

Washington Public Power Supply System

P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

Docket No. 50-397

June 3, 1982
G02-82-0497

Responds to: NA
Response required by: NA

Mr. R. H. Engelken
U.S. Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

Subject: NUCLEAR PROJECT NO. 2
10CFR50.55(e) POTENTIALLY REPORTABLE CONDITION
#190 EXCESSIVE VOLTAGE DROP DUE TO LONG CONTROL
CABLE LENGTH

Reference: Telecon between LC Floyd (Supply System) and
J Elin (NRC Region V) dated 5-11-82, Telecon
Number SQA-82-189.

In the above referenced telecon, the Supply System informed your
office of a potentially reportable deficiency under 10CFR50.55(e).

Attachment (A), to this letter, provides the Supply System's interim report
on the above caption condition. The attachment includes a restatement of
the problem and description of the safety implications associated with failure
of HPCS-P-2.

We will provide your office with quarterly updates on this subject until
resolved. The next report will be submitted on or before August 30, 1982.

If there are any questions on this item, please contact R. T. Johnson at
(509) 377-2501 extension 2712.

R. G. Matlock
R. G. Matlock
Program Director, WNP-2

RGM/LCF/ks

Attachment: As stated.

cc: WS Chin, BPA
RA Feil, NRC Resident Inspector
A Forrest, B&R HAPD
ND Lewis, NRC
J Plunkett, NUS Corp.
RE Snaith, B&R NY
RMSF 917Y

ATTACHMENT A
INTERIM REPORT
SUPPLY SYSTEM NUCLEAR PROJECT NO. 2
10CFR50.55(e) #190 EXCESSIVE VOLTAGE DROP
DUE TO EXCESSIVE CABLE LENGTH

Potential Problem

It was discovered that some of the circuits using size four (4) starters have excessive control cable length in control circuits, thereby, limiting the voltage available at starter terminals. Such voltage may be less than that required to pick up the starter coil.

Safety Significance

HPCS-P-2 is required to attain safe shutdown of the plant under certain accident conditions. If it were to be unavailable, it would negate some of the accident analysis in the FSAR.

Action Taken

All Class 1E control circuits were investigated. It was discovered that the control circuit wire length for HPCS-P-2 was too long to pick up the starter coil if MCC voltage was less than 90% of rated voltage.

Current Status

To resolve the problem for HPCS-P-2, the following alternatives are being investigated:

1. Use control cable with #10 wire size (instead of #12) so that voltage drop in control circuit is reduced.
2. Increase CPT size, so that voltage drop due to transformer impedance is low and larger control cable length can be used.
3. Use interposing relay in control circuit so as to reduce the CPT burden.