



November 3, 1978
LD-78-079

Mr. Harold D. Thornburg, Director
Division of Reactor Construction Inspection
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: IE Bulletin No. 78-12, Atypical Weld Material in Reactor Pressure
Vessel Welds, dated September 26, 1978

Dear Mr. Thornburg:

On September 26, 1978 the Office of Inspection and Enforcement issued Bulletin No. 78-12 regarding the use of atypical weld wire in reactor pressure vessels. Combustion Engineering, as a fabricator and supplier of reactor pressure vessels, has received many inquiries from our utility customers regarding the supply of information requested by the bulletin.

The Commission is, no doubt, aware of the large volume of data which is involved for each reactor vessel identified. Due to the problems associated with the supply of such a large volume of documentation, and subsequent NRC Staff review, and due to the large number of utilities involved, Combustion Engineering wishes to suggest to the Commission an alternative approach.

The problem appears to us to have two aspects: (1) assurance that the particular heat of weld wire identified in the bulletin has not, in fact, been utilized in the manufacture of reactor vessels supplied by other manufacturers; and (2) providing reasonable assurance to the Commission that no similar incident (i.e., use of weld wire not conforming to applicable specifications) has occurred.

Item (1) is a relatively simple matter to address. Item (2) is one of the major requirements of our Quality Program. In our view, the data request outlined in your bulletin effectively amounts to a complete review by the Staff of all full penetration welding records. Although the requested records can be provided, cross-indexed as required, we feel this to be an unduly burdensome and time consuming task for both the reactor vessel manufacturers and for the NRC Staff, which must then review this documentation.

C-E is confident that its Quality Program is highly effective and has prevented the occurrence of the type of problem outlined in your bulletin. For example, Combustion Engineering requires that each coil of welding wire be tested at each end to determine material type. Additionally, we require that only one weld splice may be used at the Wire Mill to splice welding materials. In

addition to the control of weld wire, Combustion Engineering conducts a test of the combined flux and wire combinations that are to be used in shop production welding. The component test specimens are analyzed to determine chemical and physical properties to assure compliance with required codes and specifications.

However, we also understand the Commission's concern with this issue and its desire to obtain further assurance that the situation reported in the bulletin is, in fact, an isolated event. We believe that such assurance can be provided, without the necessity to assemble massive documents, by using the following approach:

- 1) Confirm that the particular heat/lot of weld wire identified in Bulletin 78-12 has not been used in the manufacture of R.V. Pressure vessels provided by Combustion Engineering.
- 2) Provide the NRC with a description of our quality control procedures regarding the procurement, testing, and use of weld wire and flux.
- 3) As part of regularly scheduled audits at our Chattanooga manufacturing facility, under the Large Component Vendor Inspection Program, the NRC can obtain further assurance that quality control procedures are indeed effective and that tests are fully documented.

Furthermore, this approach can provide the Commission with a relatively rapid response to the potential problem.

We therefore request that you give consideration to revising IE Bulletin 78-12 in such a manner as to permit our suggested approach. We would be happy to discuss with you, or members of your staff, this approach, or any other that will help reduce the manpower burden on the industry and the staff, while still responding adequately to the expressed concerns.

In order that we may appropriately reply to our utility customers' inquiries regarding the bulletin, a prompt reply would be appreciated. Should you have any questions, please do not hesitate to call me or Mr. E. H. Kennedy of my staff at (203)688-1911, extension 2923.

Very truly yours,

COMBUSTION ENGINEERING, INC.


A. E. Scherer
Licensing Manager

AES:dag

Southern California Edison Company

SCE

P. O. BOX 800

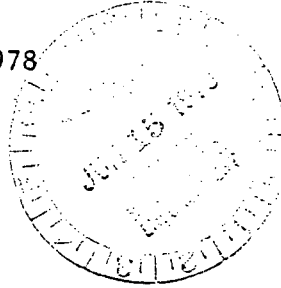
2244 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

J. H. DRAKE
VICE PRESIDENT

TELEPHONE
213-572-2258

June 12, 1978



U.S. Nuclear Regulatory Commission
Region V
Suite 202, Walnut Creek Plaza
1990 N. California Boulevard
Walnut Creek, California 94596

Attention: Mr. R. H. Engelken, Director

Gentlemen:

Subject: I.E. Bulletin 78-05
Docket Nos. 50-361 and 50-362
San Onofre Nuclear Generating Station
Units 2 & 3

Your letter of April 14, 1978 transmits I.E. Bulletin 78-05, "Mal-functioning of Circuit Breaker Auxiliary Contact Mechanism - General Electric Model CR105X". Identified therein were instances of contact failure resulting from binding of the plunger arm due to burrs and nicks on its surface.

We have contacted both our NSSS supplier and Engineer-Constructor (E-C) regarding use of the subject mechanisms. Our NSSS supplier has informed us that, within their scope of supply, the subject contact mechanisms have not been used or planned for use. To ensure that these contact mechanisms will not be utilized in the capacity identified in the subject bulletin, our E-C will notify by letter all equipment subvendors required to provide circuit breakers in their scope of supply, that the use of GE CR105X circuit breaker auxiliary contact mechanisms is not acceptable in future designs. In addition, these vendors will be required to identify equipment already designed or supplied that utilizes these contact mechanisms. The E-C will also prohibit purchase of the subject mechanisms in future specifications and bills of material. Should the use of these contact mechanisms be identified by any of the subvendors, the appropriate measures for replacement of the plunger arm with the applicable replacement parts shall be taken and completed prior to initial plant operation.

Our response for Docket No. 50-206 was previously submitted under separate cover.

As 2
GO

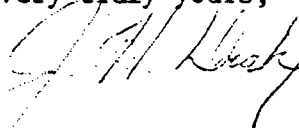
SCE

U. S. Nuclear Regulatory Commission

-2-

Should you have any questions or require further clarification,
please contact me.

Very truly yours,



cc: U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, D.C. 20555



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596

JUN 8 1978

Docket Nos. 50-206

50-361

50-362

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Attention: Mr. Jack B. Moore
Vice President

Gentlemen:

The enclosed IE Circular No. 78-09, is forwarded to you for information. No written response is required. Should you have any questions related to your understanding of this matter, please contact this office.

Sincerely,

R. H. Engelken
Director

Enclosures:

1. IE Circular No. 78-09
2. List of IE Circulars
Issued in 1978

cc w/encl:

J. M. Curran, SCE
J. T. Head, SCE
J. H. Drake, SCE

AO 2
GP



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596

MAY 18 1978

Docket Nos. 50-206, 50-361
50-362

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Attention: Mr. Jack B. Moore
Vice President

Gentlemen:

The enclosed IE Circular No. 78-04, is forwarded to you for information. No written response is required. Should you have any questions related to your understanding of this matter, please contact this office.

Sincerely,

R. H. Engelken
Director

Enclosures:

1. IE Circular No. 78-04
2. List of IE Circulars
Issued in 1978

cc w/enc:

J. M. Curran, SCE
J. T. Head, SCE
J. H. Drake, SCE

AD 2
GD

Southern California Edison Company

SCE

P. O. BOX 800

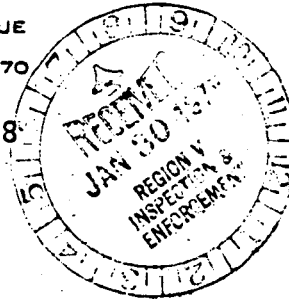
2244 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

J. H. DRAKE
VICE PRESIDENT

January 25, 1978

TELEPHONE
213-372-2258



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

Attention: Mr. R. H. Engelken, Director

Gentlemen:

Subject: Docket Nos. 50-361 and 50-362
San Onofre Nuclear Generating Station
Units 2 and 3

Your letters of November 8, 1977, and November 15, 1977, transmitted NRC IE Bulletins 77-05 and 77-05A, "Electrical Connector Assemblies." The bulletins requested information on safety-related electrical connectors and their environmental qualifications.

We have reviewed the usage of electrical connector assemblies and determined that three types of connectors are planned for use in the Containment Purge Isolation System, which falls within the scope of application of the bulletins. The connectors are Amphenol Model No. 18250, and ITT Cannon Types MS3102E and MS3106E.

All of these connectors are presently being purchased, and are scheduled for qualification testing during the first half of 1978. Documentation from the qualification testing will be submitted to the NRC by approximately September of 1978.

Our response regarding Docket No. 50-206 was previously submitted by separate correspondence.

If you have any questions or comments, please contact me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. H. Drake".

cc: USNRC, Office of Inspection and Enforcement

AO 2
60

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596

September 22, 1977

Docket Nos. 50-206, 50-361
50-362

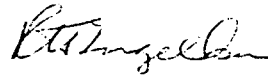
Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Attention: Mr. Jack B. Moore
Vice President

Gentlemen:

The enclosed Circular 77-13 is forwarded to you for information. If there are any questions related to your understanding of the suggested actions, please contact this office.

Sincerely,



R. H. Engelken
Director

Enclosure:
IE Circular 77-13
Reactor Safety Signals Negated
During Testing

cc w/enclosure:
J. M. Curran, SCE
J. T. Head, SCE
J. H. Drake, SCE



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596


JUN 2 1976

G. W. Roy, Chief, Field Coordination and Enforcement Branch
Office of Inspection and Enforcement, Headquarters

LICENSEE REPLIES TO IE BULLETINS
76-02 - RELAY COIL FAILURES
76-03 - RELAY MALFUNCTIONS

Enclosed for your information is a copy of the replies to the subject
IE Bulletins from the following licensees:

1. Pacific Gas and Electric Company, Diablo Canyon Units 1 & 2,
Docket Nos. 50-275 & 50-323, Letters dtd 5/14/76.
2. Southern California Edison Company, San Onofre Units 2 & 3,
Docket Nos. 50-361 & 50-362, Letter dtd 5/17/76.
3. Washington Public Power Supply System, WNP-1, Docket No. 50-460,
Letter dtd 5/12/76.
4. Washington Public Power Supply System, WNP-2, Docket No. 50-397,
Letter dtd 5/10/76.


J. L. Crews, Chief
Reactor Operations and
Nuclear Support Branch

cc w/encls.
IE Chief, FC&EB
IE DD/FO
IE AD/RIP
IE AD/MIP
Standards Development
Director/RL
DD/Tech Review, RL
AD/BWR, RL (3)
AD/PWR, RL (3)
AD/Operating Reactors, RL (3)
AD/Environmental Projects, RL (3)
R. F. Fraley, ACRS
Chief, Reg News Br., IS
ELD
MIPC/PE Hartfield, R.A.



Southern California Edison Company



P. O. BOX 800

2244 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

JACK B. MOORE
VICE PRESIDENT

TELEPHONE
213-572-2292

May 17, 1976

Mr. R. H. Engelken
U. S. Nuclear Regulatory Commission
Region V
Walnut Creek Plaza, Suite 202
1990 N. California Boulevard
Walnut Creek, California 94596

Dear Mr. Engelken:

Subject: Docket Nos. 50-361 and 50-362
San Onofre Nuclear Generating Station
Units 2 and 3

Your letter of March 17, 1976 requested that we provide you with information concerning IE Bulletin 76-02, "Relay Coil Failures - GE Type HFA, HGA, HKA, HMA Relays," Bulletin 76-03, "Relay Malfunctions - GE Type STD Relays," and the use of such equipment in safety-related applications at San Onofre Units 2 and 3.

We have contacted both our NSSS vendor, Combustion Engineering, and our engineer-constructor, Bechtel, regarding the use of the affected GE relays at San Onofre Units 2 and 3. The NSSS vendor has reported that the affected relays will not be used on safety-related equipment within his scope of supply. Our engineer-constructor has stated that the GE relays are planned for use on 4.16 kV and 480V switchgear and 480V motor control centers. Accordingly, SCE will take the following actions:

All vendors supplying safety-related equipment wherein relay types HFA, HGA, HKA, HMA and STD may be installed, will be contacted and requested to provide written confirmation by June 30, 1976 of one of the following:

- a. Relays of the affected type will not be used, or
- b. Appropriate design modifications will be made to the affected relays which will be installed in fabricated components of safety-related equipment.



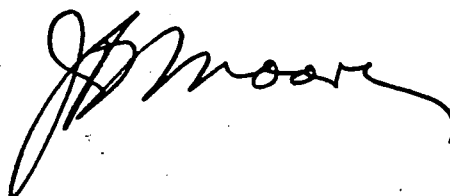
Mr. R. H. Engelken
Page two
May 17, 1976

SCE

Our response on these IE Bulletins regarding Docket 50-206 was previously submitted by separate correspondence.

If you require further information or have any additional questions, please contact me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. B. Moore". The signature is written in dark ink and is positioned below the typed name "J. B. Moore".

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596

MAY 30 1975

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Docket No. 050-0206
Docket No. 050-0361
Docket No. 050-0362

Attention: Mr. Rollin E. Woodbury
Vice President and General Counsel

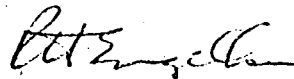
IE Bulletin No. 75-06

Gentlemen:

Enclosed is IE Bulletin No. 75-06 which requires action by you with regard to your power reactor facilities with operating license or construction permit.

Should you have questions regarding this Bulletin or the actions required of you, please contact this office.

Sincerely,



R. H. Engelken
Director

Enclosure:
IE Bulletin No. 75-06

cc w/enclosure:
J. B. Moore, SCE
H. L. Ottoson, SCE

bcc w/encl.
IE Files
NRC Central Files
PDR
Local PDR
State of California
IE:V PDR
Bell PDR
Mr. Ivan Stuart, General
Electric Company

Approved by GAO, B-180225 (R0072), clearance expires 7-31-77. Approval was given under a blanket clearance specifically for identified generic problems.



AO
(2)

LL

Date: May 30, 1975

IE Bulletin No. 75-06

DEFECTIVE WESTINGHOUSE TYPE OT-2 CONTROL SWITCHES

DESCRIPTION OF CIRCUMSTANCES:

The Westinghouse Electric Corporation recently reported to the NRC the finding of a number of defective Westinghouse type OT-2 electrical switches in the main control board of the Sequoyah Station. The defective switches were found during installation of the main control board of the Sequoyah Station, which is currently under construction.

The defective switches are of a spring-return-to-neutral type. Manual operator action of the switch involves rotating the switch clockwise or counterclockwise, and an internal spring force returns it to the central neutral position. Westinghouse reported that internal friction caused some switches to bind and fail to return to the neutral position, due to an adverse tolerance stack-up on internal switch components.

Corrective action has been taken to replace the defective switches in the Sequoyah Station. Westinghouse has issued a Technical Bulletin to utilities with Westinghouse NSSS's in operation, advising them of the potential for similar defective switches in these facilities. These switches may also be installed in other nuclear power facilities.

In case of uncertainty, licensees are advised to contact the Westinghouse Control Products Division regarding test instructions and replacement procedures for these switches.

ACTION TO BE TAKEN BY LICENSEES:

For all power reactor facilities with operating license or construction permit:

1. Determine if switches of the type described above are in use, or planned for use, in safety related systems of your power reactor facility(ies).
2. Notify this office in writing, within 30 days for facilities with an operating license and within 60 days for facilities with a construction permit, of the results of your findings with regard to item 1, above.
3. If switches of the type described are in use or planned for use in safety related systems, include in your written reply to this Bulletin the extent of their use and the actions you have taken or plan to take to prevent malfunction of the type described above. Your written reply should include the date(s) when your actions in response to this Bulletin were or will be completed.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V

SUITE 202, WALNUT CREEK PLAZA
1990 N. CALIFORNIA BOULEVARD
WALNUT CREEK, CALIFORNIA 94596

NRC Central File

MAR 14 1975

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Docket Nos. 50-206
50-361
50-362

Attention: Mr. Rollin E. Woodbury
Vice President & General Counsel

Gentlemen:

Enclosed is IE Bulletin No. 75-03 which requires action by you with regard to your power reactor facilities with operating license and construction permits.

Should you have questions regarding this Bulletin or the action required of you, please contact this office.

Sincerely,

R. H. Engelken
for R. H. Engelken
Director

Enclosure:
IE Bulletin No. 75-03

cc w/enclosure:
J. B. Moore, SCE
H. L. Ottoson, SCE

Approved by GAO, B-180225 (R0072), clearance expires 7-31-77. Approval was given under a blanket clearance specifically for identified generic problems.



IE Bulletin No. 75-03

Date: 3/14/75

INCORRECT LOWER DISC SPRING AND CLEARANCE DIMENSION IN SERIES 8300 AND 8302 ASCO SOLENOID VALVES

DESCRIPTION OF CIRCUMSTANCES:

Recent abnormal occurrences have been reported at the Point Beach and Kewaunee nuclear stations in which safety related solenoid air-pilot valves manufactured by Automatic Switch Company (ASCO) failed to operate properly due to an incorrect lower disc spring and/or improper lever to lower disc stem clearance. Information contained in the reports submitted by NRC licensees and subsequent discussions between NRC and ASCO personnel have revealed the potential for similar failures with ASCO, 120 volt, 60 cycle solenoid valves of the types listed below.

Series	Form
8300-C	F, U, RF or RU
8302-C	F, U, RF or RU

According to the manufacturer, valves of the types listed above should have a heavier duty spring on the upper than on the lower disc section. These springs are identified by a specific part number and color which may differ for each valve type. Incorrect lower disc springs as well as improper clearance between the lever and lower valve disc stem have been identified as the causes of recent valve failures.

It has also been reported that incorrect valve disc springs have been included in repair kits supplied by the valve manufacturer. In case of uncertainty, licensees are advised to contact the ASCO valve service department regarding the proper disc springs and clearance for specific valve types.

ACTION TO BE TAKEN BY LICENSEES:

For all power reactor facilities with operating license or construction permit:

1. Determine if ASCO valves of the types described above are in use or planned for use in safety related systems.

2. Report to this office in writing, within 30 days for facilities with operating license and within 60 days for facilities with construction permit, the results of your findings with regard to Item 1.
3. If solenoid valves of the types described are in use or planned for use in safety related systems, include in your written reply the actions you have taken, or plan to take, to prevent failures of the type described above. Your written reply should also include the date when such actions were, or will be, completed.

AUG 19 1974

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Docket Nos. 50-206
50-361
✓ 50-362

Attention: Mr. Rollin E. Woodbury
Vice President & General Counsel

Reference: RO Bulletin No. 74-9
Deficiency in General Electric
Model 4 KV Magne-Blast Breakers

Gentlemen:

A partial omission was made in the referencing details of the subject breakers at the bottom of page No. 1 of the above bulletin. The information should read as follows:

Manufacturer: General Electric Company
Type: AMH - 4.76 - 250 - OD or
AMH - 4.76 - 250 - 1D Breakers with Stationary Auxiliary Switch
Assemblies in MC - 4.76 Horizontal Drawout Metal Clad Switchgear.

Please make this addition to your Bulletin No. 74-9 forwarded to you on August 6, 1974.

Sincerely,

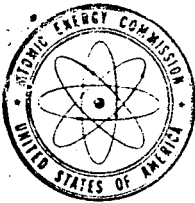
Original signed by
R. H. Engelken
R. H. Engelken
Director

cc: J. B. Moore, SCE
H. L. Ottoson, SCE

bcc: RO Files
✓ DR Central Files
PDR
Local PDR

OFFICE ▶	RO:V					
SURNAME ▶	Spencer:smg	Engelken				
DATE ▶	8/16/74	8/16/74				

Form AEC-318 (Rev. 9-53) AECN 0240



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION V
2111 DANCROFT WAY
BERKELEY, CALIFORNIA 94704
P. O. BOX 1015
BERKELEY, CALIFORNIA 94701

DR Central
File

TELEPHONE: 404-0901
EXT: 666
Telephones:
(415) 486-3141

AUG 6 1974

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Docket Nos. 50-206
50-361
50-362 ✓

Attention: Mr. Rollin E. Woodbury
Vice President & General Counsel

Gentlemen:

The enclosed DRO Bulletin No. 74-9, "Deficiency in the General Electric Model 4KV Magne-Blast Circuit Breakers," is being sent to you relating experience with some of these circuit breakers at the Vermont Yankee and Calvert Cliffs nuclear facilities.

This information may have applicability at your facilities. Action on your part is identified in Section B of the enclosed Bulletin.

Sincerely,

R. H. Engelken
Director

Enclosure:
DRO Bulletin No. 74-9

cc w/encl.:
J. B. Moore, Vice President, SCE
H. L. Ottoson, SCE

CB

DEFICIENCY IN GENERAL ELECTRIC MODEL 4KV MAGNE-BLAST BREAKERS

We recently received information from the Baltimore Gas & Electric Company relating to circuit breaker malfunctions in the engineered safety systems of their Calvert Cliffs Units 1 and 2. These circuit breakers, General Electric Model 4KV Magne-Blast, are used extensively at both PWR and BWR facilities. The malfunctions, which could negate operation of engineered safety system components, were attributed to an oversized roller trip bar and improper clearances of related guide holes and linkages.

We have also received information from the Vermont Yankee Nuclear Power Corporation describing an installation deficiency of the auxiliary switch assembly installed in the General Electric Model 4KV Magne-Blast circuit breakers at the Vermont Yankee station. Although the circuit breakers are similar in model to the units used at Calvert Cliffs, they are of a different type and are used at both PWR and BWR facilities. Pertinent details relating to both problems are contained in Section A below, and the related action requested by this Bulletin is contained in Section B.

A. Description of CircumstancesCalvert Cliffs Units 1 and 2

On several occasions in the past, there had been unexplained "trip open" operations of several 4KV circuit breakers. On each occasion, the anomaly occurred immediately following an attempt to close the circuit breakers. Investigation of the problem disclosed that cause for the failures was attributed to an oversized spring discharge roller bar located on the right side of the breaker cubicle and improper clearances in the roller bar guide hole and associated linkages. The purpose of the roller bar is to trip open the breaker unit in the event it is inserted into the breaker cubicle while in a closed position. However, the installed roller bars were found to be approximately 1/4" longer than the design length, causing interference with the breaker auxiliary switch linkage.

Approximately 116 General Electric Model 4KV Magne-Blast circuit breakers equipped with the faulty roller bars were installed in the two nuclear units at this facility.

The following details are provided for your information because we are requesting that you determine whether or not the subject breakers are used or are planned to be used at your facility:

Manufacturer: General Electric Company
Auxiliary Switch Assemblies in MC-4.76 Horizontal Drawout
Metal Clad Switchgear

Vermont Yankee

The licensee reported that while investigating a problem involving a station service water pump 4KV circuit breaker, an electrician noted that the breaker stationary auxiliary switch assembly rear mounting bolt had loosened and was disengaged from its mounting plate. The loose bolt is one of two bolts that assist in maintaining proper switch contact alignment. The loosening and disengagement of the tie bolt caused misalignment of the switch auxiliary contacts which could have rendered those contacts inoperable. Inspection of similar switch assemblies installed in forty-seven 4KV circuit breakers at this facility found that all switch assemblies exhibited varying degrees of bolt loosening.

The following details are provided for your information because we are requesting that you determine whether or not the subject devices are used or are planned to be used at your facility:

Manufacturer: General Electric Company

Type: Metal Clad, M26 Switchgear (This switchgear has the auxiliary switch assembly mounted on it and may be used with a large number of different circuit breakers.)

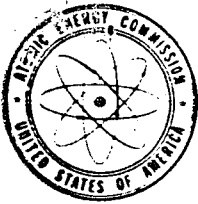
B. Action Requested

It is requested that you determine whether safety related (Class IE) circuit breakers of the described makes and models are installed at your facilities. Please provide the RO Regional Office with your findings within 20 days from receipt of this bulletin.

With regard to the problem at Calvert Cliffs Units 1 and 2, if the subject breakers are installed, please include in your response a description and the results of your program to determine if you have oversized roller trip bars installed and the scheduled completion date of your corrective actions. For facilities under construction, please inform us of your plans to assure that appropriate modification has been implemented in all safety related circuit breakers of the type described that have been or will be installed at your facility.

With regard to the Vermont Yankee problem, it is requested that you ascertain the bolt tightness of the switch assembly in question and include in your response a description and the results of your inspection program. It is also requested that you inform us of your plans regarding the long term verification of bolt tightness of the switch assemblies.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION V
~~411 BANCROFT WAY~~
~~BERKELEY, CALIFORNIA 94704~~

P. O. BOX 1515
BERKELEY, CALIFORNIA 94701

TELEPHONE: MKKH
XXXXXX
(415) 486-314

January 3, 1974

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Docket No. 050-0361
Docket No. 050-0362

Attention: Mr. Jack B. Moore
Vice President

Gentlemen:

The enclosed Directorate of Regulatory Operations Bulletin No. 74-1, involving two valve problems is sent to you to provide you with information we recently received from the Philadelphia Electric Company and the Wisconsin Electric Power Company. The problems involved deficiencies identified at the Peach Bottom, Units 2 and 3 and the Point Beach reactors. This information may relate to the performance of certain equipment at your facilities. The Bulletin also requests certain action on your part in this matter.

Sincerely,

R. H. Engelken
Director

Enclosure:
RO Bulletin No. 74-1

bcc: w/enclosure
RO Files
DR Central Files
PDR
Local PDR

cb

January 3, 1973
Regulatory Operations
Bulletin 74-1

VALVE DEFICIENCIES

Information was recently received from the Philadelphia Electric Company and the Wisconsin Electric Power Company concerning two types of deficiencies relating to valves.

The deficiency identified by the Philadelphia Electric Company at the Peach Bottom, Units 2 and 3 facilities related to weld failures between the valve yoke and the motor operator mounting plate in valves supplied by the Walworth Company. A full description of the deficiency is provided in Attachment A.

The second deficiency, identified by the Wisconsin Electric Power Company at the Point Beach plant, involved a backseating disc mislocation problem on two inch Darling valves. Full details are provided in Attachment B.

In light of the above information, you are requested to determine whether similar valves are installed or scheduled to be installed in your facilities and inform this office in writing within 30 days of the date of this letter regarding the results of your determination. Also please send a copy of your report to B. H. Grier, Assistant Director for Construction and Operation, Directorate of Regulatory Operations, USAEC, Washington, D. C. 20545. In the event such valves are identified, you are requested to determine whether those identified valves have the deficiencies described and if so, to inform us in your letter of the corrective action planned and the date of scheduled completion of that corrective action.

Attachments:

- A. Philadelphia Electric Company Letter,
dated October 1, 1973 to Dr. Knuth
- B. Wisconsin Electric Power Company Letter,
dated October 29, 1973 to J. F. O'Leary

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

PHILADELPHIA, PA. 19101

(215) 841-4500

V. S. BOYER
VICE-PRESIDENT

October 1, 1973

Dr. D. F. Knuth, Director
Directorate of Regulatory Operations
United States Atomic Energy Commission
Washington, D.C. 20545

Subject: Significant Deficiency Report -
High Pressure Service Water Valve Weld Failure
Peach Bottom Atomic Power Station - Units 2 & 3
AEC Construction Permit Nos. CPPR-37 and CPPR-38
File: QUAL 2-10-2 SDR No. 5

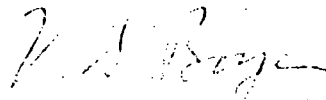
Dear Dr. Knuth:

In compliance with 10CFR50.55, paragraph (e) attached is the Significant Deficiency Report concerning the weld failure on the High Pressure Service Water valve in Unit No. 2. This item was reported to AEC DRO I by telecon on June 1, 1973.

We trust that this satisfactorily resolves this item. If further information is required, please do not hesitate to contact us.

We appreciate your extending the time for our response to October 1, 1973 as agreed by telecon on September 14, 1973 between our Mr. G. R. Hutt and Mr. R. Heischmann, USAEC DRO I.

Sincerely,



Copy to: J. P. O'Reilly, USAEC

SIGNIFICANT DEFICIENCY REPORT - SDR NO. 5

HIGH PRESSURE SERVICE WATER VALVE WELD FAILURE

PEACH BOTTOM ATOMIC POWER STATION - UNITS 2 & 3

AEC CONSTRUCTION PERMIT NOS. CPPR-37 AND CPPR-38

Description of Deficiency

During a routine walk-thru of Unit No. 2 plant by the licensees operating personnel, a 12 inch - 300 pound motor operated globe valve in the High Pressure Service Water line on the discharge side of one Residual Heat Removal heat exchanger was discovered to have experienced a weld failure. The failure occurred between the valve yoke and the motor operator mounting plate. The reason for the failure has been identified as insufficient fillet weld throat dimension caused by the installation of unauthorized shims between the yoke legs and the mounting plate, which reduced the effective size of the weld.

Corrective Action

The failed valve is one of a series of eight valves (four in Unit 2 and four in Unit 3). These eight valves were visually inspected and a second valve was found to have cracks in the yoke to motor operator mounting plate weld.¹ All eight valves were returned to the vendor for rework. The rework involved elimination of the shims in the failed valve and the rewelding of the mounting plates to the yoke legs with full penetration welds on all eight valves.

An investigation of similar valves (supplied by the same vendor) elsewhere in the plant, was undertaken. A total of 108 valves were identified by the vendor to have yoke to motor operator mounting plate construction similar to that of the failed valve. Fifty-eight (including the above mentioned eight) of these valves are nuclear valves classified as Group II as defined by Figure A.2.1 of Appendix A of the Peach Bottom Atomic Power Station FSAR. The remaining valves are Group III non-nuclear balance of plant valves.

The Vendor's weld stress analysis calculations were reviewed and a table of acceptable weld sizes prepared.

¹ This valve was originally reported in the interim report to have shims. The valve was only visually inspected at that time and the cracks were interpreted to indicate the presence of shims.