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ACCESSION NBR: 8709290414 DOC. DATE: 87/09/24 NOTARIZED: YES DOCKET #
 FACIL: 50-387 Susquehanna Steam Electric Station, Unit 1, Pennsylv 05000387
 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylv 05000388
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 RECIP. NAME RECIPIENT AFFILIATION
 BUTLER, W. R. Project Directorate I-2

SUBJECT: Application for amends to Licenses NPF-14 & NPF-22, changing
 Tech Spec 4.8.2.1.d.2.b to confirm that adoption of revised
 battery load profiles can be met by existing batteries due
 to difficulty in obtaining 125 volt dc replacement battery.

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Pennsylvania Power & Light Company

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SEP 24 1987

Harold W. Keiser
Vice President-Nuclear Operations
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September 23, 1987

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

1987 SEP 28 A 9:53
USNRC-DS

SUSQUEHANNA STEAM ELECTRIC STATION
REVISION 1 TO PROPOSED AMENDMENT NO. 98
TO NPF-14 AND REVISION 1 TO PROPOSED
AMENDMENT NO. 51 TO NPF-22: 125V DC
LOAD PROFILES
PLA-2920 FILES R41-2,S002,A17-20A,A17-2

Docket Nos. 50-387
50-388

References: PLA-2867 dated June 10, 1987
PLA-2908 dated September 1, 1987

Dear Dr. Butler:

Pursuant to 10CFR50.90, Pennsylvania Power & Light Company requests amendments in the form of Technical Specification changes to Operating License Nos. NPF-14 and NPF-22 for the Susquehanna Steam Electric Station Units 1 and 2. The requests supersedes our previous requests made under the referenced letters.

In our previous letters, we requested that the load profiles in Specification 4.8.2.1.d.2.b be modified for batteries 1D612, 1D622, 1D632 and 1D642. These changes were necessary to accommodate the installation of ATWS Alternate Rod Injection solenoid valves and to recognize additional loads associated with emergency lighting. In support of the changed load profiles, we indicated that the Unit 1 125V DC batteries would be replaced by larger capacity batteries during the Third Refueling and Inspection Outage.

Pennsylvania Power & Light Company has had difficulty obtaining qualified replacement 125V DC batteries because of delivery and factory testing problems. As a result, the replacements for the batteries have not been received and it is unlikely that they will be available to be installed in this refueling and inspection outage.

The purpose of this amendment request is to modify our previous requests to confirm that adoption of the revised battery load profiles stated in the Technical Specification amendment request can be adequately met by the existing batteries. In the event that the new larger capacity batteries are installed, this analysis still applies.

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The proposed change does not:

- (1) Involve an increase in the probability or consequences of an accident previously evaluated. FSAR Subsection 8.3.2.1.1.4 states that the station batteries have sufficient capacity without the charger to independently supply the required loads for four hours. The Technical Specifications require that the batteries be surveilled to dummy loads which are greater than the design loads. An assessment has been performed by our engineering department which verifies that the batteries have adequate capacity to power the actual loads on the 125 V DC system. The new load profiles contained in the proposed amendment to the Technical Specifications envelop the actual loads.
- (2) Create the possibility of a new or different kind of accident from any previously evaluated. As stated in Part (1), the batteries have sufficient capacity to power the actual battery loads thus enabling them to perform their intended function. Any postulated accident resulting from this change is bounded by previous analysis.
- (3) Involve a reduction in the margin of safety. IEEE 485 requires that the related battery capacity include a margin for aging of the battery and the temperature of the batteries' environment at the beginning of battery life. This margin allows replacement of the battery when its capacity is decreased to 80% of its rated capacity (100% design load). As can be seen from the attached table, if the battery capacity is corrected for a temperature of 65°F (the lowest observed electrolyte temperatures), the batteries currently have at least a 25% margin in accordance with IEEE 485. Also, based upon the vendor's aging curves it is not expected that the batteries will significantly deteriorate during the next 3-4 years. With the increased battery loads and the installation of the ATWS ARI System it can be concluded that the overall margin of safety of the plant is improved.

Pennsylvania Power & Light Company also requests that pursuant to 10CFR50.91(a)(6) this amendment request be processed as an individual notice and be issued by Nov. 7, 1987. We feel that an individual notice is justified based upon the following:

- 1) The ATWS Alternate Rod Injection System can not be implemented if this proposed amendment is not approved. The addition of the ARI is an improvement to safety.
- 2) Pennsylvania Power & Light Company has tried to expedite the shipping of the new batteries to no avail. The problems with battery delivery and testing were unforeseen events and could not have been avoided.
- 3) The previous request was submitted on September 1, 1987 and had the replacement batteries not become a problem, the amendment would have been issued on approximately October 30, 1987 in order to support start up following the Unit 1 Third Refueling and Inspection outage. Therefore the Third Refueling and Inspection outage should not be delayed because of the amendment.

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If you have any questions, please contact us.

Very truly yours,



H. W. Keiser
Vice President - Nuclear Operations

cc: NRC Document Control Desk (original)
NRC Region I
Mr. L. R. Plisco, NRC Resident Inspector
Mr. M. C. Thadani, NRC Project Manager

Attachment(s)

Battery Load Profiles

<u>Battery</u>	<u>Capacity corrected for aging and temp(60°F) (design basis limit) (1 min/4hr)</u>	<u>Proposed Technical Specification load profiles (1 min/4hr)</u>	<u>Capacity corrected for aging and temp(65°F) (1 min/4hr)</u>
1D612	339/114	343/114	345/117
1D622	339/114	344/116	345/117
1D632	339/114	318/100	345/117
1D642	339/114	336/117	345/117

