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May 26, 1983

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

ATTENTION: Mr. James Allan
Acting Administrator

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
Potential for Misoperation of DS-416 Reactor Trip
Switchgear Undervoltage Attachments
Significant Deficiency Report No. 83-03

Gentlemen:

This Interim Report is in reference to the potential for misoperation of DS-416 reactor trip switchgear undervoltage attachments reported to the Nuclear Regulatory Commission by S. D. Hall of Duquesne Light Company (DLC) on April 26, 1983.

DLC is presently evaluating information received from Westinghouse with regard to the impact of this problem on Beaver Valley Unit No. 2. Pursuant to the requirements of 10CFR50.55(e), it is anticipated that a subsequent report on this matter should be submitted to Region I by September 1, 1983.

DUQUESNE LIGHT COMPANY

By

E. J. Woolever
Vice President

SUBSCRIBED AND SWORN TO BEFORE ME THIS
26th DAY OF May, 1983.

Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

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United States Nuclear Regulatory Commission
Mr. James Allen
page 3

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REFERENCES: (1) Significant Deficiency Report No. 83-03

(2) DMW-D-3395, dated April 21, 1983, "DS-416 Reactor Trip
Switchgear 10CFR50.55(e) Reportable Issue"

BEAVER VALLEY POWER STATION - UNIT NO. 2
DUQUESNE LIGHT COMPANY

Interim Report No. 1 on the Potential for
Misoperation of DS-416 Reactor Trip Switchgear
Undervoltage Attachments

1. SUMMARY

On March 30, 1983, Westinghouse (W) advised affected operating plants of the potential for misoperation of DS-416 reactor trip switchgear undervoltage attachments based on reported malfunctions at one plant during testing.

W advised operating plants on April 15, 1983, of an additional misoperation of another DS-416 undervoltage attachment. Investigation of this event revealed a missing retaining ring on one of the two undervoltage attachment pivot shafts.

2. IMMEDIATE ACTION TAKEN

On April 20, 1983, W advised the Nuclear Regulatory Commission (NRC) of the potential for misoperation of DS-416 reactor trip switchgear undervoltage attachments. S. D. Hall, Duquesne Light Company, notified E. Brunner, Region I office, on April 26, 1983, that an evaluation of this problem for Beaver Valley Unit No. 2 (BVPS-2) was underway.

3. DESCRIPTION OF THE DEFICIENCY

Based on reported malfunctions at one plant during testing, W advised affected operating plants on March 30, 1983, of the potential for misoperation of DS-416 reactor trip switchgear undervoltage attachments. W began an evaluation of the input from several affected operating plants concerning dimensions of several clearances in the undervoltage attachment.

On April 15, 1983, W advised operating plants of an additional misoperation of another DS-416 undervoltage attachment. Investigation of this event revealed a missing retaining ring on one of the two undervoltage attachment pivot shafts. This allowed the pivot shaft to move laterally such that one end came out of its guide hole in the frame of the undervoltage attachment, and did not permit the attachment to operate on demand.

4. ANALYSIS OF SAFETY IMPLICATION

W evaluated the input from several affected operating plants concerning dimensions of several clearances in the undervoltage attachment and concluded that deviations from the recommended clearances could increase the potential for misoperation of the attachment, thereby creating a condition wherein the reactor trip switchgear might not open on automatic demand from the reactor protection system.

The W evaluation of the retaining ring issue revealed a discrepancy in design. The groove in the shaft receiving the retaining ring was not increased in width to be consistent with an earlier (1972) retaining ring design change. The new retaining ring is wider than the original design and does not seat properly in the existing grooves. This discrepancy increases the potential for misoperation of the DS-416 undervoltage attachment, thereby creating a condition wherein the reactor trip switch-gear might not open on automatic demand from the reactor protection system.

5. CORRECTIVE ACTION TO REMEDY DEFICIENCIES

BVPS-2 is currently evaluating the potential for misoperation of the DS-416 undervoltage attachment. When further details concerning this problem are available, BVPS-2 will issue another report.

6. ADDITIONAL REPORTS

BVPS-2 will issue another report on this matter when further details of the evaluation are available. It is expected that this report will be issued to Region I by September 1, 1983.