



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Enclosure 1

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
REQUESTS FOR DEVIATION FROM CERTAIN FIRE PROTECTION
PROVISIONS OF APPENDIX R TO 10 CFR PART 50
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NO. 50-387 AND 50-388

1.0 INTRODUCTION

By letter dated June 30, 1988, the licensee (Pennsylvania Power and Light Company - PP&L) submitted Revision No. 3 to the Susquehanna Steam Electric Station, Units 1 and 2 Fire Protection Revision Report. That submittal, along with prior submittals, including requests from the staff for additional information and the licensee's responses to the requests, was reviewed for NRC by Science Application International Corporation (SAIC). SAIC submitted their evaluation (Technical Evaluation Report dated June 22, 1989) of the various PP&L documents. We have reviewed the SAIC Technical Evaluation Report (TER) and agree with the details of their evaluations and conclusions. The SAIC Susquehanna TER is attached to and is a part of this safety evaluation.

2.0 CONCLUSION

By way of recapitulation, the conclusions from the SAIC Technical Evaluation Report are repeated.

2.1 Based on the evaluations in the SAIC TER, the following deviations from certain commitments of the licensee's Fire Protection Program have been found acceptable and may be granted:

<u>Section in TER</u>	<u>Title</u>
2.1	Battery Room Exhaust Fans
2.2	Suppression Pool Temperature Indication
2.3	Non-Rated Fire Doors
2.4	Wraparound Area
2.6	Non-Fireproofed Structural Steel
2.7	Fire Spread Limitations
2.9	HVAC Penetrations Reactor Building Fire Walls
2.10	Fire Barriers Without Fire Dampers in Vertical Ventilation Duct Penetrations
2.11	Essential Redundant Raceway Protection
2.12	Reactor Building Fire Zones Without Fire Detection
2.13	Fire Areas in the Control Structure Without Fire Suppression
2.14	Emergency Switchgear Room Cooling System Components - Insufficient Spatial Separation

8908170037 890809
PDR ADOCK 05000387
F PDC

<u>Section in TER</u>	<u>Title</u>
2.15	Kaowool System as an Acceptable 1-Hour Barrier Wrap
2.16	Incomplete Fire Suppression and Fire Detection in Diesel Generator Fire Areas
2.17	Penetration Seals - Conduits
2.18	Control Structure - Fire Zones Without Fire Detection and/or Fire Suppression
2.19	Control Structure - Fire Areas CS-9, Partial Fire Suppression
2.20	Automatic Fire Suppression in Fire Zone 2-5D
2.21	Automatic Fire Suppression and Intervening Combustibles in Fire Zone 1-3A
2.22	Automatic Fire Suppression and Intervening Combustibles in Fire Zone 2-3B-N
2.23	Nuclear Boiler Instrumentation in Fire Zone 1-5A-S Nuclear Boiler Instrumentation in Fire Zone 2-5A-N
2.24	Category I Components in Fire Zones 1-3C-W and 2-3C-W
2.25	Control Structure HVAC System Components - Fire Zones 0-29B and 0-30A
2.26	Outside Areas - Lack of Separation of Safe Shutdown Components and Electrical Cables
2.27	Reactor Coolant Makeup and Depressurization Systems
2.28	Control Structure Chiller ESW Valves -
2.29	Insufficient Fire Barrier, Fire Zone 1-3A Control Room Raised Floor and Control Structure Cable Chase Fire Protection

2.2 Based on evaluations in the SAIC TER, the following requests for deviation from Appendix R have been found not necessary and should be withdrawn:

<u>Section in TER</u>	<u>Title</u>
2.5	Partial Rating of Walls and Floor/Ceiling
2.8	Fire Area D-3 Boundaries

2.3 Based on evaluations in the SAIC TER, adequate justification has not been demonstrated for the following deviation from the provision of Appendix R and this, therefore, remains an open item:

<u>Section in TER</u>	<u>Title</u>
2.30	Safe Shutdown Analysis - Evaluation of High Impedance Faults

