

August 14, 1990

Docket Nos. 50-387
and 50-388

Mr. Harold W. Keiser
Senior Vice President - Nuclear
Pennsylvania Power and Lighting Company
2 North Ninth Street
Allentown, Pennsylvania 18101

<u>DISTRIBUTION w/enclosure</u>	
<u>Docket File</u>	MThadani
NRC PDR	JStone
Local PDR	MO'Brien
PDI-2 Reading	OGC
SVarga	ACRS (10)
BBoger	DHagan
WButler	GPA/PA
RBlough	LDoerflein

Dear Mr. Keiser:

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES AND PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING FOR SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 (TAC NOS. 76369 AND 76370)

The Commission has requested the Office of the Federal Register to publish the enclosed "Notice of Consideration of Issuance of Amendments to Facility Operating Licenses and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing."

This notice relates to your application dated February 12, 1990. In that application you requested an extension to allowable Limiting Condition for Operation outage times for residual heat removal service water system and emergency service water system from 3 days to 7 days.

Sincerely,

/s/

Mohan C. Thadani, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosure:
Notice

cc w/enclosure:
See next page

DOCUMENT NAME: ~~AMEND~~ TAC NOS. 76369/370

<i>MB</i>	<i>M</i>	
PDI-2/PM	PDI-2/D	
MThadani:ag	WButler	<i>WB</i>
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 14, 1990

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and 50-388

Mr. Harold W. Keiser
Senior Vice President - Nuclear
Pennsylvania Power and Lighting Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Keiser:

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES AND PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION
DETERMINATION AND OPPORTUNITY FOR HEARING FOR SUSQUEHANNA STEAM
ELECTRIC STATION, UNITS 1 AND 2 (TAC NOS. 76369 AND 76370)

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Sincerely,

A handwritten signature in black ink, appearing to read "Mohan C. Thadani".

Mohan C. Thadani, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosure:
Notice

cc w/enclosure:
See next page

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Pennsylvania Power & Light Company

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Units 1 & 2

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UNITED STATES NUCLEAR REGULATORY COMMISSION

PENNSYLVANIA POWER & LIGHT COMPANY

ALLEGHENY ELECTRIC COOPERATIVE INC.

DOCKET NOS. 50-387 AND 50-388

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO
FACILITY OPERATING LICENSES AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. NPF-14 and NPF-22 issued to Pennsylvania Power and Light Company, the licensee, and Allegheny Electric Cooperative Inc., for operation of Susquehanna Steam Electric Station, Units 1 and 2, located in Luzerne County, Pennsylvania.

The proposed amendments would extend the allowable Limiting Condition for Operation (LCO) outage time for suppression pool spray and cooling modes of operation of residual heat removal service water (RHRSW) and emergency service water (ESW) systems from 3 days to 7 days to allow modifications of RHRSW/ESW. The LCO extension is requested on a one time basis only and will be effective during forthcoming refueling outages.

Before issuance of the proposed license amendments, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

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The Commission has made a proposed determination that the request for amendment involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The staff has reviewed the following licensee's analysis in accordance with the requirements of 10 CFR 50.92, and concurs with the licensee's analysis and conclusions reached in its application dated February 12, 1990.

The proposed temporary changes do not:

- (1) Involve an increase in the probability or consequences of an accident previously evaluated. The effect of increasing the Allowed Outage Time (AOT) from 3 days to 7 days on the plant response to a design basis event was considered. It was assumed that the planned 7 day outage of one ESW loop and one RHRSW loop fell within the AOT's for LCO's; therefore, no further single failures were required to be considered. It was also assumed that one unit is operating and the second unit is either in Condition 5 (refueling) or actually in the fuel movement process Condition *. Given that no further single failures need to be considered, the complement of equipment available for accident response was evaluated. For short term (less than 10 minutes) response to the postulated accident under the assumed conditions, the full complement of ECCS equipment is available because the ECCS pumps will operate for greater than ten minutes without motor or pump cooling, based on engineering studies. Therefore, the short term decay heat removal requirements are met for the accident unit. For long term (greater than 10 minutes) accident response, two RHR and all core spray pumps, are operable. The available RHRSW loop provides the required long term decay heat removal.

The accidents that were considered are the full range of loss of coolant accidents (LOCA's) with and without a concurrent Loss of Offsite Power (LOOP). Since the assumption of no further single failure was made, the LOOP and non-LOOP cases are equivalent because

power to all eight ESS buses is assured in either case. In addition, the LOCA/false LOCA event did not need to be assessed for the RHRSW/ESW outage because the complicated series of failures required to produce a false LOCA signal was considered as a further single failure.

The requirements for long term accident response are: one ECCS pump (core spray or RHR) for level control and one decay heat removal loop, consisting of an RHR pump, an RHRSW pump and one RHR heat exchanger. Since one RHR pump in each of two loops, one decay heat removal loop and all core spray pumps are available for long term accident response, the long term decay heat removal requirements are also met for the accident unit.

For the unit in Condition 5 or *, long term decay heat removal is the only requirement. This requirement is easily accomplished using fuel pool cooling, provided that the water level requirements are met.

The ESW system does have other functions which apply to ECCS and post accident response systems such as cooling emergency switchgear rooms. One loop of ESW is sufficient to provide enough room cooling for the HPCI and RCIC rooms, by design. Therefore, cooling of these rooms is not of concern.

As a result of the above discussion, it is concluded that since the proposed RHRSW/ESW outage of 7 days is within the revised AOT for those systems, the plant design basis will not be compromised or violated and therefore, there is no increase in the probability or consequence of an accident previously evaluated.

- (2) Create the possibility of a new or different kind of accident from any previously evaluated. As stated in Part (1), the accidents that were considered are the full range of LOCA's with and without a concurrent LOOP. A full complement of ECCS equipment was assumed available for the short term response and one loop of decay heat removal for long term response. Any postulated accident occurring during this modification is bounded by previous analysis.
- (3) Involve a reduction in the margin of safety. The main concern with the RHRSW/ESW modification from a safety margin viewpoint is its affect on RHR capability for both injection to the vessel and decay heat removal. Also, loss of one loop of the ESW system affects the DG Cooling and SBO. We have completed an extensive study comparing the present and modification unavailabilities of RHR (SPC and decay heat removal modes) DG Cooling and present and modification risks of SBO to determine the affect of the proposed temporary 7 day LCO extension on the margin of safety. In our analysis, we have taken the following compensatory measures to offset RHRSW/ESW subsystem unavailability: the ESW spray pond bypass valve will be open, the

ESW transfer valves at the DG's will be open, we plan no system unavailability due to planned maintenance or test, we will verify proper valve positions to diminish the possibility of valve misalignments, we take credit for the non-operating unit RHRSW pump and finally we take credit for RWCU as an alternate means of heat removal. It should be mentioned that as a conservative measure we take no credit in our analysis for use of the main condenser as a heat sink or RHRSW/ESW system recovery during the 7 day LCO.

Our study shows that the modification unavailability of the heat removal function of the SPC/SPS mode of the RHR system and RHRSW system increases. This increase in unavailability is due to the fact that during the modification, only one RHR pump and one RHR HX will be available for SPC. The Technical Specification, 3.6.2 states that with one loop of the RHR unavailable for SPC, the AOT for the RHR system can be three days. However, since procedures are available for using the RWCU for decay heat removal from the vessel, we take credit for it to increase the AOT of the RHR system for SPC. Using the RWCU as an alternative for SPC, along with the precautionary measures outlined above, reduces the modification unavailability by 75.4%.

In addition to our analysis of the unavailability of the SPC mode of the RHR system, we considered the effect of ESW unavailability. The unavailability of DG cooling decreases during the modification by 71.9%. This is mainly due to the fact that the spray pond bypass valve will be opened with the ESW system in operation before the modification starts. Technical Specification 3/4.7.1.2 states that with one loop of the ESW system unavailable, the ESW system can have a 3 day AOT. Verification of proper positioning of the valves in the ESW system and DG's contribute to this unavailability reduction, too.

Therefore, based on the above considerations, the Commission has made a proposed determination that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Written comments may be submitted by mail to the Regulatory Publications Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland, from 7:30 a.m. to 4:15 p.m. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. The filing of requests for hearing and petitions for leave to intervene is discussed below.

By September 19, 1990 , the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Request for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C., 20555 and at the Local Public Document Room located at the Osterhout Library, Reference Department, 71 South Franklin Street, Wilkes-Barre, Pennsylvania, 18701. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR §2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide

references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendments under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the request for amendment involves no significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C., by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 325-6000 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to Walter R. Butler, Director, Project Directorate I-2, Division of Reactor Projects I/II: (petitioner's name and telephone number), (date petition was mailed), (plant name), and (publication date and page number of this FEDERAL REGISTER notice). A copy of the petition should also be sent to the Office of the General Counsel, U. S. Nuclear Regulatory

Commission, Washington, D.C. 20555, and to Shaw, Pittman, Potts & Trowbridge, 2300 N. Street, N.W., Washington, D.C. 20037, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated February 12, 1990, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. 20555, and at Osterhout Free Library, Reference Department, 71 South Franklin Street, Wilkes-Barre, Pennsylvania 18701.

Dated at Rockville, Maryland, this 14th day of August 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation