



Duquesne Light

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April 29, 1983

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

ATTENTION: Mr. R. C. Haynes
Administrator

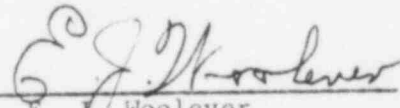
SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50/412
Potential Deficiency of Westinghouse Gate Valve Position
Indication
Significant Deficiency No. 83-01

Gentlemen:

Pursuant to the requirements of 10CFR50.55(e), this Interim Report on Potential Deficiency in Westinghouse Gate Valve Position Indication is attached for your review. Duquesne Light Company is currently evaluating the Westinghouse review results and it is expected that a subsequent report on this subject will be issued to the Region I Office by May 31, 1983. If there are any questions concerning this report, please contact the Beaver Valley Unit 2 Project Office.

DUQUESNE LIGHT COMPANY

By


E. J. Woolever
Vice President

RWF/wjs
Attachment

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

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COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this 29th day of April, 1983, before me,
a Notary Public in and for said Commonwealth and County, personally
appeared E. J. Wcolever, who being duly sworn, deposed and said that (1)
he is Vice President of Duquesne Light, (2) he is duly authorized to exe-
cute 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.

Anita Elaine Reiter
Notary Public

ANITA ELAINE REITER, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

RWF/wjs
Attachment

bcc: C. R. Bishop (w/o attachment)
T. D. Jones "
R. J. Swiderski "
J. F. Zagorski "
R. Coupland (w/attachment)
C. E. Ewing "
R. W. Fedin "
J. C. Hoebel "
J. Pedro (NUS) "
P. RaySircar (3) "
H. M. Siegel "
J. Sutton (S&W) "
NCD File "

- REFERENCES: 1. Significant Deficiency Report No. 83-01
2. DMW-D-3232, dated January 7, 1983, "EMD Gate Valve Position Indication Issue"
3. 2NRC-3-009, dated February 11, 1983, "Interim Report, SDR 83-01"
4. DMW-D-3390, dated April 18, 1983, "EMD Gate Valve Position Indication Issue"

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

Final Report on Potential Deficiency of Westinghouse
Gate Valve Position Indication

1. SUMMARY

Westinghouse has identified a potential significant deficiency in Westinghouse supplied EMD gate valve position indication instrumentation which could result in an indication that the valve is "closed" prior to the valve disc fully isolating flow. Should the valve stall or bind following the premature indication, the operator would have an inaccurate indication of true valve position.

2. IMMEDIATE ACTION TAKEN

On January 12, 1983, Duquesne Light Company notified B. Crocker of the Region I office by telephone. Duquesne Light Company also instructed Westinghouse to continue with their investigation of the potential deficiency.

3. DESCRIPTION OF DEFICIENCY

A geared limit switch rotor is set to provide an electrical bypass of the OPEN torque switch at the beginning of the opening stroke. On a closing stroke, this switch changes state before the flow path is completely blocked. As a result, it is likely that monitor and/or indicator lights also operated by that rotor will indicate valve closure slightly before the flow path is completely shut off. If the valve were to stop between this setpoint and the full shut off position, a flow path through the valve could exist even though a CLOSE indication had been achieved.

Depending on the plant-specific valve application and consequences of inaccurate closure indication, the wiring of certain valves may need to be altered to meet operational safety requirements. This finding was based on Westinghouse generic wiring specification.

The various generic gate valve applications have been reviewed to determine those that may result in unacceptable consequences. These are:

- a. Hot leg safety injection (high and low pressure)
- b. Alternate cold leg (high pressure) injection (3-loop plants only)
- c. Cold leg injection (low head)

All valves which have been identified as potentially requiring modification and which incorrect position indication by itself could cause an unacceptable situation that violates the established licensing basis for Beaver Valley Power Station Unit 2 are:

8816
8886
8889
8814
8888A
8888B

4. ANALYSIS OF SAFETY IMPLICATIONS

Inaccurate position indication of safety-related isolation valves could result in improper system isolation or system operation and possible inaccurate operator response, degrading the affected system's ability to perform its safety function.

5. CORRECTIVE ACTION TO REMEDY DEFICIENCY

Westinghouse has completed a plant specific review for Beaver Valley Power Station Unit 2. It confirms that the six (6) valves listed above are the only safety related valves which could require corrections due to this potential significant deficiency. Westinghouse has issued a Field Change Notice (FCN) which describes the changes necessary, acceptable alternative wiring if already installed, and references other appropriate repair procedures. Duquesne Light Company is currently evaluating the suggested modifications of the subject valves. Duquesne Light Company will report the results of their evaluation and their sections to be taken concerning this significant deficiency by May 31, 1983.

6. ADDITIONAL REPORTS

Duquesne Light Company plans to issue another report, interim or final, when details concerning the corrective action are evaluated and established by Duquesne Light Company. It is expected that this report will be submitted to Region I by May 31, 1983.