



## Duquesne Light

Nuclear Construction Division  
Robinson Plaza, Building 2, Suite 210  
Pittsburgh, PA 15205

2NRC-4-019

(412) 787-5141

(412) 923-1960

Telecopy (412) 787-2629

February 28, 1984

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

ATTENTION: Dr. T. E. Murley  
Administrator

SUBJECT: Beaver Valley Power Station - Unit No. 2  
Docket No. 50-412  
General Electric Type HEA Lock-out Relays  
Significant Deficiency Report No. 84-03, Interim Report

Gentlemen:

This interim report is in reference to the above subject. Duquesne Light Company notified the Region I office that an evaluation under 10CFR 50.55(e) was underway on January 27, 1984.

Pursuant to the requirements of 10CFR50.55(e), an interim report is submitted, and it is presently anticipated that a subsequent report on this subject should be submitted to the Region I office by June 15, 1984.

DUQUESNE LIGHT COMPANY

By E. J. Woolever  
E. J. Woolever  
Vice President

SDH/wjs  
Attachment

cc: Mr. R. DeYoung, Director  
Office of Inspection and Enforcement (3) (w/a)  
Mr. G. Walton, NRC Resident Inspector (w/a)  
Ms. L. Lazo, NRC Project Manager (w/a)  
NRC Document Control Desk (w/a)  
INPO Records Center (w/a)

SUBSCRIBED AND SWORN TO BEFORE ME THIS  
27<sup>th</sup> DAY OF February, 1984.

Elva G. Lesondak  
Notary Public

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

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COMMONWEALTH OF PENNSYLVANIA )  
 ) SS:  
COUNTY OF ALLEGHENY )

On this 27<sup>th</sup> day of February, 1984, before me, a Notary Public in and for said Commonwealth and County, personally appeared P. H. Orr who being duly sworn deposed and said that (1) he is duly authorized to execute and file the foregoing Submittal on behalf of E. J. Woolever, Vice President of Duquesne Light, (2) he is duly authorized to execute and file the foregoing Submittal on behalf of said Company, and (3) the statements set forth in the Submittal are true and correct to the best of his knowledge.

  
Notary Public

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

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

Report on Potential Significant Deficiency No. 84-03  
GE HEA Type Relays

SUMMARY

System Control (SC) had notified Stone & Webster Engineering Corporation (SWEC) on December 2, 1983, that a particular group of General Electric (GE) HEA type lock-out relays had a tendency to misoperate under certain conditions. These relays were manufactured between September 1980 and August 1983 (with corresponding date codes of KS, LS, MS, AT through MT, AU through MU, and AW through HW). SC indicated that Beaver Valley Power Station Unit 2 (BVPS-2) had been supplied relays of this type for auxiliary panels PNL\*REL-241, PNL\*REL-249, PNL\*REL-251, and PNL\*REL-259 under purchase order 2BV-731.

IMMEDIATE ACTION TAKEN

BVPS-2 directed SWEC to investigate whether any Class 1E equipment for BVPS-2 used HEA relays manufactured during the period in question. SWEC was instructed to follow the corrective action as recommended by GE for any potential problem with any questionable HEA relays identified at BVPS-2. SWEC was also instructed to notify BVPS-2 of their findings and the action taken. Mr. E. F. Kurtz, Jr., Manager of Regulatory Affairs, BVPS-2, notified Mr. Lowell Tripp, NRC Region I, of a potential reportable significant deficiency on January 27, 1984.

DESCRIPTION OF THE PROBLEM

GE HEA type relay misoperated when the panel door, on which it was mounted, was closed. GE has reported that a design change, which increased the relays' capability to operate at reduced voltages has caused a limited number of these relays to malfunction due to shocks or vibration. These relays were manufactured between September 1980 and August 1983 with date codes of KS, LS, MS, AT through MT, AU through MU and AW through HW. GE recommends that a check to determine the force applied at the armature should be made. If the force is determined to be less than 500 grams or 1.1 lbs. the relay should be considered out of specification.

ANALYSIS OF SAFETY IMPLICATION

If these relays should malfunction, this may result in problems with the transfer of control from the Main Control Board to the Alternate and Emergency Shutdown panels for BVPS-2. Until the testing program discussed below is conducted to determine whether or not the BVPS-2 HEA relays meet the acceptance criteria there is no evidence of a reportable condition, at this time.

CORRECTIVE ACTION TO REMEDY THE PROBLEM

GE has developed a field test procedure which will enable site personnel to test the HEA relays, which have been delivered, for excessive

vibration sensitivity. Those relays which do not meet the acceptance criteria will be replaced.

#### ADDITIONAL REPORTS

It is expected that the above testing program will be completed and an additional report submitted to the NRC, Region I, by June 15, 1984.