Duquesne Light Company
Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077-0004

JOHN D. SIEBER
Vice President - Nuclear Group

(412) 643-6255

September 20, 1988

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
NRC Bulletin 88-08

Gentlemen:

We have reviewed NRC Bulletin 88-08 "Thermal Stresses in Piping Connected to Reactor Coolant Systems" for applicability to Beaver Valley Power Station Units 1 and 2. Attached is our response to Action Item 1 of the Bulletin. As described in our response, we will provide our plans and schedule for implementing the program required by Action Item 3 of the Bulletin by November 30, 1988.

If there are any questions concerning this reply, please contact my office.

Very truly yours,

J. D. Sieber
Vice President
Nuclear Group

Attachment

cc: Mr. J. Beall, Sr. Resident Inspector
Mr. W. T. Russell, NRC Region I Administrator
Mr. P. Tam, Project Manager
Director, Safety Evaluation & Control (VEPCO)

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COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF BEAVER)

On this 21st day of September, 1988, before me, Sheila M. Fatone a Notary Public in and for said Commonwealth and County, personally appeared J. D. Sieber, who being duly sworn, deposed, and said that (1) he is 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 torth in the Submittal are true and correct to the best of his knowledge, information and belief.

Sheila M. Fatone

SHEILA M. FATTORE, NOTARY PUBLIC
BEAVER FALLS, BEAVER COUNTY
MY COMMISSION EXPIRES OCT. 23, 1990
Member, Pennsylvania Association of Notaries

DUQUESNE LIGHT COMPANY
Nuclear Group
Beaver Valley Power Station Units 1 and 2

Attachment

Reply to NRC Bulletin 88-08

Action Item 1

Review systems connected to the RCS to determine whether unisolable sections of piping connected to the RCS can be subjected to stresses from temperature stratification or temperature oscillations that could be induced by leaking valves and that were not evaluated in the design analysis of the piping. For those addressees who determine that there are no unisolable sections of piping that can be subjected to such stresses, no additional actions are requested except for the report required below.

Response

A review was performed to determine any unisolable sections of piping connected to the RCS which could be subjected to stresses from temperature stratification or temperature oscillations that could be induced by leaking valves. This review focused on piping lines which could receive flow from the charging pumps since the charging pumps are the only pumps capable of injecting flow into the RCS during normal operation. The review also assumed that all normally closed valves would leak by. The results of the above review have identified the following piping lines:

Beaver Valley Unit 1 Piping Lines

6"-SI-20-1502-Q1	SAFETY INJECTION to "A" HOT LEG
6"-SI-72-1502-Q1	SAFETY INJECTION to "A" COLD LEG
6"-SI-29-1502-Q1	SAFETY INJECTION to "B" HOT LEG
6"-SI-73-1502-Q1	SAFETY INJECTION to "B" COLD LEG
6"-SI-30-1502-Q1	SAFETY INJECTION to "C" HOT LEG
6"-SI-74-1502-Q1	SAFETY INJECTION TO "C" COLD LEG
2"-CH-140-1503-Q1	CHARGING FILL TO "A" LOOP
2"-CH-141-1503-Q1	CHARGING FILL TO "B" LOOP
2"-CH-142-1503-Q1	CHARGING FILL TO "C" LOOP
2"-CH-23-1502-Q1	NORMAL CHARGING TO PRESSURIZER SPRAY LINE

Beaver Valley Unit 2 Piping Lines

2-SIS-006-26-1(A)	SAFETY INJECTION TO "A" HOT LEG
2-SIS-006-12-1(A)	SAFETY INJECTION TO "A" COLD LEG
2-SIS-006-24-1(B)	SAFETY INJECTION TO "B" HOT LEG
2-SIS-006-15-1(B)	SAFETY INJECTION TO "B" COLD LEG
2-SIS-006-25-1(C)	SAFETY INJECTION TO "C" HOT LEG
2-SIS-006-16-1(C)	SAFETY INJECTION TO "C" COLD LEG
2-CHS-002-140-1(A)	CHARGING FILL TO "A" LOOP
2-CHS-002-141-1(B)	CHARGING FILL TO "B" LOOP
2-CHS-002-142-1(C)	CHARGING FILL TO "C" LOOP
2-CHS-006-490-1(2)	NORMAL CHARGING TO PRESSURIZER SPRAY LINE

As required by Action Item 2 of the Bulletin, nondestructive examinations of the above piping for flaws will be conducted during the Seventh Refueling Outage for Unit 1 and the First Refueling Outage for Unit 2.

With regard to Action Item 3 of the Bulletin, we are currently reviewing our options concerning the type of program we intend to implement to provide continuing assurance that unisolable sections of the identified piping will not experience stresses which could cause fatique failure. We will provide our plans and schedule for implementing this program by November 30, 1988.

The First Refueling Outage for Unit 2 is currently scheduled to begin in March, 1989 and the Seventh Refueling Outage for Unit 1 is currently scheduled to begin in July, 1989. Follow-up reports will be submitted within 30 days of completion of the actions required by the Bulletin.

Additional Information

Based on information received on the Farley event from NRC Information Notice 88-01 and INPO documents, nondestructive examinations of welds on BVPS Unit 1 Safety Injection piping lines connected to the RCS were performed in January, 1988, during the Sixth Refueling Outage. The welds inspected were downstream of check valves on the Safety Injection lines where the piping connects to the RCS (in an area similar to where cracking was found at Farley). The ultrasonic inspections were done using a 45 and 60 degree shear wave. In cases where the complete volume of the weld could not be inspected, the ultrasonic inspection was supplemented with a penetrant (PT) examination. No defect indications were found in any inspection.