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 AUTH. NAME KENYON, B. D. AUTHOR AFFILIATION Pennsylvania Power & Light Co.
 RECIP. NAME BUTLER, W. R. RECIPIENT AFFILIATION Project Directorate I-2

SUBJECT: Application for proposed Amends 94 & 47 to Licenses NPF-14 & NPF-22, respectively, revising Tech Specs to incorporate new action statement for Spec 3.6.5.3, "Standby Gas Treatment Sys." Fee paid.

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Bruce D. Kenyon
Senior Vice President-Nuclear
215/770-4194

APR 13 1987

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, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED AMENDMENTS 94 TO NPF-14 AND
47 TO NPF-22
PLA-2837 FILES A17-2, R41-2

Docket Nos. 50-387
and 50-388

Dear Dr. Butler:

The purpose of this letter is to propose a change to the Susquehanna SES Units 1 and 2 Technical Specifications. The change, attached in marked-up form, provides a new action statement for specification 3.6.5.3, Standby Gas Treatment System.

BACKGROUND

Specification 3.6.5.1, Secondary Containment, allows 4 hours to restore Secondary Containment Integrity prior to having to proceed to shutdown. Specification 3.6.5.3, Standby Gas Treatment System (SGTS), implicitly requires that upon losing both trains of SGTS, Specification 3.0.3 be invoked and within one hour proceed to shutdown. This is inconsistent, since both systems are assumed to function in the off-site dose analysis, and neither system alone is adequate to ensure that the release of airborne radioactive materials is minimized to the levels generated due to both systems working together.

PROPOSED CHANGE

See attached mark-up. The proposed revision to Specification 3.6.5.3 would allow 4 hours to restore at least one inoperable SGTS subsystem to operable status, thereby eliminating the provisions of Specification 3.0.3 for this case.

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JUSTIFICATION

Per FSAR Subsection 6.5.1.1.1, the SGTS is designed to accomplish the following safety-related objectives:

- 1) Exhaust sufficient filtered air from the reactor building (i.e., secondary containment) to maintain a negative pressure of about 0.25 in.wg. in the affected volumes following secondary containment isolations for the following design basis events:
 - a) spent fuel handling accident in the refueling floor area
 - b) LOCA
- 2) Filter the exhausted air to remove radioactive particulates and both radioactive and nonradioactive forms of iodine to limit the offsite dose to the guidelines of 10CFR100.
- 3) Filter and exhaust discharge from the main steam isolation valve leakage control system (post-LOCA).

It is the availability of these functions that the one hour action time is ensuring.

Per the Technical Specifications,

"SECONDARY CONTAINMENT INTEGRITY shall exist when:

- 1) All secondary containment penetrations required to be closed during accident conditions are either:
 - a) Capable of being closed by an OPERABLE secondary containment automatic isolation system, or
 - b) Closed by at least one manual valve, blind flange, or deactivated automatic damper secured in its closed position, except as provided in Table 3.6.5.2-1 of Specification 3.6.5.2.
- 2) All secondary containment hatches and blowout panels are closed and sealed.
- 3) The standby gas treatment system is OPERABLE pursuant to Specification 3.6.5.3.
- 4) At least one door in each access to the secondary containment is closed.
- 5) The sealing mechanism associated with each secondary containment penetration, e.g., welds, bellows, resilient material seals, or O-rings, is OPERABLE.

The following information was obtained from a review of the files of the [redacted] and [redacted] concerning the activities of [redacted] and [redacted] in the [redacted] area during the period [redacted] to [redacted].

[redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted]. [redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted].

[redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted]. [redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted].

SECRET

The following information was obtained from a review of the files of the [redacted] and [redacted] concerning the activities of [redacted] and [redacted] in the [redacted] area during the period [redacted] to [redacted].

[redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted]. [redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted].

[redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted]. [redacted] was observed on [redacted] at [redacted] and [redacted] was observed on [redacted] at [redacted].

- 6) The pressure within the secondary containment is less than or equal to the value required by Specification 4.6.5.1.a."

Therefore, Secondary Containment Integrity combines the physical boundaries of the Reactor Building with the exhaust and filtering capabilities of the SGTS to effectively minimize the ground level release of airborne radioactive materials. It is this function that the four hour action time is ensuring.

With this background on the safety functions of Secondary Containment and the SGTS, each of the pertinent Technical Specification action statements can now be examined for appropriateness. It is noted that per Specification 3.6.5.3, 7 days is allowed with one SGTS train out-of-service, and as previously stated Specification 3.0.3 (one hour) is followed for both trains of SGTS out-of-service. These times have no analytical basis that we are aware of; it can be stated in general that the 7 day action recognizes that a single train of SGTS is capable of performing the system's safety function and that only redundancy has been impaired - i.e., another "single failure" must occur for the ability to respond to a design basis accident to be in question. Therefore, for the condition where the second failure has occurred, a more immediate action (3.0.3) is applied in recognition of the impaired safety function.

For Secondary Containment Integrity, a 4 hour action is entered when any of the surveillance requirements that are performed during operational conditions 1, 2, 3 and * are either unable to be met or are invalidated (e.g., the railroad bay door is opened to move equipment). The 4 hour period, again not analytically based, recognizes that Secondary Containment is not single failure proof - i.e., once a "hole" has been established, there is a known degradation of the safety function of the physical boundary.

The inconsistency referred to under BACKGROUND is between the 1 hour and 4 hour actions cited above. This inconsistency is not so general in nature that we can say we should have 4 hours in Specification 3.0.3., thereby applying it to all specifications. It is justified in this case because the releases of radioactive material are essentially the same regardless if one of the aforementioned design basis events occurs with either no SGTS is operable or while no Secondary Containment exists. Therefore, since a 4 hour action has been accepted by NRC for a breach of Secondary Containment, the same time should be provided for loss of all SGTS. Specification 3.0.3 remains to be used only for those cases where a longer restoration time has not been evaluated as acceptable by the NRC.

NO SIGNIFICANT HAZARDS CONSIDERATIONS

The proposed change does not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change affects the allowed restoration time of the SGTS, and this can impact the existing accident analyses only if the time is

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ENCLOSURE

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increased to the point where the system cannot be assumed to perform its safety function when required. This is not the case, since the proposed increase (from 1 to 4 hours) is consistent with the currently allowed restoration time for the safety function that SGTS is supporting.

- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated.

Neither the design nor the operation of the SGTS have been affected by the proposed change; therefore, no new events are required to be evaluated.

- 3) Involve a significant reduction in a margin of safety.

This change, in terms of impact on safety margin has been qualitatively assessed as an insignificant degradation if it is one at all. This degradation is representative of the "extra" safety margin provided by shutting the unit down sooner when SGTS is the reason Secondary Containment Integrity has been violated. This is insignificant for two main reasons:

- a) It has been shown that Secondary Containment Integrity can be violated for up to 4 hours and that this should be independent of the reason for the violation, and
- b) Some positive safety margin is incurred through fewer shutdowns due to SGTS inoperability, coupled with the fact that less restoration work will have to be performed while the unit is proceeding to shutdown and is therefore in a transient condition.

Based on the above, the current level of safe operation is not adversely affected by the proposed change.

Pursuant to 10CFR170, the appropriate fee is enclosed. Any questions on this change should be directed to Mr. R. Sgarro at (215) 770-7916.

Very truly yours,



B. D. Kenyon
Senior Vice President - Nuclear

Enclosures

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

Dear Mr. [Name],
I have your letter of [Date] regarding [Subject].
I am sorry that I cannot give you a more definite answer at this time.
The matter is still under consideration.

I will contact you again as soon as a final decision has been reached.
Thank you for your patience.

Sincerely,
[Name]
[Title]

Very truly yours,
[Name]

Enclosed for you are [Number] copies of [Document Name].
I hope this information is helpful.

If you have any questions, please do not hesitate to call me.

Best regards,
[Name]

cc: [Name]
[Name]
[Name]

BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of

:

PENNSYLVANIA POWER &
LIGHT COMPANY

:

Docket No. 50-387

PROPOSED AMENDMENT NO. 94

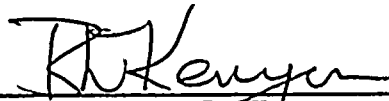
FACILITY OPERATING LICENSE NO. NPF-14

SUSQUEHANNA STEAM ELECTRIC STATION
UNIT NO. 1

Licensee, Pennsylvania Power & Light Company, hereby files proposed Amendment No. 94 to its Facility Operating License No. NPF-14 dated July 17, 1982.

This amendment contains a revision to the Susquehanna SES Unit 1 Technical Specifications.

PENNSYLVANIA POWER & LIGHT COMPANY
BY:



B. D. Kenyon

Senior Vice President - Nuclear

Sworn ~~10/1~~ and subscribed before me
this 13th of April, 1987.



Notary Public

MARTHA C. BARTO, NOTARY PUBLIC
ALLENTOWN, LEHIGH COUNTY
MY COMMISSION EXPIRES JAN. 15, 1990
Member, Pennsylvania Association of Notaries

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BEFORE THE
UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of

PENNSYLVANIA POWER &
LIGHT COMPANY

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Docket No. 50-388

PROPOSED AMENDMENT NO. 47

FACILITY OPERATING LICENSE NO. NPF-22

SUSQUEHANNA STEAM ELECTRIC STATION
UNIT NO. 2

Licensee, Pennsylvania Power & Light Company, hereby files proposed Amendment No. 47 to its Facility Operating License No. NPF-22 dated March 23, 1984.

This amendment contains a revision to the Susquehanna SES Unit 2 Technical Specifications.

PENNSYLVANIA POWER & LIGHT COMPANY
BY:



B. D. Kenyon
Senior Vice President - Nuclear

Sworn to and subscribed before me
this 13th of April, 1987.



Notary Public
MARTHA C. BARCO, NOTARY PUBLIC
ALLENTOWN, LEHIGH COUNTY
MY COMMISSION EXPIRES JAN. 15, 1990
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