



Portland General Electric Company

TIC

Donald J. Broehl, Assistant Vice President

July 17, 1979

Trojan Nuclear Plant  
Docket 50-344  
License NPF-1

Mr. R. H. Engelken, Director  
U.S. Nuclear Regulatory Commission  
Region V  
Suite 202 Walnut Creek Plaza  
1990 N. California Blvd  
Walnut Creek, CA 94596



Dear Sir:

IE Bulletin 79-14, dated July 2, 1979 expressed concern about the accuracy of input information for seismic analyses of safety-related piping systems, and requested verification that analytical input data conforms to installed system configurations. The verification program required by this bulletin is in progress.

We have a high degree of confidence that the program will not identify any major problems which will affect the operability of safety-related piping systems at the Trojan Nuclear Plant, nor result in major modifications to piping restraints and supports. This conclusion is based on the results of numerous reviews and re-evaluations involving field verification of piping systems, many of which have taken place in the last 12 months. A summary of these investigative efforts includes the following:

1. Results of investigations initiated pursuant to other IE Bulletins have revealed no significant discrepancies. Specifically,
  - a. Appropriate computer codes were utilized for seismic analyses of safety-related piping (IE Bulletin 79-07);
  - b. Appropriate weights were utilized in analyses for systems with Velan check valves (IE Bulletin 79-04); and
  - c. Field inspection and testing of pipe support base plates and anchor bolts did not identify any conditions affecting the operability of any Seismic Category I piping system (IE Bulletin 79-02, Rev. 1).

902330

7909040335

## Portland General Electric Company

Mr. R. H. Engelken  
July 17, 1979  
Page two

2. Re-evaluation and modification of supports for Seismic Category I piping in the Control-Auxiliary-Fuel Building Complex to accommodate revised SSE response spectra has not yet identified any conditions which affect the operability of safety-related systems (Control Building proceeding).
3. A survey of safety-related piping was initiated in early 1978 to evaluate potential additional stresses due to grouted wall penetrations. This effort, which involved a walkdown of the piping and confirmation/closeout by drawing update to show the location of wall penetrations on the piping isometrics, did not identify any conditions which affected system operability (Licensee Event Report 78-20, reports dated July 21, 1978, October 6, 1978, and December 26, 1978).
4. Design changes completed since initial plant operation have been controlled by an on-going design change program. This program includes the closeout of as-built drawings by walkdown and markup of design drawings, which are then incorporated on the originals. Deviations from design, if any, are reviewed and resolved. In this manner, a continuing "as-built" status of design drawings is maintained.
5. Prior to initial operation in 1975, the construction contractor provided details of the as-built configuration of all critical piping to the designer for confirmation against the stress design isometrics. This review covered all Seismic Category I piping and other piping whose service condition necessitated stress analysis. This review was conducted in parallel with a similar confirmation/walkdown of Nuclear Class I piping inside Containment by an independent engineering company. In addition to these checks, all the Seismic Category I piping system restraints were independently inspected by our Architect-Engineer's stress analysts to ensure that the as-built installation conformed to the design documents. In each of the above reviews, the design isometrics were compared to the as-built installation to validate the design bases of stress analysis calculation. All significant piping and piping restraint data was inspected and deviations from design were noted, evaluated, and resolved prior to initial operation.

Thus, considerable effort has been expended to ensure the accuracy of design documents, both prior to plant operation and during subsequent

902331

Portland General Electric Company

Mr. R. H. Engelken

July 16, 1979

Page three

design changes and re-evaluations of piping systems. We are confident that conditions identified during the inspections required by Bulletin 79-14 will not affect the operability of any safety-related system. If any discrepancies are identified during the course of the verification program, they will be resolved in accordance with existing Technical Specification requirements.

Additional information concerning inspection schedules and design document listings will be provided in accordance with IE Bulletin 79-14.

Sincerely,



c: Director  
Office of Inspection & Enforcement

Director  
Nuclear Reactor Regulation  
ATTN: A. Schwencer

Mr. Lynn Frank, Director  
State of Oregon  
Department of Energy

302332