April 9, 1999

Mr. Robert G. Byram
Senior Vice President - Nuclear
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

SUBJECT: PLANT PERFORMANCE REVIEW - SUSQUEHANNA STEAM ELECTRIC STATION

On February 24, 1999, the NRC staff completed a Plant Performance Review (PPR) of the Susquehanna Steam Electric Station. The staff conducts these reviews for all operating nuclear power plants to develop an integrated understanding of safety performance. The results are used by NRC management to facilitate planning and allocation of inspection resources. PPRs provide NRC management with a current summary of licensee performance and serve as inputs to the NRC's senior management meeting (SMM) reviews. PPRs examine information since the last assessment of licensee performance to evaluate long term trends, but emphasize the last six months to ensure that the assessments reflect current performance. The PPR for Susquehanna Steam Electric Station involved the participation of all technical divisions in a detailed evaluation of inspection results and safety performance information for the period April 1998 to January 15, 1999 and a review of long-term performance trends since your last Systematic Assessment of Licensee Performance (SALP). The NRC's most recent summary of licensee performance was provided in a letter of September 26, 1997 and was discussed in a public meeting with you on October 9, 1997.

As discussed in the NRC's Administrative Letter 98-07 of October 2, 1998, the PPR provides an assessment of licensee performance during an interim period that the NRC has suspended its SALP program. The NRC suspended its SALP program to complete a review of its processes for assessing performance at nuclear power plants. At the end of the review period, the NRC will decide whether to resume the SALP program or terminate it in favor of an improved process.

During this assessment period, Susquehanna Units 1 and 2 experienced a variety of challenges, including three automatic reactor shutdowns, four unplanned manual reactor shutdowns and several unplanned power reductions, primarily related to equipment failures.

Overall performance at the Susquehanna Steam Electric Station was acceptable. Senior management involvement in station activities increased. Some improvements were noted in the operations and maintenance areas. However, early in the period there were a number of plant shutdowns and unplanned power reductions (transients) that challenged the station. In the maintenance area, some improvement has been made in the work control planning and scheduling processes in response to previously identified problems. Station management took steps to address problems in coordination and communication among work groups; however, this area remains a challenge. While the engineering organization has contributed to improved plant operations, it has been slow to resolve some longstanding material condition issues. The

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radiation protection, security, and emergency preparedness programs continued to be effective. The fire protection program performance was satisfactory. The PP&L program for identifying and correcting problems was deficient in a number of instances, in that PP&L's response to some important problems was slow or narrowly focused.

Operators typically demonstrated competent performance during normal operations, plant transients and planned evolutions. This performance was attributed, in part, to station management's continued attention to daily operation and an effective operator training program. In contrast, some instances of poor reactivity control management and oversight by operators were noted during two reactor startups in the summer of 1998. During the second startup, these deficiencies in reactivity control management resulted in an automatic shutdown of the reactor. Station management made several changes, which were observed to be effective in improving performance during subsequent reactor startups. These changes strengthened the reactivity management program and resulted in increased oversight of reactor startup activities by senior operations and training managers. We plan to perform the normal core inspection program in the operations area, with some increased emphasis placed on reactivity management.

Overall performance in the maintenance area has improved since station management made changes in the maintenance program, although equipment failures continue to burden the operators. Recently, work coordination issues delayed the restoration of the 'B' and 'E' emergency diesel generators and extended the diesels unavailability time. In the last six months, some improvement was observed in the work control planning and scheduling processes due to implementation of a new work schedule process. Emergency core cooling systems were maintained in a highly reliable state. However, other equipment covered within the scope of the Maintenance Rule experienced some failures that were preventable. Notable examples included problems with the emergency diesel generator (EDG) air system and the reactor water cleanup system. We plan to perform the normal core inspection program in the maintenance area. In addition, initiative inspections are planned to review the new work control process, the predictive maintenance program and the Maintenance Rule program implementation.

The engineering organization has contributed to improved plant operation through the implementation of improved technical specifications and efforts to reduce the number of temporary plant modifications. However, the engineering organization was slow to resolve longstanding equipment problems regarding main steam relief valve acoustic monitors and feedwater isolation valves. In addition, the engineering organization significantly delayed taking corrective actions for two degraded conditions involving EDG fuel oil tanks. We plan to perform the normal core inspection program in the engineering area. In addition, initiative inspections are planned to review the engineering organization involvement in the work control and corrective action programs.

Performance in the plant support functional area continued to be very effective. The occupational radiation protection program, radioactive liquid and gaseous effluent control programs and the radioactive environmental and meteorological monitoring programs were effective. The implementation of the security and emergency preparedness programs was also effective. The fire protection program continued to be acceptable, with PP&L having established

acceptable corrective actions for identified fire protection issues. We plan to perform the normal core inspection program in the plant support area. In addition, an initiative inspection to review the major upgrades being made to security system equipment and an operational safeguards response evaluation are planned.

PP&L performance in identifying and correcting problems at the station was deficient on a number of important issues. While the threshold for identifying problems was appropriately low, on some occasions (e.g. July 1998 automatic reactor shutdown during startup, core spray system design errors and EDG fuel oil tank issues), the root cause analyses and corrective actions were narrowly focused and not timely, in part because of some weaknesses in communication and coordination among work groups. In addition, recurrence of some problems, such as the emergency diesel generator cooldown cycle trips and reactor water cleanup seal purge pump failures was attributed, in part, to limited trending of corrective action program data. The effectiveness of your corrective action program will be assessed as part of the planned core and initiative inspections in the four functional areas.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were considered during this PPR process to arrive at an integrated view of licensee performance trends. The PIM includes items summarized from inspection reports or other docketed correspondence between the NRC and Pennsylvania Power and Light. The NRC does not attempt to document all aspects of licensee programs and performance that may be functioning appropriately. Rather, the NRC only documents issues that the NRC believes warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since the last NRC inspection report was issued, but had not yet received full review and consideration. This material will be placed in the PDR as part of the normal issuance of NRC inspection reports and other correspondence.

This letter advises you of our planned inspection effort resulting from the Susquehanna Steam Electric Station PPR review. It is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Enclosure 2 details our inspection plan through January 2000. Also included in the plan are NRC non-inspection activities. The rationale or basis for each inspection outside the core inspection program is provided so that you are aware of the reason for emphasis in these program areas. Resident inspections are not listed due to their ongoing and continuous nature.

Because of the anticipated changes to the inspection program and other initiatives, this inspection schedule is subject to revision. Any changes to the schedule listed will be promptly discussed with your staff. If you have any questions, please contact Curtis Cowgill of my staff at (610) 337-5233.

Sincerely,

Original Signed By:

A. Randolph Blough, Director
Division of Reactor Projects

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

Enclosures: 1. Plant Issues Matrix
2. Inspection Plan

cc w/encl:
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G. Kuczynski, General Manager - SSES
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United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

Region I
SUSQUEHANNA

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
01/04/1999	1998012	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: 1C Ter:	During a planned plant process computer outage, PP&L removed one of the two methods being utilized to monitor suppression pool average water temperature and disabled the initial suppression pool water high temperature control room overhead annunciator. PP&L did not recognize that Unit 2 had entered two limiting conditions for operations. This resulted in a violation of minor significance because suppression pool bulk temperature did not exceed 90 degrees Fahrenheit. (Section O4.1)
01/04/1999	1998012	Pri: OPS Sec:	NRC	NEG	Pri: 1C Sec: Ter:	In December 1998, PP&L incorrectly implemented a complex residual heat removal service water system Technical Specification Interpretation (TSI). Previous to this event in October, 1998, PP&L did not implement this TSI due to a lack of a reference to the TSI. In both instances PP&L returned the equipment to an operable status within the required time limit specified in the TSI. PP&L corrective actions include planned revisions to the TSI and ultimately removal of all TSIs. (Section O3.1)
01/04/1999	1998012	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: 2A Ter:	The operator response to a Unit 1 loss of main condenser offgas system was excellent. Timely restoration of the offga equipment by nuclear plant operators enabled plant control operators to stabilize the plant in a safe condition. (Section O1.1)
01/04/1999	1998012	Pri: OPS Sec: MAINT	NRC	POS	Pri: 5A Sec: 5C Ter: 2A	Management's decision to stroke the Unit 1 outboard main steam isolation valve (MSIV), prior to the required surveillance test, was proactive and resolved a potential safety problem that could have resulted in a higher than expected pressure increase during a postulated MSIV closure event. (Section M1.1)
11/23/1998	1998011	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: 1C Ter:	Plant operator building rounds were thorough and properly maintained. Communications between control room and field operators were good, operations personnel were knowledgeable of their responsibilities and control board awareness was good. However, the inspectors observed inconsistencies in the number of identified leaking safety relief valves on multiple Plant Control Operator and Unit Supervisor turnover sheets during the week of October 19, 1998, and operations personnel were unsuccessful in starting the "A" Turbine Building Filter Exhaust Fan because they were unaware that a blocking permit was still in effect on the fan dampers' air supply.
11/23/1998	1998011	Pri: OPS Sec:	NRC	NEG	Pri: 1C Sec: Ter:	PP&L identified several problems associated with the implementation of Technical Specifications (TS), including a missed surveillance test (drywell floor drain sump level instrumentation), a PP&L determination that prior surveillances for the source range monitors were not adequately performed, and an instance where a more conservative TS Interpretation was not recognized. In each case, the inspectors concluded PP&L took prompt and effective initial corrective actions.
11/23/1998	1998011	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 2A Ter:	The observed operator performance during the October 9, 1998, startup was good. Changes made to plant procedures in response to a previous event were effective in minimizing operator distractions and resulted in improved control of core reactivity. However, operators were challenged by minor equipment problems and discrepancies between training and actual operation of nuclear instrumentation.
11/23/1998	1998011-01	Pri: OPS Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	PP&L identified that four eighteen month logic system functional feedwater/main turbine trip system actuation instrumentation tests, required by TS, were missed. PP&L's corrective actions, including procedure and programmatic actions, were good. This did not represent a repetitive condition because it resulted from a single failure to establish an adequate surveillance procedure. Therefore, this non-repetitive, licensee identified violation is being treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
11/23/1998	1998011-02	Pri: OPS Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	The failure to perform a monthly channel functional test on four SPOTMOS alarm relays was a violation of TS 4.6.2.1.c.2, functions 3a, b, c, and d surveillance requirements. This licensee-identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Date: 04/06/1999
Time: 16:21:51

Region 1
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
11/23/1998	1998011-03	Pri: OPS Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	The failure to establish a continuous fire watch within one hour of halon system inoperability was a violation of TS 3.7.6.4 action "a" requirements. This non-repetitive licensee-identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
11/23/1998	1998011-04	Pri: OPS Sec:	Licensee	NCV	Pri: 1C Sec: Ter:	PP&L identified, in a Licensee Event Report, that a one hour fire watch was established, instead of a continuous fire watch, as required by TS. PP&L's corrective actions, including procedure and programmatic actions, were good. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
10/12/1998	1998010	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 2A Ter:	The licensee conducted plant operations in accordance with SSES procedures, and established effective equipment alignment and operability. The alignment of the Essential Service Water, Residual Heat Removal Service Water, Spent Fuel Pool Cooling Water, and Reactor Water Cleanup systems was determined to be adequate. The material condition of these systems was adequate.
10/12/1998	1998010-05	Pri: OPS Sec:	Self	NCV	Pri: 4B Sec: 4C Ter:	PP&L identified in LER 50-387/98-008 that a test procedure error resulted in inadvertently de-energizing a portion of Secondary Containment Isolation Logic for about fourteen hours, a time in excess of that allowed by technical specifications. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
10/12/1998	1998010-06	Pri: OPS Sec:	Licensee	NCV	Pri: 5A Sec: Ter:	PP&L identified in LERs 50-388/98-001, 50-388/98-003, and 50-388/98-004 an inadequate surveillance that resulted from a word processing software conversion error. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
10/12/1998	1998010	Pri: OPS Sec: MAINT	NRC	NEG	Pri: 1B Sec: 2A Ter:	Operators responded adequately to an unplanned Unit 1 scram on October 3, 1998. A corroded connection on a potential transformer resulted in a main generator protective relay actuation which, in turn, caused a generator trip and subsequent reactor scram. PP&L's corrective actions were adequate.
10/12/1998	1998010	Pri: OPS Sec: MAINT	NRC	NEG	Pri: 1B Sec: 2A Ter:	Operators were challenged and responded appropriately to several equipment malfunctions and minor plant transients including oil injection into Unit 1 reactor coolant due to a reactor water cleanup system fault, a Unit 2 main generator transient during main turbine control valve testing, and a Unit 2 unexpected half-scram, due to a recirculation flow unit failure. Appropriate SSES procedures were adhered to and actions were adequately performed, communicated and documented.
08/31/1998	1998007	Pri: OPS Sec:	NRC	NEG	Pri: 1B Sec: Ter:	On July 2, 1998, a Unit 2 scram during plant startup occurred due to poor reactivity control management. Procedures did not contain sufficient restrictions for reactivity manipulations of Group 2 control rods, operating crew team dynamics and shift management and supervisory oversight were not effective in preventing the scram. After criticality but before the point of adding heat was achieved, control rod withdrawals were stopped for about 60 minutes. During this time, core decay heat caused reactor coolant temperature to increase, returning the core to a subcritical condition. With the core now subcritical, and lacking specific procedural restrictions, a Plant Control Operator (PCO), with approval of the senior reactor operator responsible for reactivity management, continuously withdrew a Group 2 control rod. The continuous rod withdrawal caused relatively high reactivity addition and power increase rates. Two PCOs attempted to up-range intermediate range monitors (IRMs) to keep the IRMs on scale. Each PCO down-ranged an IRM, in error, resulting in a reactor scram.

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Region I
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
08/31/1998	1998007	Pri: OPS Sec: 	NRC	NEG	Pri: 3A Sec: 5A Ter:	The startup training portion of the SSES licensed operator re-qualification program was adequate. However, on July 2, 1998, operators departed from the startup training by using two Plant Control Operators to operate the intermediate range monitor range switches. PP&L training and condition report action items on training in support of the July 3, 1998, startup were adequate.
08/31/1998	1998007	Pri: OPS Sec: 	NRC	POS	Pri: 1B Sec: 1C Ter:	PP&L's initial corrective actions following the Unit-2 scram on July 2, 1998, were adequate, including the activities of the Event Review Team, Plant Operations Review Committee, and Independent Safety Engineering Group.
08/31/1998	1998007	Pri: OPS Sec: 	NRC	POS	Pri: 1C Sec: 2A Ter:	The licensee conducted plant operations in accordance with SSES procedures, and established effective equipment alignment and operability. The alignment of the Ultimate Heat Sink, Reactor Water Cleanup and Transverse Incore Probe systems was determined to be adequate. The material condition of both units was adequate.
08/31/1998	1998007	Pri: OPS Sec: 	NRC	POS	Pri: 1C Sec: 3A Ter:	Based on inspector review of a sample of 38 Operability Determinations (ODs) and Condition Report (CR) action items, PP&L adequately identified degraded conditions on safety related equipment, adequately initially resolved the degraded condition, and if appropriate, developed adequate long term corrective actions.
08/31/1998	1998007-01	Pri: OPS Sec: 	NRC	VIO IV	Pri: 4B Sec: 5A Ter: 5C	PP&L failed to promptly identify and take corrective actions for a significant condition adverse to quality that could have prevented the July 2, 1998 reactivity control scram event. PP&L failed to initiate a condition report following a June 26, 1998, reactivity control event in which continuous Group 2 rod withdrawal caused a relatively high reactivity addition rate and a corresponding high rate of power increase which required operator action to mitigate. On July 2, 1998, a similar Group 2 control rod withdrawal led to a reactor scram. The failure to initiate a condition report was a violation of 10CFR 50 Appendix B Criterion XVI.
08/31/1998	1998007-03	Pri: OPS Sec: 	Licensee	NCV	Pri: 1C Sec: 5A Ter:	PP&L identified in LER 50-387/98-008 that the position indication for some primary containment isolation valves had not been tested as required by Technical Specifications. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
01/04/1999	1998012	Pri: MAINT Sec: 	NRC	POS	Pri: 3A Sec: Ter:	The Unit 2 high pressure coolant injection (HPCI) system outage was well planned and executed. The pump and turbine equipment areas were maintained as clean areas which resulted in an excellent work environment. Excellent coordination of the HPCI post maintenance test minimized the heat addition to the suppression pool. (Section M1.1)
01/04/1999	1998012-01	Pri: MAINT Sec: 	Licensee	NCV	Pri: 2B Sec: Ter:	PP&L identified that channel functional surveillance tests of the source range monitors did not include the indication portion of the channels as acceptance criteria, as required by Technical Specifications. PP&L's proposed and completed corrective actions, including procedure and programmatic actions, were good. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. LER 50-387/388/98-017 is closed. (Section O8.1)
01/04/1999	1998012	Pri: MAINT Sec: OPS 	NRC	POS	Pri: 3A Sec: 5A Ter: 1C	Instrumentation and control technicians promptly reported an activity that led to the foreign material addition to the Unit 2 standby liquid control (SLC) tank. The technicians, actions were representative of a good safety culture to report work activity problems. The shift supervisor's continuous operability assessment led to the appropriate SLC pump operability determination and the timely removal of all foreign material from the SLC tank. (Section M1.1)

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

Date: 04/06/1999
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Region I
SUSQUEHANNA

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
11/23/1998	1998011	Pri: MAINT Sec: 	NRC	NEG	Pri: 2A Sec: Ter:	Operators and maintenance technicians responded properly to numerous equipment problems. Previous analysis and completed corrective actions have not been fully effective at preventing recurrence of some equipment problems. Examples included repetitive instances of Unit 2 containment instrument gas header pressure loss due to a stuck open check valve, "C" emergency diesel failure to start, and a repetitive steam leak on reactor feedwater pump turbine steam supply valve HV-12710C requiring a second on-line leak seal repair.
11/23/1998	1998011	Pri: MAINT Sec: 	NRC	POS	Pri: 2B Sec: Ter:	The inspectors concluded that the PP&L method to assess plant risk for on-line/emergent work, by reviewing the work in accordance with the current revision of the Susquehanna Team Manual and quality assurance procedures, meets the intent of the maintenance rule.
11/23/1998	1998011	Pri: MAINT Sec: 	NRC	POS	Pri: 5A Sec: Ter:	PP&L Management's proactive response to the residual heat removal service water pump shaft failure aggressively resolved this potential common cause failure.
10/12/1998	1998010	Pri: MAINT Sec: 	NRC	NEG	Pri: 1B Sec: 2A Ter:	Operators and maintenance technicians were challenged and responded well to several degraded material conditions, including a minor steam leak on the Unit 1 feedwater check valve, a Unit 2 electro-hydraulic control system power supply failure, and a minor steam leak on a Unit 2 pressure sensing line to a pressure switch for the Main Steam Low Pressure Isolation logic. Appropriate SSES procedures were adhered to and actions were adequately performed and documented.
10/12/1998	1998010-02	Pri: MAINT Sec: 	Licensee	NCV	Pri: 2A Sec: 5A Ter: 5C	PP&L identified in LERs 50-387/98-001, 50-387/98-006, 50-388/98-002, and 50-388/98-006 that continuous vent sampling, as required by Technical Specifications, was not performed on four separate occasions, over a four month period, due to sample tubing separation from its connectors. PP&L determined the cause to be age related loss of resilience of the tubing. The licensee's corrective actions were adequate. These non-repetitive, licensee identified and corrected violations are being treated as a non-cited violation.
10/12/1998	1998010-04	Pri: MAINT Sec: 	Licensee	NCV	Pri: 4C Sec: 5A Ter:	PP&L identified in LER 50-387/98-005 that the test frequency for nine check valves exceeded the inservice testing program test frequency. The appropriate tests were performed with adequate results. The licensee's corrective actions, including procedure and programmatic corrective actions, were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
10/12/1998	1998010-07	Pri: MAINT Sec: 	Licensee	NCV	Pri: 2A Sec: 5A Ter: 5C	PP&L identified continuous vent sampling, as required by Technical Specification (TS), was not performed on three separate occasions, over a four day period; during this same period, sample flow rate estimates were not completed within the TS time limit on one occasion. These events involved the mechanical failure of a sample pump, inadequate temporary installation and operation of a backup sampling system, and inadequate attention to detail by non-licensed technicians. The licensee's corrective actions were adequate. These non-repetitive, licensee identified and corrected violations are being treated as a non-cited violation.
10/12/1998	1998010-03	Pri: MAINT Sec: ENG 	Licensee	NCV	Pri: 4C Sec: 5A Ter:	PP&L identified in LER 50-387/98-002 pressure instruments that were not leak rate tested as required by Technical Specifications. A Notice of Enforcement Discretion, requested by the licensee, was approved by the NRC on February 3, 1998. The licensee completed testing with adequate results. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Region I
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
09/18/1998	01014-EA1998140	Pri: MAINT Sec:	NRC	VIO IV	Pri: 5B Sec: Ter:	Contrary 10 CFR 50 Appendix B Criterion XVI, Corrective Action, PP&L failed to promptly identify and correct a condition adverse to quality involving the depressurization of the SLCS accumulators. Specifically, prior to September 1997, PP&L did not initiate Condition Reports, nor perform an evaluation to justify that the ability of the SLCS to perform its safety function was not adversely impacted when the accumulators were found below the pressure required by procedure. Additionally, following maintenance on both Unit 1 SLCS accumulators in September 1997, PP&L did not recognize that the caps on the accumulator gas valves were apparently improperly tightened causing the valves to leak. Although your staff recognized in September 1997 that depressurization of the accumulators could adversely impact the operability of the SLCS, the degraded condition of the Unit 1 accumulators was not identified until November 25, 1997.
08/31/1998	1998007-02	Pri: MAINT Sec:	Licensee	NCV	Pri: 2A Sec: 5A Ter: 5B	PP&L identified in LER 50-387/97-022 that the primary coolant degasifier exhaust treatment system may have been degraded, due to water intrusion and wetting of the charcoal filter, and had not been surveillance tested, as required by Technical Specification. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
01/04/1999	1998012	Pri: ENG Sec:	NRC	POS	Pri: 3A Sec: Ter:	System and maintenance engineers provided good outage support at the high pressure coolant injection (HPCI) jobsite. Also, the HPCI system engineer monitored the post maintenance surveillance test and provided timely feedback to the operator performing the test. (Section M1.1)
01/04/1999	1998012-02	Pri: ENG Sec: MAINT	NRC	VIO IV	Pri: 4C Sec: 5C Ter: 2A	PP&L failed to adequately translate the system design, from a modification, into appropriate specifications, drawings, and procedures, and on two separate occasions substituted gasket material without a review for suitability of materials. The inspectors determined this was an apparent violation of 10 CFR 50 Appendix B, Criterion III, Design Control. PP&L's initial corrective actions were good. However, the proposed final corrective actions, which appeared reasonable to correct the original condition, were not performed in a timely manner. In addition, PP&L failed to recognize that SSES design control requirements had not been followed, when a different type gasket was installed in the plant. URI 50-387,388/98-06-03 is closed. (Section E8.2)
11/23/1998	1998011	Pri: ENG Sec:	NRC	NEG	Pri: 4A Sec: Ter:	The inspectors concluded that the lack of an adequate feedwater loop seal existed since initial plant startup. Once the lack of an adequate loop seal and other related issues were documented in condition reports, PP&L performed thorough operability determinations. PP&L's completed and planned corrective actions were well planned and thorough.
11/23/1998	1998011-05	Pri: ENG Sec:	Licensee	NCV	Pri: 4A Sec: 4C Ter:	PP&L identified inconsistencies within the FSAR and TS for the feedwater containment boundary penetrations. These inconsistencies resulted in PP&L not requesting an exemption from 10 CFR 50 Appendix J testing. PP&L's completed corrective actions and scheduled corrective actions were thorough and complete. This non-repetitive, PP&L identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
10/12/1998	1998010-01	Pri: ENG Sec:	Licensee	NCV	Pri: 5A Sec: 5B Ter: 5C	PP&L identified in Licensee Event Report 50-387/97-024 a single failure mechanism that could enable drywell and suppression chamber atmospheres to communicate through a bypass line, following a postulated loss of coolant accident. The licensee's interim corrective actions and planned modifications were adequate to resolve this issue. In accordance with the NRC Enforcement Policy, Section VII.B.3, Violations Involving Old Design Issues, the NRC is exercising enforcement discretion and not citing this violation.
10/02/1998	1998005	Pri: ENG Sec:	NRC	NEG	Pri: 4B Sec: 4C Ter: 5A	PP&L Nuclear Department Administrative Procedures provide adequate guidance to determine if a 10 CFR 50.59 unreviewed safety question exists. These documents clearly delineate the responsibilities for various processes within the 10 CFR 50.59 program and provide adequate controls for record retention and reporting the results of the evaluations. The team noted several instances in which the required 10 CFR 50.59 documentation was not completed for condition reports dispositioned "use-as-is," as required by program procedures. However, technical evaluations provided bases for no unreviewed safety question. The failure to implement the administrative procedure for 10 CFR 50.59 evaluations is considered a minor violation of procedural adherence, and is not being cited for formal enforcement action.

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PLANT ISSUE MATRIX

By Primary Functional Area

Region 1
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
10/02/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 4C Ter:	The core spray system was found to be installed and operated in a manner consistent with the design requirements for electrical power supplies as described in the update final safety analysis report and design basis documents. Calculations reviewed were adequate to assure that the components and control circuits associated with the operation of the core spray system had sufficient direct current voltage to perform the intended design function. Refueling testing and emergency diesel load calculations demonstrated the adequacy of the electrical power supply to the core spray system components.
10/02/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 4C Ter:	The inservice testing program for the core spray system was sound. Program documents were found to be well organized, with appropriate records of relief requests, test deferral justifications and supporting technical information. Test failures identified during relief valve testing were appropriately dispositioned. The industry experience review program appropriately considered industry information.
10/02/1998	1998005-01	Pri: ENG Sec:	NRC	VIO IV	Pri: 4B Sec: 5A Ter: 5C	Discrepancies identified in surveillance test procedures indicated weak engineering support in assuring acceptance criteria bases were sound. The acceptance criteria for Unit 1 core spray test pressure did not take into account system configuration differences between Units 1 and 2, even though these differences were identified in design calculations. The Unit 2 core spray quarterly flow surveillance test inappropriately included a non-conservative correction factor for which no basis could be identified. Although the consequence of these discrepancies did not result in system inoperability, the above failures to incorporate the requirements and acceptance limits contained in applicable design documents are two examples of a violation of 10 CFR Part 50, Appendix B, Criterion III. The resolution of core spray flow concerns reflected a lack of questioning attitude. PP&L missed opportunities to identify that the loss of coolant accident (LOCA) analysis did not reflect the correct core spray flow in the facility's design. The failure to ensure that the design basis is correctly translated into the LOCA analysis is a third example of a violation of the design control requirements of 10 CFR Part 50, Appendix B, Section III.
10/02/1998	1998005	Pri: ENG Sec: OPS	NRC	NEG	Pri: 1C Sec: 4B Ter: 5A	PP&L's program and process controls for the identification of conditions adverse to quality were adequate. The team's review of sixty condition reports indicated that the initiation threshold was sufficiently low. However, two conditions, which were not documented, reflected inconsistency in the initiation of condition reports. A pressurization of a portion of Unit 1 core spray discharge piping was not documented in a condition report, although a similar problem with the residual heat removal system was documented. An unexpected power increase was not document in a condition report; this event was also documented in NRC inspection report 50-387,388/98-07.
08/31/1998	1998007-05	Pri: ENG Sec:	Licensee	NCV	Pri: 4C Sec: 5A Ter:	PP&L identified in LER 50-387/98-004 that a portion of Residual Heat Removal system logic had not been surveillance tested, as required by Technical Specification. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.
08/31/1998	1998007-06	Pri: ENG Sec:	NRC	URI	Pri: 4A Sec: 4B Ter: 5A	PP&L took adequate initial corrective actions for a non-conservative ultimate heat sink (UHS) Technical Specification (TS) surveillance requirement that resulted from a PP&L evaluation. However, since the PP&L TS surveillance requirement acceptance criteria for key UHS parameters do not consider instrument measurement uncertainty in establishing the acceptance criteria, an unresolved item was identified to review a PP&L assessment of margins available in the UHS analysis and a PP&L assessment of measurement uncertainty as applied to the surveillance procedures.
01/04/1999	1998012	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A Sec: Ter:	The security computer replacement, in the Security Control Center, was well controlled and completed with minimal interruptions to the normal plant access areas. A significant improvement was noted for the plant accountability capabilities. (Section S2)
11/23/1998	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A Sec: 3B Ter:	PP&L implemented overall effective surveys, monitoring, and control of radioactive materials and contamination. The surveys, monitoring, and controls were performed with calibrated and properly used devices. Personnel and area contamination rates were properly tracked and trended.

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PLANT ISSUE MATRIX

By Primary Functional Area

Date: 04/06/1999
Time: 16:21:51

Region I
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
11/23/1998	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A Sec: 3B Ter:	PP&L's self-identification and corrective action processes in the area of radiation protection were effective. Quality Assurance surveillances, corporate assessments, and self-assessments continued to be effective in identifying, at a low threshold, deficiencies and improvement opportunities. Corrective actions were implemented for findings.
11/23/1998	1998011	Pri: PLTSUP Sec:	NRC	STR	Pri: 3A Sec: 3B Ter:	PP&L implemented effective radiological controls at SSES. Access controls to radiologically controlled areas were effective, appropriate occupational exposure monitoring devices were provided and used, personnel occupational exposure was maintained within applicable regulatory limits and As-Low-As-Reasonably-Achievable (ALARA), and the radiation work permit program was implemented properly for control of radiological work.
10/19/1998	02014	Pri: PLTSUP Sec:	NRC	VIO IV	Pri: 4A Sec: Ter:	PP&L failed to properly implement the requirements of National Fire Protection Association Standards 13, 15, 72D, and 72E in the design and installation of the SSES fire detection and suppression systems, as required by SSES Fire Protection Review Report (FPRR), Sections 4.1.2, 4.3, and Table 5.0-1, sections E.1, and E.3.c. This was a violation of Operating License Conditions to implement and maintain provisions of the approved fire protection program, as described in the SSES FPRR.
10/19/1998	03014	Pri: PLTSUP Sec:	NRC	VIO IV	Pri: 4A Sec: 1C Ter:	PP&P failed to provide 8-hour battery powered emergency lighting in all areas of the plant requiring manual actions for safe shutdown; as required by SSES Fire Protection Review Report (FPRR), Section 3.3.2 and Table 5.0-1, section D.5.a. This was a violation of Operating License Conditions to implement and maintain provisions of the approved fire protection program, as described in the SSES FPRR.
10/19/1998	05014	Pri: PLTSUP Sec:	NRC	VIO IV	Pri: 4A Sec: 4C Ter:	PP&L failed to provide tools and equipment necessary to make connection from the fire water system to the condensate transfer system to assure availability of the keepfill system, which is necessary to prevent water hammer in the High Pressure Coolant Injection, Reactor Core Isolation Cooling, Core Spray, and Residual Heat Removal system discharge piping, as required by SSES Fire Protection Review Report (FPRR), Section 3.3.1.1. This was a violation of Operating License Conditions to implement and maintain provisions of the approved fire protection program, as described in the SSES FPRR.
10/19/1998	01014	Pri: PLTSUP Sec: ENG	NRC	VIO IV	Pri: 4A Sec: 4C Ter:	PP&L failed to provide a shutdown methodology that would have maintained the indicated reactor vessel water level above the top of the active fuel during a postulated fire, as required by SSES Fire Protection Review Report (FPRR), Section 3.0. This was a violation of Operating License Conditions to implement and maintain provisions of the approved fire protection program, as described in the SSES FPRR.
10/12/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 2A Sec: 2B Ter: 3A	SSES security facilities and equipment in the areas of protected area assessment aids, protected area detection aids, and personnel search equipment were determined to be well maintained and reliable and met PP&L's commitments and NRC requirements.
10/12/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 2B Sec: 3A Ter:	The licensee effectively maintained and implemented a radiological environmental monitoring program in accordance with regulatory requirements.
10/12/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 2B Sec: 3A Ter:	Generally, the licensee effectively maintained system operability and performed channel calibrations and channel functional tests for the meteorological instrumentation. A NRC identified concern with the adequacy of the channel calibration methodology involving the wind speed channel was entered into PP&L's corrective action system for resolution.

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PLANT ISSUE MATRIX

Region I
SUSQUEHANNA

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The licensee maintained effective radioactive liquid and gaseous effluent control programs. The Offsite Dose Calculation Manual contained sufficient specification and instruction to acceptably implement and maintain the radioactive liquid and gaseous effluent control programs.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The licensee established, implemented, and maintained an effective radiation monitoring system program with respect to electronic and radiological calibrations. As a result of self-assessment initiatives, the licensee implemented efforts to improve radiation monitoring system reliability. Licensee tracking and trending efforts provided sufficient information to assess radiation monitoring system performance.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The licensee established, implemented, and maintained an effective ventilation system surveillance program with respect to charcoal adsorption surveillance tests, high efficiency particulate mechanical efficiency tests, and air flow rate tests.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The licensee established, implemented, and maintained an effective quality assurance program for the radioactive effluent control program with respect to audit scope and depth, audit team experience, and response to audit findings. The licensee also implemented an effective quality control program to validate measurement results for radioactive effluent samples.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	PP&L conducted security and safeguards activities in a manner that protected public health and safety in the areas of alarm stations, communications, and protected area access control of personnel, packages, and vehicles. This portion of the program, as implemented, met PP&L's commitments and NRC requirements.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	Security and safeguards procedures and documentation were properly implemented. Event logs were properly maintained and effectively used to analyze, track, and resolve safeguards events.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	Security training was conducted in accordance with the training and qualification plan and, based upon interviews and inspector observations, was considered effective.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The level of management support was adequate to ensure effective implementation of the security program, as evidenced by adequate staffing levels and allocations of resources to support programmatic needs.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The review of PP&L's audit of the security program indicated that the audit was comprehensive in scope and depth, the audit findings were reported to the appropriate level of management, and the program was being properly administered. In addition, a review of the documentation applicable to the self-assessment program, indicated that the program as being effectively implemented to identify and resolve potential weaknesses.

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PLANT ISSUE MATRIX

By Primary Functional Area

Region I
SUSQUEHANNA

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter: 5A	The audits and self-assessments were of sufficient depth to assess the implementation of the Radiological Environmental Monitoring Program and the Meteorological Monitoring Program.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 5A Ter:	The environmental laboratory continued to implement effective Quality Assurance and Quality Control programs for the Radiological Environmental Monitoring Program samples, and continued to provide effective validation of analytical results.
10/12/1998	1998010	Pri: PLTSUP Sec: 	NRC	POS	Pri: 3A Sec: Ter:	Security force members adequately demonstrated they had the requisite knowledge necessary to effectively implemen the duties and responsibilities associated with their position.
08/31/1998	1998007	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The solid radioactive waste management program was effective based on proper implementation of the program by knowledgeable personnel, the existence of appropriate procedures and controls, and the acceptable condition of facilities and equipment. The Process Control Program was complete, detailed, and provided an accurate description of the waste types generated, waste stream sampling and analyses performed, and waste processing methods used.
08/31/1998	1998007	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The program to transport low level radioactive waste and other radioactive materials was generally effective. The shipping manifests and supporting documentation were properly prepared, radiation and contamination limits were met, waste was properly classified, and shipments were properly typed as to their Department of Transportation class.
08/31/1998	1998007	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The NRC and Department of Transportation training and retraining requirements for radioactive waste group personnel were met. While overall performance was effective, compensatory measures were initiated to assure that personnel training and qualification in the use and application of programs and procedures used to document waste shipments, and classify waste type, was sufficient.
08/31/1998	1998007	Pri: PLTSUP Sec: 	NRC	POS	Pri: 2B Sec: 3A Ter:	The self-assessment and corrective action programs, in the area of radioactive waste and radioactive material transportation, were effective. The Technical Specification required audit was extensive in scope and depth, and surveillance and quality control inspections identified items for enhancement and corrective action. The threshold for generation of condition reports was low.
08/31/1998	1998007	Pri: PLTSUP Sec: 	NRC	POS	Pri: 3A Sec: Ter:	The licensee's presentation of training to the offsite emergency response agencies was good and included all the topics required by NRC regulations.
08/31/1998	1998007-04	Pri: PLTSUP Sec: 	Licensee	NCV	Pri: 2B Sec: 5A Ter:	PP&L identified in LER 50-387/98-003 that a fire barrier wall in the emergency diesel generator building was not included in fire protection surveillance procedures. The licensee's corrective actions were adequate. This non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation.

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PLANT ISSUE MATRIX
By Primary Functional Area

Date: 04/06/1999
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Legend

Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

Template Codes:

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
7/20/98	Positive	IR 98-06	N	OPS	1A 1C 3B	Each of the CRs contained an operability determination (OD). With the exception of the operability determination related to the acoustic monitor and water intrusion into the "A" emergency diesel generator fuel oil storage tank, the ODs were found to have been adequately performed. (Section O4.1)
7/20/98	Negative	IR 98-06	N	OPS	1A 1C 3A	The NRC identified a work control evolution that had removed redundant Emergency Switch Gear Coolers (ESGC) from service. When brought to the licensee's attention, the licensee entered the appropriate Technical Specification Interpretation, secured the work evolution and returned one of the ESGC divisions within the required 12 hours. (Section O1.4)
7/20/98	Positive	IR 98-06	N	OPS	1A 3A	The licensee conducted plant operations in accordance with SSES procedures, and established effective equipment alignment and operability. The alignment of the residual heat removal and core spray systems was found to be adequate. The material condition of both units was adequate with the exception of the Unit 1 acoustic monitor and the Unit 2 condensate filtration flow element. (Section O1.2)
6/8/98	Positive	IR 98-03	N	OPS	1A 3A	A sample of operator log entries was observed to be complete and accurate. A specific series of operator log entries accurately reported equipment status tag data, Technical Specification requirements, and condition report data. (Section O2.2)
6/8/98	Positive	IR 98-03	N	OPS	1A 3A	The alignment of eight safety related systems were found to be adequate. The licensee conducted plant operations in accordance with SSES procedures, and established effective equipment alignment and operability. (Section O1.2)
6/8/98	Positive	IR 98-03	L	OPS	1B 3B	Operator response to the discovery of a misaligned resin effluent valve was in accordance with the PP&L Equipment Status Control Event procedure. Operators responded well and conservatively. There was no safety impact associated with the misaligned component. (Section O2.1)
6/8/98	Positive	IR 98-03	N	OPS	1A 3A	Operator activities in support of the Unit 1 shutdown for refueling, the Unit 1 restart following refueling, and Unit 2 shutdown to repair the 2A recirculation pump were adequate and conservative. (Section O1.1)

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
6/8/98	Negative	IR 98-03	N	OPS	1A 1C 3B	Twenty seven safety related initial Operability Determinations (ODs) and Condition Reports (CRs) were reviewed in detail and were found to be adequately performed. Two PP&L OD procedural requirements were not being consistently implemented by the licensee (consideration of compounded deficiencies and all applicable operating conditions). Failure to implement these procedural requirements has the potential to affect the quality of ODs, but, no issues of safety significance were identified by the inspectors in the selected sample. (Section O4.1)
6/8/98	Positive	IR 98-03	N	OPS	1B 3B	Operators were observed to respond well to a selection of seven alarmed conditions, including a loss of Residual Heat Removal system cooling and an infrequently occurring condition (power coast down). Appropriate SSES procedures were adhered to, operability and impact on plant equipment were controlled, and actions were adequately performed, communicated and documented. (Section O1.3)
5/14/98	Positive	IR 98-02 LER 97-04 NCV 98-02-01	S	OPS	1B 2A	A Unit 1 recirculation pump increased speed to its high speed stop, resulting in a reactor power increase to approximately 103.5%. The operators responded appropriately to the alarmed transient condition and limited the time that the licensed full power limit or 102% was exceeded, to approximately one minute. The licensee determined that the cause of the transient was a failed fuse in a Bailey controller and replaced the fuse and additional suspect components.
5/14/98	Positive	IR 98-02	N	OPS	1C	The two Plant Operations Review Committee (PORC) meetings observed demonstrated that PORC conducted in-depth and conservative reviews and demonstrated a conservative and safe approach.
5/14/98	Positive	IR 98-02	N	OPS	1A 3A	A sample of operator log entries was determined to be complete and accurate. A specific series of operator log entries was compared to condition report data and determined to be consistent with the data in condition reports.
5/14/98	Positive	IR 98-02	L	OPS	3A 5A	Operator response to the discovery of a misaligned valve was in accordance with the PP&L Equipment Status Control Event procedure. Operators responded well and conservatively. There was no safety impact associated with the misaligned system.
5/14/98	Positive	IR 98-02	N	OPS	1C	Safety permits (tagouts) authorized by the control room were properly prepared. However, due to a weak Work Control review process, the control room operators identified and corrected several errors in the permits, prior to the permit application in the field.

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
5/14/98	Positive	IR 98-02	N	OPS	1A	Operators were observed to respond well to control room alarmed conditions and an infrequently occurring condition (power coast down). Appropriate SSES procedures were adhered to, operability and impact on plant equipment were controlled, and actions were adequately announced and documented.
5/14/98	Positive	IR 98-02	N	OPS	1A	The licensee conducted plant operations in accordance with SSES procedures, and established effective equipment alignment and operability.
5/14/98	Positive	IR 98-02	N	OPS	1A 3B	Licensed and non-licensed operator activities were well performed and communicated. Shift turnovers were observed to be detailed and complete.
3/16/98	NCV Negative	IR 98-01 NCV 98-01-11 NCV 98-01-12	L	OPS	3A 5C	Auxiliary System Operators were not consistently performing radwaste control room panel alarm tests and Plant Control Operator performance issues were identified regarding performance of main control room annunciator alarm tests in the same time period when VIO 50-387, 388/96-270-01022 was issued.
3/16/98	Negative	IR 98-01	L	OPS	3A 5C	PP&L's corrective actions for three procedure violations, associated with the June 1996 "E" emergency diesel generator circuit breaker misalignment, were acceptable. Corrective actions focused on improving operator performance, management oversight, and independent assessment. Subsequent licensee audits of operator performance were acceptable and appropriate actions were taken to validate and verify the quality of computer data used to assess operator performance.

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
3/16/98	NCV LER Negative	IR 98-01 NCV 98-01-03 LER 97-05-00	L	OPS	2A	On March 25, 1997, while the unit was shut down, chemistry technicians were performing a transfer process from the reactor building ventilation stack monitor to the system particulate iodine noble gas (SPING) system. During the transfer, a spurious reactor building criticality monitor alarmed, requiring the evacuation of the area in which the technicians were working. Upon returning to the area the technicians realized that there had been an approximately 20 minute period that continuous sampling of the reactor building vent was not maintained in accordance with Technical Specification (TS) 3.3.7.11. The licensee determined that the reactor building criticality monitor had drifted low which caused the unanticipated alarm. The inspectors reviewed the Licensee Event Report , inspected the licensee's corrective actions and root cause evaluation, conducted an onsite field inspection and determined that there were no safety consequences associated with the failure to continuously monitor the stack release. There were no safety consequences because the unit was shut down and there was a clear pattern of data established both before and after the missed time period. With respect to the criticality alarm drift, the drift was in the conservative direction, and there was no significant pattern of spurious alarms. This TS violation resulted from circumstances not within reasonable licensee control, in that the criticality alarm failure could not have been avoided within the parameters of the licensee's surveillance program.
3/16/98	NCV LER Negative	IR 98-01 NCV 98-01-02 LER 97-03-00	L	OPS	3A	On March 20, 1997, a service water radiation monitor was removed from service. Subsequently a service water sample required by TS was not collected and analyzed within the time specified by TS Limiting Condition for Operation (LCO) Action 3.3.7.10. The TS LCO Action states that with less than the minimum required number of radiation monitors operable, the effluent release pathway may continue for up to 30 days provided that, at least once per eight hours grab samples are collected and analyzed for gross radioactivity at a specific limit of detection. The subject sample was taken and analyzed within fifteen minutes of the required eight hour period. The licensee determined that the root cause of the event was personnel error and entered the involved individual in the PP&L performance improvement process. The inspectors performed a summary review of the Licensee Event Report, the associated condition report and its corrective actions. In addition, onsite field inspections were performed. It was determined there was no safety impact from the delay in taking the effluent sample, because the results of the sample were normal and as expected. Therefore, this non-repetitive, licensee identified and corrected violation is being treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. This LER is closed.

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
3/16/98	Positive	IR 98-01	N	OPS	5A 1C	A selection of Plant Operations Review Committee (PORC) and Susquehanna Review Committee (SRC) activities, covering a 3 month period, were reviewed. NRC determined PORC and SRC, in general, conducted in-depth reviews and demonstrated a conservative and safe approach.
3/16/98	Positive	IR 98-01	N	OPS	1C 3B	The inspector concluded that Susquehanna's licensed operator re-qualification training program was satisfactory overall. The written examinations were adequate, but a section for five of six written examinations were weak. Examination administration was good, and operator performance was generally good with some individual operator deficiencies identified for followup.
3/16/98	Positive	IR 98-01	N	OPS	4A	The licensee's approach to the establishment of alarm setpoints for safety relief valves (SRVs), compensatory measures for a Notice of Enforcement Discretion on the "S" SRV and the control of SRV operability, were acceptable.
3/16/98	Positive	IR 98-01	N	OPS	1B	Operators were observed to respond well to control room alarmed conditions. Appropriate SSES procedures were adhered to, operability and impact on plant equipment were controlled, and actions were adequately announced and documented. Operators identified a slow speed drift of one reactor recirculation pump, on two separate occasions, and responded well to these anomalies.
3/16/98	Positive	IR 98-01	N	OPS	1A	Operator communications were observed to be clear, concise, formal, and in compliance with SSES operations department procedures. Shift turnovers were detailed and complete. In general, communications between plant control operators and nuclear plant operators were observed to be of good quality.
1/19/98	Negative	IR 97-10	N	OPS	3C 1C	Operator performance was reviewed by direct observations, interviews, and evaluations of PP&L self assessments. The inspectors verified the weaknesses, identified by the PP&L self assessments, that were described as environmental factors. Despite the weaknesses, the inspectors verified current operator performance was very good. PP&L management is establishing general approaches to resolve these weaknesses. The identified weaknesses currently have no apparent impact on the safe operation of SSES.
12/8/97	Positive	IR 97-09	N	OPS	1B	Operators responded well on September 1, 1997, when a feedwater pump minimum flow control valve failed open. The licensee initiated a condition report to review the root cause and work authorizations to perform corrective actions. The inspector reviewed the licensee's corrective actions and found them to be adequate.

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Date	Type	Source	ID	SFA	Code	Item Description
12/8/97	Negative	IR 97-09	N	OPS	5A 5B 3B	Several weak initial operability determinations were identified by the inspectors. After discussions with Operations and Nuclear System Engineering personnel, additional information was provided that justified why the equipment was capable of performing its intended safety function. The inspectors noted that PP&L has not provided operability determination training for on shift personnel responsible for initial operability determinations. Operations management is aware of this issue and is planning to enhance training in this area.
12/8/97	Positive	IR 97-09	N	OPS	3A 1A	Licensed operators responded well to specific annunciated plant conditions. Licensed operators were able to clearly describe the reasons for their actions, discuss the impact of their actions upon the safe operation of the units, and fully implement established plant procedures.
10/20/97	Negative	IR 97-07	N	OPS	4B 5B	The initial operability determination for the Unit 2 High Pressure Coolant Injection (HPCI) overspeed trip assembly problem was weak. Nuclear System Engineering personnel overlooked the potential impact on the HPCI injection valve and how this impact could affect the response time to rated flow. PP&L management made a conservative decision to declare HPCI inoperable, pending further evaluation. A subsequent revision of the operability determination provided a good basis for operability. Significant licensee attention was focused on resolution of the problem and the overspeed trip assembly has performed acceptably since the corrective maintenance.
10/20/97	NCV LER Negative	IR 97-07 NCV 97-07-05 LER 97-15-00	L	OPS	5A	During a review of procedures as a follow-up to a previous plant event, PP&L determined that the requirement of Technical Specification Table 3.3.7.10-1, ACTION 101 was not being met. ACTION 101, requires a gross radioactivity analysis on liquid effluent grab samples when the associated effluent monitoring instrumentation is not operable to be performed. Performance of gamma isotopic analysis does not meet the verbatim TS requirement since it does not measure gross radioactivity to a sensitivity of 1E-7 microcurie/ml. The cause of the event was determined to be human performance. It was not recognized that a change to the TSs was required since it was viewed that the isotopic analysis was an improved method of analysis. The isotopic analysis is a better analysis in determining radioactivity in effluents. Corrective actions include: procedure changes to require a gross radioactivity analysis along with the isotopic analysis and a revision to the Technical Specifications.
10/20/97	Positive	IR 97-07	N	OPS	5C	The resolution of several issues by the PP&L Corrective Action Team (CAT) was direct, safety oriented, and conservative. The issues included loose pole pieces on 4 kv electrical breakers and level indication maintenance on the standby liquid control system.

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Date	Type	Source	ID	SFA	Code	Item Description
10/20/97	Positive	IR 97-07	N	OPS	1A 3A	The plant control operators (PCOs) responded well to those alarmed conditions requiring actions. PCOs were able to describe the reasons for their actions and discuss the impact of their actions upon the units. PCO actions were determined to be conservative and in accordance with established plant procedures.
10/20/97	Positive	IR 97-07	S	OPS	1B 5C 3A	A reactor feedwater pump (RFP) minimum flow control valve failed open resulting in a reactor water level induced transient. The Plant Control Operator (PCO) reduced power to approximately 68%, reactor water level was recovered, and the unit was returned to a steady state condition. PCO actions were conservative and in accordance with unit procedures.
10/20/97	Positive	IR 97-07	N	OPS	1A 5C	PP&L management conservatively opted to shut down Unit 2 in response to an increasing trend of unidentified reactor coolant system leakage before reaching Technical Specification (TS) limits. Good management involvement was observed during preparation for the shutdown and an orderly shutdown was conducted with no significant challenges to the operators.
10/20/97	VIO	IR 97-07 VIO 97-07-02	N	OPS	1C 3A	On various occasions prior to October 17, 1997, the General Visual Inspections were not performed during operator rounds as specified in Attachment A to procedure OI-AD-016; in that, inspections of all rotating equipment, protective covers on load centers, and all accessible areas of the plant were not performed on every shift.

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Date	Type	Source	ID	SFA	Code	Item Description
7/20/98	URI Negative	IR 98-06	S	MAINT	2A 5C 5B	On July 3, 1998, the Unit 1 "S" safety relief valve (SRV) acoustic monitor had indication of a malfunction. Maintenance was performed on this monitor and the monitor was returned to service. On July 6, 1998, the Unit 1 "S" SRV acoustic monitor again malfunctioned, with the same indications that occurred on July 3, 1998. Unit 1 was shutdown to repair the monitor. All Unit 1 acoustic monitors were modified during the shutdown to improve equipment reliability. The adequacy of acoustic monitor maintenance instructions and procedures, the adequacy of the operability determination for the "S" acoustic monitor, the adequacy of the diagnostic field techniques used to verify acoustic monitor operability and the adequacy of the corrective actions for previous acoustic monitor failures will be tracked as an URI to obtain further information to determine if the actions were acceptable or represent a violation of NRC requirements. (Section M2.2)
7/20/98	NOED Negative	IR 98-06	S	MAINT	2A 5C 5B	PP&L requested enforcement discretion for Technical Specification requirements concerning a failed acoustic position indicator for the Unit 2 "J" Safety Relief Valve, to avoid an undesirable transient as a result of forcing compliance with a license condition. The NRC approved PP&L's request, on June 15, 1998, after determining the action involved minimal or no safety impact and had no adverse radiological impact on public health and safety. (Section M2.1)
6/12/98	NCV Negative	IR 98-04 NCV 98-04-04 EA 98-350	N	MAINT	4C	Starting in December 1995, PP&L conducted a thorough set of evaluations of the maintenance rule program implementation. These evaluations identified a number of problem areas, however addressing of the issues was delayed. At the time of the team's inspection in June 1998, the corrective actions were in place and the maintenance rule program was appropriately established. Failure to have an adequate maintenance rule program that met the requirements of the rule on July 10, 1996 constituted apparent violations of 10 CFR 50.65. However, this violation is not cited, based on the exercise of discretion in accordance with Section VII.B.6 of the Enforcement Policy.
6/12/98	Negative	IR 98-04	N	MAINT	4C	The licensee's program for assessing the risk of taking equipment out of service when on-line was weak in that undesirable risk configurations could occur for scheduled work as well as for emergent work. While currently not a mandatory requirement, the team concluded that the licensee's process for assessment of plant risk during on-line maintenance does not appear to meet the intent of the maintenance rule. The plant procedure for risk assessment did not cover all risk significant systems and was not utilized for emergent work. However, when a formal risk assessment was required by the plant procedure, the assessment was adequately detailed, developed, and implemented.

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Date	Type	Source	ID	SFA	Code	Item Description
6/12/98	NCV Negative	IR 98-04 NCV 98-04-03 EA 98-350	N	MAINT	4C	The licensee's new periodic maintenance effectiveness assessment procedure was adequate for implementing the requirements of the periodic assessments under 50.65(a)(3). The first periodic assessment did not meet the requirements of the rule by failing to adequately balance reliability and availability and assess the continued adequacy of goals for (a)(1) structures, systems and components. This failure is an apparent violation. However, this violation is not cited, based on the exercise of discretion in accordance with Section VII.B.6 of the Enforcement Policy.
6/12/98	Positive	IR 98-04	N	MANT	4C	Appropriate goal setting was in place for the (a)(1) systems which were reviewed. However, the team observed the corrective actions for (a)(1) systems did not include review of preventive maintenance activities. Correction and preventive maintenance were considered appropriate and effective for the (a)(2) systems reviewed.
6/12/98	Positive	IR 98-04	N	MAINT	3B	The system engineers had excellent knowledge of their systems, and good knowledge of the maintenance rule requirements. The system engineer's involvement and role was found to be a significant positive attribute of the maintenance rule program. In general, system engineers, work coordination managers, and licensed operators appeared able to fulfill their responsibilities under the maintenance rule. Their understanding of rule was acceptable.
6/12/98	NCV Negative	IR 98-04 NCV 98-04-02 EA 98-350	N	MAINT	4C	Several structures, systems and components had exceeded their performance criteria in 1996 or 1997, but were not evaluated and placed in (a)(1) status until as late as June 1998. This was an apparent violation. However, this violation is not cited, based on the exercise of discretion in accordance with Section VII.B.6 of the Enforcement Policy.
6/12/98	Positive	IR 98-04	N	MAINT	4C	The unavailability performance criteria resulted in an acceptable increase in core damage frequency when factored into the probabilistic risk assessment (PRA), and were based on the PRA unavailability data. The reliability criteria were linked to the PRA assumptions and were acceptable.
6/12/98	Positive	IR 98-04	N	MAINT	4C	The risk ranking process was based on probabilistic risk assessment information and was acceptable. Appropriate actions had been taken by the expert panel to compensate for any weaknesses in the probabilistic risk assessment (PRA). The risk ranking process appropriately used the risk achievement worth, risk reduction worth and 90% of cutsets and included considerations for containment systems. Truncation levels and human recovery actions were considered appropriately when evaluating the PRA results.

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Date	Type	Source	ID	SFA	Code	Item Description
6/12/98	VIO SL-IV	IR 98-04 VIO 98-04-01 EA 98-350	N	MAINT	4C	PP&L adequately placed structures, systems and components within the scope of the maintenance rule, with the exception of the Bypass Indication System. Failure to include the Bypass Indication System in the maintenance rule program was an apparent violation of 10 CFR 50.65(b)
6/8/98	Negative	IR 98-03	N	MAINT	3A 3B 2B	Inservice inspections (ISI) were performed acceptably, with qualified personnel and approved procedures. In general, proper implementation, appropriate examination documentation, and adequate PP&L oversight were observed. The ISI were thorough and of sufficient extent to determine the integrity of the components. Non-conforming conditions were adequately identified and reported for disposition. However, two instances of work package problems were identified by the NRC, including an outdated procedure and an inaccurate qualification record, which constituted a violation of NRC document control requirements of minor safety significance. (Section M2.1)
6/8/98	VIO	IR 98-03 VIO 98-03-04	N	MAINT	3A 3B 2B	Two emergency diesel generator (EDG) maintenance activities were inadequate, resulting in a violation of NRC requirements. Under Work Authorization (WA) H50056, dated February 6, 1996, maintenance technicians installed repair parts on the "C" emergency diesel generator (EDG) that had not received proper quality receipt inspections and were potentially defective materials. Under WA H70311, dated September 26, 1997, maintenance technicians installed a defective EDG head on the "A" EDG that had not received a proper quality receipt inspection. The defective head caused a February 3, 1998, EDG performance test abort. (Section M1.4)
6/8/98	Negative	IR 98-03	N	MAINT	3A 3B	Seventeen of nineteen pre-planned maintenance activities observed/reviewed were found to be appropriately conducted and controlled; the remaining two maintenance activities are discussed in detail in other sections of this report. Overall, maintenance procedural controls were determined to be general in nature and did not prescribe some activities performed by maintenance personnel. Specifically, performed activities for which there were no detailed guidance included; emergency diesel generator (EDG) valve grinding, valve lapping technique, and valve seat tightness testing. Each of these activities were identified by the inspectors as potential contributors to a failed EDG performance test. (Section M1.1)
6/8/98	Negative	IR 98-03	N	MAINT	3B 3A 2B	Also, symptomatic of problems in work planning, on at least three occasions, scheduled NDE work was delayed from hours to a day due to various work planning problems. While these delays of themselves did not represent a regulatory concern, the high frequency of delays did appear to be related to weak work planning, which could potentially affect the quality of NDE work, including As-Low-As-Reasonably-Achievable (ALARA). (Section M2.1)

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Date	Type	Source	ID	SFA	Code	Item Description
5/14/98	Positive	IR 98-02	N	MAINT	2A	The present material condition and general housekeeping at SSES were determined to be good. Several minor housekeeping and material condition items that did not affect the system operability were communicated to the licensee for its review.
5/14/98	Positive	IR 98-02	N	MAINT	3A 3B	The surveillance activities observed/reviewed were adequately performed and appropriately controlled. The surveillance activities were accomplished by qualified and trained personnel.
5/14/98	Positive	IR 98-02	N	MAINT	3A 3B	The planned maintenance activities observed/reviewed were found to be appropriately conducted and controlled. Procedural control was general in nature. Interviews with maintenance personnel showed the individuals were knowledgeable, appropriately qualified, and capable of explaining their activities.
3/16/98	Negative	IR 98-01	N	MAINT	3C 5C	The licensee implemented several actions, in response to NRC and SSES self assessment identified issues, in the maintenance and work control programs. The performance issues include, in part, work control effectiveness, outstanding work backlog, and maintenance activity control. These actions have not been in place for a sufficient period of time to show improvement in the maintenance area.
3/16/98	Negative	IR 98-01	S	MAINT	2A 3A	The "B" Emergency Diesel Generator (EDG) test run was discontinued following receipt of an unexpected turbocharger lube oil low pressure alarm. The cause was adequately identified, and the EDG was repaired and returned to service within the time period allowed by Technical Specification. Overall, maintenance activities were adequate.
3/16/98	Positive	IR 98-01	N	MAINT	3A 3B	The surveillance activities observed were adequately performed and appropriately controlled. The activities were accomplished by qualified and trained personnel. No violations of NRC requirements were identified.
3/16/98	Positive	IR 98-01	N	MAINT	3A 3B	Four planned maintenance activities, reviewed during this period, were found to be appropriately conducted and controlled. Interviews with maintenance personnel showed the individuals involved in these activities were knowledgeable, appropriately qualified, and capable of explaining their activities.
3/16/98	Negative	IR 98-01	S	MAINT	2A 1B	A PP&L management decision, to reduce power in response to a main generator isophase bus duct cooler leak, was well communicated within the operations department and was conservative. The licensee initiated appropriate corrective actions, no violations of NRC requirements occurred, and the failure was documented for maintenance rule tracking purposes.

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Date	Type	Source	ID	SFA	Code	Item Description
1/19/98	Positive	IR 97-10	N	MAINT	3A 3B	The surveillance activities observed were adequately performed and appropriately controlled. The surveillance activities were determined to have been accomplished by qualified and trained personnel. No violations of NRC requirements were identified.
1/19/98	Positive	IR 97-10	N	MAINT	3A 3B	The planned maintenance activities, reviewed during this period, were found to be appropriately conducted and controlled. Interviews with maintenance personnel showed the individuals involved in the maintenance activities to be knowledgeable and capable of explaining their activities. No violations of NRC requirements were identified.
12/8/97	VIO LER	IR 97-09 VIO 97-09-02 LER 97-06-00	N	MAINT	2B 3A	In March 1997, maintenance procedures for the replacement of the bonnet vent line for reactor recirculation valve HV-2F031B failed to ensure the vent line support configuration was not altered from its original design. As a result, excessive vibration during power operation caused a weld on the bonnet vent line to crack, resulting in a loss of reactor coolant. The failure to provide adequate procedures for control of safety related maintenance is identified as a violation.
12/8/97	Positive	IR 97-09	N	MAINT	2B 3A	The surveillance activities observed were adequately performed and appropriately controlled. No violations of NRC requirements were identified.
12/8/97	Positive	IR 97-09	N	MAINT	2B 3A	Seven of the eight planned maintenance activities reviewed during this period were found to be appropriately conducted and controlled. In one instance, informal drawings were used during corrective maintenance on non-safety related equipment. This activity had no impact on safety related equipment and no violation of NRC requirements occurred.
12/8/97	Negative	IR 97-09	S	MAINT	2A	A problem occurred with the level control valve for the "4C" feedwater heater. A power reduction to 80% was directed by procedures after preparations for corrective maintenance on the control valve caused an automatic an automatic isolation of the steam supply to the feedwater heater.
10/20/97	NCV Negative	IR 97-07 NCV 97-07-07	N	MAINT	5C	Corrective actions for a safety related check valve deficiency, identified in 1994, did not address generic implications. In 1996, the same condition was identified on a different valve and, in this case, the planned actions to prevent recurrence were appropriate. However, the administrative process to implement and track these actions was not initiated. These two corrective action problems are considered a violation of minor significance because this had no impact on safety.

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Date	Type	Source	ID	SFA	Code	Item Description
10/20/97	NOED LER Negative	IR 97-07 IR 97-09 LER 97-20-00	S	MAINT	2B 1C	PP&L requested enforcement discretion for TS requirements concerning a failed acoustic position indicator for the "S" Safety Relief Valve. PP&L requested the enforcement discretion to avoid an undesirable transient as the result of forcing compliance with a license condition. The NRC approved PP&L's request after determining the action involved minimal or no safety impact and had no adverse radiological impact on public health and safety.
10/20/97	Positive	IR 97-07	N	MAINT	5B 5C	The licensee's corrective actions in response to an interrupted cool down of the "C" Emergency Diesel Generator (EDG) were adequate. The interrupted cool down did not affect the operability of the EDG.
10/20/97	Positive	IR 97-07	N	MAINT	3B	The maintenance task certification matrix and its implementation were adequate to control the assignment of qualified workers to safety related maintenance activities. No violation of NRC requirements was identified.
10/20/97	Positive	IR 97-07	N	MAINT	3A 1C 3B	Susquehanna surveillance activities, observed during this inspection period, were well performed, described and controlled by detailed Susquehanna procedures, and performed by well trained, experienced and capable technicians/operators.
10/20/97	Positive	IR 97-07	N	MAINT	3A 3B	The work authorization (WA) activities observed during this inspection period were, in general, well performed. The WAs described and controlled maintenance activities with adequate, but in some cases general, procedures. The maintenance activities were implemented by well trained and experienced maintenance technicians, and resulted in equipment being returned to service in good condition.
10/20/97	VIO	IR 97-07 VIO 97-07-06	N	MAINT	2B 3A	Susquehanna procedures for control of Standby Liquid Control (SLC) maintenance were inadequate in that the procedures did not control the activities such that the system remained in an analyzed configuration. The unanalyzed configuration had the potential to negatively affect the performance of this safety related system. PP&L allowed maintenance work to proceed on the "A" SLC pump nitrogen accumulator without evaluating whether the activity would affect operability. After the question of operability impact was raised by the NRC, an initial operability determination by the Shift Technical Advisor was weak because it did not address known technical issues with the potential to affect operability. The failure to provide adequate procedures for control of maintenance on safety related equipment is a violation of TSs.

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Date	Type	Source	ID	SFA	Code	Item Description
7/20/98	URI Negative	IR 98-06	S	ENG	2A 4A 4C	The heavy rains on June 23, 1998 resulted in significant quantities of water entering the "A" emergency diesel generator (EDG) storage tank through an unsealed penetration in the "A" EDG storage tank vault, due to in-progress modification work, and a loose flange on the "A" storage tank. The "A" EDG was declared inoperable for a short period of time and remained in a degraded condition for several days, following rain water leakage into the "A" fuel oil storage tank. This appears to have been the result of inadequate design control during the installation a diesel fuel oil storage tank sampling system, in conjunction with an inadequate maintenance activity which left a loose flange on the storage tank. The design control and maintenance issues will be tracked as an unresolved item, to obtain further information to determine if the actions were acceptable or represented a violation of NRC requirements. (Section E2.3)
7/20/98	Negative	IR 98-06	S	ENG	2A 2B 4B	During heavy rains, the Emergency Diesel Generator (EDG) Building sump room flooded, and as a result of foreign material lodged in a backflow preventer valve, the "A" EDG room basement also flooded. The licensee's initial actions for this event appeared reasonable. Room flooding alarms and sump high-high level alarms failed to alert operations personnel of the flooding condition. Although this presented a single means to flood all of the EDG rooms from a single event, no violations of NRC requirements were identified. (Section E2.2)
7/20/98	Negative	IR 98-06	S	ENG	4A 4C 2A	The weld crack occurred because of a lack of fusion on the end cap weld base pass and unexpected high amplitude vibration. The vibration was the result of an error in the engineering analysis that resulted in a less than optimum installation of the flow sensing element. PP&L took action to correct the Unit 2 failure and determined that Unit 1 does not have similar conditions that would lead to this type of failure. Because of PP&L corrective actions and the low safety significance of this issue, no further actions are planned by the NRC. No violation of NRC requirements were identified. (Section E2.1)

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Date	Type	Source	ID	SFA	Code	Item Description
11/5/96	NCV LER Positive	IR 98-03 NCV 98-03-03 LER 96-15-00	L	ENG	5A 5B 5C	PP&L identified safety-related 4KV switchgear were dynamically qualified with breakers in the racked-in position only (i.e., the switchgear had not been dynamically qualified for service with the breakers in the "test" position or installed but racked out). PP&L determined, based on the breaker alignment, that seven breakers were, at various times, in positions other than the dynamically qualified position, which represents a violation of Technical Specification (TS) 3.8.3.1. PP&L modified the switchgear and established administrative controls for the position of breakers in switchgear. The inspectors noted that excellent questioning attitude by PP&L led to identification of the design deficiency, and ultimately resulted in issuance of NRC Information Notice 97-53, "Circuit Breakers Left Racked Out in Non-Seismically Qualified Positions." The issue also was not likely to be identified by routine PP&L activities. The corrective actions were comprehensive and performed within a reasonable time frame. In accordance with Section VII.B.3 of the Enforcement Policy, the NRC has exercised enforcement discretion and not cited the violation of TS.
10/7/97	NCV LER Positive	IR 98-03 NCV 98-03-02 LER 97-23-00	L	ENG	4C 4A	The license identified Technical Specification (TS) 4.7.6.3 surveillance requirements were not included in the SSES surveillance program. The licensee determined the root cause to be inadequate control of fire protection modification and licensing processes. The errors occurred between 1988 and 1991. The failure to test fire system equipment in accordance with the TS had little safety impact because, when tested, the equipment performed appropriately. Therefore, this licensee identified and corrected event was treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy.
8/8/97	NCV LER Positive	IR 98-03 NCV 98-03-01 LER 97-18-00	L	ENG	4C	PP&L identified that specific relays related to two Unit-1 reactor building closed cooling water isolation valves had not been included in its original response time testing program. The appropriate tests were subsequently completed acceptably. The inspectors reviewed the licensee's corrective actions and determined that the identification of the untested relays was the result of corrective actions for a violation identified in NRC Inspection Report 50-387,388/97-03, which addressed a failure to perform required Technical Specification testing. The root cause for this event was different than the root cause for the previous violation identified. Therefore, this licensee identified and corrected event was treated as a non-cited violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. (section O8.1)

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Date	Type	Source	ID	SFA	Code	Item Description
6/30/98	VIO	IR 98-08 VIO 98-08-02	N	ENG	4C 5A 5C	In 1990 and 1991, PP&L identified the fuel oil transfer pump automatic start level-switch setpoints in the emergency diesel generator day tanks did not meet the American National Standards Institute (ANSI) requirement to ensure a day tank minimum fuel oil volume sufficient for 60 minutes of operation at the level where fuel oil is automatically added to the day tank, at rated load, plus a 10% margin. PP&L documented this nonconforming condition in Nonconformance Report 90-0173 and engineering study SEA-ME-332, and implemented administrative controls, as compensatory measures, but failed to effect timely resolution. The failure to effect timely resolution of this nonconformance is considered a violation of 10 CFR 50 Appendix B, Criterion XVI, Corrective Action.
6/30/98	NCV Negative	IR 98-08 NCV 98-08-01	N	ENG	4C 5A 5C	In 1990, a PP&L safety evaluation for a facility modification concluded a Technical Specification (TS) revision was involved for a proposed change to the diesel day tank minimum volume. The safety evaluation failed to identify the proposed change as an unreviewed safety question. PP&L did not obtain NRC approval prior to implementing the change and did not submit a TS change until 1996. This is considered a violation of 10 CFR 50.59 requirements. However, this violation is not cited, based on the exercise of discretion in accordance with Section VII.B.6 of the Enforcement Policy.
5/14/98	Positive	IR 98-02	N	ENG	4B	The PP&L methodology, which used a test pressure less than the integrated leak rate test pressure, to accomplish closed loop system integrity verification for the suction lines on the high pressure coolant injection and the reactor core isolation cooling systems was consistent with the NRC expectations for leakage testing of these lines.
5/14/98	Negative	IR 98-02	N	ENG	4A 4C 5A	The licensee's Final Safety Analysis Report, for the refuel platform and refueling interlocks, had not been revised following a 1996 modification. In response to NRC questions, the licensee has issued a Condition Report to review the current design control process which allows partial modification closeouts.
5/14/98	Positive	IR 98-02	N	ENG	4B	The licensee implemented a detailed analysis, qualification, and testing program to address the issue of electrical isolation.
5/14/98	NCV LER Positive	IR 98-02 NCV 98-02-02 LER 97-04	L	ENG	4C 5A	The licensee identified that portions of the Residual Heat Removal System, designated as closed loop systems which function as redundant containment isolation barriers, had never been leak rate tested as required by the technical specifications.

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Date	Type	Source	ID	SFA	Code	Item Description
3/16/98	NOED VIO LER	IR 98-01 IR 97-06 VIO 97-04-01 LER 97-13-00	S	ENG	4C	On June 19, 1997, while both units were operating at 100% power, the licensee determined that the testing methodology used for activated carbon samples was different than that required by Technical Specification (TS). The licensee received a Notice of Enforcement Discretion to operate until it accomplished the required testing. VIO 50-387,388/97-04-01 and a notice of enforcement discretion were issued to the licensee. The licensee responded to the violation in PP&L letter PLA-4666, dated September 4, 1997, and affected adequate corrective actions which included a TS change, procedure changes, and technician training. VIO 50-387,388/97-04-01 was closed in inspection report 50-387,388/97-06, through onsite field inspection activities.
3/16/98	NCV Negative	IR 98-01 IR 97-07 NCV 98-01-10 URI 97-07-09	N	ENG	4C	PP&L failed to perform a 10 CFR 50.59 safety evaluation prior to opening a plant equipment hatch assumed to be closed by the tornado design basis analysis. This condition existed for an extended period before identification by the NRC. Subsequently, plant equipment hatches have been verified to be in the condition assumed by the tornado analysis (shut) and are now being administratively controlled. PP&L's evaluation to determine whether an unreviewed safety question existed with the hatch open is expected in January 1998 and will be reviewed to determine the safety significance of this violation. In the interim, this item is being tracked as an unresolved item. Update from IR 98-01: The inspectors identified a floor hatch in the reactor building which was maintained open for many years. In response to the inspectors questions, PP&L determined the site tornado analysis assumed the hatch was closed. No safety evaluation was performed prior to placing the hatch in other than the analyzed position. A subsequent PP&L calculation determined the result of the tornado analysis was not adversely affected by hatch position. The failure to perform a safety evaluation prior to changing the hatch position was a violation of minor significance and is being treated as a non-cited violation.
3/16/98	Negative	IR 98-01	N	ENG	4A	NRC identified three control room annunciators which alarm after TS Limiting Condition for Operation (LCO) action levels are exceeded. The issue was discussed with operations management and it was determined the general issue of annunciator conservatism, including LCO action statement start time, was being addressed in the PP&L corrective action system. Several examples of unalarmed TS entries were identified by the NRC, but no violations of the TS allowed outage time were identified.

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Date	Type	Source	ID	SFA	Code	Item Description
1/19/98	NCV Negative	IR 97-10 NCV 97-10-05	N	ENG	4B 1A	The "E" Emergency Diesel Generator (EDG) tripped on high jacket water temperature, as designed, during a surveillance test. Prior to the surveillance, the Emergency Service Water (ESW) supply valve failed to stroke open under dynamic conditions and was not noticed by the operators. Post maintenance testing for a previous maintenance activity failed to verify the valve would function under the expected operational conditions. Although the inadequate post maintenance test of the valve had the potential to impact safety related equipment, the "E" EDG was not aligned to a safety-related bus at the time of the event, there was no effect on the operating units, and no damage to the EDG occurred. The licensee identified failure to provide adequate post maintenance testing for safety related equipment is considered a non-cited violation.
12/8/97	Positive	IR 97-09	L	ENG	5A 4B	PP&L identified a potential non-conservatism in the vendor supplied methodology used to establish minimum critical power ratio (MCPR) limits for single loop operation. The identification of this issue by PP&L was viewed as a positive indication of the level of scrutiny being given to fuel related calculations. The inspector verified that conservative interim corrective actions have been implemented for Susquehanna pending the resolution of the potential issue, by the NRC Office of Nuclear Reactor Regulation.
10/20/97	NCV LER Positive	IR 97-07 NCV 97-07-03 LER 97-10-00	L	ENG	4C 5A	During a 1997 procedure review, the licensee discovered reactor water level instruments were in-operable, during a 1996 Unit 1 hydrostatic pressure test, without performing the required Technical Specification actions. The cause was determined to be a personnel error, made during a previous procedure revision. The inspectors reviewed the corrective actions and found them to be adequate.
10/20/97	Negative	IR 97-07	N	ENG	5B 5C 2A	The engineering corrective actions for problems with the Unit 1 RCIC drain pot level switch were not timely. This allowed continuous degradation of the drain line and a continuous alarmed condition for over ten months after it caused a forced shutdown. A modification to replace the drain pot level switch was completed and has been effective in restoring the normal operation of the RCIC system.
10/20/97	VIO	IR 97-07 VIO 97-07-10	N	ENG	4C	PP&L failed to perform a 10 CFR 50.59 safety evaluation prior to placing a floating service platform on the spray pond that serves as the ultimate heat sink for both Susquehanna units. This condition existed for an extended period before identification by the NRC. PP&L has yet to perform an evaluation to determine whether an unreviewed safety question existed with the platform on the spray pond. Subsequently, the spray pond was verified to be in the condition assumed by the Final Safety Analysis (the platform was removed). Analysis of the spray pond design basis and evaluation of the potential USQ will be reviewed with the response to this violation.

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Date	Type	Source	ID	SFA	Code	Item Description
10/20/97	Positive	IR 97-07	N	ENG	4A	A review of the Susquehanna responses to 10 CFR 50.63, Station Blackout (SBO) rule was conducted. The licensee installed an auxiliary diesel power source to increase the SBO coping duration of its 125 Vdc batteries from approximately 5-hours to greater than 8-hours. The NRC safety evaluation report concluded that Susquehanna must meet a 4-hour coping duration. Therefore, the inspectors concluded that there was no current regulatory requirement for the licensee to maintain the auxiliary power source.
10/20/97	NCV Negative	IR 97-07 NCV 97-07-08	N	ENG	5B 2A	In February 1997, PP&L identified that the "A" Control Structure (CS) chiller would not automatically start as designed and took immediate actions to correct the problem. However, PP&L initially failed to recognize this condition as outside the plant's design basis, as described in the Final Safety Analysis Report. After identification by the NRC, PP&L initiated a Condition Report, determined the condition was reportable, and submitted a Licensee Event Report as required. Corrective actions for both the technical problem and the failure to recognize the condition outside the design basis were implemented by PP&L. In this case, the failure to report a condition outside the design basis within 30 days of discovery is a non-cited violation.
10/20/97	Positive	IR 97-07	N	ENG	4C	The erosion control program portion of engineering corrective actions for an indicated high level in a reactor core isolation cooling (RCIC) drain pot was determined to be outstanding.

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Date	Type	Source	ID	SFA	Code	Item Description
7/20/98	Positive	IR 98-06	N	PS	1C 5A	The licensee's review of the emergency preparedness program was well structured and addressed all NRC requirements for conducting an independent review of the emergency preparedness program. Auditors evaluated the program against all of the attributes specified in 10 CFR 50.54(t) of NRC regulations. The assessment of the adequacy of licensee interface with the offsite organization was not complete since it failed to evaluate interface with representatives of one of the risk counties. (Section P7)
7/20/98	Positive	IR 98-06	N	PS	1C	The licensee maintained the Nuclear Emergency Planning staff at consistent levels with only brief periods of under staffing. The recently appointed Senior Nuclear Emergency Planning Coordinator was well qualified to perform his assigned duties. Nuclear Emergency Planning kept well informed of station issues and conducted appropriate interface with station management. (Section P6)
7/20/98	Negative	IR 98-06	N	PS	1C	The licensee maintained a good Emergency Plan training program and ensured completion of all required training. Evaluation techniques for some elements of this program were unreliable, including the lack of annual re-examination of the entire spectrum of emergency action levels for decision makers and the use of the same evaluation scenario for radiological assessment personnel for the last six years. The licensee was effectively using mini-drills to train on severe accident management concepts. (Section P5)
7/20/98	Negative	IR 98-06	N	PS	1C	Discrepancies in the recent revision of the emergency plan indicate that the licensee did not perform a sufficient level of review of emergency plan changes and had not given an adequate amount of attention to the annual reviews of the plan. The reduction of the radiological assessment staff in the Emergency Operations Facility from three to two, after that staffing level had been increased to three during a recent revision of the plan was a reduction of the effectiveness of that plan. Although this change was not in compliance with the requirements of 10 CFR 50.54(q), the actual level of preparedness was not reduced and the non-compliance is one of minor significance. This violation, therefore, will not be subject to formal enforcement action. (Section P3)
7/20/98	Positive	IR 98-06	N	PS	3A	The emergency response facilities were very well maintained. The licensee has enhanced the ability to assess plant and environmental conditions by installing a recent computer data display modification and a remote radiation monitoring system. Surveillances were accomplished, but a management expectation regarding communication surveillances created the possibility for a missed surveillance. The surveillance was performed correctly despite the management expectation. (Section P2)

SUSQUEHANNA 1& 2 PLANT ISSUES MATRIX

Date	Type	Source	ID	SFA	Code	Item Description
11/7/98	NCV Negative	IR 98-09 IR 97-201 URI 97-201-5 NCV 98-09-07	N	PS	4A	Failure to properly implement the requirements of NFPA 14 in the design and installation of standpipe system.
11/7/97	Negative	IR 97-201	N	PS	4B 4C	Failure of the SSES Individual Plant Examination for External Events Review to consider the operational plant conditions or fire conditions which propagate into a large fire.
11/7/97	Negative	IR 97-201	N	PS	5A 5B	Failure of fire protection audits to evaluate the plant's compliance with 10CFR50 Appendix R.
11/7/97	Negative	IR 97-201	N	PS	1B 2A	Fire brigade's effectiveness to control and suppress a fire during a drill exercise impaired by equipment logistics and deployment problems.
11/7/97	Negative	IR 97-201	N	PS	1C 4C	Fire brigade effectiveness to control and extinguish a flammable or combustible liquids fire impacted by the policy to restrict the use of fire fighting foams on site.
5/14/98	Positive	IR 98-02	N	PS	2B 1C	Radiological controls for the As-Low-As-Reasonably-Achievable (ALARA) program were performed in an effective manner. The selection and qualification of contracted radiological control technicians was proceduralized, conducted, administered, and documented in a detailed and thorough manner. The combination of audits, surveillances, corporate assessments, self-assessments, and the problem identification process resulted in a high volume of deficiencies and improvement opportunities being identified and in a low threshold for such identification.
5/14/98	NCV Positive	IR 98-02 NCV 98-02-04	L	PS	3A 5A	Overall, effective performance in the area of radiological controls for radioactive materials, contamination, surveys, and monitoring was evident. The licensee identified that they had failed to post high radiation areas during work that involved changing exposure conditions.
5/14/98	Positive	IR 98-02	N	PS	3A 1C	Performance in radiological controls for individual external and internal exposures for 1997 and for 1998 up to April 28 was fully effective.
3/16/98	Positive	IR 98-01	N	PS	5A 5B 5C	The condition reporting system was effectively used to identify, evaluate, and resolve radiological control program deficiencies.
3/16/98	Positive	IR 98-01	N	PS	2A	Housekeeping and material conditions of plant structures and equipment were good.

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Date	Type	Source	ID	SFA	Code	Item Description
3/16/98	Positive	IR 98-01	N	PS	2A	Health physics equipment and facilities were well maintained.
3/16/98	Positive	IR 98-01	N	PS	2B 3C 5A	A strong commitment to reducing plant contamination was evidenced by the reduction of recoverable-contaminated areas in 1997 from 9.4 to 6.2 percent and performance of a self-assessment in contamination controls.
3/16/98	Positive	IR 98-01	N	PS	1C	The ALARA organization was effectively evaluating and implementing radiation dose reduction measures and the health physics staff effectively used the employee ALARA concern program. Although ALARA initiatives to minimize the radiological impact of hydrogen water chemistry (HWC) appeared comprehensive including the implementation of condensate filtration, shielding up-grades, contingencies for chemical decontamination, and improvements in work practices and scheduling, continued vigilance to assess and mitigate the radiological impact of HWC is warranted.
1/19/98	NCV Negative	IR 97-10 NCV 97-10-06	N	PS	1C	Implementation of the licensee's site access authorization (AA) and Fitness-for-Duty (FFD) programs were reviewed. A failure to allow an individual to review the psychological information contained in his file is considered a violation of NRC regulations of minor significance and is being treated as a non-cited violation.
12/8/97	Positive	IR 97-09	N	PS	1A 2A	The licensee maintained an effective security program. Management support was evident. Quality assurance audits were thorough and in-depth. Alarm station operators were knowledgeable and alert. Security equipment was tested and maintained in accordance with the security plan and security training was performed in accordance with the training and qualification plan. The provisions for land vehicle control measures satisfy regulatory requirements and licensee commitments.
10/30/97	Positive	IR 97-08	N	PS	1C	Good communications throughout the emergency response facilities and with the Commonwealth of Pennsylvania.
10/30/97	Positive	IR 97-08	N	PS	3A	Good command and control in all emergency response facilities.
10/30/97	Positive	IR 97-08	N	PS	3B 3A	The overall performance of the emergency response organization was good. Simulated events were accurately diagnosed, proper mitigation actions were performed, emergency declarations were timely and accurate, and off-site agencies were notified promptly. No exercise weaknesses, safety concerns, or violations of NRC requirements were observed.

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Date	Type	Source	ID	SFA	Code	Item Description
10/20/97	Positive	IR 97-07	N	PS	5C	An evaluation of condition reports (CRs), from the Unit 2 eighth refueling outage, concluded that there was no continuing trends regarding inadequate frisking practices with hand held monitors. The licensee's initial corrective actions for the identified weaknesses in the three CRs inspected were adequate.
10/20/97	Positive	IR 97-07	N	PS	1C	The licensee's programmatic response to a potential fire in the control room was reviewed and determined to rely on off normal procedures which require the manual initiation of a CO2 fire protection system and the immediate evacuation of the control room. The controls established by the licensee to ensure that control room operators do not require the use of self contained breathing apparatus (SCBA), during a fire and/or habitability problem in the control room. These controls were determined to be adequate.
10/20/97	NCV LER Positive	IR 97-07 NCV 97-07-04 LER 97-16-00	L	PS	5A	PP&L determined that the monthly surveillance to inspect fire hose stations had not been completed within the frequency as required per TS Surveillance Requirement 4.7.6.5.a. TSs require inspection of the fire hose stations listed in Table 3.7.6.5-1 at least once per 31 days. The frequency for performing this surveillance including the grace period was exceeded seven (7) times since January 1995. In addition, while reviewing other surveillances that used a fixed schedule, it was determined that the 6-month surveillance of fire hydrants had exceeded its frequency, including the grace period on one occasion since January 1995. The cause of the event was determined to be that the scheduling tool used to track these surveillances used a fixed date each month for the determination of the start of the surveillance instead of calculating the start date from when the surveillance was last performed. Corrective actions include: revising the method of tracking these surveillances and discussion of this event with appropriate plant personnel.

ABBREVIATIONS USED IN PIM TABLE

ALARA	As-Low-As-Reasonably-Achievable
CO2	Carbon Dioxide
CR	Condition Reports
CS	Control Structure
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
HWC	Hydrogen Water Chemistry
LER	Licensee Event Report
NRC	Nuclear Regulatory Commission
PCO	Plant Control Operator
RCIC	Reactor Core Isolation Cooling
SLC	Standby Liquid Control
TS	Technical Specification
VIO	Violation

GENERAL DESCRIPTION OF PIM TABLE COLUMNS

Date	The actual date of an event or significant issue for those items that have a clear date of occurrence (mainly LERs), the date the source of the information was issued (such as for EALs), or the last date of the inspection period (for IRs).
Type	The categorization of the item or finding - see the Type / Findings Type Code table, below.
Source	The document that describes the findings: LER for Licensee Event Reports, EAL for Enforcement Action Letters, or IR for NRC Inspection Reports.
ID	Identification of who discovered issue: N for NRC; L for Licensee; or S for Self Identifying (events).
SFA	SALP Functional Area Codes: OPS for Operations; MAINT for Maintenance; ENG for Engineering; and PS for Plant Support.
Code	Template Code - see table below.
Item Description	Details of NRC findings on LERs that have safety significance (as stated in IRs), findings described in IR Executive Summaries, and amplifying information contained in EALs.

TYPE / FINDINGS CODES

ED	Enforcement Discretion - No Civil Penalty
Strength	Overall Strong Licensee Performance
Weakness	Overall Weak Licensee Performance
EEI *	Escalated Enforcement Item - Waiting Final NRC Action
VIO	Violation Level I, II, III, or IV
NCV	Non-Cited Violation
DEV	Deviation from Licensee Commitment to NRC
Positive	Individual Good Inspection Finding
Negative	Individual Poor Inspection Finding
LER	Licensee Event Report to the NRC
URI **	Unresolved Item from Inspection Report
Licensing	Licensing Issue from NRR
MISC	Miscellaneous - Emergency Preparedness Finding (EP), Declared Emergency, Nonconformance Issue, etc. The type of all MISC findings are to be put in the Item Description column.

TEMPLATE CODES

1	Operational Performance: A - Normal Operations; B - Operations During Transients; and C - Programs and Processes
2	Material Condition: A - Equipment Condition or B - Programs and Processes
3	Human Performance: A - Work Performance; B - Knowledge, Skills, and Abilities / Training; C - Work Environment
4	Engineering/Design: A - Design; B - Engineering Support; C - Programs and Processes
5	Problem Identification and Resolution: A - Identification; B - Analysis; and C - Resolution

NOTES:

* EEIs are apparent violations of NRC requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made. Before the NRC makes its enforcement decision, the licensee will be provided with an opportunity to either (1) respond to the apparent violation or (2) request a predecisional enforcement conference.

** URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

ENCLOSURE 2

Susquehanna Inspection Plan for April 1999 through January 2000

Inspection	Program Area/Title	Planned Dates	Type Inspection/Comments
IP-37551	Root Cause Evaluations and Review LPCI Valve Stem Breakage Issue	April 12, 1999	Regional Initiative
IP-60853	On-site Fabrication of Independent Spent Fuel Storage Installation	May 3, 1999	Regional Initiative-Date may change based on PP&L fabrication status
IP-60854	Independent Spent Fuel Storage Installation-Preoperational Test Program-Procedure Review	May 3, 1999	Regional Initiative-Date may change based on PP&L fabrication status
	Licensed Operator Examination	May 10, 1999	NRC Operator License Examination
	Y2K Review	May 10, 1999	NRC review of Y2K readiness
IP-60854	Independent Spent Fuel Storage Installation-Dry Runs	June 7, 1999	Regional Initiative-Date may change based on PP&L fabrication status
IP-81080	Detection Aids and Organization	June 7, 1999	Regional Initiative
IP-37750	Engineering Support to Operations	July 12, 1999	Regional Initiative
IP-60855	Independent Spent Fuel Storage Loading	August 2, 1999	Regional Initiative-Date may change based on PP&L fabrication status
IP-81110	Operations Safeguards Response Evaluation	August 2. 1999	Regional Initiative
IP-62706	Predictive Maintenance Program and Maintenance Rule	August 16, 1999	Regional Initiative
IP-62700	Work Controls	August 16, 1999	Regional Initiative

ENCLOSURE 2

Susquehanna Inspection Plan for April 1999 through January 2000

IP-37550	Engineering	Sept 13, 1999	Core
IP-84750	Radioactive Waste Treatment and Effluent and Environmental Monitoring	Sept 20, 1999	Core
IP-81700	Security	November 1, 1999	Core
IP-86750	Solid Rad Waste Management and Transportation of Radioactive Materials	November 15, 1999	Core
IP-40500	Problem Identification and Corrective Action	November 29, 1999	Core
IP-83750	Occupational Radiation Exposure Non-Outage	December 6, 1999	Core

Legend:

IP	-	Inspection Procedure
Core Inspection	-	Minimum NRC Inspection Program (mandatory at all plants)
Regional Initiative	-	Additional Inspection Effort Planned by Region I