

October 18, 1996

Mr. J. E. Cross
President-Generation Group
Duquesne Light Company
Post Office Box 4
Shippingport, PA 15077

SUBJECT: REQUEST FOR INFORMATION CONCERNING POROUS CONCRETE SUB-FOUNDATION,
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (TAC NO. M95689)

Dear Mr. Cross:

The NRC has been evaluating the reported erosion of cement from under the containment foundation basemat of Millstone 3. The Millstone Unit 3 containment foundation basemat is supported on rock; however, between the rock surface and the underside of the structural concrete basemat there are several layers of material, one of which is a 9-inch thick porous concrete layer consisting of coarse stone aggregates and high alumina cement. Six-inch diameter porous concrete pipes are installed in this porous concrete layer to collect and drain ground water which may seep down along the periphery of the containment wall. The collected water drains into two sumps inside the Engineered Safety Features building. Cement slurry has been observed in these sumps. Based on our review of the information provided to us so far, there is no immediate safety concern because the amount of cement estimated to have possibly eroded since the plant was built in 1975 is only a small fraction of the total cement weight of the porous concrete, and because no adverse consequences of the cement erosion are either predicted or have been observed at Millstone 3. With regard to any generic implication of this issue on other containment foundations with similar design, the staff has identified additional plants for which it requires more detailed information, including Beaver Valley Power Station, Unit Nos. 1 and 2.

Enclosed is a request for additional information (RAI). Please provide your response within 14 days from receipt of this letter.

Sincerely,

L. Olshan /S/ for

Donald S. Brinkman, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

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PDR ADOCK 05000334
P PDR

Docket Nos. 50-334/412

Enclosure: RAI

cc w/encl: See next page

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NAME	DBrinkman:rb	MO'Brien	JStolz		
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in dark ink, appearing to read "D. S. Brinkman", is written over the word "For".

Donald S. Brinkman, Senior Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-334/412

Enclosure: RAI

cc w/encl: See next page

J. E. Cross
Duquesne Light Company

Beaver Valley Power Station
Units 1 & 2

cc:

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Duquesne Light Company
Beaver Valley Power Station
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ATTN: S. C. Jain, Vice President
Nuclear Services (BV-A)

REQUEST FOR INFORMATION
REGARDING CEMENT EROSION UNDER CONTAINMENT FOUNDATION
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-334 AND 50-412

Your plant appears to have a porous concrete layer below the containment basemat.

1. Have you found slurry in the drainage from this layer?
2. Has there been any settlement of the containment basemat?
3. Have you noticed any unusual conditions which may be related to the porous concrete sub-foundation layer?
4. Are you monitoring anything related to the drainage from the porous concrete sub-foundation layer(s) below the containment basemat?

ENCLOSURE