Duquesne Light

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

2NRC-5-102
(412) 787-5141
(412) 923-1960
Telecopy (412) 787-2629

July 12, 1985

United States Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Mr. George W. Knighton, Chief
Licensing Branch 3
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
Proposed Alternative to ASME III Code for Certain Class 3 Piping Penetrations

Gentlemen:

Attached is a list of 22 ASME III, Class 3, embedded piping penetrations at BVPS-2. In accordance with 10CFR50.55a(a)(3), Duquesne Light Company (DLC) is requesting NRC concurrence with a proposed alternative to the ASME III Code for these specific piping penetrations. This alternative would allow performance of a hydrostatic maintenance of pressure test in lieu of a hydrostatic test in accordance with Paragraph ND-6110 of the applicable ASME III Code (1971 Edition through Winter 1972 Addenda).

Paragraph ND-6110 indicates, in part, that all joints, including welded joints, shall be left uninsulated and exposed for examination during hydrostatic testing. DLC has performed the hydrostatic maintenance of pressure tests on the subject piping penetrations. The penetrations were pressurized to the test pressure and then isolated from the pressurizing source for a period of one hour. All of these penetrations successfully demonstrated no pressure drop during the test. However, since the subject piping penetrations had been embedded in concrete prior to performance of the test, visual inspection of the welds could not be performed in accordance with Paragraph ND-6110.

An intensive review and evaluation by DLC has resulted in the conclusion that a visual inspection during hydrostatic testing would have no effect on the quality or safety of these welds for the following reasons:

1. The subject welds are attachment fillet welds on the outside of the pressure boundaries and are not pressure retaining. The fillet weld sizes are less than the corresponding pipe wall thickness.

2. The hydrostatic test pressures for these penetrations ranged from 110 psi to 190 psi. The penetration pipes were hydrostatically tested in the range of 950 psi to 2,800 psi, as required, prior to welding the attachments.

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3. The wall thickness of these penetrations are at least 2.5 times the calculated code minimum wall thickness.

Therefore, DLC proposes the hydrostatic maintenance of pressure test without simultaneous visual inspection of the attachment welds as an acceptable alternative to the ASME III Code requirement. The appropriate revisions to the BVPS-2 FSAR, the related specifications, and the BVPS-2 ASME Code Baseline Document will be made upon your concurrence, which is requested by July 26, 1985.

DUQUESNE LIGHT COMPANY

By J. J. Carey
J. J. Carey
Vice President

JDO/wjs
Attachment

cc: Mr. R. Kirkwood, NRC-MEB (w/a)
Mr. B. K. Singh, Project Manager (w/a)
Mr. G. Walton, NRC Resident Inspector (w/a)

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this 12th day of July, 1985, before me, a Notary Public in and for said Commonwealth and County, personally appeared J. J. Carey, 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 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

ASME Class 3 Embedded Piping Penetrations Related to the Proposed Alternative to the ASME III Code

Penetration/ Anchor No.	Location	Iso. No.	Line No.
P-1373	Auxiliary Building	1019011	2SWS-008-200-3
P-1374	Auxiliary Building	1019012	2SWS-008-201-3
P-1377	Auxiliary Building	1072024	2CCP-018-038-3
P-1378	Auxiliary Building	1072011	2CCP-018-032-3
P-1379	Auxiliary Building	1072010	2CCP-018-029-3
P-1380	Auxiliary Building	1072022	2CCP-018-035-3
A-75	Valve Pit	1207028	2SWS-030-040-3
A-640	Valve Pit	1207027	2SWS-030-041-3
A-585	Valve Pit	1207030	2SWS-006-042-3
A-1065	Valve Pit	1207031	2SWS-006-043-3
A-340	Valve Pit	1207029	2SWS-030-050-3
A-155	Valve Pit	1207013	2SWS-024-062-3
A-930	Valve Pit	1207014	2SWS-024-063-3
A-470	Valve Pit	1207015	2SWS-006-064-3
A-695	Valve Pit	1207005	2SWS-030-081-3
A-5	Valve Pit	1207006	2SWS-030-082-3
A-260	Valve Pit	1207007	2SWS-012-161-3
A-755	Valve Pit	1207008	2SWS-012-162-3
P-20	Intake Structure	CI311-001	30"SWS-14-151-Q3
P-21	Intake Structure	CI311-001	30"SWS-14-151-Q3
P-24	Intake Structure	CI311-002	30"SWS-5-151-Q3
P-25	Intake Structure	CI311-002	30"SWS-5-151-Q3