

**Washington Public Power Supply System**

P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000  
April 2, 1982  
G0-1-82-0120

Nuclear Regulatory Commission  
Region V  
1450 Maria Lane, Suite 210  
Walnut Creek, California 94596

Attention: Mr. R. H. Faulkenberry  
Chief, Reactor Construction  
Projects Branch

Subject: NUCLEAR PROJECTS 1 AND 4  
DOCKET NOS. 50-460 AND 50-513  
REPORTABLE CONDITION 10CFR50.55(e)  
GENERAL ELECTRIC CIRCUIT BREAKERS  
AKR-30 AND AKR-50

Reference: Telecon ME Rodin, Supply System to  
PP Narbut dated March 2, 1982.

In the above reference the Supply System informed your office of a Potentially Reportable Condition under the provisions of 10CFR50.55(e).

Attachment A to this letter, includes a statement of the identified condition and a brief description of our planned corrective action. It has been concluded by the Project that the subject condition is reportable under the provision of 10CFR50.55(e) in that the circuit breakers are being utilized in Class IE safety related applications. It is anticipated that the corrective action will be fully implemented and verified by the end of April 1983. If circumstances change during the interim, we will promptly inform your office of the change(s).

If you have any questions or desire further information, please advise.

*Bill Root*  
R. W. Root  
Acting Program Director

RWR:MER:lm

Attachment

cc: CR Bryant, BPA/399  
EW Edwards/860  
V. Mani/897  
A. Toth, NRC  
V. Stello, Director of Inspection, NRC  
FDCC/899



ATTACHMENT A  
WNP-1/4  
DOCKET NO: 50-460  
REPORTABLE CONDITION 10CFR50.55(e)  
GENERAL ELECTRIC CIRCUIT BREAKERS TYPES AKR 30  
AND AKR 50, SERVICE ADVICE NO 175-9.7 & 175-9.7

BACKGROUND

The General Electric Co. in their letter dated February 10, 1982 informed the Supply System that potential problems exist in their electrically operated low voltage circuit breaker types AKR-30 and AKR-59. This report provides the corrective action being taken to rectify the identified problems and appraises the NRC of the current status.

DESCRIPTION OF DEFICIENCY

The General Electric Co. (GE) Service Advice No. 175-9.6 indicated that GE electrically operated low voltage circuit breaker types AKR-30 and AKR-50 manufactured before December 19, 1980 contain a bearing which may become deformed after the breaker is left in the charge position for several hours.

GE is not aware of any such failures but advised that the suspect bearing should be replaced with an improved bearing.

In addition, GE Service Advice No. 175-9.7 indicated that a flat head screw on the lower end of the closing spring assembly of AKR-30 and AKR-50 circuit breakers could "backout". It was determined by GE that a thread locking compound, which should have been applied to the threaded portion of the flat head screw, had been intermittently omitted.

SAFETY IMPLICATIONS

The potential bearing deformation in the breaker as identified in GE Service Advice No. 175-9.6 could result in failure of the circuit breaker to close upon command. This could result in safety related equipment not starting, when required, due to unavailability of power supply.

The possible omission of the thread locking compound required at the threaded portion of the flat head screw on the lower end of the closing assembly of the circuit breakers, as identified in GE Service Advice No. 175-9.7, could result in the screw interfering with the charging of the circuit breaker closing spring. This will prevent the circuit breaker from closing, which could prevent safety related equipment from starting for non-availability of the power supply.

#### CORRECTIVE ACTION PLANNED

The Architect-Engineer (AE) for WNP-1/4, United Engineers & Constructors, Inc. (UE&C) performed a review of all low voltage breakers being used on WNP-1/4 and have determined that a total of seventy-five (75) GE type AKR-30 and AKR-50 breakers have been used in various locations of the plant for Class 1E applications. These breakers were supplied by Powell Electric Manufacturing Co. These breakers will be shipped to the local GE facility for replacement of the potentially defective bearing and application of thread locking compound to the threaded portion of the flat head screw on the lower end of the breaker closing assembly. The corrective action to be taken by GE is expected to be completed by the end of March 1983.