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 SCHWENCER, A. Licensing Branch 2

SUBJECT: Forwards Rev 2 to fire protection review rept. *SEE RPI*

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Dec. 30, 1982

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUSQUEHANA STEAM ELECTRIC STATION
REVISION 2 TO FIRE PROTECTION REVIEW REPORT
ER 100450 FILE 841-1
PLA-1463

Docket Nos 50-387
50-388

Dear Mr. Schwencer:

Attached are sixty (60) copies of Revision 2 to the Fire Protection Review Report. A summary of changes made in this revision is presented below:

<u>Section</u>	<u>Page</u>	<u>Description of Change</u>
1.0	1.0-2	Editorial change addressing applicability of report.
2.0	2.0-1	Editorial comment updating figure enumeration and description of the support configuration for fire protection and suppression systems located in areas containing safety related equipment.
2.1	2.1-1	Editorial change to better describe design of the clarified water storage tank and the methodology used to insure availability of the fire protection water source.

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| 2.1 | 2.1-2 | Editorial changes |
| 2.4 | 2.4-1 | Revised description of the automatic preaction sprinkler systems reflecting as-built configurations. |
| 2.8 | 2.8-1 | Automatic closure doors have been deleted. Subject doors are normally closed. The existing configuration satisfies NRC requirement and does not represent a safety impact. |
| 2.9 | 2.9-1 | Product of combustion detectors located in the PGCC have an alarm function only; heat detectors activate the Halon 1301 system.

General room flooding Halon 1301 fire extinguishing systems are not provided to protect safety related equipment as previously stated. There is no requirement for this protection. Deletion of this equipment has no impact on safety. |
| 2.10 | 2.10-1 | Corrections and updating of standards references.

Revision to the alarm configuration to reflect as-built plant which incorporates changes to the alarm panel resulting from NRC walkdown of plant fire protection systems. |
| 2.11 | 2.11-1 | Revision to the criteria for separation of redundant safe shutdown cable to incorporate previously accepted changes. These change do not negatively impact safety. |
| 3.1 | 3.1-18 | Item 103: Editorial change correcting figure numbers. |
| 3.1 | 3.1-21 | Adds option to lock major fire protection control valves in the open position; consistent with NRC requirements. |



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- 3.2 3.2-9 Item 48: Editorial change correcting typographical error from Revision 1.
- 3.2 3.2-11 Item 57: Editorial change correcting typographical error from Revision 1.
- 3.2 3.2-13 Revision to reflect as-built condition. Subject CO₂ systems were improperly installed and corrections were deferred. There are no safety related equipment or cable in these areas.
- 3.2 3.2-14 Change "will" to "can".
- 3.2 3.2-15 Change operation of smoke and heat vents from fusible link or remote electrically operated release to fusible link or manually operated release.
- Change "will" to "can".
- 3.2 3.2-20 Editorial changes to reflect as-built conditions and NRC requested changes upgrading from Class B detection and alarm system.
- 3.2 3.2-23 Editorial change reflecting upgrading from Class B detection and alarm system.
- 3.2 3.2-26 Added areas provided with sprinkler protection.
- 3.2 3.2-27 Incorporates response to FSAR questions.
- 3.2 3.2-29 Corrects spelling error and changes word "will" to "can".
- 3.2 3.2-32 Editorial change. Deletion of this material permits the operator or fire brigade leader to make the decision to turn off the diesel



Small, illegible handwritten marks or characters in the top right corner.

The main body of the page contains several lines of extremely faint, illegible text. The characters are too light to be accurately transcribed, appearing as sparse, scattered marks across the page.

generator room ventilation
fan based on existing
conditions.

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| 4.1 | 4.1-1 | Editorial change to correct reference to figure numbers. |
| 4.1 | 4.1-7 | Editorial changes provided for clarity. |
| 4.2 | 4.2-1 | Editorial changes and clarifications to provide consistency with other licensing documents. |
| 4.2 | 4.2-3 | Provides additional information on analytical methodology. |
| 4.3.1 | 4.3-2 | For each zone in which detection only is provided, the description under paragraph g has been rewritten to reflect the change in detection (i.e. no local alarm). Note: this statement is applicable throughout this report. |
| 4.3.3 | 4.3-5 | Deleted essential raceway from list of major safety related components located in the zone: Further analysis has shown previous listing, which resulted from conservative assumptions, to be incorrect. |
| 4.3.3 | 4.3-6 | Deleted statement regarding essential safe shutdown raceway. (See Section 4.3.3 remark). |
| 4.3.11 | 4.3.-17 | Correction of typographical error. |
| 4.3.14 | 4.3-22, 24 | Addition of essential safe shutdown raceway and related protection statement. |
| 4.3.18 | 4.3-36 | Deletion of paragraph discussing detection. This paragraph was redundant to revised paragraph g. |

- 4.3.33 4.3-71, 72 Description of zone 1-6A revised to reflect the effects of creating new fire zone 1-6I.
- 4.3.41 4.3-82, 83 Description of new Fire Zone 1-6I.
- 4.5.2 4.5-3 Editorial change to correct typographical error and changes to detection configuration.
- 4.5.3, 4 4.5-5, 6 Editorial change deleted remark regarding dispatch of fire brigade.
- 4.5.10 4.5-16 Deleted statement regarding essential safe shutdown raceway. (See Section 4.3.3 remark)
- 4.5.26 4.5-41 Paragraph g: Revised description of the detection configuration. Revised statement regarding activation of the manual spurt CO₂ system to permit operator decision.
- Paragraph h: Editorial revision and revised statement regarding start of battery room exhaust fans to permit operator decision.
- 4.5.30 4.5-49, 50, 51 Deleted statement regarding essential safe shutdown raceway.
- Paragraph g: Changed requirement to activate manual spurt CO₂ system to permit operator decision.
- 4.5.31 4.5-54 Paragraph g: Revised description of detection configuration and changed requirement to activate manual spurt CO₂ system to permit operator decision.
- 4.5.32 4.5-55 Deleted statement regarding essential safe shutdown raceway.

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| 4.5.36 | 4.5-62, 64 | Addition of essential safe shutdown raceway and related protection statement.

Paragraph g: Revised description of the detection configuration.

Revised statement regarding activation of the manual spurt CO ₂ system to permit operator decision. |
| 4.5.37 | 4.5-65 | Paragraph g: Revised description of the detection configuration.

Revised statement regarding activation of the manual spurt CO ₂ system to permit operator decision. |
| 4.5.38 | 4.5-67 | Same as Section 4.5.37 |
| 4.5.39 | 4.5-68 | Editorial change |
| 4.5.45 | 4.5-78 | Addition of essential safe shutdown raceway and related protection statement. |
| 4.5.48 | 4.5-85 | Revised stement regarding start of battery room exhaust fans to permit operater decision. |
| 4.5.51 | 4.5-88 | Revised statement regarding protection of essential safe shutdown raceway. This deviation has been previously approved by NRC. |
| 4.5.52 | 4.5-91 | Same as Section 4.5.51. |
| 4.5.58 | 4.5-101 | Editorial change to locate text material under proper heading. |
| 4.5.65 | 4.5-113 | Editorial change |
| 4.5.66 | 4.5-114 | Paragraph e: Addition of combustible material in the form of cable insulation not previously listed in Zone. There is no impact on safety. |



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4.5.67	4.5-117	Revised statement regarding use of portable fans in the battery rooms to permit operator decision.
4.5.71	4.5-123	Same as Section 4.5.67.
4.6.1	4.6-1	Editorial change to correct typing error.
4.6.1	4.6-2	Deletion of requirement for fire brigade response. Plant procedures to govern.
4.6.2	4.6-3	Same as Section 4.6.1, Page 4.6-2.
4.6.2	4.6-5	Same as Section 4.6.2
4.6.4	4.6-6	Same as Section 4.6.2
4.8	4.8-1	Editorial change expanding the description of analytical methodology.
4.9	4.9-1	Correction to inaccurate text. This change satisfies NRC requirements and does not impact safety.
Figures		Report figures have been updated to current status.
Table 6-1		This table has been updated to reflect further analysis and the results of a detection system walkdown.

Appendix A

Appendix A has been updated
to reflect further analysis
and the results of field
verification.



Very truly yours

N. W. Curtis
Vice President-Engineering & Construction-Nuclear



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