CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9812230007 DOC.DATE: 98/12/15 NOTARIZED: NO DOCKET #
FACIL:50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylva 05000387
50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylva 05000388
AUTH.NAME AUTHOR AFFILIATION
BYRAM,R.G. Pennsylvania Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
Records Management Branch (Document Control Desk)

SUBJECT: Responds to NRC 981113 ltr re violations noted in insp repts 50-387/98-05 & 50-388/98-05.Corrective actions:formal calculation will be developed as part of CR 98-1197 resolution to document SSES licensing basis PCT unaffected.

DISTRIBUTION CODE: IE01D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 4
TITLE: General (50 Dkt)-Insp Rept/Notice of Violation Response

NOTES: 05000387

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD1-2 PD	1	1	NERSES,V	1	1
INTERNAL:	ACRS	2	2	AEOD/SPD/RAB	1	1
	AEOD/TTC	1	1	DEDRO	1	1
	FILE CENTER	1	1	NRR/DRCH/HOHB	1	1
	NRR/DRPM/PECB	1	1	NRR/DRPM/PERB	1	1
	NUDOCS-ABSTRACT	1	1	OE DIR	1	1
	OGC/HDS2	1	1	RGN1 FILE 01	1	1
EXTERNAL:	LITCO BRYCE,J H	1	1	NOAC	1	1
	NRC PDR	1	1	NUDOCS FULLTEXT	1	1
NOTES:		1	1			

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: LTTR 20 ENCL 20

CATEGORY 1 DOCUMENT

Robert G. Byram
Senior Vice President
Generation and Chief Nuclear Officer
Tel. 610.774.7502 Fax 610.774.5019
E-mail: rgbyram@papl.com

PP&L, Inc.
Two North Ninth Street
Allentown, PA 18101-1179
Tel. 610.774.5151
http://www.ppl-inc.com/

DEC 15 1998

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
REPLY TO A NOTICE OF VIOLATION
(50-387/98-05-01 & 50-388/98-05-01)
PLA-5014

Docket Nos. 50-387
and 50-388

This letter provides PP&L, Inc.'s (PP&L) response to NRC Notice of Violation 50-387/98-05-01 and 50-388/98-05-01 contained in combined NRC Inspection Report 50-387/98-05 and 50-388/98-05, dated November 13, 1998.

The Notice of Violation (NOV) states that for examples 1 and 2 of the cited violation appropriate corrective actions have been taken to assure compliance is achieved, and no reply to these violation examples is required. The notice however, requires submittal of a written reply to example 3 of the notice within thirty (30) days of the date of the letter.

If you have any questions concerning the response, please contact Mr. J. M. Kenny at (610)-774-7535.

Sincerely,

R. G. Byram

Attachment

Copy: NRC Region I
Mr. S. L. Hansell, NRC Acting Sr. Resident Inspector
Mr. V. Nerses, NRC Sr. Project Manager

IE01

REPLY TO A NOTICE OF VIOLATION

Violation 50-387 & 388/98-05-01

"Section III, "Design Control," of Appendix B to Title 10 of the Code of Federal Regulations, Part 50, requires that measures be established to ensure that the applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures and instructions. It further requires that design control measures be applied to items such as accident analyses and delineation of acceptance criteria for tests and inspections.

Contrary to the above, three examples were identified, in which measures did not ensure that regulatory requirements and the design basis were correctly translated into accident analyses or test acceptance criteria.

1. Contrary to the above, on July 27, 1998, Pennsylvania Power and Light Company (PP&L) did not ensure that the design basis of the facility was correctly translated into test acceptance criteria in that, when PP&L revised the Unit 1 quarterly core spray flow verification test, SO-151-A02, the acceptance criteria for system flow and pressure did not assure the level of core spray pump performance required by Improved Technical Specification SR 3.5.1.7 would be met. Specifically, SR 3.5.1.7 requires that the core spray system loops be capable of injecting 6350 gpm into the reactor vessel at a steam dome pressure of 105 psig. However, based upon calculation EC-051-004, the SO-151-A02 acceptance criterion of 282 psig discharge pressure at 6350 gpm correlated to 99 psig reactor vessel steam dome pressure.

2. Contrary to the above, on and before October 1, 1998, PP&L did not ensure that the design basis of the facility was correctly translated into test acceptance criteria in that the acceptance criteria for the Unit 2 quarterly core spray flow verification test did not assure the level of core spray pump performance required by Technical Specification 4.5.1 b. would be met. Specifically, the Unit 2 core spray quarterly flow test methodology specified adding a 7 psig correction factor to the indicated discharge pressure before comparing the discharge pressure to the acceptance criterion pressure. No basis existed for adding the 7 psig correction factor.

3. Contrary to the above, on and before October 2, 1998, PP&L had not ensured that the facility design basis was correctly translated into the accident analyses in that the Loss of Coolant Accident analysis assumed core spray system flows up to and including 8143 gallons per minute per loop. These flows are in excess of the system design flow limit of 7900 gallons per minute per loop."

Response

The Notice of Violation (NOV) states that for examples 1 and 2 of the cited violation appropriate corrective actions have been taken to assure compliance is achieved, and no reply to these violation examples is required. The NOV also requests a written reply to example 3 of the cited violation. PP&L's reply is provided below.

1. Reason for the Violation

To support the Power Uprate effort, PP&L used the General Electric SAFER/GESTR LOCA analysis. General Electric used three specific conditions to generate a core spray system (CSS) flow versus vessel pressure curve: (1) shutoff head of 289 psid; (2) technical specification requirement of 6350 gpm at 105 psid; and (3) pump runout conditions of 7900 gpm at 0 psid. The Siemens (current PP&L fuel supplier) LOCA analysis, developed in 1995, requested only two points to generate the CSS flow versus vessel pressure curve. The data requested by Siemens included: (1) shutoff head of 289 psid; and (2) technical specification requirement of 6350 gpm at 105 psid. Siemens used this information together with FSAR Figure 6.3-6 (in FSAR Revision 48) to develop the CSS runout flow condition. The use of FSAR Figure 6.3-6 resulted in the calculation of an erroneous value for CSS runout flow that was contained in a Siemens document sent to PP&L to review. PP&L's original review of this document did not identify this value as erroneous.

In April 1998, PP&L initiated Condition Report 98-1197 to assess the impact of CSS flow performance at low pressure on the LOCA analysis results. As part of the evaluation associated with this Condition Report PP&L identified the specific Core Spray runout flow discrepancy identified in the NOV. PP&L also determined that FSAR Figure 6.3-6 (which was removed in 1996, as part of the FSAR change to support Power Uprate) conflicted with FSAR Table 6.3-2, which contains the correct CSS runout flow condition.

2. Corrective Steps Which Have Been Taken and the Results Achieved

The operability determination for CR 98-1197 concluded that the SSES licensing basis Peak Cladding Temperature (PCT) was unaffected by the discrepancy in the value of CSS flow at low pressures.

The incorrect flow versus vessel pressure curve for CSS flow (FSAR Figure 6.3-6) was previously removed from the FSAR.

3. Corrective Steps Which Will Be Taken to Avoid Further Violations

a) A formal calculation will be developed as part of CR 98-1197 resolution to document that the SSES licensing basis Peak Cladding Temperature (PCT) is unaffected by the discrepancy in the value of CSS flow at low pressures. This activity will be completed by January 29, 1999.

b) Appropriate PP&L personnel will be trained regarding the expectations associated with the review of vendor data for plant performance and accident analyses. This training will be completed by January 29, 1999.

c) PP&L will conduct an additional review of vendor data used to support the existing LOCA analyses to assure that the data reflects current plant performance parameters. This activity will be completed by March 31, 1999.

4. Date of Full Compliance

Based on (2) above PP&L is in full compliance. Completion of documentation demonstrating compliance will be completed by January 29, 1999.