

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

3/9/78

In The Matter Of)	
)	
PUBLIC SERVICE ELECTRIC &)	
GAS COMPANY)	DOCKET NO. 50-272
)	
(Salem Generating Station,)	
Unit #1))	

PETITION FOR LEAVE TO INTERVENE BY THE
TOWNSHIP OF LOWER ALLOWAYS CREEK

I. Public Service Electric and Gas Company, herein-
after referred to as "Licensee", has applied for an
amendment to its facility operating license #DPR-70 by
application for increased capacity fuel racks dated
November 18, 1977 supplemented by request for amendment
facility operating license #DPR-70 dated December 13,
1977. Notice of said application, dated January 13,
1978, was given by the Nuclear Regulatory Commission.

II. Petitioner is a Municipal Corporation in the
County of Salem and of the State of New Jersey. It shall
hereinafter be referred to as "Municipality".

III. Said Municipality consists of approximately 45.7 square miles of land and contains a population of approximately 1,600 persons.

IV. Said Municipality is the site for Salem Generating Station, Unit #1, for which said facility operating license amendments have been requested by Licensee.

V. Said Municipality is charged with the protection of persons and property and with the preservation of the public health, safety and welfare of the Municipality and its inhabitants.

VI. The governing body of said Municipality by resolution authorized the Municipality to intervene in this proceeding.

VII. Said Municipality has retained the services of Dr. John Lamarsh, a Nuclear Engineer, in order to assist it in evaluating said application for amendment and for intervening in this proceeding in order to assure the protection of persons and property and the preservation of the public health, safety and welfare of the Municipality and its inhabitants.

VIII. Service in this proceeding may be made on Municipality by serving its attorney, William C. Horner, 67 Market Street, Salem, New Jersey 08079.

IX. In order to meet the deadline for filing this Petition for Leave to Intervene the Municipality lists herein its contentions at present, but reserves the right and requests that it be permitted to amend this Petition and to add new contentions upon receiving further reports from Dr. Lamarsh and upon receiving further information through discovery and otherwise, including the hearings in this proceeding. The contentions at this time are as follows:

1. The Licensee has not considered in sufficient detail possible alternatives to the proposed expansion of the spent fuel pool. Specifically, the Licensee has not established that spent fuel cannot be stored at another reactor site. Also while the GESMO proceedings have been terminated, it is not clear that the spent fuel could not by some arrangement with Allied Chemical Corp. be stored at the AGNS Plant in Barnwell, South Carolina. Furthermore, the Licensee has not explored nor exhausted

the possibilities for disposing of the spent fuel outside of the U.S.A.

2. The reactor site on Artificial Island was originally approved and the Licensee was granted NRC permits and licenses to build and operate a nuclear facility for the production of electric power not for the purpose of storing spent fuel. Indeed, it was on this basis that the Township of Lower Alloways Creek issued a Certificate of Occupancy to the Licensee. In its application to enlarge its spent fuel pool, the Licensee has not established that it is not its intention to build additional spent fuel capacity even at such time as other repositories have become available. The Licensee should be required to assure that it will not convert the reactor site into a permanent repository for spent fuel.

3. While the Licensee has requested increased spent fuel storage capacity at its Salem Unit 1 it has not limited the use of such storage facility to fuel removed from Salem Unit 1. Storage of spent fuel from other units on or off Artificial Island therefore is a

possibility and such storage creates many hazards not analyzed by the Licensee in its application. Included among these hazards are those created by unloading spent fuel casks.

4. The Licensee has failed to demonstrate that the spent fuel can, in fact, be stored in the spent fuel pool for the contemplated period, or what may actually turn out to be a longer period, without deterioration and release of fission products.

5. The Licensee has not established in its application precisely what would be done with spent fuel assemblies if, because of corrosion or other reasons, one or more assemblies began to leak fission products.

6. The Licensee has failed to address the issue of the consequences of sabotage on the spent fuel pool, consequences which could be more severe in view of the higher fuel loading of the pool. Further, in this regard, the Licensee has not considered the need for increased surveillance or other security measures which should be required in view of the larger amount of fuel in the pool.

7. The Licensee has failed to consider the impact on the spent fuel cooling system of the increased cooling required with the pool filled to capacity with spent fuel. Further, the Licensee has not shown what effect the increased heat load will have on the Delaware River.

8. The Licensee has failed to demonstrate that increased reliance on the Residual Heat Removal System to provide coolant for the spent fuel under the proposed modification would not lessen the ability of that system to perform its safety functions while serving as a backup heat sink for the spent fuel.

9. Although the manufacturer of the spent fuel pool racks has a quality assurance program to guarantee that proper Boral plates have been used in the racks, the Licensee has failed to establish that it plans to undertake an independent verification of the rack construction. As a consequence, the Licensee plans to load fuel into racks whose material structure is only assumed, not known to Licensee. As an independent check on both structure of the racks and on the neutronics calculations of the multiplication factor, the Licensee should be

required to perform a l/M multiplication experiment whenever loading new or spent fuel into the racks.

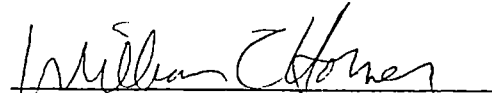
10. While the Licensee plans an in-pool surveillance program for verifying the condition of the Boral by removal and inspection of prototypical Boral sheets, no schedule for such surveillance is established.

11. The Licensee has not addressed the increased risk of consequences from releases of radioactivity or criticality occurring in the modified spent fuel pool due to an accident resulting from projectiles generated by natural events, such as earthquakes or tornadoes, or by mechanical failure, such as turbine failure.

WHEREFORE, Petitioner, Lower Alloways Creek Township, respectfully requests that it be granted leave to intervene in this proceeding. Petitioner also requests that it be permitted to amend this Petition and to add new contentions within a reasonable time.

Dated: March 9, 1978 LOWER ALLOWAYS CREEK TOWNSHIP

BY:



WILLIAM C. HORNER

Its Attorney

67 Market Street

Salem, NJ 08079

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AFFIDAVIT IN SUPPORT OF PETITION FOR LEAVE TO INTERVENE
BY THE TOWNSHIP OF LOWER ALLOWAYS CREEK

SAMUEL E. DONELSON, being duly sworn according to law, deposes and says:

1. I am a duly elected member of the Township Committee of the Township of Lower Alloways Creek. I am also the Mayor of said Municipality and am authorized on behalf of the Township of Lower Alloways Creek to make this Affidavit.


2. To the best of my information, knowledge and belief the facts set forth in the foregoing PETITION FOR LEAVE TO INTERVENE and the contentions contained therein are true and correct.

3. The aspect of the proceeding as to which intervention is desired is the request by licensee

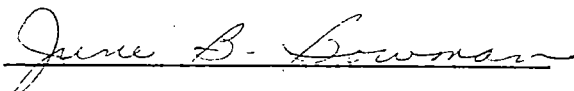
for an amendment to its Facility Operating License No. DPR-70 by application for increased capacity fuel rods dated November 18, 1977 supplemented by request for an amendment Facility Operating License No. DPR-70 dated December 13, 1977.

4. The facts relied upon as to both interest and contentions are set forth in the foregoing Petition For Leave To Intervene, all of which are true and correct to the best of my information, knowledge and belief and I adopt them as my own statements.

DATED: March 9, 1978


Samuel E. Donelson, Mayor
Township of Lower Alloways
Creek

Sworn and Subscribed to
before me this 9th day
of March, 1978



NOTARY PUBLIC OF NEW JERSEY
My Commission Expires February 9, 1983