Docket No. 50-397

50.55(e) Report

Washington Public Power Supply System

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

Docket No. 50-397

November 23, 1982
G02-82-944

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

Subject: NUCLEAR PROJECT NO. 2
10CFR50.55(e) REPORTABLE CONDITION #190
EXCESSIVE CABLE LENGTH

References: 1. Letter G02-82-0997, dated June 3, 1982, R. G. Matlock to R. H. Engelken, same subject.

2. Letter G02-82-718, dated August 27, 1982, R. G. Matlock to R. H. Engelken, same subject.

In accordance with the provisions of 10CFR50.55(e), your office was informed by telephone, of the subject reportable condition on May 11, 1982. References 1 and 2 above were interim reports on the same subject. All actions relative to this condition have yet to be completed, therefore, we are submiting this as an interim report. Attachment A to this letter is an updated copy of the attachment to our last interim report.

We will continue to provide your office with quarterly updates on the subject condition until it is resolved. The next report will be submitted on or before February 22, 1983.

If there are any questions concerning this matter, please contact Roger Johnson, WNP-2 Project QA Manager, at (509) 377-2501, extension 2712.

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

MER/kd

cc: W.S. Chin, BPA - Site
A. Forrest, Burns and Roe - HAPO
N.D. Lewis, NRC
J. Plunkett, NUS Corp.
R.E. Snaith, Burns and Roe - NY
A. Toth, NRC Resident Inspector - WNP-2
Document Control Desk, NRC
WNP-2 Files (917B)

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ATTACHMENT A

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
NUCLEAR PROJECT NO. 2
DOCKET NO. 50-397
LICENSE NO. CPPR-93
EXCESSIVE VOLTAGE DROP DUE TO EXCESSIVE CABLE LENGTH
10CFR50.55(e) CONDITION #190

INTERIM REPORT

DESCRIPTION OF DEFECT OR NONCOMPLIANCE

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 IMPLICATION

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.

APPROACH TO RESOLUTION

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 were 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 impedence is low and longer control cable length can be used.

3. Use interposing relay in control circuit so as to reduce the CPT burden.

The Project has determined to implement option 2 to increase the control power transformer (CPT) from a 300 VA CPT to either a 500 VA CPT or a 1 KVA CPT. We are in the process of identifying a qualified Class 1E CPT for this application. Project Engineering is preparing PED 218-E-A320 to effect the required changes, the work associated with this PED has yet to be performed because the Project is waiting for the equipment to arrive on site.