Washington Public Power Supply System

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August 27, 1982
G02-82-718

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) REPORTABLE CONDITION #190,
EXCESSIVE CABLE LENGTH

Reference: Letter G02-82-0997, dated June 3, 1982, R.G. Matlock to R.H. Engelken

In accordance with the provisions of 10CFR50.55(e), your office was informed by telephone of the above subject reportable condition on May 11, 1982. Attachment A provides the Project's interim report on Condition #190. We will continue to provide your office with quarterly updates on Condition #190 until resolved. The next report will be submitted on or before November 24, 1982.

If there are any questions concerning this matter, please contact Roger Johnson, (509) 377-2501, extension 2712.

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

LCF/jdb

Attachments: (1) As stated

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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
AUGUST 19, 1982

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 IE 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 5000 VA CPT or a 1 KVA CPT. We are in the process of identifying a qualified Class 1E CPT for this application. As soon as this is done a Project Engineering Directive will be issued to effect the change.