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       50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylvania      05000388  
 AUTH. NAME      AUTHOR AFFILIATION  
 KEISER, H.W.      Pennsylvania Power & Light Co.  
 RECIP. NAME      RECIPIENT AFFILIATION  
 BUTLER, W.R.      Project Directorate I-2

SUBJECT: Forwards proposed Rev 4 to plant fire protection review rept  
 for review & approval. Summary of changes listed. W/o encl.

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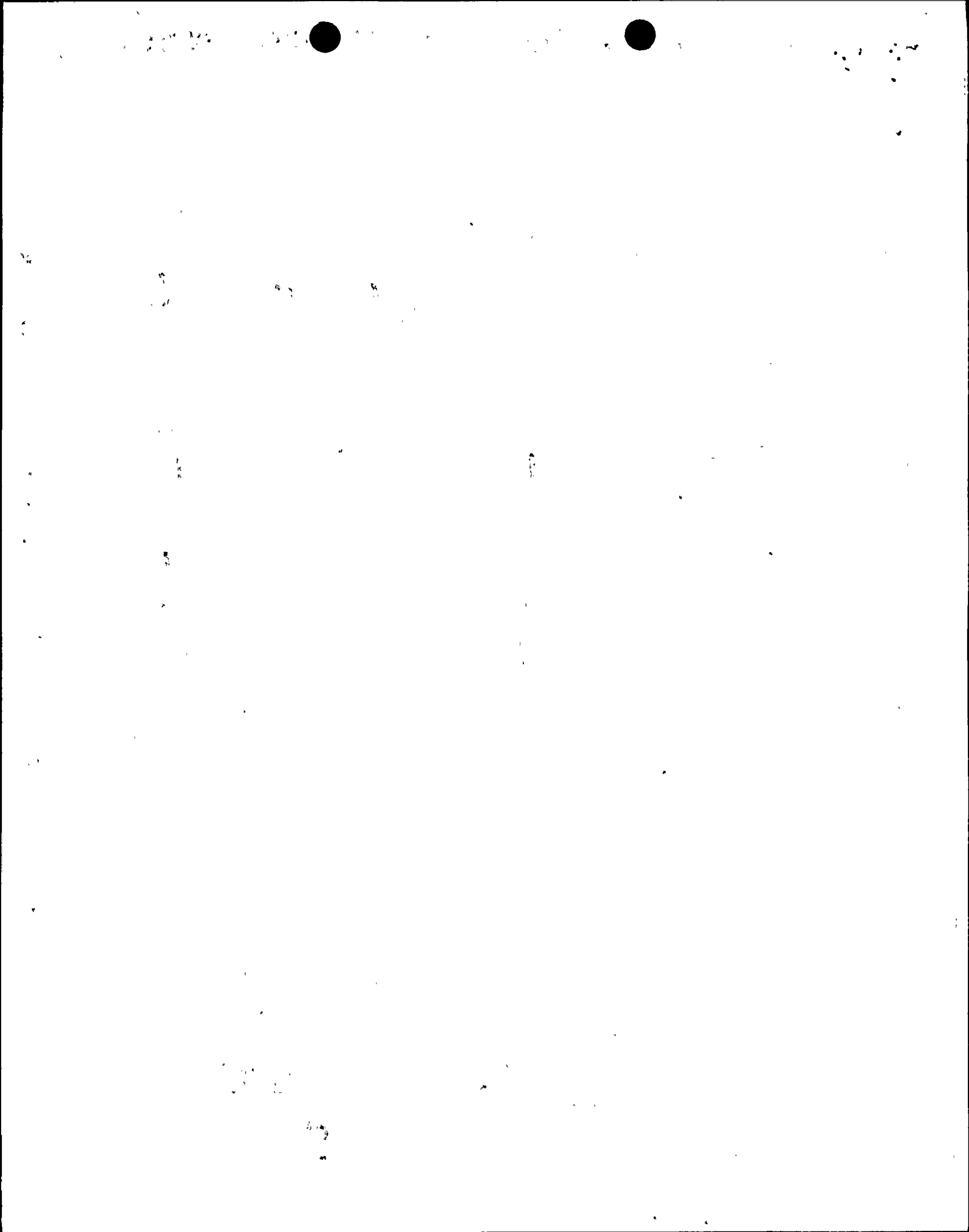
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**Pennsylvania Power & Light Company**

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

Harold W. Keiser  
Senior Vice President-Nuclear  
215/770-4194

DEC 29 1989

Director of Nuclear Reactor Regulation  
Attention: Dr. W. R. Butler, Project Director  
Project Directorate I-2  
Division of Reactor Projects  
U.S. Nuclear Regulatory Commission  
Washington DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION  
REVISION NO. 4 TO THE FIRE PROTECTION  
REVIEW REPORT  
PLA-3317 FILES R41-2,S013,P5-1,A17-15

DOCKET NO. 50-387  
AND 50-388

Dear Dr. Butler:

Enclosed for your review and approval is the proposed Revision 4 to the Susquehanna SES Fire Protection Review Report. To facilitate your review changes have been marked on a copy of Revision 3 to the document. The format of this submittal was previously discussed with your staff.

All changes to the document since the submittal of Revision 3 have been included. Changes submitted under PLA-3117 which were previously reviewed and approved by your staff, have been side barred and noted as previously approved.

A summary of the changes follows:

Section 3.3.1.1

This section was changed to more completely describe PP&L's position on transient events relative to Appendix R safe shutdown methodology.

A statement was added regarding the occurrence of a fire in the upper or lower relay room and its affect on automatic initiation of core spray.

A reference was added to Section 4.13 for a discussion of the voice powered communication system.

Section 3.3.1.5

The discussion of multiple high impedance faults was revised to include a description of analytical work done by PP&L.

*Adob  
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- Table 3.3-1 This Table was revised to include the addition of the Appendix R Voice Powered Communication System.
- Section 4.5 This change describes activation capabilities for plant deluge systems. Deluge systems may be manually activated locally from pushbuttons and manually from the control room with the exception of the HPCI and RCIC pump room which have no remote manual activation capability in the control room.
- Section 4.13 This section has been added to describe the Appendix R Voice Powered Communication System.
- Table 5.0-1 The Appendix R Voice Powered Communication System was added to the listing in Section D.5.(c).  
  
The reference to NFPA 194 in Section E.2.(g) was updated to NFPA 1963.  
  
A cross-reference was added to Section F.1.(a).
- Section 6.1.2.1 This section has been revised to describe the 50 foot spatial separation criteria used in the wraparound zone.
- Section 6.1.2.2 This change describes the long term program for controlling cable tray fills.
- Section 6.1.2.6 A note was added to indicate that Deviation Request No. 13 applies only to fire areas in the reactor buildings.
- Table 6.1-1 A note has been added to Page 7 of the table to clarify how the turbine building analysis was handled. This note is only for clarity and is not to indicate a change in the way the analysis was conducted.
- Section 6.2.1.5.20 This change adds a cross-reference to Deviation Request No. 39.
- Section 6.2.1.7 Deviation Request No. 39 was added to the listing of deviation requests affecting Fire Area R-1A.  
  
A typographical error, double listing of Deviation Request No. 16, was corrected.
- Section 6.2.2.5 Correction of a typographical error.



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- Section 6.2.2.5.24 A reference was added to Deviation Request No. 39.
- Section 6.2.2.7 Deviation Request No. 39 was added to the listing of deviation requests affecting Fire Area R-1B.
- Section 6.2.9.5.10 A statement was added to indicate that no Category I components are located in Fire Zone 2-3C-S.
- Section 6.2.9.5.20 and 6.2.9.5.22 Corrects typographical error. A statement regarding the location of Category I equipment was erroneously placed in Section 6.2.9.5.20.
- Section 6.2.9.7 Deviation Request Nos. 39 and 40 were added to the listing of deviation requests affecting Fire Area R-2A.
- Section 6.2.10.5.7 RHR valve HV-E11-2F009 controls and control circuits and Pressure Instrument B31-2N018A were added to the listing of Category I components located in Fire Zone 2-3B-N.
- Section 6.2.10.5.14 The text for Fire Zone 2-4G was corrected to place the Division II Pilot Solenoid Valves for the Main Steam Isolation Valves HV-B21-2F028 A,B and C in the listing of equipment required to achieve safe shutdown in the event of a fire. This action is also addressed by Deviation Request No. 38.
- Section 6.2.10.5.15 The word "not" was added to the text to correct a typographical error.
- Section 6.2.10.5.17 The word "not" was added to the text to correct a typographical error.
- Section 6.2.10.5.20 Reference to Deviation Request No. 38 was added to the text.
- Section 6.2.10.6 A manual action to close HV-B21-2F019 was added for Fire Zone 2-4G.
- Section 6.2.10.7 Deviation Request Nos. 38, 39, and 40 were added to the listing of deviation requests affecting Fire Area R-2B.
- Section 6.2.21.6 A manual action is being added to protect against a fire in Fire Zone 0-24G disabling the low pressure permissive required to open the Core Spray Inboard Injection Valve.



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- Section 6.2.25.5 This section has been changed to reflect the requirement for control room operators to man the alternate control structure HVAC control panel in the event of a control room fire.
- Section 6.2.25.6 This change deletes a manual action no longer necessary due to the addition of the alternate control structure HVAC control panel.
- Section 6.2.25.7 This change deletes reference to Deviation Request No. 1, which has been withdrawn.
- Sections 6.2.26.3, 6.2.26.5.1, 6.2.45.3, 6.2.45.5.1, 6.2.46.3, 6.2.46.5.1, 6.2.48.3, 6.2.48.5.1 The changes to these sections were made to reflect changes made to satisfy commitments made to the NRC (Ref PLA-2366 and PLA-2419) to provide reliable power for instrumentation useful to operations during station blackout conditions.
- Section 6.2.47.6 A manual action is being added to protect against a fire in Fire Zone 0-24G disabling the low pressure permissive required to open the Core Spray Inboard Injection Valve.
- Table 7.1-1 This table was updated to reflect the current status of deviation requests.
- Table 7.2 The deviation request index has been updated to reflect current status.
- Deviation Request No. 1 Deviation Request No. 1 has been withdrawn.
- Deviation Request No. 4 A note was added to the "Deviation Request" section to clarify the request (i.e. separation within the wraparound zone is provided by a minimum 50'-0" spatial separation).
- A note was added to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating. Statements regarding in-situ combustible durations will not be updated.
- Deviation Request No. 5 Deviation Request No. 5 has been withdrawn.
- Deviation Request No. 9 The title and terminology used in this request were change to agree with terminology currently in use. The intent of the request has not been charged.
- Deviation Request No. 10 Deviation Request No. 10 has been withdrawn.

10/10/44

Dear Sir,

I have the pleasure to acknowledge the receipt of your letter of the 10th inst. in relation to the above matter.

The information you have provided is being reviewed and a decision will be made as soon as possible.

Yours faithfully,

[Signature]

Deviation Request No. 12

Deviation Request No. 12 was changed to correct grammar. The word "was" has been replaced with "were" and an incomplete sentence was rewritten. There was no intent to change the meaning of the request.

Deviation Request No. 13

A note was added to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating. Statements regarding in-situ combustible durations will not be updated.

Deviation Request No. 15

A note was added to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating. Statements regarding in-situ combustible durations will not be updated.

Deviation Request No. 16

The deviation request was expanded to cover transfer valves HV-08601 A/B, HV-08602 A/B and HV-08603 A/B.

Deviation Request No. 21

The change corrects errors in Revision 3. On page DR 21-2, the fire area reference was incorrect. Also, Fire Area 0-21A has partial detection with no suppression.

Deviation Request No. 24

The unreviewed change to this request is the addition of a note to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating. Statements regarding in-situ combustible duration will not be updated.

Deviation Request No. 25

A note was added to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating. Statements regarding in-situ combustible durations will not be updated.

Deviation Request No. 26

RHR valve HV-E11-2F009 controls and control circuits were added to the scope of the deviation request.

A note was added to ensure program commitments regarding combustible controls are clear. Combustibles are controlled to remain below the fire area boundary fire resistance rating.

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Statements regarding in-situ combustible durations will not be updated.

Deviation Request No. 27

The deviation contains text as revised by PLA 3117 which was the version previously reviewed by the NRC. Changes to the text are correcting typographical errors or wording and are not intended to change the meaning of the request.

Deviation Request No. 28

The deviation contains text as revised by PLA 3117 which was previously reviewed by the NRC. No other changes have been made.

Deviation Request No. 30

This request was changed to reflect the addition of the CSHVAC alternate control panel. Other text changes were made to correct typographical errors and to add clarity.

The request was also revised to add OP 170 A,B; SV 08621 A,B; HD 07802 A,B; SV 07802 A,B; XISH 07802 A,B; and OC 879. TY 07802 A,B; FSL 08602 A,B; and TE 08621 A,B were deleted.

Deviation Request No. 38

Deviation Request No. 38 has been added to the report. The intent is to eliminate the need to install fire barriers between redundant safe shutdown cable located in the Unit 2 main steam pipeway.

Deviation Request No. 39

Deviation Request No. 39 has been added to the report. The intent is to address Category I components located in Fire Zones 1-6D and 2-6D.

Deviation Request No. 40

Deviation Request No. 40 has been added to the report. The intent is to address protection of redundant safe shutdown cables in Fire Zone 2-3C-W.

Very truly yours,



H.W. Keiser

cc: NRC Document Control Desk (original)  
NRC Region I  
Mr. M.C. Thadani, NRC Project Manger  
Mr. G.S. Barber, NRC Sr. Resident Inspector

