



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

AUG 23 1985

Docket Nos. 50-387/388

Mr. Norman W. Curtis, Vice President
Engineering and Construction-Nuclear
Pennsylvania Power and Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: DETAILED CONTROL ROOM DESIGN REVIEW (DCRDR) FOR SUSQUEHANNA
STEAM ELECTRIC STATION UNITS 1 and 2

A meeting was held in Bethesda between the NRC staff and representatives of Pennsylvania Power and Light Company (PP&L) on July 16, 1985, to discuss the remaining open issues in the Detailed Control Room Design Review (DCRDR) for Susquehanna Steam Electric Station (SSES), Units 1 and 2. Satisfactory resolutions have been proposed by PP&L for most of the individual Human Engineering Discrepancies (HEDS), and they have been assigned to design change packages for implementation. Several major concerns still exist. These include: (1) the extended schedule for completion of control room modifications, (2) the delay in completing a satisfactory function and task analysis and its impact on dependent activities, and (3) remaining open HEDS with incomplete or unsatisfactory resolutions.

The SSES DCRDR was started in 1981, and the staff is concerned about the pace of the review. This was first expressed in a letter to PP&L dated May 1, 1984. The Supplemental Summary Report, dated March 1, 1985, now indicates that all DCRDR modifications will be completed by June 1987. The staff has some questions concerning the length of this schedule for completing corrective actions. The Order Confirming Licensee Commitments on Emergency Response Capability for SSES, Unit 1 states that the "implementation dates will be reviewed, negotiated, and confirmed by a subsequent order". We suggest that these negotiations regarding an acceptable date be discussed with your staff.

On three separate occasions the NRC staff has discussed with PP&L the requirements and scope of the function and task analysis. In addition, function and task analysis requirements were the subject of a meeting with the BWR Owners' Group on May 4, 1984, at which PP&L representatives were in attendance. The SSES task analysis is not completed and has been scheduled to be accomplished in 1986. Since the function and task analysis is the basis for several NUREG-0737 initiatives, it should be one of the first activities to be completed. Scheduling it as one of the last activities in the DCRDR casts some doubt as to its usefulness in ensuring the quality and comprehensiveness of the dependent activities. This issue will remain open for staff review.

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PP&L has indicated that a study is being conducted to resolve the HED on lack of bulb test capability for single indicator lights that are not normally lit. This HED will remain open until the staff can review a proposed resolution.

It is the staff's position that the five HEDs related to color coding have not been answered satisfactorily. When red, green, and yellow/amber/orange have each been used for more than 10 different meanings in only four different contexts, color is overused as a code. As stated in the staff's SSER of February 5, 1985, A. Schwencer (NRC) to N. Curtis (PP&L), the meanings of some colors in the SSES control rooms are: (1) inconsistent within a given color, (2) conflicting between colors, and (3) incompatible with common population stereotypes. The response in the PP&L Supplemental Summary Report dated March 1, 1985, does not adequately answer the specific HEDs. The NRC staff questions whether discrepancies in the meanings of certain colors described in the February 5, 1985, SSER may impact operation. No progress was made on this issue at the July 16 meeting.

I recommend your participation at a management level meeting here in Bethesda on August 28, 1985, to discuss this matter.

Sincerely,

Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

cc: See next page

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<u>Docket File</u>	NRC PDR	Local PDR	PRC System	NSIC	LB#2Rdng	EHy1ton
Goldberg, OELD	ACRS(16)	JPartlow	BGrimes	EJordan		

*Previously concurred:

LB#2/DL/PM
*MCampagnone:mk
8/15/85

LB#2/DL/BC
*WButler
8/15/85

AD/DL
TNovak
8/21/85

1964

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AUG 23 1985

- 2 -

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[The body of the document contains extremely faint and illegible text, likely a list or index of names and dates. The text is too light to transcribe accurately.]

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Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

cc: See next page

Mr. Norman W. Curtis
Pennsylvania Power & Light Company

Susquehanna Steam Electric Station
Units 1 & 2

cc:
Jay Silberg, Esq.
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Regional Administrator, Region I
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Mr. Thomas M. Gerusky, Director
Bureau of Radiation Protection
Resources
Commonwealth of Pennsylvania
P. O. Box 2063
Harrisburg, Pennsylvania 17120

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August 13, 1985

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Docket Files (50-387)
LB #2 Reading
NRC PDR
Local PDR
NSIC
PRC System
OELD
MCampagnone
EHyton

DOCKET NO(S). 50-387/388

Mr. N. W. Curtis, Vice President
Engineering and Construction-Nuclear
Pennsylvania Power & Light Company
Two North Ninth Street
Allentown, PA 18101

SUBJECT: NOTICE OF DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE AND OPPORTUNITY FOR HEARING -- SUSQUEHANNA, UNIT 1

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated _____.
- Draft/Final Environmental Statment, dated _____.
- Notice of Availability of Draft/Final Environmental Statement, dated _____.
- Safety Evaluation Report, or Supplement No. _____, dated _____.
- Notice of Hearing on Application for Construction Permit, dated _____.
- Notice of Consideration of Issuance of Facility Operating License, dated _____.
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- Application and Safety Analysis Report, Volume _____.
- Amendment No. _____ to Application/SAR dated _____.
- Construction Permit No. CPPR- _____, Amendment No. _____ dated _____.
- Facility Operating License No. _____, Amendment No. _____, dated _____.
- Order Extending Construction Completion Date, dated _____.
- Other (Specify) See subject line above.

Office of Nuclear Reactor Regulation

Enclosures:
As stated,

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OFFICE >	DL:LB#2						
SURNAME >	EHyton						
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WASHINGTON, D. C. 20555

August 13, 1985

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Pennsylvania Power & Light Company

Susquehanna Steam Electric Station
Units 1 & 2

cc:

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Washington, D.C. 20036

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Commonwealth of Pennsylvania
P. O. Box 2063
Harrisburg, Pennsylvania 17120

UNITED STATES NUCLEAR REGULATORY COMMISSION

PENNSYLVANIA POWER AND LIGHT COMPANY, ET AL

DOCKET NO. 50-387

NOTICE OF DENIAL OF AMENDMENT TO

FACILITY OPERATING LICENSE AND OPPORTUNITY FOR HEARING

The U. S. Nuclear Regulatory Commission (the Commission) has denied in part requests by the licensee for amendments to Facility Operating License NPF-14, issued to the Pennsylvania Power and Light Company, for operation of the Susquehanna Steam Electric Station, Unit 1 located in Luzerne County, Pennsylvania. The Notice of Consideration of Issuance of Amendments was published in the Federal Register on December 31, 1984 and January 23, 1985 (49 FR 252) and (50 FR 3051) respectively.

The amendments as proposed by the licensee, would change the Unit 1 Technical Specifications as follows: (1) Page 3/4 3-55/Table 4.3.6-1: changing CHANNEL CALIBRATION surveillance intervals to be less conservative than the present requirement. Experience has shown that electrical equipment will tend to drift or fail and as a result surveillance requirements were established. The frequency of surveillance has been based on the difficulty in conducting the surveillance test and the consequence of equipment failure. The staff has defined the required surveillance intervals on a generic basis in the standard Technical Specifications. The licensee has proposed substantial departures from the requirements in the standard Technical Specifications, but has not provided an acceptable basis for this departure from the staff's judgement. Therefore, the staff has denied the licensee's request. (2) Page 3/4 3-8: incorporating a quarterly surveillance interval for the channel functional test for the Scram

Discharge Volume (SDV) float switches. The staff has denied this request and requires the licensee to test on a monthly basis. The objective of the SDV modification was to provide reliable instrumentation which can accommodate a single random failure or potential common-cause failures for all postulated SDV filling events. The basis for this denial is the same as that stated above. Additionally, experience has shown that problems have been experienced in the past with these SDV float switches and these problems have been discovered as a result of the surveillance tests. Therefore, the staff finds the monthly testing interval to serve a useful purpose. (3) Page 3/4 5-5/Insert A: including a new surveillance requirement to test the LOCA/false LOCA logic in support of two unit operation. The staff has denied this proposal due to the potentially long time lapses between testing of the LOCA/false LOCA logic. The staff finds that the licensee's proposal does not provide good assurance that the LOCA/false LOCA logic will be surveilled on an appropriate schedule. The staff understands that the licensee has undertaken a study to determine more accurately an appropriate surveillance requirement based on this study. It is the staff's understanding that when this study is completed the licensee will submit it to the staff along with a request for new surveillance requirement for review and approval. (4) Page 3/4 7-9 through 3/4 7-30/Snubbers: revising the snubber Technical Specifications by placing the inspection schedule of snubbers on a system basis rather than a plant or unit basis. The staff has denied this request based on the fact that the intent of visual inspection is to survey all snubbers in a plant and to locate those which may suffer from an identified failure mode, which may not always be

system specific. Operating experience has indicated that snubber inoperabilities are not generally related to the systems on which they are installed. Such inoperabilities are usually caused by either:

1. an isolated incident such as installation error,
2. a problem related to the snubber design, or
3. a general environment problem, such as high temperature or radiation.

None of the above causes are system unique. The staff believes that the visual inspections should be used to identify the type of inoperable snubbers, and reinspection intervals should be based on the number of failures within the identified type instead of the specific system to which the original inoperable snubber was attached. All other portions of the proposed amendments were granted on April 12, 1985 Amendment 36 and April 23, 1985 Amendment 41. Notice of issuance of Amendment Nos. 36 and 41 were published on April 23, 1985 (50 FR 16024) and May 21, 1985 (50 FR 21002).

By _____, 1985, the licensee may demand a hearing with respect to the denials described above and any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for a hearing or petition for leave to intervene must be filed with the Secretary of the Commission, Washington, D. C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room 1717 H Street, N.W., Washington, D.C., by the above date.

A copy of any petitions should also be sent to the Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Jay Silberg, Esquire, Shaw, Pittman, Potts and Trowbridge, 1800 M Street, N.W., Washington, D.C.

For further details with respect to this action see (1) the application for amendments dated May 18, 1984 as supplemented on September 20, 1984, March 11 and 13, 1985 and April 4, 1985; and application dated November 13, 1985, (2) the Commission's letters to the licensee dated April 12, 1985 and April 23, 1985 which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Osterhout Free Library, Reference Department, 71 South Franklin Street, Wilkes-Barre, Pennsylvania 18701.

Dated at Bethesda, Maryland this 5th day of August 1985

FOR THE NUCLEAR REGULATORY COMMISSION



Walter R. Butler, Chief
Licensing Branch No. 2
Division of Licensing

9/5/85

DOCKET NO(S). 50-387/388
 Mr. Norman W. Curtis, Vice President
 Engineering and Construction
 Pennsylvania Power and Light Company
 2 North Ninth Street
 Allentown, Pennsylvania 18101

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

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Office of Nuclear Reactor Regulation

Enclosures:
 As stated

cc: See next page

OFFICE >	LB#2/RL						
SURNAME >	EHytton						
DATE >	8/5/85						



THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

REPORT OF THE COMMITTEE ON THE ORGANIZATION OF THE DEPARTMENT OF CHEMISTRY

FOR THE YEAR 1964-1965

CHICAGO, ILLINOIS

1965