calibration observed (1)
- Containment radiation monitors (2)
- Refuel floor area radiation monitors (ARMs) (2)
- Transverse In-core Probes (TIP) drive and TIP chamber shield ARMs (4)
- Eberline EC-4 area radiation monitors (3)
- Xetex 501A area radiation monitors (1)
- Eberline RO-2 (3)
- Eberline RO-2A (4)
- Teletector 6112B (2)
- Telescan (1)
- Ludlum 3 (3)
- AMP-100 (2)
- Staplex high volume air samplers (2)
- Mini RAS pump air samplers (3)
- RAS pump air samplers (3)
- Eberline MS-2 scaler (1)
- Ludlum 2000 scaler (1)
- Ludlum 177 scaler (1)
- Canberra gamma spectroscopy systems (2) for 6 sample geometries
- Tennelec TC-535P gas flow proportional counter (1)
- Nuclear Enterprises CM-11 alpha/beta frisker (1)
- Eberline PCM1B personnel contamination monitors (2)
- Tool Contamination Monitors (2)
- Small Article Monitors (2)
- Radose 51 electronic personnel dosimeters (4)
- Radose 51T radio transmitting electronic personnel dosimeters (5)
- Dupont P4LC lapel air samplers (3)
- SCBAs in the control room and technical support center (9)
- SCBA non-fire brigade spare bottle inventory (10)
- SCBA training, respiratory protection training, respirator fit, and medical qualifications for on-shift control room operators (9)
- September 2001 breathing air test results for the Unit 1 and Unit 2 air compressors, the - Delmonox 19 and 11 compressors, the eagle air compressor, the operations spare and training center air compressors

The performance in this area was evaluated relative to information and criteria contained in the following documents and interviews.

Procedures: SI-279-319, Rev. 7, SI-079-317, Rev. 12, SI-079-325, Rev. 12, SI-079-331, Rev. 11, SI-079-335, Rev. 10, SI-079-327, Rev. 12, SI-079-326, Rev. 12, SI-179-319, Rev. 6, SI-279-330, Rev. 8, SI-179-330, Rev. 6, SI-079-336, Rev. 11, SI-079-330, Rev. 12, SI-079-328, Rev. 10, SI-079-329, Rev. 12, IC-079-010, Rev. 4, SI-279-310, Rev. 3, SI-279-311, Rev. 2, SI-179-310, Rev. 3, SI-179-311, Rev. 2, SH-179-003, Rev. 10, SH-279-003, Rev. 10, CH-IC-016, Rev. 22, EP-AD-013, Rev. 9; 9/26/2001 Operations personnel shift schedule; 10 CFR 20 and NUREG-0041, Rev. 1

Interviews: 5 health physics instrument technicians, the Health Physicist - Instruments, the I & C Supervisor, the Chemistry Supervisor, 2 chemistry technicians, and a respiratory protection HP technician.

In addition, 18 radiation protection condition reports that were initiated between July and September 2001, were screened for safety significant issues and potential performance indicator events.

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS3 Radiological Environmental Monitoring Program (71122.03)

.1 Radiological Environmental Monitoring Program

a. Inspection Scope

The inspector evaluated the effectiveness of PPL's Radiological Environmental Monitoring Program (REMP) at the Susquehanna site and the Corporate Office in Allentown, Pennsylvania. The requirements of the REMP are specified in the Technical Specifications, Technical Requirements Manual, and Offsite Dose Calculation Manual (TS, TRM, and ODCM). The inspector reviewed the following documents and data:

- 1999 and 2000 Annual REMP Reports
- Selected analytical results for 2001 REMP samples
- Most recent REMP-ODCM (Revision 3, May 22, 2001) and technical justifications for ODCM changes, including sampling media and locations
- 2000 QA Audit (SRC Audit No. 2000-005) for the REMP-ODCM and Meteorological Monitoring Program implementations
- NUPIC Audit (2000-1003 by Clinton Power Station) for the contractor laboratory (Midwest Laboratory)
- Source Verification Audit Report for the Midwest Laboratory (Report No. 2000-047 audited by PPL)
- Most recent calibration results for all TS, TRM, and ODCM air samplers
- Most recent calibration results (April, 2001) of the meteorological monitoring instruments for wind direction, wind speed, and temperatures
- 2000/2001 meteorological monitoring data recovery statistics

Analytical laboratories in the areas of:

- QA/QC Manual for the PPL Corporate Environmental Radiological Monitoring Laboratory (CERML) and the contractor laboratory (Midwest Laboratory, Northbrook, Illinois)
- Implementation of the interlaboratory and intralaboratory comparisons
- Implementation of the quality control program by the CERML and the contractor laboratory

- associated procedures

- Implementation of the environmental thermoluminescent dosimeters (TLDs) program including co-located TLDs with the Pennsylvania State
- The Land Use Census procedure and the 2000 results

The inspector toured and observed the following activities to evaluate the effectiveness of the REMP:

- Meteorological monitoring instruments at the tower and the control room
- Air iodine/particulate and water sampling techniques
- Walk-down for determining whether all air samplers, milk farms, and 25%TLDs were located as described in the TRM and ODCM (including control and indicator stations) and for determining the equipment material condition

b. Findings

No findings of significance were identified.

.2 Radioactive Material Control Program (71122.03)

a. Inspection Scope

The inspector reviewed the following documents to ensure that PPL met the requirements specified in PPL's program for the unrestricted release of material from the Radiologically Controlled Area (RCA):

- The most recent calibration results for the radiation monitoring instrumentation (Tool Contamination Monitor, TCM-1A/RM22-TA), including the (a) alarm setting, (b) response to the alarm, and (c) the sensitivity
- PPL's criteria for the survey and release of potentially contaminated material using gamma spectroscopy (calibration efficiency for bulk sample analyses)
- The methods used for control, survey, and release of material from the RCA
- Associated procedures and records to verify the lower limits of detection for bulk sample analyses

The review was against criteria contained in 10CFR20, NRC Circular 81-07, NRC Information Notice 85-92, NUREG/CR-5569, Health Position Data Base (Positions 221 and 250), and the PPL's procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

.1 RETS/ODCM Radiological Effluent Occurrences

a. Inspection Scope

The inspector reviewed the PPL Radiological Effluent performance indicator data from the second quarter 2000 to the second quarter 2001, to verify whether PPL satisfied the reporting requirements. The review included the following documents:

- Monthly projected dose assessment results due to radioactive liquid and gaseous effluent releases
- Quarterly projected dose assessment results due to radioactive liquid and gaseous effluent releases
- Associated procedures

The inspector compared the data against the criteria contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," revision 1, to verify that all conditions that met the NEI criteria were recognized, identified, and reported as a Performance Indicator.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 Unusual Event Declared due to an Unauthorized Entry of the Owner Controlled Area Adjacent to the Site

a. Inspection Scope

On August 23, 2001, the inspectors observed the plant response to a security issue that resulted in an emergency classification of an Unusual Event. The Unusual Event (UE) is the lowest of four emergency classification levels. A contractor, not employed by PPL, attempted to gain entrance to the plant through a normally closed security access building. The individual was apprehended by PPL security before entering the plant protected area. The control room emergency director (ED) declared the UE at 4:21 p.m. and the event was terminated at 7:52 p.m.

The inspectors assessed the operators' adherence to the approved emergency plan, emergency implementation procedures, and the response to the security event. The inspectors reviewed the following documents and procedures:

- EP-PS-100, "Emergency Director Control Room;"
- EP-PS-126, "Control Room Communicator;"
- Emergency Plan, Rev. 33, November 2000;
- Condition Report Nos. 352956 and 352418;

b. Findings

The inspectors identified a Green non-cited violation of 10 CFR 50.54(q) because the emergency action level (EAL) numbering scheme in PPL's emergency classification procedure did not match the approved emergency plan (E-Plan).

The control room emergency director (ED) classified the August 23rd security issue as an Unusual Event. The ED used emergency procedure EP-PS-100, "Emergency Director Control Room," to determine that the security event met the criteria of EAL number 16.1. This is inconsistent with the NRC approved E-Plan. The E-Plan lists the event classification conditions in Section 5.0, "Emergency Conditions," Table 5.1. The E-Plan numbering scheme for the security event met the criteria for EAL number 14. There is no EAL number 16.1 in the approved E-Plan. This is inconsistent with the NRC approved E-Plan. Also, the EAL references contained in procedure EP-PS-100 are only provided to the Local and State officials, not the NRC.

On the day of the security event, the PPL phone communicator called the Local and State officials, and the NRC duty officer to inform everyone of the Susquehanna event. The communicator was trained to only provide the EP-PS-100 emergency procedure EAL reference number without a verbal description of the event. The initial EAL information provided to the NRC was limited and did not describe the actual event at the plant. Upon request, the PPL ED provided the NRC duty officer with a verbal description of the plant event.

This NRC identified issue was determined to be more than minor because if left uncorrected, there was a potential impact on public safety in that the inconsistent E-Plan and emergency classification procedure resulted in the NRC receiving an event classification reference that did not agree with the actual event and could have misdirected the NRC response to this event. The issue involved the failure to meet the regulatory requirement of 10 CFR 50.54(q). NRC Inspection Manual Chapter 0609, Appendix B, "Emergency Preparedness Significant Determination Process," Sheet 1 and 2, were used to assess the risk significance of this finding. This finding was an actual event implementation problem that occurred during a Notice of Unusual Event (NOUE). This issue was determined to be of very low safety significance (Green) because even though conflicting information was provided to the NRC, the State and local officials received consistent information related to the security event classification.

In accordance with 10 CFR 50.54(q), PPL failed to follow and maintain in effect emergency plans which meet the requirements in 10 CFR 50, Appendix E, "Emergency Planning and Preparedness." 10 CFR Part 50, Appendix E, Sections IV.B. and C., require, in part, that emergency action levels for notification of offsite agencies shall be described, including EALs that are to be used as criteria for determining the need for notification and participation of local and State agencies, and the Commission. This violation 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) and was documented in PPL's corrective action program as condition reports 352956 and 352418. **(NCV 05000387,388/2001-009-01)**

.2 (Closed) LER 05000387/2001-002-00 Unusual Event Declared due to Unauthorized Entry of the Owner Controlled Area Adjacent to the Site

On August 23, 2001, an individual entered a portion of the owner controlled area without authorization by climbing over an isolation zone area fence. Security personnel isolated the individual; the individual was unarmed, appeared disoriented, and requested medical assistance. No new issues were identified during this review. No violations of NRC security requirements were identified. This issue was documented in condition report 352418. This LER is closed.

.3 (Closed) LER 05000388/2001-002-00 Both Trains of Suppression Chamber Hydrogen Recombiners Inoperable

On March 2, 2001, the Unit 2 "A" suppression chamber hydrogen recombiner was removed from service for scheduled maintenance when the "B" emergency diesel generator (EDG) became inoperable due to an emergent equipment problem. With the "B" EDG inoperable, the "B" hydrogen recombiner also became inoperable, rendering both divisions of hydrogen recombiners inoperable. No new issues were identified during this review. No violations of NRC requirements were identified. This issue was documented in condition report 316629. This LER is closed.

4OA5 Other

.1 Independent Spent Fuel Storage Installation Operation (60855)

a. Inspection Scope

On August 28, 2001, the loading of Susquehanna dry shielded canister (DSC) No. 9 with spent fuel was observed with respect to the requirements in 10 CFR Part 72, the NUHOMS-52B cask Certificate of Compliance No.1004, the associated safety analysis report, and the NRC safety evaluation report of same. Specifically, the verification of preselected spent fuel bundle serial numbers was observed in accordance with Procedure RE-081-043, “Selection and Monitoring of Fuel for Dry Storage”, Rev. 1. Radiological controls were reviewed with respect to radiation work permit No. 2001-200, its associated ALARA pre-job review, and 10 CFR Part 20 requirements. Hot particle dose rate limitation technical basis No. 2001-023 and implementation guidance in Hot particle controls procedure HP-TP-511, Rev. 8, were also reviewed with respect to 10 CFR Part 20 requirements.

b. Findings

No findings of significance were identified.

4OA6 Meetings

.1 Exit Meeting Summary

On October 2, 2001, the resident inspectors presented the inspection results to Mr. B. Shriver, Vice President - Nuclear Site Operations, and other members of your staff, who acknowledged the findings.

The inspectors asked PPL whether any items discussed during the exit meeting should be considered proprietary. No proprietary information was identified.

ATTACHMENT 1

a. List of Items Opened, Closed, and Discussed

Opened

None

Opened and Closed

05000387,388/2001-009-01	NCV	Emergency Action Level Changes (section 4OA3.1)

Closed

05000388/2001-002-00	LER	Both Trains of Suppression Chamber Hydrogen Recombiners Inoperable (section 4OA3.3)
05000387/2001-002-00	LER	Unusual Event Declared due to Unauthorized Entry of the Owner Controlled Area Adjacent to the Site (section 4OA3.2)

Discussed

None

b. List of Documents Reviewed

(as listed in body of report)

c. List of Acronyms

ALARA	As Low As is Reasonably Achievable
ARM	Area Radiation Monitor
CFR	Code of Federal Regulations
CR	Condition Report
DSC	Dry Shielded Canister
EAL	Emergency Action Level
ED	Emergency Director
EDG	Emergency Diesel Generator
ESW	Emergency Service Water
FSAR	[SSES] Final Safety Analysis Report
ISFSI	Independent Spent Fuel Storage Installation
NCV	Non-cited Violation
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual

PPL	PPL Susquehanna, LLC
QA	Quality Assurance
QC	Quality Control
RBCCW	Reactor Building Closed Cooling Water
RCA	Radiologically Controlled Area
REMP	Radiological Environmental Monitoring Program
SCBA	Self-Contained Breathing Apparatus
SDP	Significance Determination Process
SGTS	Standby Gas Treatment System
SLC	Standby Liquid Control
SPING	Sampler for Particulate, Iodine and Noble Gas
SSC	Structure, System, or Component
SSES	Susquehanna Steam Electric Station
TIP	Transverse In-Core Probe
TLD	Thermoluminescent Dosimeter
TS	Technical Specification