

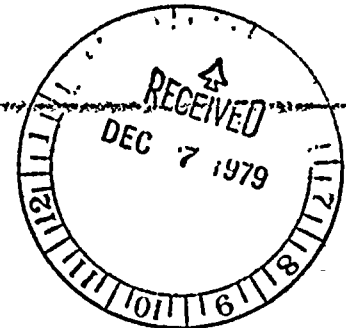
Washington Public Power Supply System
A JOINT OPERATING AGENCY

P. O. Box 988 3000 GEO. WASHINGTON WAY RICHLAND, WASHINGTON 99352 PHONE (509) 375-5000

December 4, 1979
G02-79-216

Docket No. 50-397

Nuclear Regulatory Commission
Region V
1990 North California Blvd.
Suite 202, Walnut Creek Plaza
Walnut Creek, California 94596



Attention: Mr. R. H. Engelken, Director

Subject: WPPSS NUCLEAR PROJECT NO. 2
DOCKET NO. 50-397, CPPR-93
FREEZE PROTECTION OF SAFETY RELATED PROCESS,
INSTRUMENTATION AND SAMPLING LINES

Reference: NRC IE BULLETIN NO. 79-24

Dear Mr. Engelken:

The referenced bulletin requested construction permit holders review their plants to determine that adequate protective measures have been taken to assure safety related process, instrumentation and sampling lines do not freeze during extremely cold weather. The following is in response to the Bulletin.

All safety related process, instrument and sampling lines for WNP-2, with the exception of the Standby Service Water System are contained entirely within heated buildings. Heating from existing heat sources will maintain building temperatures above freezing at the extreme cold weather condition of -27°F.

Portions of the Standby Service Water System piping, from the pumphouses to the Reactor Building and other heated areas of the plant, are routed outside. Most of this outside piping is buried well below the frost line. Sections of the piping not buried are either drained when water is not flowing through them or are insulated and heat traced. Heat tracing is by self limiting heater systems which adjust heat input to the piping based on the ambient temperature. The heat tracing and insulation are adequate to prevent line freeze up at the extreme low temperature condition. The insulation and heat tracing are Quality Class I and supports and restraints are Seismic I.

8008130516

102
79-141

The sensing system for switching the Reactor Core Isolation Cooling (RCIC) and High Pressure Core Spray (HPCS) system lines from condensate storage tank to the suppression pool was originally located on the condensate storage tank. This sensing system has been relocated to the Reactor Building and is no longer subject to freezing conditions.

In summary, ~~all safety-related process, instrumentation and sampling~~ lines are protected from freezing by:

1. Locating the systems within adequately heated buildings.
2. Burying, to well below the frost line, parts of the systems located outside heated buildings, and,
3. Draining or providing insulation and heating tracing for those outside parts of the systems which cannot be buried to below the frost line.

Additionally, a procedure covering operating precautions to be taken during cold weather conditions will be prepared.

Very truly yours,

D L Renberger

D. L. RENBERGER
Assistant Director
Technology

DLR:HLB:cph

cc: JJ Verderber - B&R, N.Y.
RC Root - B&R, Site
JG Davis - NRC, Wash DC
ND Lewis - EFSEC, Olympia
JR Lewis - BPA
WNP-2 Files

