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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

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gion I	By Primary Functional Area / Issue Date
SOUEHANNA	

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
01/13/2000	1999013	Pri: OPS	NRC	NEG	Pri: 5A	Executive Summary
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: 5B Ter:	The present industry operating experience program relies primarily on discussions during the initial screening of new industry experience reviews. However, once the event is determined to be applicable to PP&L, the issue is processed through the condition report system to provide a more detailed review and tracking of potential concerns.
01/13/2000	1999013	Pri: OPS	NRC	NEG	Pri: 5C	Executive Summary
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: Ter:	In general, significant facility self-assessment activities produced by Nuclear Assessment Services (NAS) are thorough, detailed, and critical. ISEG surveillances and investigations were also self critical and thorough. However, deficiencies documented in self-assessments in the past have not always resulted in action to correct the identified problems. SSES initiated a multi-focus Corrective Action Program (CAP) Improvement Plan to address the deficiencies identified by internal and external identified weaknesses in the present CAP.
01/13/2000	1999013	Pri: OPS	NRC	NEG	Pri: 5C	Executive Summary
		Sec:			Sec:	The failure of most functional units to implement the requirements of the functional unit self-assessment program was
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	identified, both by the NRC team and your Decision 2000 process, as a program deficiency and entered into the correction action program.
01/13/2000	1999013	Pri: OPS	NRC	NEG	Pri: 5C	Executive Summary
Dockets Discu 05000387 Susa 05000388 Susa	quehanna 1	Sec:			Sec: Ter:	The plant operations review committee (PORC) and the Susquehanna review committee (SRC) demonstrated a critical, probing, and questioning attitude. Overall, implementation of the independent review organizations continue to challenge the effectiveness of the CAP. The management review team (MRT) was slow to respond to recent responsibility changes, however they effectively implemented most of the required tasks.
01/13/2000	1999013	Pri: OPS	NRC	POS	Pri: 5A	Executive Summary
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 5B Ter:	In general, PP&L appropriately identified problems and entered them into a corrective action mechanism. Formal investigations and assessments, such as scram investigations and independent safety engineering group (ISEG) assessments, were thorough and identified plant and human performance issues beyond the immediate causes of the scram.
01/13/2000	1999013	Pri: OPS	NRC	POS	Pri: 5B	Executive Summary
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1	Sec:			Sec: Ter:	PP&L's proposed use of risk insights to assist in prioritizing attention on risk significant condition reports could develop into a useful tool to minimize plant risk.

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Region I	,,
SUSQUEHANNA	

Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description	
01/01/2000	1999012	Pri: OPS	NRC	POS	Pri: 1A	Executive Summary	
		Sec:	Sec:		Sec: 5C	PP&L made conservative and effective decisions in response to increasing primary containment leakage on Unit 2.	
Dockets Discu					Ter: 1C	(Section O4.1)	
05000387 Sus							
05000388 Sus	quehanna 2						
11/20/1999	1999011	Pri: OPS	NRC	NEG	Pri: 1A	Executive Summary	
		Sec:			Sec: 1C	PP&L delayed starting Unit 1 suppression pool cooling after the suppression pool water high temperature alarm had	
Dockets Discussed:					Ter:	annunciated. Although this delay resulted in suppression pool water temperature exceeding the Technical Specificati (TS) limit, temperature was restored within the allowed time. In addition, PP&L did not recognize that the suppression	
05000387 Sus	•					pool water temperature had exceeded the TS limit until after the water temperature had been restored. The NRC had	
05000388 Sus	quehanna 2					proof water temperature had exceeded the 15 limit until after the water temperature had been restored. The N previously identified a similar issue regarding delayed starting of suppression pool cooling in NRC Inspection 50-387, 388/99-06. (section O4.1)	
11/20/1999	1999011	Pri: OPS	NRC	POS	Pri: 1C	Executive Summary	
		Sec:			Sec: 2B	PP&L's initial response to the "A" emergency diesel generator toxic gas event was appropriate and ensured personne	
Dockets Discussed:					Ter:	safety throughout the event. Areas for improvement in the emergency preparedness area were captured in the	
05000387 Susquehanna 1						corrective action program. (section O4.2)	
05000388 Sus	quehanna 2						
10/16/1999	1999009	Pri: OPS	NRC	POS	Pri: 3A	Executive Summary	
		Sec:			Sec:	PP&L successfully transferred the first dry shielded canister to the dry fuel storage pad, in accordance with design an	
Dockets Discu	ssed:				Ter:	license requirements. (Section O2.3)	
05000387 Sus	quehanna 1						
05000388 Sus	quehanna 2						
09/30/1999	1999302	Pri: OPS	NRC	NEG	Pri: 1C	Executive Summary	
		Sec:			Sec:	Overall, the as-submitted written examination met the guidance of NUREG 1021. Eleven questions required	
Dockets Discu	ssed:				Ter:	replacement and several changes were also made to question stems to make the question easier to understand and	
05000387 Sus	quehanna 1					distractors to make them more plausible.	
05000388 Sus	quehanna 2						
09/30/1999	1999302	Pri: OPS	Licensee	POS	Pri: 1C	Executive Summary	
		Sec:			Sec:	One instant SRO and one upgrade SRO applicant were administered an initial written retake licensing exam. Both	
Dockets Discu	ssed:				Ter:	applicants successfully passed the written retake examination.	
05000387 Sus	quehanna 1						
05000388 Sus	quehanna 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
08/28/1999	1999007-01	Pri: OPS	NRC	NCV	Pri: 1C	Safety Function Determination of RCIC Primary Containment Isolation Valve
Dockets Disc	ussed:	Sec:			Sec: 3A	On August 5, 1999, PP&L did not perform a Technical Specification required safety function determination for out of service primary containment isolation instruments because the requirement to perform a safety function determination
05000387 Su: 05000388 Su:	•				Ton.	for out of service primary containment isolation instruments was not contained in the procedure that controlled the Safety Function Determination Program. PP&L's failure to maintain adequate procedures for the control of the Safety Function Determination Program is a violation of Technical Specification Section 5.4, "Procedures." This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is documented in PP&L's corrective action program as condition report 194180. (Section O3.1)
07/19/1999	1999006	Pri: OPS	NRC	NEG	Pri: 1B	Executive Summary - Section O5.1
		Sec:			Sec: 5A	Following the Unit 1 automatic reactor shutdown on July 1, 1999, operators unnecessarily delayed placing the second
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	division of suppression pool cooling in service. The operators placed the second division of suppression pool cooling in service approximately 40 minutes after the SSES emergency operating procedures directed suppression pool cooling to be maximized. (Section O5.1)
07/19/1999	1999006	Pri: OPS	NRC	NEG	Pri: 5B	Executive Summary - Section O5.1
Sec:			Sec: 1C	PP&L's post trip event reviews following the Unit 1 automatic reactor shutdown on July 1, 1999, were weak in that the		
05000387 Sus 05000388 Sus	squehanna 1				Ter:	reviews did not identify the unnecessary delay in placing the second division of suppression pool cooling in service. (Section O5.1)
07/19/1999	1999006-01	Pri: OPS	NRC	NCV	Pri: 1C	Reportability Determinations
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 5A Ter:	On July 1, 1999, PP&L did not notify the NRC within the required time period that the Unit 1 high pressure coolant injection system injected water into the reactor coolant system. On July 3, PP&L did not notify the NRC within the required time period that a main steam isolation valve had degraded to the extent that the valve's leakage rate exceeded the Technical Specification requirements. The failure to make these notifications within the required time period is a violation of 10 CFR 50.72. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is documented in PP&L's corrective action program as condition reports CR 187420 and CR 192457. (Section O4.1)
06/07/1999	1999005	Pri: OPS	NRC	NEG	Pri: 2A	EXECUTIVE SUMMARY
Dockets Disc 05000387 Sus 05000388 Sus	squehanna 1	Sec:			Sec: Ter:	PP&L operators delayed entry into a technical specification limiting condition for operation to perform troubleshooting after a Unit 1 main turbine bypass valve did not meet surveillance test requirements. Whereas the delay to enter the technical specification limiting condition for operation was not consistent with operation's department procedures, no violation of technical specifications occurred since the corrective actions were completed within the required time. (Section O4.2)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
06/07/1999	1999005	Pri: OPS	Self	NEG	Pri: 2A	EXECUTIVE SUMMARY
		Sec:			Sec:	During this inspection period a number of notable equipment problems occurred which challenged the plant staff and the
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1				Ter:	availability of plant systems important to safety. Specifically, the equipment problems were related to the Unit 1 electro-hydraulic control system fast acting solenoid valves, the Unit 2 isophase bus duct, the "C" emergency diesel generator lube oil and air start systems, a containment atmosphere sample valve limit switch, and loose fastener hardware on the "B" emergency diesel generator. (Section O2.1)
06/07/1999	1999005-01	Pri: OPS	NRC	NCV	Pri: 2A	SV 15774A PRIMARY CONTAINMENT ISOLATION VALVE POSITION INDICATION
		Sec:			Sec:	On May 28, 1999, operators did not satisfactorily implement an approved station procedure for containment atmosphere
	Dockets Discussed: Ter: 05000387 Susquebanna 1 Ter: sample valve testing. The operators used an invalid control room indication 15774A when local valve position indication had failed. This Severity Lev		sample valve testing. The operators used an invalid control room indication to determine the position of valve SV 15774A when local valve position indication had failed. This Severity Level IV violation is being treated as a Non-Cited Violation. This violation is documented in PP&L's corrective action program as condition report 96931. (Section O4.1)			
05/21/1999	1999301	Pri: OPS	Licensee	NEG	Pri: 1C	Executive Summary
		Sec:			Sec:	Overall, the as-submitted written examination met the guidance of NUREG 1021. Only two questions required more
	Dockets Discussed:					than minor revision; however, subsequent analysis by the licensee resulted in comments, concerning technical subject matter, for 8 questions (see Attachments 1 and 2).
	05000387 Susquehanna 1					matter, for 6 questions (see Attachments 1 and 2).
05000388 Sus	05000388 Susquehanna 2					
05/21/1999	1999301	Pri: OPS	NRC	NEG	Pri: 1C	Executive Summary
		Sec:			Sec:	One performance problem exhibited by the applicants was identified concerning their knowledge of the function of the
Dockets Discu					Ter:	safety/relief valve (SRV) bellows and what affect its failure has concerning subsequent SRV function and operability.
05000387 Sus	•					
05000388 Sus	quehanna 2					
05/21/1999	1999301	Pri: OPS	Self	NEG	Pri: 1C	Executive Summary
		Sec:			Sec:	Four instant SRO and one upgrade SRO applicants were administered initial licensing exams. Three applicants
Dockets Discu	ıssed:				Ter:	successfully passed all portions of the exam. Two applicants did not pass the written examination.
05000387 Sus	•					
05000388 Sus	quehanna 2					
05/21/1999	1999301	Pri: OPS	Licensee	POS	Pri: 1C	Executive Summary
		Sec:			Sec:	The JPM set developed by the licensee met the guidance of NUREG 1021.
Dockets Discu					Ter:	
05000387 Sus	•					
05000388 Sus	quenanna 2					

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04/26/1999	1999004	Pri: OPS	NRC	NEG	Pri: 5C	Executive Summary
Sec		Sec:			Sec: 4C	PP&L did not troubleshoot the unexpected slow pressurization of the residual heat removal system in a structured and
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1		methodical manner, which extended the time needed to identify the failed "1B" low pressu While troubleshooting was in progress, and unaware that the "1B" valve was failed, PP&L		methodical manner, which extended the time needed to identify the failed "1B" low pressure coolant injection valve. While troubleshooting was in progress, and unaware that the "1B" valve was failed, PP&L removed the "A" residual heat removal system from service for maintenance for 17 hours. During this 17 hour period, neither Unit 1 loop of residual heat removal was available for low pressure coolant injection. (Section E2.1)	
04/26/1999	1999004	Pri: OPS	NRC	POS	Pri: 3A	Executive Summary
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1	Sec:			Sec: 2B Ter:	During the Unit 2 refueling outage, the control, execution, and performance of major activities were good. Management emphasized to the staff the importance of human performance, attention to detail, and personnel safety throughout the outage. (Section O1.1 and O1.2)
04/26/1999	1999004	Pri: OPS	NRC	POS	Pri: 5A	Executive Summary
		Sec: ENG			Sec: 5B	PP&L identified and resolved a potential common cause failure of all RHR injection valves prior to any need for the
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	system to function. The operator's initial identification of the "1B" residual heat removal system slow pressurization reflected a good questioning attitude. The system engineer appropriately focused station priorities to complete troubleshooting and identify a failed low pressure coolant injection valve. (Section E2.1)
04/26/1999	1999004-03	Pri: OPS	NRC	NCV	Pri: 1C	Failure to Make a One Hour Notification for the Unit 1 Residual Heat Removal Injection Control Valve Failure
Dockets Discu 05000387 Sus		Sec:			Sec: 1A Ter:	On February 27, 1999, PP&L did not notify the NRC, within one hour of identification, that the Unit 1 RHR loop B was in a condition that was outside of the design basis. The failure to make the notification within one hour is a violation of 10 CFR 50.72. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is documented in PP&L's corrective action program as part of condition report 90981. (Section E2.1)
02/19/1999	1999002	Pri: OPS	NRC	NEG	Pri: 5C	EXECUTIVE SUMMARY
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1	Sec: ENG			Sec: 5B Ter:	The condition report process is focused on accomplishing initial reviews, reportability and operability determinations, cause assessments, and establishment of proposed corrective actions to correct the condition and prevent recurrence. However, process accountability is not readily apparent in the corrective action implementation portion of the process. Corrective action implementation dates do not correlate with the assigned significance level. Action due dates are controlled by the responsible manager who may change them during the course of implementation. The only procedural requirement regarding corrective action implementation is refueling outage related with the shortest lead time being approximately 7-10 months, and the longest lead time being approximately 31-37 months. The minimal administrative control over the corrective action implementation portion of the process contributes to a high process backlog. (Section E7.1)

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Date	Source	Area	ID	Туре	Codes	Item Description
02/19/1999	1999002	Pri: OPS	NRC	POS	Pri: 5A	EXECUTIVE SUMMARY
Sec: ENG			Sec: 5B	Annual assessments of the condition report process by NAS were thorough, critical, and well founded. NAS		
Dockets Discu	ıssed:				Ter:	assessments conducted in 1997 and 1998 identified most of the concerns identified by the inspectors. (Section E7.
05000387 Susquehanna 1						
05000388 Susc	quehanna 2					
02/19/1999	1999002	Pri: OPS	NRC	POS	Pri: 5A	EXECUTIVE SUMMARY
Sec:		Sec: ENG			Sec: 5B	The condition report (CR) process is a high volume, low threshold corrective action system that is acceptable to meet
Dockets Discussed:					Ter: 5C	the requirements of 10 CR 50, Appendix B, Criterion XVI. Adverse conditions are promptly identified and the process
05000387 Sus	quehanna 1					appears to be widely accepted for use, and is used by a broad cross section of the plant staff. There are no significal delays in the initial assessment, investigation, and completion of initial operability and reportability determinations.
05000388 Susquehanna 2						Initial investigations and root cause assessments for issues of higher safety significance are thorough. Investigations
						and causal analyses for CRs of lesser safety significance are generally thorough, but there are some instances where
						extent of conditions and/or generic implications may not be sufficiently explored. (Section E7.1)
02/01/1999	1999001	Pri: OPS	NRC	POS	Pri: 2A	Executive Summary
		Sec:			Sec: 1A	A Unit 2 feedwater heater leak was promptly identified, repaired, and returned to service. Management highlighted th
Dockets Discussed:					Ter: 3A	importance of reactivity control manipulations prior to the plant's return to full power and maintained a 1% per hour
05000387 Susquehanna 1						increase in reactor power.
05000388 Sus	quehanna 2					
01/13/2000	1999013	Pri: MAINT	NRC	NEG	Pri: 5A	Executive Summary
		Sec:			Sec:	Examples were noted of human performance, work planning, or coordination issues which should have been address
Dockets Discu	ıssed:			Ter:	by a condition report (CR) but were not until prompting was provided by a licensee manager, auditor or NRC staff. Other	
05000387 Sus	quehanna 1					examples were identified where CR generation was not timely.
05000388 Sus	quehanna 2					
01/13/2000	1999013	Pri: MAINT	NRC	NEG	Pri: 5C	Executive Summary
		Sec:			Sec:	The team identified that condition report due dates were sometimes revised without approval. About 12 condition report
Dockets Discu	ıssed:				Ter:	action (CRA) dates were changed per week. Maintenance stopped this practice in November 1999.
05000387 Sus	quehanna 1					
05000388 Sus	quehanna 2					
01/13/2000	1999013-03	Pri: MAINT	NRC	NCV	Pri: 5C	Non-Conforming Material Extent of Condition
		Sec:			Sec:	Industry events review program that existed in the late 1980s and early 1990s failed to remove non-conforming
Dockets Discu	ıssed:				Ter:	components. Those same components continue to challenge the plant. The failure of the Unit 2 "A" main transforme
05000387 Sus	quehanna 1				101.	neutral bushing and the Unit 1 reactor core isolation cooling (RCIC) leak detection temperature switch resulted, in pa
05000388 Susquehanna 2						because of ineffective control of those non-conforming components. An NCV was issued on this failure to prevent the

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01/01/2000	1999012	Pri: MAINT	Licensee	NEG	Pri: 5C	Executive Summary
Sec		Sec:	c:		Sec: 5A	Two recent equipment failures related to the Unit 2 main transformer and Unit 1 reactor core isolation cooling
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1				Ter: 2B	temperature switch module were attributed to inadequate follow-up actions related to industry event information that had been previously reviewed by PP&L in the 1986 and 1990 time frames. (Section O8.1)
01/01/2000	1999012	Pri: MAINT	NRC	POS	Pri: 3A	Executive Summary
Dockets Discu 05000387 Susa 05000388 Susa	quehanna 1	Sec:			Sec: 3B Ter:	During the planned replacement of two emergency service water (ESW) pumps, PP&L's maintenance department exhibited excellent work performance and good management oversight. (Section M1.3)
01/01/2000	1999012	Pri: MAINT	NRC	POS	Pri: 5C	Executive Summary
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec : 5B	After PP&L management established an Event Review Team, PP&L successfully resolved the numerous problems that
				Ter: 5A	occurred following the 2 year preventive maintenance on the "A" emergency diesel generator. (Section M1.2)	
11/20/1999	1999011	Pri: MAINT	NRC	NEG	Pri: 3A	Executive Summary
		Sec:			Sec : 2B	During observations of five pre-planned work activities, the inspectors identified two examples of informal work control.
05000387 Suse 05000388 Suse	quehanna 1				Ter:	Maintenance workers did not follow PP&L procedures and did not obtain the required approvals for changes to pre-approved work instructions. PP&L concluded that unapproved changes to work instructions did not meet management expectations. (section M4.3)
11/20/1999	1999011	Pri: MAINT	NRC	NEG	Pri: 3A	Executive Summary
		Sec:			Sec: 4C	PP&L inappropriately used an informal process to determine that a core spray relay met specified surveillance test
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1				Ter:	acceptance criteria. Although the core spray relay did not meet the specified surveillance acceptance criteria, PP&L concluded that the relay was functional based on their previous experience. After the core spray technical specification surveillance test results were approved, PP&L recognized that their actions were informal and inappropriate and performed an alternate test which verified that the core spray relay was functional. (section M4.1)
11/20/1999	1999011	Pri: MAINT	NRC	NEG	Pri: 5A	Executive Summary
		Sec:			Sec: 5C	On November 5, and on November 17, contract maintenance workers caused unexpected reactor protection system
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	actuations (half-scrams). The inspectors concluded that PP&L's corrective actions for the November 5 event were narrowly focused and as a result, not effective at preventing a similar event on November 17. (section M4.2)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
11/20/1999	1999011-01	Pri: MAINT	NRC	NCV	Pri: 3A	PP&L Analysis of Reactor Scram due to Main Steam Isolation Valve Failure
		Sec:			Sec: 5B	In a Licensee Event Report, PP&L identified that the "C" outboard main steam isolation valve did not meet the Technical
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	Specification seat leakage specification. PP&L's corrective actions, including valve rebuild and re-test activities, were good. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with section VII.B.1.a of the NRC Enforcement Policy. This violation was documented in PP&L's corrective action program as condition report 187209. (section O8.2)
10/16/1999	1999009	Pri: MAINT	NRC	MV	Pri: 5B	Executive Summary
		Sec:			Sec:	During this inspection period the inspectors concluded that station personnel were inconsistent in their use of PP&L's
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	corrective action system. The types of inconsistencies observed included: failure to document equipment problems, narrowly focused corrective actions or evaluations, missed opportunities to correct problems, and slow problem evaluation. (Section M1.1)
10/16/1999	1999009-01	Pri: MAINT	NRC	NCV	Pri: 5B	A Feedwater Penetration Exceeded Technical Specification Leakage Criteria
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: Ter:	PP&L did not promptly identify conditions which affected the ability of the Unit 1 and Unit 2 feedwater containment isolation valves to prevent leakage from September 1995 through March 25, 1999. On March 25, 1999, the leakage past both the inboard and outboard primary containment isolation valves for the Unit 2 "A" feedwater penetration exceeded the primary containment leak requirements, a significant condition adverse to quality. This level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the Enforcement Policy. This violation is entered in PP&L's corrective action program as condition report 204514. LER 99-002-00 is closed. (Section M4.2)
09/02/1999	1999008	Pri: MAINT	NRC	POS	Pri: 2B	Executive Summary
09/02/1999 1999008 Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 4C Ter:	The Certificate of Compliance requirements for heavy loads and for maximum handling height for the loaded transport cask and dry storage cask were adequately addressed based on appropriate procedures being in place, including procedures for qualification of crane operators, on the independently verified operable condition of the single-failure-procedure, on the quality control measures on the independent spent fuel storage installation rigging, and on the documentation of the safe load path. (Section 12)
09/02/1999	1999008	Pri: MAINT	NRC	POS	Pri: 3A	Executive Summary
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 2B Ter:	The preparations for welding of the dry shielded canister welds, including training and qualification of the welders, were thorough. The quality of the welds were excellent including weld process parameter control, the visual appearance of each weld pass and the final as-welded surface as verified by dye penetrant testing. The capability to cut through the completed welds should a DSC need to be unloaded was demonstrated. The penetrant examination method for testing welds met the procedural requirements and industry standards. (Section 7)
07/19/1999	1999006	Pri: MAINT	Self	NEG	Pri: 2A	Executive Summary - Section O2.1
Dockets Disc 05000387 Sus 05000388 Sus	squehanna 1	Sec:			Sec: 5C Ter:	A number of equipment problems occurred which challenged the plant staff and the availability of important plant systems. Equipment problems caused two automatic plant shutdowns. A stem/disk separation on the Unit 1 "C" outboard main steam isolation valve caused one shutdown and a failure on the Unit 2 "A" main transformer caused the second. In addition, equipment problems caused two unplanned power reductions. A tube leak on the Unit 1 "3A" feedwater heater caused one power reduction and a motor failure on the Unit 1 "C" circulating water pump caused the second. (Section O2.1)

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07/19/1999	1999006	Pri: MAINT	NRC	POS	Pri: 2B	Executive Summary - Section S1
		Sec:			Sec: 2A	PP&L's physical security program testing and maintenance activities were conducted in a manner that protected public
Dockets Disc					Ter:	health and safety and met PP&L's commitments and NRC requirements. (Section S1)
05000387 Su 05000388 Su	•					
06/07/1999	1999005	Pri: MAINT	NRC	POS	Pri: 3A	EXECUTIVE SUMMARY
		Sec:			Sec:	Maintenance activities were well controlled and well performed during installation of a new battery for the "E" emergence
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	diesel generator. Battery cell handling, physical and electrical installation, and post maintenance testing conformed to SSES procedures, industry practices, and regulatory requirements. (Section M1.2)
06/07/1999	1999005-02	Pri: MAINT	NRC	NCV	Pri: 3A	"B" EMERGENCY DIESEL GENERATOR INOPERABLE DUE TO MISSING/LOOSE HARDWARE
		Sec:			Sec:	PP&L technicians did not properly implement a maintenance procedure and properly fasten the generator inspection
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	screens to the "B" emergency diesel generator. The improper fastening could have caused a failure of the emergency diesel generator. The failure to properly implement a maintenance procedure for safety related equipment is considered a violation of Technical Specification section 5.4. This Severity Level IV violation is being treated as a Non-Cited Violation. This violation is documented in PP&L's corrective action program as condition report 95536. (Section M1.1)
04/26/1999	1999004	Pri: MAINT	Self	NEG	Pri: 3A	Executive Summary
04/26/1999 1999004 Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 3C Ter:	During a Unit 2 under vessel maintenance activity on a local power range monitor (LPRM), technicians momentarily unseated the seal between the LPRM and reactor vessel, spraying about two quarts of contaminated water on themselves. The additional total radiation exposure (both internal and external) to the individuals, as a result of the contamination, was non-consequential. PP&L initiated condition reports 92527 and 92528 to review this event. PP&L's initial response and proposed actions were appropriate. No violations of NRC requirements were identified. (Section M1.1)
04/26/1999	1999004	Pri: MAINT	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3B	The inservice inspections had been performed acceptably and had included acceptable ASME program coverage,
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	qualified personnel, approved procedures, proper implementation, appropriate examination documentation, and PP&L oversight. The inspections performed were thorough and of sufficient extent to determine the integrity of the components inspected. Indications of nonconforming conditions were identified, explored, evaluated, documented and dispositioned in accordance with established requirements. (Section M2.1)
04/26/1999	1999004-01	Pri: MAINT	Licensee	NCV	Pri: 2A	Main Steam Isolation Valve (MSIV) Seat Leakage
Dockets Discussed: 05000388 Susquehanna 2		Sec:			Sec: 5C Ter:	In a Licensee Event Report, PP&L identified that two main steam isolation valves did not meet a seat leakage specification. PP&L's corrective actions, including valve seat repair and re-test activities, were good. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is documented in PP&L's corrective action program as condition report 92338. LER 50-388/99-001 is closed. (Section O8.1)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
03/15/1999	1999003	Pri: MAINT	Licensee	POS	Pri: 5A	EXECUTIVE SUMMARY
		Sec:			Sec: 5B	The observation of ultrasonic testing of the residual heat removal injection valves determined that the technique applied
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	was effective in identifying significant stem cracking. The ultrasonic testing minimized personnel radiation exposure and resulted in the timely identification of an additional cracked valve stem. (Section M1.1)
02/19/1999	1999002	Pri: MAINT	NRC	POS	Pri: 2B	EXECUTIVE SUMMARY
		Sec: ENG			Sec: 4B	The inspectors concluded that the surveillance testing procedures reviewed satisfactorily met the testing requirements
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	outlined in NRC Generic Letter 96-01. The inspectors also determined that the minor discrepancies noted in the procedures and drawings would not have affected the outcome of the testing. (Section E2.1)
02/01/1999	1999001	Pri: MAINT	NRC	NEG	Pri: 3A	Executive Summary
		Sec:			Sec: 2B	During restoration of the "B" emergency diesel generator to service, following a 20 year overhaul, and removal of the
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter: 2A	maintenance spare "E" emergency diesel generator from service, the restoration of an operable emergency diesel generator was unexpectedly delayed due to work coordination issues and continued problems with the diesels' non-safety related control air system. Nonetheless, the restoration of an operable diesel was completed within the allowed time.
02/01/1999	1999001	Pri: MAINT	NRC	POS	Pri: 3A	Executive Summary
		Sec:			Sec: 5A	Instrument and controls technicians identified that Technical Specification instruments had been contaminated with
05000387 Sus 05000388 Sus	quehanna 1				Ter: 5C	sodium hydroxide during planned surveillance tests. Initial corrective actions included a detailed operability determination and a thorough review to determine the extent of the sodium hydroxide contamination. Instruments were sampled, drained, flushed, and re-calibrated to restore equipment operability.
01/13/2000	1999013	Pri: ENG	NRC	NEG	Pri: 5B	Executive Summary
		Sec:			Sec:	The team concluded that PP&L was not consistently meeting the industry guidance and procedure requirements for
Dockets Discu 05000387 Sus 05000388 Sus	quehanna 1				Ter:	operability screenings and determinations. This resulted in a minor violation due to failure to follow the CR procedure requirements for not promptly submitting the CR for an operability screening.
01/13/2000	1999013	Pri: ENG	NRC	NEG	Pri: 5B	Executive Summary
		Sec:			Sec:	Overall, the licensee's implementation regarding corrective actions for NCVs was acceptable. NCVs were entered into
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	the corrective action program, as required. Corrective actions were properly implemented on closed CRs. However, in one instance, the licensee review of the main steam isolation valve (MSIV) leakage was weak regarding root cause analyses, extent of condition reviews, actions to prevent recurrence and timeliness.

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
01/13/2000	1999013	Pri: ENG	NRC	NEG	Pri: 5B	Executive Summary
		Sec:		Sec: 5C	Although PP&L had identified decreasing margins on the high risk reactor water cleanup (RWCU) isolation valves, you	
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	extended the completion date of required internal inspections of those valves during the May 1999 forced outage at U 1 without reviewing the risk of extending those inspections.
01/13/2000	1999013-01	Pri: ENG	NRC	NCV	Pri: 5B	Delayed Operability Determination for SLC Air Sparge

01/13/2000	1999013	Pri: ENG	NRC	NEG	Pri: 5B	Executive Summary
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 5C Ter:	Although PP&L had identified decreasing margins on the high risk reactor water cleanup (RWCU) isolation valves, you extended the completion date of required internal inspections of those valves during the May 1999 forced outage at Unit 1 without reviewing the risk of extending those inspections.
01/13/2000	1999013-01	Pri: ENG	NRC	NCV	Pri: 5B	Delayed Operability Determination for SLC Air Sparge
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 5C Ter:	PP&L failed to perform a timely operability determination for the standby liquid control (SLC) system during air sparge. A non-cited violation (NCV) was issued for failure to timely inform the operating staff of a determination that concluded system inoperability.
01/13/2000	1999013-02	Pri: ENG	NRC	NCV	Pri: 5A	Inadequate Corrective Action Regarding Maintenance Rule Scope
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 5B Ter:	PP&L did not identify the safety-related remote shutdown panel (RSP) transfer switch functions during their corrective action of a previous NRC violation, which identified that the bypass indication system was not in the maintenance rule scope. Failure to identify and include the safety-related functions of the RSP resulted in PP&L excluding the RSP from July 10, 1996 to January 10, 2000. An NCV was issued for inadequate corrective action.
01/01/2000	1999012	Pri: ENG	NRC	POS	Pri: 5A	Executive Summary
05000387 Susc	01/01/2000 1999012 Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Sec: 5B Ter:	The Independent Safety Engineering Group report results were indicative of thorough investigation and analysis of plant issues and personnel performance. The reports were objective and contained meaningful feedback to plant management. (Section E7.1)
11/20/1999	1999011	Pri: ENG	NRC	POS	Pri: 4B	Executive Summary
		Sec:			Sec:	Three safety evaluations, performed for the Independent Spent Fuel Storage Installation, were reviewed and met the
05000387 Susc	Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Ter:	requirements of 10 CFR 50.59 and 10 CFR 72.48. The inspectors noted that, in one case, the basis for some assumptions and conclusions were not documented within the evaluation. (section E4.1)
10/16/1999	1999009	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	The planning, fabrication, and documentation of the Susquehanna dry shielded canisters resulted in a quality product
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	that met the design. Effective fabrication practices were in use and full-time Quality Assurance coverage by PP&L was in place at the manufacturing plant. (Section E2.1)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
10/16/1999	1999009-02	Pri: ENG	NRC	NCV	Pri: 4C	High Pressure Coolant Injection (HPCI) Vibration Limits
		Sec:			Sec:	Since May 1995, the HPCI surveillance test procedure contained incorrect vibration alert values for the Unit 1 and 2
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	HPCI pumps. When the correct values were used, the Unit 2 HPCI pump was in a degraded condition, due to high vibrations, for an extended period of time in 1998. The failure to use the correct alert vibration value is a Severity Level IV violation of Part 6 of ASME Oma-1988, "Inservice Testing of Pumps in Light-Water Reactor Power Plants," and is being treated as a Non-Cited Violation, consistent with Appendix C of the Enforcement Policy. This violation is entered in PP&L's corrective action program as condition report 199506. (Section E3.1)
10/12/1999	1999010	Pri: ENG	NRC	NEG	Pri: 4B	Executive Summary
		Sec:			Sec:	Although the majority of the operability assessments reviewed were acceptable, some operability assessments did not
05000387 Sus	Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Ter:	provide adequate justification to support operability conclusions. Most noteworthy was an error discovered in the technical basis of an operability assessment which resulted in two Emergency Service Water pumps subsequently being declared inoperable. (Section E1.3)

	05000387 Susquehanna 1 05000388 Susquehanna 2					IV violation of Part 6 of ASME Oma-1988, "Inservice Testing of Pumps in Light-Water Reactor Power Plants," and is being treated as a Non-Cited Violation, consistent with Appendix C of the Enforcement Policy. This violation is entered in PP&L's corrective action program as condition report 199506. (Section E3.1)
10/12/1999	1999010	Pri: ENG	NRC	NEG	Pri: 4B	Executive Summary
		Sec:			Sec:	Although the majority of the operability assessments reviewed were acceptable, some operability assessments did not
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	provide adequate justification to support operability conclusions. Most noteworthy was an error discovered in the technical basis of an operability assessment which resulted in two Emergency Service Water pumps subsequently being declared inoperable. (Section E1.3)
10/12/1999	1999010	Pri: ENG	NRC	NEG	Pri: 4C	Executive Summary
		Sec:			Sec:	PPL did not have an effective means to collect and evaluate open operability assessments and as a result did not
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	routinely consider and evaluate the cumulative operability impact of all degraded conditions on a particular system. (Section E1.3)
10/12/1999	1999010	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
05000387 Sus	10/12/1999 1999010 Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Sec: Ter:	The design control process for permanent plant modifications was being properly implemented for the sample of modifications reviewed. The technical quality of changes was adequate and modification package content, including the 10CFR50.59 screening and safety reviews, was comprehensive. Post modification testing accomplished the verification of relevant design change attributes. (Section E1.1)
10/12/1999	1999010	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	There were 13 open bypasses (temporary modifications) in use at Susquehanna. The open bypasses were properly
Dockets Discu	ssed:				Ter:	designed and implemented. Increased oversight by PPL has significantly reduced the number of open bypasses in the last two years. (Section E1.2)
05000387 Sus 05000388 Sus	•					last two years. (Section E1.2)
10/12/1999	1999010	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	PPL did not perform 10CFR50.59 screening determinations or evaluations for seven waived "required" preventive
05000387 Sus	Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Ter:	maintenance items as required by a station maintenance procedure. This was a violation for failing to follow procedures and was considered a Non-Cited Violation of Technical Specification Section 5.4, "Procedures." (Section E2.4)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
10/12/1999	1999010	Pri: ENG	NRC	WK	Pri: 4B	Executive Summary
	Sec:			Sec:	The engineering staff when fully engaged was providing adequate support for resolution of technical problems and was	
Dockets Discus					Ter:	generally effective in supporting safe plant operations. However, communication and coordination weaknesses observed delayed resolution of some technical issues by engineering. (Section E2.2)

10/12/1999	1999010	Pri: ENG	NRC	WK	Pri: 4B	Executive Summary
		Sec:			Sec:	The engineering staff when fully engaged was providing adequate support for resolution of technical problems and was
Dockets Disco	squehanna 1				Ter:	generally effective in supporting safe plant operations. However, communication and coordination weaknesses observed delayed resolution of some technical issues by engineering. (Section E2.2)
05000388 Sus	squehanna 2					
10/12/1999	1999010	Pri: ENG	NRC	WK	Pri: 4C	Executive Summary
		Sec:			Sec:	This inspection found no specific problems regarding the prioritization of engineering work backlogs. Nonetheless, the
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	team was concerned about the effectiveness of PPL's efforts in managing the engineering work backlogs since due dates for other than priority 1 condition reports or corrective actions were routinely changed by the individuals assigned the task of resolving the issue, without management review and approval. (Section E2.3)
10/12/1999	1999010-01	Pri: ENG	NRC	NCV	Pri: 4C	Failure to Follow Bypass and Preventive Maintenance Procedures
		Sec:			Sec: 4B	PPL failed to follow their administrative procedure governing the bypass program in that system configurations which
Dockets Disc	ussed:				Ter:	were bypasses were not documented, evaluated, and controlled. This problem was in PPL corrective action program and was treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. (Section E1.2)
05000387 Susquehanna 1 05000388 Susquehanna 2						PPL did not perform 10CFR50.59 screening determinations or evaluations for seven waived "required" preventive maintenance items as required by a station maintenance procedure. This was a violation for failing to follow procedures and was considered a Non-Cited Violation of Technical Specification Section 5.4, "Procedures." (Section E2.4)
10/12/1999	1999010-02	Pri: ENG	NRC	NCV	Pri: 4B	Exceeding Technical Specification 3.7.2 LCO
		Sec:			Sec:	Although engineering personnel generally responded in an effective manner to technical issues, several examples were
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	noted where engineering support was not adequate. Specifically, engineering personnel were not successful in initially resolving issues relating to adverse ESW pump-to-pump interactions. Engineering performed an invalid operability assessment which resulted in two of the four ESW pumps being inoperable for in excess of the 7 day LCO time limit. This violation of Technical Specification Section 3.7.2.D, was considered a Severity Level IV violation and was treated as a Non-Cited Violation. A contributing cause was that engineering personnel had not adequately addressed the potential for adverse ESW pump-to-pump interactions during their review of NRC Bulletin 88-04. (Section E2.1)
10/12/1999	1999010-03	Pri: ENG	NRC	NCV	Pri: 4B	Inadequate Corrective Actions Secondary Containment Dampers
		Sec:			Sec:	Engineering was not effective in resolving numerous Secondary Containment isolation damper stroke time surveillance
Dockets Disco 05000387 Sus 05000388 Sus	squehanna 1				Ter:	test failures in a timely fashion, as eighteen surveillance test failures occurred within the last 2.5 years. These failures challenged station personnel to react to numerous Technical Specification Limiting Condition of Operation entries regarding secondary containment integrity. Failure to identify conditions adverse to quality constituted a violation of 10 CFR Part 50, Appendix B, Criterion XVI, corrective action. This Severity Level IV violation was treated as a Non-Cited Violation. (Section E2.1)

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09/02/1999	1999008	Pri: ENG	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3A	During the independent spent fuel storage installation (ISFSI) dry run, the PP&L ISFSI staff properly demonstrated the
05000387 Sus	Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Ter: 4C	equipment, procedures, planning and training of the ISFSI work team members. When the preparations and dry run exercises identified issues or items for improvement, these were addressed by evaluation and appropriate action. Issues raised by the inspectors, including establishing a process for the acceptance of the dry run by management, were addressed by PP&L during the course of the inspection. The dry run demonstrated that the ISFSI staff along with the task equipment and procedures were adequately prepared to initiate the transfer of spent fuel from the spent fuel pool to the horizontal storage module pad area located on the plant site. (Section 2)
09/02/1999	1999008	Pri: ENG	NRC	POS	Pri: 4B	Executive Summary
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: Ter:	Based on the review of completed procedures and work packages, the detailed 10 CFR 72.212 evaluation documentation that compares the specifics of the Susquehanna independent spent fuel storage installation(ISFSI) project to that licensed by NRC, the extent of planning, and the overall effectiveness of the PP&L ISFSI project management, PP&L was found to be meeting the significant terms and conditions of the Certificate of Compliance, and 10 CFR Parts 50 and 72, as they related to the ISFSI, and was adequately prepared to use the ISFSI. (Section 1)
07/19/1999	1999006	Pri: ENG	Licensee	NEG	Pri: 5B	Executive Summary - Section M1.1
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: 5C Ter:	A failed main transformer bushing resulted in the June 8, 1999, Unit 2 automatic reactor shutdown. The PP&L root cause analysis team concluded that PP&L had failed to take correct action on a vendor's 1990 recall notice which identified a manufacturing defect which eventually led to this failure. (Section M1.1)
07/19/1999	1999006	Pri: ENG	NRC	POS	Pri: 4B	Executive Summary - Section E2.1
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: 5B Ter:	On July 1, 1999, the Unit 1 "C" outboard main steam isolation valve (MSIV) stem separated from the valve poppet, resulting in an automatic reactor shutdown. PP&L determined that the stop plate had not been properly installed in the valve poppet during valve maintenance performed in 1990. PP&L reviewed the maintenance history on all Unit 1 and Unit 2 MSIVs, inspected three additional Unit 1 MSIVs, and found no additional problems. The inspectors concluded that PP&L had performed a thorough root cause analysis and a comprehensive extent of condition review. (Section E2.1)
06/07/1999	1999005	Pri: ENG	Self	NEG	Pri: 2A	EXECUTIVE SUMMARY
Dockets Discu 05000387 Suse 05000388 Suse	quehanna 1	Sec:			Sec: Ter:	Continued problems with the emergency diesel generator non-safety related control air system components have resulted in increased emergency diesel generator unavailability time, additional fast starts, and increased operator, maintenance and scheduling burden. (Section M1.1)

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06/07/1999	1999005-03	Pri: ENG	Licensee	NCV	Pri: 4B	SAFETY RELIEF VALVE ACOUSTIC MONITOR ENVIRONMENTAL QUALIFICATION AND INSTALLATION
		Sec:			Sec:	PP&L determined that all Unit 1 and Unit 2 safety relief valve acoustic monitors were not installed in an environmental
Dockets Discussed: 05000387 Susquehanna 1					Ter:	qualified configuration, as a result of a failure to apply RTV sealant during modification activities. PP&L failed to adequately translate vendor environmental qualification and design requirements into appropriate specifications and
05000387 Sus	•					instructions. This is a severity level IV violation of 10 CFR 50 Appendix B, Criterion III, Design Control and is being treated as a Non-Cited Violation. This violation is documented in PP&L's corrective action program as condition report 97121. (Section E1.1)
04/26/1999	1999004	Pri: ENG	NRC	NEG	Pri: 4B	Executive Summary
		Sec:			Sec: 4C	Although PP&L identified problems with roles and responsibilities during troubleshooting, they did not identify a change
Dockets Disc	ussed:				Ter:	management issue. Specifically, the station staff was not fully aware that the system engineering interface with
05000387 Sus	•					operations and maintenance during troubleshooting had been changed. (Section E2.1)
05000388 Sus	squehanna 2					
04/26/1999	1999004	Pri: ENG	NRC	NEG	Pri: 5A	Executive Summary
		Sec:			Sec: 5B	The PP&L independent safety engineering group review of the slow pressurization of the residual heat removal system
Dockets Disc	ockets Discussed:				Ter:	event was limited and missed opportunities to reveal additional insights related to the station staff response to the failed
05000387 Susquehanna 1						valve. (Section E2.1)
05000388 Sus	squehanna 2					
04/26/1999	1999004	Pri: ENG	NRC	POS	Pri: 5B	Executive Summary
		Sec:			Sec: 5C	Engineering personnel performed a comprehensive failure analysis and a thorough root cause determination of the Unit
Dockets Disc	ussed:				Ter:	1 and 2 low pressure coolant injection valve stem failures. Corrective actions, including the replacement of internal
05000387 Sus	•					parts with an improved design and material, were acceptable. (Section E1.1)
05000388 Sus	squehanna 2					
04/26/1999	1999004-02	Pri: ENG	NRC	NCV	Pri: 4B	Residual Heat Removal System Injection Control Valve Stem Failure - Old Design Issue
		Sec:			Sec: 4A	Design control deficiencies in the mid-1980's led to the use of material in the stem of the low pressure coolant injection
Dockets Disc	ussed:				Ter:	valves that was susceptible to stress corrosion cracking. These deficiencies constituted a violation of 10 CFR 50
05000387 Sus	•					Appendix B, Criterion III, "Design Control," In accordance with the NRC Enforcement Policy, Section VII.B.3, Violations Involving Old Design Issues, the NRC exercised enforcement discretion and did not cite this violation. (Section E1.1)
05000388 Sus	squehanna 2					(Coolen 200)
03/15/1999	1999003	Pri: ENG	Licensee	POS	Pri: 3A	EXECUTIVE SUMMARY
		Sec:			Sec: 4A	The planning and construction of the Susquehanna Independent Spent Fuel Storage Facility (ISFSF) were being
Dockets Disc	ussed:				Ter:	accomplished well. Quality Assurance involvement has been evident throughout the ISFSF project. (Section E2.2)
05000387 Sus	•					
05000388 Sus	squehanna 2					

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03/15/1999	1999003-01	Pri: ENG	Licensee	NCV	Pri: 5B	CORE SPRAY QUARTERLY FLOW SURVEILLANCE DID NOT MEET ACCEPTANCE CRITERIA
Dockets Discussed: 05000388 Susquehanna 2		Sec:			Sec: Ter:	In a Licensee Event Report, PP&L identified that on two occasions, the Unit 2 core spray quarterly flow surveillance test did not meet the Technical Specification (TS) acceptance criteria due to a procedure error. PP&L's proposed and completed corrective actions, including procedure and programmatic actions, were good. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in PP&L's corrective action program as condition report 98-3070. LER 50-388/98-011 is closed. (Section O8.1)
03/15/1999	1999003-02	Pri: ENG	NRC	NCV	Pri: 4A	RESIDUAL HEAT REMOVAL SERVICE WATER (RHRSW) RADIATION MONITOR
Dockets Disc 05000388 Su		Sec:			Sec: 4B Ter:	The residual heat removal service water (RHRSW) radiation monitors do not meet requirements of General Design Criteria 64. Specifically, the radiation monitors would not be functioning following a postulated design basis accident, since the monitors can not be manually started locally in the high post accident area radiation levels. In addition, the location of a backup grab sample would not provide a representative sample as delineated in Regulatory Guide 1.21. This is a violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," which requires, in part, selection of suitable equipment that are essential to the safety related function of the system. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is documented in PP&L's corrective action program as condition report 91031. (Section E2.1)
02/19/1999	1999002	Pri: ENG	Licensee	NEG	Pri: 5C	EXECUTIVE SUMMARY
Dockets Disc 05000387 Su: 05000388 Su:	squehanna 1	Sec:			Sec: 5B Ter:	Internal reviews of the condition report system by Operating Experience Services (OES) and external reviews by Nuclear Assurance Services (NAS), the Cooperative Management Audit Program, the Institute of Nuclear Power Operations, and the Susquehanna Review Committee are continuing to find incomplete or inadequate corrective action closure. A recent process change requiring OES to review competed actions to ensure that the actions satisfies the one prescribed, is reducing the amount of items identified. However, problems persist in this area. (Section E7.1)
02/19/1999	1999002	Pri: ENG	NRC	POS	Pri: 4A	EXECUTIVE SUMMARY
05000387 Su	Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2				Sec: 4B Ter:	The inspector concluded that PP&L's response to Generic Letter 96-01 adequately addressed the issues identified in the GL, and that there was an adequate basis for the positions taken in the response. (Section E1.1)
02/19/1999	1999002	Pri: ENG	NRC	POS	Pri: 4C	EXECUTIVE SUMMARY
02/19/1999 1999002 Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 4A Ter:	The inspector determined that the procedures for control of modifications to the facility provided appropriate controls for ensuring that modifications were properly carried over into the technical specifications and surveillance tests. (Section E3.1)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
02/01/1999	1999001	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2		Sec:			Sec: 4B Ter:	Two Plant Operations Review Committee (PORC) meetings, related to a Unit 1 "C" reactor feedwater drain valve leak seal repair and a generic main generator synchronization issue, demonstrated that PORC conducted in-depth reviews of safety issues. The PORC recommendations for both meetings were sound and supported by a conservative decision making process.
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3A	PP&L implemented overall effective surveys, monitoring, and control of radioactive materials and contamination. Health

02/01/1999	1999001	Pri: ENG	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec: 4B	Two Plant Operations Review Committee (PORC) meetings, related to a Unit 1 "C" reactor feedwater drain valve leak
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	seal repair and a generic main generator synchronization issue, demonstrated that PORC conducted in-depth reviews of safety issues. The PORC recommendations for both meetings were sound and supported by a conservative decision making process.
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3A	PP&L implemented overall effective surveys, monitoring, and control of radioactive materials and contamination. Health
05000387 Susc 05000388 Susc	quehanna 1				Ter:	Physics technicians properly documented survey results. In general, radiological housekeeping conditions were acceptable. (Section R1.2)
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec : 3B	Security and safeguards procedures and documentation were properly implemented. Event logs were properly
Dockets Discu 05000387 Susc 05000388 Susc	quehanna 1				Ter:	maintained and effectively used to analyze, track, and resolve safeguards events. (Section S3)
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3C	Management support was adequate to ensure effective implementation of the security program, as evidenced by
05000387 Susc 05000388 Susc	quehanna 1				Ter:	adequate staffing levels and the allocations of resources to support programmatic needs. (Section S6)
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 5C	PP&L implemented effective applied radiological controls. The radiation work permit program was adequately
Dockets Discussed: 05000387 Susquehanna 1 05000388 Susquehanna 2					Ter:	implemented. Personnel occupational exposure was maintained within applicable regulatory limits and as low as reasonably achievable. Access controls to radiologically controlled areas were effective, and appropriate occupational exposure monitoring devices were provided and used. (Section R1.1)
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 3A	Executive Summary
		Sec:			Sec: 3C	Security and safeguards activities with respect to alarm station controls, communications, and protected area access
Dockets Discu 05000387 Susc 05000388 Susc	quehanna 1				Ter:	control of personnel, packages and vehicles were effectively implemented. (Section S1)

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
01/01/2000	1999012	Pri: PLTSUP	NRC	POS	Pri: 3B	Executive Summary
		Sec:			Sec: 2B	The security force members (SFMs) were provided effective training and adequately demonstrated that they had the
Dockets Discu	ssed:				Ter:	requisite knowledge necessary to effectively implement their duties and responsibilities. (Sections S4 and S5)
05000387 Sus	•					
05000388 Sus	quehanna 2					
11/20/1999	1999011	Pri: PLTSUP	NRC	POS	Pri: 3A	Executive Summary
		Sec:			Sec: 2B	PP&L's program to transport low level radioactive waste and other radioactive materials was generally effective.
Dockets Discu	ssed:				Ter:	(section R1.2)
05000387 Susc	quehanna 1					
05000388 Susc	quehanna 2					
11/20/1999	1999011	Pri: PLTSUP	NRC	POS	Pri: 3A	Executive Summary
		Sec:			Sec: 2B	The assessment and corrective action programs, in the areas of radioactive waste and radioactive material
Dockets Discu	ssed:				Ter:	transportation, were effective. The problem identification and corrective action program identified and adequately
05000387 Susquehanna 1						resolved Condition Reports. (section R7)
05000388 Susc	quehanna 2					
11/20/1999	1999011	Pri: PLTSUP	NRC	POS	Pri: 5A	Executive Summary
		Sec:			Sec: 5B	PP&L's solid radioactive waste management program continued to be effective, based on proper implementation of the
Dockets Discu	ssed:				Ter:	program, the use of documented procedures and controls, satisfactory record keeping, and the acceptable condition of
05000387 Susc	•					facilities and equipment. Also, the Process Control Program was detailed and provided a description of the waste types generated, waste stream sampling and analyses performed, and waste processing methods used. (section
05000388 Susc	quehanna 2					R1.1)
10/16/1999	1999009	Pri: PLTSUP	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	PP&L effectively maintained and implemented the Radiological Environmental Monitoring Program (REMP) in
Dockets Discu	ssed:				Ter:	accordance with regulatory requirements. The monitoring program was performed using the REMP procedures and the
05000387 Susc	quehanna 1					Offsite Dose Calculation Manual, the annual reports documented the results of the REMP, and the contractor laboratories continued to provide effective validation of analytical results. Overall, the environmental monitoring program
05000388 Susc	quehanna 2					was capable of ensuring independent verification and validation of the integrity of the effluent release program. (Section
						R1.3)
10/16/1999	1999009	Pri: PLTSUP	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	Overall, PP&L effectively maintained the meteorological instrumentation operable. Channel calibrations and channel
Dockets Discu	ssed:				Ter:	checks were performed in accordance with the procedures and the Technical Requirements Manual. (Section R1.4)
05000387 Susc	quehanna 1					
	guehanna 2					

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Date	Source	Functional Area	ID	Туре	Template Codes	Item Title Item Description
10/16/1999	1999009	Pri: PLTSUP	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec:	Performance of audits and assessments for the REMP activities were directly observed, timely feedback was provided
Dockets Discu	ıssed:				Ter:	and identified findings were appropriately categorized and entered into the corrective action process. The audits were
05000387 Sus	quehanna 1					thorough and of sufficient depth to assess the REMP activities. (Section R7.1)
05000388 Sus	quehanna 2					
10/12/1999	1999010	Pri: PLTSUP	NRC	NEG	Pri: 4C	Executive Summary
		Sec:			Sec:	The QA department was not effectively used to monitor, assess, and improve plant performance based on limited
Dockets Discu	ıssed:				Ter:	resources for audits and surveillances, lack of substantive performance based findings, and lack of trending findings.
05000387 Sus	quehanna 1					The on-site Quality Assurance organization did not appear to be fully integrated into significant work activities at the plant as observed by the inconsistency in QA coverage for the maintenance work performed on the D ESW pump
05000388 Susquehanna 2						motor. (Section E7.1)
09/02/1999	1999008	Pri: PLTSUP	NRC	POS	Pri: 2B	Executive Summary
		Sec:			Sec: 3A	The training program for personnel involved with the independent spent fuel storage installation (ISFSI) activities was
Dockets Discu	ıssed:				Ter:	implemented appropriately. The Certificate of Compliance requirement that training should include an overview,
05000387 Susquehanna 1						radiological safety issues, off normal event procedures, and licensing requirements was met. Criteria for determining which individuals required training were adequate. ISFSI operations personnel were given specialized training in the
05000388 Sus	05000388 Susquehanna 2				equipment and procedures. In numerous cases, hands-on simulation to demonstrate an ability to conduct the activities	
						was conducted. The training of HP technicians for the radiological aspects of the ISFSI evolutions was performed in a
						thorough manner based on the detailed training materials used and on their involvement in the dry runs. (Section 11)
09/02/1999	1999008	Pri: PLTSUP	NRC	POS	Pri: 4C	Executive Summary
		Sec:			Sec: 3A	PP&L's plans and preparations for controlling radiological activities for the independent spent fuel storage installation
Dockets Discu	ıssed:				Ter:	(ISFSI) were extensive and detailed. Specific radiation work permits, with appropriate radiological controls included,
05000387 Sus	quehanna 1					were available. Health physics technicians were observing the dry run activities, anticipating radiation conditions and providing countermeasures to the ISFSI work staff. The ISFSI operational procedures had been reviewed by radiation
05000388 Sus	quehanna 2					protection personnel and contained cautionary notes for specific radiological hazards. (Section 8)
08/28/1999	1999007-02	Pri: PLTSUP	Self	NCV	Pri: 3A	Packaging and Shipment of Radioactive Waste
		Sec:			Sec: 4C	PP&L improperly packaged radioactive waste that was shipped to a low-level waste disposal facility. Upon
Dockets Discussed:					Ter:	identification, PP&L reviewed the circumstances of these shipments, entered the occurrences into their corrective
05000387 Susquehanna 1						action program as condition report 188042, and initiated corrective measures to prevent recurrence. This Severity
05000388 Susquehanna 2						IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. (Section R8.1)
07/19/1999	1999006	Pri: PLTSUP	NRC	POS	Pri: 3B	Executive Summary - Section S2
		Sec:			Sec: 3C	The SSES security force members adequately demonstrated that they had the required knowledge to effectively
Dockets Discu	ıssed:				Ter:	implement the duties and responsibilities associated with their position. (Section S2)
05000387 Sus	quehanna 1					
05000388 Sus	guehanna 2					

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Region I SUSQUEHANNA

05000388 Susquehanna 2

		Functional			Template	Item Title
Date	Source	Area	ID	Туре	Codes	Item Description
04/26/1999	1999004	Pri: PLTSUP	NRC	POS	Pri: 3C	Executive Summary
		Sec:			Sec:	Access controls to radiologically controlled areas were effective, and appropriate occupational exposure monitoring
Dockets Discu	ıssed:				Ter:	devices were provided and used. Personnel occupational exposure was maintained within applicable regulatory limits
05000387 Sus	•					and as low as reasonably achievable (ALARA). The ALARA efforts and results for 1998 were good, including the management of radiologically significant outage work. The annual and Unit 2 refueling and inspection outage collective
05000388 Sus	quehanna 2					dose goals for 1999 were aggressive and challenging. (Sections R1.1 and R1.3)
04/26/1999	1999004	Pri: PLTSUP	NRC	POS	Pri: 3C	Executive Summary
		Sec:			Sec: 2B	Radiological housekeeping conditions were noted to be good. In particular, the equipment and personnel work activit
Dockets Discu	Dockets Discussed:				Ter:	control and coordination for the Unit 2 refuel floor, suppression pool, and drywell were excellent. The number and type
05000387 Sus	quehanna 1					of personnel contaminations were tracked, trended, and evaluated for cause and corrective actions. (Section R1.2)
05000388 Sus	quehanna 2					
04/26/1999	1999004	Pri: PLTSUP	NRC	POS	Pri: 5A	Executive Summary
		Sec:			Sec: 5C	PP&L's self-identification and corrective action processes in the area of radiation protection were effective. Nucle
Dockets Discu	ıssed:				Ter:	Assessment Services surveillance reports, HP self-assessments, and the corrective action program continued to be
05000387 Sus	quehanna 1					effective in identifying, at a low threshold, deficiencies and improvement opportunities. Effective corrective actions were implemented for findings. (Section R7)
05000388 Sus	quehanna 2					implemented for intallige. (Geodon W)
02/01/1999	1999001	Pri: PLTSUP	NRC	NEG	Pri: 4C	Executive Summary
		Sec:			Sec: 5A	The NRC identified that two accessible fire zones were not inspected by hourly firewatches since 1992. PP&L
Dockets Discussed: 05000387 Susquehanna 1					Ter: 3A	incorrectly treated the areas as inaccessible when in fact they were accessible. Once recognized, PP&L took immediate and effective corrective actions.

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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
OTHR	Other
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
ЗА	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 MAINT ENG PLTSUP	Operations Maintenance Engineering 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.