

JOHN C. DAVIS



## LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

P.O. BOX 618, NORTH COUNTRY ROAD • WADING RIVER, N.Y. 11792

June 29, 1979

SNRC-401

Mr. Boyce Grier, Director  
Office of Inspection & Enforcement  
Region 1  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

LONG ISLAND LIGHTING COMPANY  
SHOREHAM NUCLEAR POWER STATION - UNIT 1  
DOCKET NO. 50-322

Dear Mr. Grier:

On May 29, 1979, in accordance with 10CFR50.55(e) we reported verbally to Region 1 a deficiency in the welding of integral attachments to Class 1 piping systems. This letter serves as our 30-day written report of this deficiency.

### DESCRIPTION OF DEFICIENCY

The deficiency associated with the welding of integral attachments to Class 1 piping systems is a lack of penetration of the weld at its root. This deficiency was found by ultrasonic examination (UT) of three integral attachments (lugs) welded in the field and two shop welded lugs supplied by General Electric (GE). The UT examinations performed were not required by the installation code (the code requires only a surface examination) or by any site procedures; but were performed to determine if a meaningful examination could be conducted on the lugs for in-service examination. The applicable ASME code to which these lugs were welded as well as the Stone & Webster (S&W) and GE stress analyses require these welds to have full penetration at the root.

We have completed a UT examination of all 142 lugs (both field welded and shop welded), all of which indicate some lack of penetration. Additionally, during the course of our investigation it was found that the material used for 100 of the 142 lugs did not have certain test records required for Class 1 material.

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#### CORRECTIVE ACTION

Presently several courses of action are available to correct these deficiencies:

1. Repair the lugs
2. Remove and replace the lugs
3. Upgrade lug material used to Class 1 requirements
4. Utilize the summer '79 addendum of the ASME III code which will allow either full penetration welds or fillet welds (if this option is used, new stress analysis must be performed and increased weld size may be required)
5. A combination of the above

#### CORRECTIVE ACTION TO PREVENT RECURRENCE

All new lugs installed will be UT examined and material certifications reviewed to assure compliance with the code. Since all lugs are involved any corrective action taken to assure code compliance will also prevent recurrence.

#### DATE OF FULL COMPLIANCE

The date of full compliance as well as the actual corrective actions taken will be addressed in our final written report which will be submitted in 90 days.

This letter is being submitted two days late in order to include certain information not available earlier. This was discussed with Mr. A. Toth of the NRC on June 28, 1979, at which time he agreed to the delay.

Very truly yours,

bcc: Dist. List 14  
R. M. Kascsak  
J. A. Rigert  
C. A. Fonseca  
C. L. Albertini  
D. W. Papa  
Eng. File A21.200  
SR2/ A21.200

Original signed by: *OK [Signature]*  
J. P. Novarro  
Project Manager  
Shoreham Nuclear Power Station

JJM:jm

cc: Mr. John G. Davis, Director  
Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

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