



LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION

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

October 30, 1979

SNRC-443

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

IE Bulletin 79-14  
Shoreham Nuclear Power Station - Unit 1  
W.O. 44430/48923

IE Bulletin 79-14 identified two issues requiring a response; the first issue involved, "The algebraic summation of loads in some seismic analyses," and the second issue involved, "The accuracy of the input data need for the seismic stress analysis."

Issue one, "The algebraic summation of loads in some seismic analyses," was addressed in IE Bulletin 79-07, and Long Island Lighting Company's letter No. SNRC-397, dated June 6, 1979, responded to this issue.

Issue two requires demonstration that the seismic analysis performed on safety-related piping 2½" diameter and greater, and all seismic Category I piping regardless of size that was dynamically analyzed by computer, accurately reflects the actual installation. The original stress analysis, developed during the engineering and design phase of the project was generated from the piping geometry shown on the piping drawings, and the pipe supports were located and designed based on this stress analysis. Tolerances for the location of the pipe supports are shown on the pipe support drawings, and the base-plates required for the installation of the support are included as part of the pipe support drawing. The piping drawing, the piping design specification and the vendor drawings of equipment mounted in the system, provided the stress analyst with the input data required for the original analysis.

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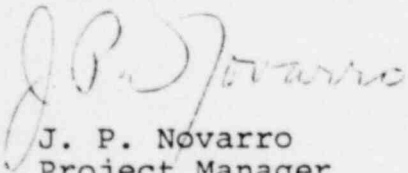
The fabrication and installation is accomplished from isometric drawings, generated by the pipe fabricator from the piping drawing in accordance with the specification. The installation is controlled by the relevant "Quality Assurance Procedures" (QAP) and requires all deviations from the designed geometric configuration of one inch or greater, to be documented on either a "Nonconformance and Disposition Report" (N&D) or, if the deviation was requested prior to installation to be documented on an "Engineering and Design Coordination Report" (E&DCR). Prior to responding to the E&DCR or N&D, the effects of the deviation on the stress analysis is evaluated. Both the E&DCR and the N&D are controlled documents that are indexed to the affected document.

On completion of the installation, the system is inspected according to the pertinent QAP, using the system flow diagrams and piping isometric drawings to ensure that the system had been installed to the latest information, and that it conforms to the engineering specification.

When the inspection has been completed, and all N&D's resolved, an "as-built" piping isometric is developed to accurately reflect the actual geometry of the piping, the actual location of the pipe support and the actual orientation of the valve operators or handwheels. The "as-built" isometric drawings are reviewed by Engineering (stress analyst) and any variation between the approved configuration and the as-built conditions is resolved. If the resolution of the stress analysis affects the pipe supports, this also will be resolved. Any changes required are issued to Construction. The updated isometric drawing, reflecting the engineer's approval is then issued to Field Quality Control for their verification that the installed system is as shown on the approved "as-built" isometric drawing.

We trust that the above has been responsive to your request. Should you desire any additional information, please do not hesitate to contact us.

Very truly yours,



J. P. Novarro  
Project Manager  
Shoreham Nuclear Power Station

cc: Mr. Victor Stello, Director  
Office of I&E  
U.S. Nuclear Regulatory Comm.  
Washington, D.C. 20555

CKS:jm

cc: J. Higgins, NRC Site

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