CENTRAL FILES

50-272

Frederick W. Schneider
Vice President
Production

Public Service Electric and Gas Company 80 Park Place Newark, N.J. 07101 201/622-7000

August 7, 1978

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Grier:

NRC IE BULLETIN NO. 78-08
RADIATION LEVELS FROM FUEL
ELEMENT TRANSFER TUBES
NO. 1 UNIT
SALEM NUCLEAR GENERATING STATION

In reply to IE Bulletin 78-08 dated June 12, 1978 and received on June 15, 1978, we offer the following response:

The fuel transfer tube shield design has been reviewed and an inspection of this shielding was made to assure that it has been installed as designed. The review and inspection has shown that the shield design in this area is sufficient to reduce area dose rates to acceptable levels outside the shielding and that the shielding was installed as designed. A possible radiation streaming problem that exists due to some pipe sleeves being imbedded in one of the compartment shield walls will be given additional study and if necessary, shielding will be provided to reduce the streaming to acceptable area radiation levels. At present, administrative controls are used to prevent access to the area affected by the streaming and streaming dose rates are transient in nature.

The fuel transfer tube compartment is completely enclosed by concrete, lead and steel shielding. Access to the compartment can only be gained by removing the lead-steel hatch cover located on elevation 100 in the annular area between the crane wall and the containment wall. This hatch is normally left closed and is only removed when the transfer tube or seismic relief bellows require inspection. Special equipment is required to remove the hatch cover. In addition, the hatch will be marked "fuel transfer tube access hatch - do not remove during refueling" and the lead shielding associated with the transfer tube compartment will be similarly marked. The design and marking assures adequate control of access to the transfer tube compartment.

During the first refueling, it is planned to perform a detailed radiation survey of the fuel transfer tube area to assure that radiation levels are within the expected design limits for that area.

Should additional information be desired, we will be pleased to further discuss it with you.

Very truly yours,

CC: Dr. Ernest Volgenau
Bethesda, Maryland

Mr. Leif J. Norrholm
Resident Reactor Inspector
Hancocks Bridge, New Jersey