February 28, 2002

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 50-387/01-12, 50-388/01-12

Dear Mr. Byram:

On February 9, 2002, 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 February 11, 2002, 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 issue of very low safety significance (Green). The issue was determined to involve a violation of NRC requirements. 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.

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

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 50-387/01-12, 50-388/01-12

Attachment 1 - Supplemental Information

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

cc w/encl: B. L. Shriver, Vice President - Nuclear Site Operations
R. Anderson, General Manager - SSES Operations
R. L. Ceravolo, General Manager - Plant Support
G. A. Williams, General Manager - Nuclear Assurance
A. J. Wrape III, General Manager - Nuclear Engineering
T. Harpster, Manager - Regulatory Affairs
R. R. Sgarro, Supervisor, Nuclear Licensing - SSES
C. D. Markley, Supervisor - Nuclear Licensing
M. M. Golden, Manager - Nuclear Security
P. Nederostek, Nuclear Services Manager, General Electric
D. Roth, 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

Distribution w/encl: H. Miller, RA/J. Wiggins, DRA (1)
M. Shanbaky, DRP
D. Florek, DRP

J. Talieri, DRP
S. Iyer, DRP
R. Junod, DRP
S. Hansell, DRP - SRI Susquehanna
T. Bergman, OEDO
E. Adensam, NRR (RidsNrrDipmLpdi)
D. Collins, PM, NRR
T. Tate, PM, NRR (Backup)
G. Vissing, PM, NRR
Region I Docket Room (with concurrences)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.: 05000387, 05000388

License Nos.: NPF-14, NPF-22

Report No.: 50-387/01-12, 50-388/01-12

Licensee: PPL Susquehanna, LLC

Facility: Susquehanna Steam Electric Station

Location: Post Office Box 35
Berwick, PA 18603

Dates: December 30, 2001 to February 9, 2002

Inspectors: S. Hansell, Senior Resident Inspector
J. Richmond, Resident Inspector
A. Blamey, Senior Operations Engineer
C. Sisco, Operations Engineer
L. Prividy, Senior Reactor Engineer
S. Chaudhary, Senior Reactor Engineer
D. Florek, Senior Project Engineer

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

SUMMARY OF FINDINGS

IR 05000387-01-12, 05000388-01-12; on 12/01-02/09/2002; PPL Susquehanna, LLC; Susquehanna Steam Electric Station; Units 1&2. Permanent plant modifications.

The report covered a 6 week period of inspection by resident inspectors, regional operations engineers, regional reactor engineers, and a regional project engineer. 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/ASSESS/index.html.

A. Inspection Findings

Cornerstone: Mitigating Systems

- **Green**. The inspector identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. Three operating procedures were incorrectly revised after modification 225635 was installed on Unit 2 to change the source of power for Division 1 automatic depressurization system safety relief valve solenoid valves.

  The finding was of very low safety significance since there was no actual loss of the Division 1 automatic depressurization system safety function and PPL entered this finding into the corrective action program. (Section 1R17)

B. Licensee Identified Violations

A violation of very low safety significance which was identified by PPL has been reviewed by the inspectors. Corrective actions taken or planned by PPL appear reasonable. This violation is listed in section 4OA7 of this report.

Report Details

Summary of Plant Status

Susquehanna Steam Electric Station (SSES) Unit 1 was operated at or near full power through January 11, 2002. Since January 11th the plant power declined gradually due to the end of the two year operating cycle. Plant power was 85% at the end of the report period.

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

1R01 Adverse Weather Protection (71111.01)

a. Inspection Scope

The inspectors reviewed PPL's preparations for the January 6th and 7th snow storm. The inspectors performed a plant walkdown of the emergency core cooling systems and on-site electrical distribution systems. The inspectors reviewed and evaluated plant conditions using NDAP-00-0024, revision 2, "Winter Operation Preparations and Severe Weather Operation." In addition, the residents reviewed PPL's assessment of the storms impact on plant risk. Procedure NDAP-QA-1902, "Maintenance Rule Risk Assessment and Management Program," provided guidance to evaluate the risk impact of the storm in conjunction with the planned equipment maintenance .

b. Findings

No findings of significance were identified.

1R02 Evaluations of Changes, Tests, or Experiments (IP 7111102)

a. Inspections Scope

The inspectors reviewed safety evaluations associated with barrier integrity and mitigating systems cornerstones to verify that changes to the facility or procedures as described in the Updated Final Safety Analysis Report (UFSAR) were reviewed and documented in accordance with 10 CFR 50.59. Safety evaluations were selected based on the safety significance of the changes and the risk to structures, systems and components.

The inspectors also reviewed screenings of those changes for which PPL determined that a safety evaluation was not required. This review of safety evaluation screens was performed to verify that PPL's threshold for performing safety evaluations was consistent with 10 CFR 50.59. Finally, the inspectors reviewed a sample of condition reports that documented problems that PPL identified with the safety evaluation process.

A listing of the safety evaluations, safety evaluation screens, and other documents reviewed is provided in Attachment A.

b. Findings

No findings of significance were identified.

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 2 “B” and “D” core spray system during planned maintenance Unit 2 “A” and “C” core spray system, January 11, 2002.
- Unit 1 “A” and “C” core spray system during planned maintenance Unit 1 “B” and “D” core spray system, January 16, 2002.
- Unit 2 reactor core isolation cooling during planned maintenance on the Unit 2 high pressure coolant injection system, January 28, 2002.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05Q)

a. Inspection Scope

The inspectors examined PPL's Fire Protection Review Report to determine the required fire protection design features, fire area boundaries, and combustible loading requirements for selected areas. The inspectors walked down those areas to assess PPL’s control of transient combustible material and ignition sources, fire detection and suppression capabilities, fire barriers, and any related compensatory measures. In addition, based on the heightened level of security since September 11, 2001, the inspectors reviewed the fire protection features of the Security Control Center and the North Gate House and performed walkdowns to assess PPL's fire protection program in those areas. The areas and documents reviewed included:

Plant Areas and Fire Zones

- Unit 2 reactor core isolation cooling during planned maintenance on the Unit 2 high pressure coolant injection (HPCI) system, January 28, 2002.
- Unit 2 HPCI pump and valve rooms after planned maintenance, January 31, 2002.
- Security Control Center
- North Gate House

c. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

On February 7, 2002, the inspectors reviewed licensed operator performance during the annual simulator examination and PPL's critique of the operators' performance. The inspectors focused on the operating crews' satisfactory completion of crew critical tasks. Critical tasks are limits placed on key reactor plant and containment parameters that will ensure safety margins are maintained during simulated malfunctions. Also, the evaluation included the operators' adherence to Technical Specifications, emergency plan implementation, and the use of emergency operating procedures. In addition, the ability of the simulator to model the actual plant performance was reviewed.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12Q)

a. Inspection Scope

The inspectors evaluated the follow-up actions for selected system, structure, or component (SSC) issues and reviewed the performance history 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 whether the actions were reasonable and appropriate. The following issues were reviewed:

Equipment Issues

- "E" emergency diesel generator loss of jacket water during the 24 hour endurance run. Evaluated as a maintenance rule functional failure, CR 376231, February 6, 2002.
- Unit 1 "A" residual heat removal room cooler breaker trip, Technical Specification 3.0.3 entry, CR 383247, February 7, 2002.
- Unit 2 reactor vessel water level switch LISB212N031C, found inoperable after a 24 month calibration was complete, January 25, 2002. CR 383247, February 7, 2002.

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 evaluate 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 determine 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. 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 PPL's risk assessments were appropriately implemented. The selected maintenance activities included:

- "E" emergency diesel generator loss of jacket water during the 24 hour endurance run. Observed the drain and flush of the diesel lube oil system and the replacement of the faulty jacket water cylinder liner, WOs 37625 and 376260, January 10, 2002.
- Unit 1 "A" electro hydraulic control (EHC) motor replacement performed with the plant at power. The initial motor failed the uncoupled test and had to be replaced by a second EHC motor, WO 266407, AR 266280, January 8, 9, and 11, 2002.
- Unit 1 "A" residual heat removal room cooler breaker trip, Technical Specification 3.0.3 entry, CR 383247, February 7, 2002.
- Unit 1 stator water cooling breaker work, January 21, 2002

- Station response to the January 6th and 7th snow storm including PPL's assessment of the storms impact on plant risk and release of equipment for planned work as defined in procedure NDAP-QA-1902, "Maintenance Rule Risk Assessment and Management Program."

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions & Events (71111.14)

.1 Unit 1 Reactor Building Contamination/Evacuation

a. Inspection Scope

On January 21, 2002, approximately 800 square feet of floor space was contaminated in the Unit 1 Reactor Building (RB) 670 foot elevation. The contamination was caused when a reactor water cleanup (RWCU) relief valve opened during the backwash of the "B" RWCU filter demineralizer. A plant operator missed a step in Operations procedure OP-161-002, "RWCU Filter Demineralizers," Rev. 22, to close a RWCU manual isolation valve (14541B), resulting in the flow of excessive water to a waste water receiving tank. With the excessive water, the relief valve opened to direct the excessive water to a floor drain which was clogged. The clogged reactor building floor drain contributed to the extent of the area contaminated. The contamination was at a very low level such that it did not have a significant radiological consequence.

The inspectors reviewed operating logs, plant computer data, and interviewed plant personnel for this unplanned event to independently determine what occurred and evaluate the initiating cause. The inspectors assessed personnel performance during this event to evaluate whether the operator response was appropriate and in accordance with procedures and training. The inspectors reviewed OP-161-002, "RWCU Filter Demineralizers," Rev. 22, PPL's root cause evaluation, master list of operator work-arounds, and condition report 379343.

b. Findings

This issue is considered a licensee identified Non-cited Violation and is documented in section 4OA7 of this report.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed selected operability determinations, based on risk insights, 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:

- "E" emergency diesel generator loss of jacket water during the 24 hour endurance run. Observed the drain and flush of the diesel lube oil system and the replacement of the faulty jacket water cylinder liner, WOs 37625 and 376260, January 10, 2002.
- Unit 1 "A" residual heat removal room cooler breaker trip, Technical Specification 3.0.3 entry, CR 383247, February 7, 2002.
- Unit 2 reactor vessel water level switch LISB212N031C, found inoperable after a 24 month calibration was complete, Technical Specification (TS) 3.0.3 was entered for Units 1 and 2. Both offsite electrical power sources were declared inoperable January 25, 2002. CR 383247, February 7, 2002.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (IP 711117B)

a. Inspection Scope

The inspectors selected permanent plant modifications for review at Susquehanna Units 1 and 2. Modifications were selected from design changes that were implemented at each unit during the last refueling outage. Modifications were selected based on risk insights from the Susquehanna probabilistic risk assessment, including inspectable areas related to the barrier integrity and mitigating systems cornerstones. The modifications included safety-related piping and components, such as motor-operated valves (MOVs), electrical power systems, and changes to operator training and plant operating procedures. The review of the modification packages included safety evaluations, design calculations, procedure and setpoint changes, and post modification test results. The inspectors discussed the scope of the modification information with cognizant engineering personnel and conducted plant walkdowns where equipment was accessible. The inspectors reviewed condition reports, which documented problems identified by PPL related to plant modifications, to verify the effectiveness of PPL's corrective actions. The inspectors also reviewed quality assurance audits of modification activities. A listing of the plant modifications and condition reports reviewed is provided in Attachment A.

b. Findings

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control. The violation involved three operating procedures which were incorrectly revised after modification 225635 was installed on Unit 2 to change the source of power for Division 1 automatic depressurization system (ADS) safety relief valve (SRV) solenoid valves.

In March 2001, PPL installed a modification (DCP 225635) on Unit 2 that relocated the power supply for the Division 1 ADS SRV solenoid valves from power source 2D614-03 to 2D614-18. The Division 1 ADS logic remained powered from 2D614-03. The inspectors identified that three operating procedures: ON-202-610, “Loss of 125 VDC Bus 2D610 (Channel A),” Revision 4; AR-210-001, “ADS and Drywell Cooling 2C601," Revision 10; and AR-255-001, “ADS Div 1 BIS Display 2C610," Revision 3, were incorrectly revised to reflect the modification. ON-202-610 was incorrectly revised to indicate that the ADS logic, rather than the ADS SRV solenoid valves, was relocated to power supply 2D614-018. In addition, the procedure did not state the impact and response for a failure of power supply 2D614-018 and did not reference the correct panel identifications. AR-210-001 was incorrectly revised in that it did not direct operator actions in response to the alarm (ADS A OUT OF SERVICE) to ensure that both breakers 2D61403 and 2D61418 were closed. AR-255-001 was incorrectly revised in that the probable cause for the alarm (VALVE A POWER FAILURE) did not reflect that the power supply to Division 1ADS SRV solenoid valves was relocated to 2D614-18.

The inadequate revision of the three operating procedures after this modification was installed on Unit 2 was an issue of more than minor significance. The issue had a credible impact on safety in that, if a loss of 125 VDC electrical power to one of more of the ADS loads on bus 2D614 had occurred, the information provided to the operator by the procedures was incorrect in that the operators would have seen a different response for Division 1 of ADS than contained in the procedures. The operator would not have been able to monitor the restoration of Division 1 of ADS as stated in the procedures. The issue credibly affected the Mitigating Systems cornerstone. The incorrect operating procedures related to the Division 1 ADS system could affect operability and availability if Division 1 ADS was not properly restored following a loss of 125 VDC power. This finding was determined to be of very low significance (Green) using phase 1 of the Significance Determination Process (SDP) since there was no actual loss of the Division 1 ADS safety function.

10 CFR 50, Appendix B, Criterion III, Design Control, requires, in part, that the design basis for safety-related structures, systems, and components are correctly translated into procedures. Contrary to the above, the modified design included in modification DCP 225635 concerning the power supply to Division 1 ADS SRV solenoid valves was not correctly translated into procedures ON-202-610, “Loss of 125 VDC Bus 2D610 (Channel A),” Revision 4, AR-210-001, “ADS and Drywell Cooling 2C601," Revision 10, and AR-255-001, “ADS Div 1 BIS Display 2C610," Revision 3. This violation of 10 CFR 50, Appendix B, Criterion III, Design Control is being treated as a non-cited violation

consistent with Section VI.A of the NRC Enforcement Policy. PPL entered this issue into the corrective action system as condition report 382975. **(NCV 50-388/01-12-01)**

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors observed portions of post-maintenance testing activities in the field, to determine whether the tests were performed in accordance with the approved procedures. The inspectors assessed the test's adequacy by comparing the test methodology to the scope of maintenance work performed. In addition, the inspectors evaluated the test acceptance criteria to verify whether the test demonstrated that the tested components satisfied the applicable design and licensing bases and the Technical Specification requirements. The inspectors reviewed the recorded test data to determine whether the acceptance criteria were satisfied. The maintenance activities reviewed included:

- Unit 1 "A" electro hydraulic control motor replacement performed with the plant at power, WO 266407, January 10, 2002.
- "E" emergency diesel generator 24 hour endurance run after the jacket water cylinder liner repair, SE-024-E01," January 04, 2002.
- SO-293-001, "Unit 2 Quarterly Turbine Valve Cycling," after CIV-4 and CIV-6 would not stroke, January 04, 2002.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed portions of selected surveillance test activities in the control room and in the field, and reviewed the test data results. The inspectors compared the test result to the established acceptance criteria and the applicable Technical Specification or Technical Requirements Manual operability and surveillance requirements to evaluate whether the systems were capable of performing their intended safety functions. The observed or reviewed surveillance tests included:

- Unit 2 "A" core spray pump motor overcurrent relay calibration, WO 358013, January 11, 2002.
- "E" emergency diesel generator loss of jacket water during the 24 hour endurance run, SE-024-E01, January 04, 2002.
- SI-280-303, "24 Month Calibration-Reactor Vessel Water Level Channels (ECCS Actuation Logic)." The surveillance test as found data was reviewed for the reactor vessel water level switch LISB212N031C, after the switch became inoperable during restoration, January 25, 2002.
- SO-293-001, "Unit 2 Quarterly Turbine Valve Cycling," January 04, 2002.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation (71114.06)

a. Inspection Scope

On January 15, 2002, the inspectors observed the unannounced exercise for the activation of the Emergency Plan support facilities. The inspectors observed the technical support center and operations support center staffing. The inspectors also reviewed the emergency operations facility staffing documentation. The inspectors reviewed the following documents and procedures:

- Susquehanna Emergency Plan, Rev. 38, Table 6.2, "Minimum On-site and Off-site Emergency Organization Capabilities;"
- EP-PS-100, "Emergency Director Control Room;"
- Technical Support Center minimum activation checklist;
- Operation Support Center Drill Log.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 Meetings

.1 Exit Meeting Summary

On February 8, 2002, the inspectors presented the inspection results of the plant modification and evaluation of changes, tests, and experiments inspection to Mr. Bryce Shiver and other members of PPL's management.

On February 11, 2002, the resident inspectors presented the inspection results to Mr. B. Shriver, Vice President - Nuclear Site Operations, and other members of PPL's 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.

4OA7 Licensee Identified Violations

The following finding of very low significance was identified by PPL and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as Non-cited Violations (NCVs).

NCV Tracking Number	Requirement Licensee Failed to Meet
50-387/01-012-02	Technical Specification section 5.4.1 states: "Written procedures shall be established and implemented that meet the requirements of NRC's Regulatory Guide 1.33, Rev. 2, February 1978. Operations procedure OP-161-002, "RWCU Filter Demineralizers," Rev. 22. Section 3.3.3, states "If backwashing "1B" filter, CLOSE reactor water cleanup (RWCU) filter demineralizer "B" effluent isolation valve 145041B. On January 21, 2002, a plant operator failed to close the RWCU 14541B manual isolation valve. The error resulted in overflow of radioactive water and contamination in the Unit 1 Reactor Building on the 670 foot elevation. The issue was documented in condition report 379343.

ATTACHMENT A

a. Key Points of Contact

Rich Anderson	General Manager - SSES
Chris Boschetti	Site Modification Group
Andre Dominguez	Nuclear System Engineering
Bob Kichline	Nuclear Regulatory Affairs
Gerard Machalick	Nuclear Regulatory Affairs
Jim O'Sullivan	Supervisor - Site Mods Group
Rick Pagodin	Manager - Nuclear Technology
David Przyjemski	MOV Design Engineering
Bryce Shriver	VP Nuclear Site Operations
Michael Simpson	Manager - Nuclear Modifications
Al Wrape	General Manager - Nuclear Engineering

b. List of Items Opened, Closed and Discussed

Opened

None

Opened and Closed

50-388/01-012-01	NCV	Three operating procedures were incorrectly revised after a modification was installed on Unit 2 to change the source of power for Division 1 automatic depressurization system safety relief valve solenoid valves (Section 1R17)
50-387/01-012-02	NCV	Unit 2 reactor water cleanup overflow and floor contamination due to the failure to follow a plant operating procedure (Section 4OA7)

Closed

None

Discussed

None

c. List of Documents Reviewed

10 CFR 50.59 Safety Evaluations

NL-92-023	EO-000-102, Reactor Pressure Vessel Control
No. 97-9075/6	Unit 1&2 CS/RHR/LPCI Reactor Low Pressure Permissive Pressure Switch Replacement
No. 98-3024A	Replacement of Actuator Motor for RHR Containment Isolation Valve HV-151F016A
No. 99-3029	Replacement of Actuator Gearset on HPCI Steam Supply Isolation Valve HV-155F001
NL-99-046	Loss of all Decay Heat Removal - EP-DS-005
No. 179444	Replacement of Actuator Motor for HPCI Steam Isolation Valve HV-155F002
No. 200714	Replacement of Actuator Gearset on HPCI Steam Supply Isolation Valve HV-255F001
No. 225635	Automatic Depressurization System Division 1 Solenoid Valve/Control Relocation
No. 239383	Permanent Elimination of Diesel Generator Intercooler Flow Measuring Pipe Taps
No. 240056/240057	Remove Feedback Signal from Motor Generator Set
No. 318280	Design Pressure Rating of Standby Liquid Control System

10 CFR 50.59 Safety Evaluation Screens

5059-01-05	Installation of MSIV Internal Upgrade Kit
5059-01-33	Alarm Response Procedures for RHR and Core Spray Div I(II)
5059-01-67	Feedwater Flow Measurement
5059-01-73	Generic Modification to Allow the Installation of Quick Disconnects on the Air Supply to Various AOVs
5059-01-126	Replacement Item Evaluation 356361 for ESW Flex Hose for “E” EDG
5059-01-213	Replacement Item Evaluation 345263 for Butterfly Valve for ESW Throttling
5059-01-221	Reactor Core Isolation Cooling Qualification Update
5059-01-245	Replacement Item Evaluation 353460 for Thermostatic Valve for HPCI Turbine Control
5059-01-259	High Pressure Coolant Injection Pump Suction Logic Transfer to Suppression Pool
5059-01-283	Change Power Constant, RE-OTY-008
5059-01-304	Turbine Building Closed Cooling Water Operation during Refueling Outage
5059-01-325	SO-293-001 Quarterly Turbine Valve Cycling Revision
5059-01-408	SW Discharge Check Valve Leaking
5059-01-431	Repair Corrosion for HPCI Room Cooler End Bell
5059-01-434	ASCO Solenoid Valve Failures
ECO 269731	Correct Spurious RHR Service Water Alarm PSL 11211B

Plant Modifications (Design Change Packages - DCP and Engineering Change Order - ECO)

DCP 97-9075	CS/RHR/LPCI Pressure Switch Replacement
DCP 98-3024A	Replacement of Actuator Motor for RHR Containment Isolation Valve HV-151F016A
DCP 99-3029	Replacement of Actuator Gearset on HPCI Steam Supply Isolation Valve HV-155F001
DCP200714	Replacement of Actuator Gearset on HPCI Steam Supply Isolation Valve HV-255F001
DCP 225635	Automatic Depressurization System Division 1 Solenoid Valve/Control Relocation
DCP 239383	Eliminate EDG Intercooler Flow Pipe Taps
DCP 318267	Design Pressure Ratings of Unit 2 Standby Liquid Control System
ECO 324960	Main Steam Isolation Valve Limit Switch Relocation

Condition Reports

300123
361132
373490
373780
383500
382334
97-3684

Other Documents

EC-052-0533	MOV Data Detail Calculation for HV255F001, Rev. 9 and 10
EC-VALV-0509	Determination of Limiting Values for Full Stroke Times for Power Operated Valves within the Scope of the IST Program, Rev. 22
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d. List of Acronyms

ADS	Automatic Depressurization System
AOV	Air-Operated Valve
CFR	Code of Federal Regulations
CR	Condition Report
CS	Core Spray
DBT	Design Basis Threat
DCP	Design Change Packages
ECCS	Emergency Core Cooling System
EHC	Electro Hydraulic Control
EOF	Emergency Operations Facility
FSAR	[SSES] Final Safety Analysis Report
HPCI	High Pressure Coolant Injection
LPCI	Low Pressure Coolant Injection
MOV	Motor-Operated Valve
MSIV	Main Steam Isolation Valve
NCV	Noncited Violation
NRC	Nuclear Regulatory Commission
OSC	Operation Support Center
PPL	PPL Susquehanna, LLC
QA	Quality Assurance
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RWCU	Reactor Water Cleanup
SLC	Standby Liquid Control
SRV	Safety Relief Valve
SSC	Structure, System, or Component
SSES	Susquehanna Steam Electric Station
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
TSC	Technical Support Center
WO	Work Order