

May 19, 1997

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING BEAVER VALLEY
POWER STATION, UNIT NO. 1 (BVPS-1), REQUEST FOR EXEMPTION FROM THE
REQUIREMENTS OF 10 CFR 70.24 FOR AN ACCIDENTAL CRITICALITY MONITOR
(TAC NO. M97469)

Dear Mr. Cross:

By letter dated December 18, 1996, Duquesne Light Company (DLC) submitted a request for an exemption from the requirements of 10 CFR 70.24 for an accidental criticality monitor for the BVPS-1. The NRC staff is reviewing DLC's request; however, before we can complete our review we will require DLC to specifically respond to the criteria in the enclosed RAI. DLC is requested to respond to this RAI within 30 days of receipt of this letter to enable us to complete our review of DLC's exemption request within a timely manner.

Please contact me at (301) 415-1409 if you have any questions regarding this issue.

Sincerely

/S/

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

Docket No. 50-334

Enclosure: RAI

cc w/encl: See next page

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DATE	5/16/97	5/16/97	5/16/97		

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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A handwritten signature in cursive script, reading "Donald S. Brinkman", is written above the typed name.

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

Docket No. 50-334

Enclosure: RAI

cc w/encl: See next page

J. E. Cross
Duquesne Light Company

Beaver Valley Power Station
Units 1 & 2

cc:

Jay E. Silberg, Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

Director-Safety and Licensing
Department (BV-A)
Duquesne Light Company
Beaver Valley Power Station
PO Box 4
Shippingport, PA 15077

Commissioner Roy M. Smith
West Virginia Department of Labor
Building 3, Room 319
Capitol Complex
Charleston, WVA 25305

Director, Utilities Department
Public Utilities Commission
180 East Broad Street
Columbus, OH 43266-0573

Director, Pennsylvania Emergency
Management Agency
Post Office Box 3321
Harrisburg, PA 17105-3321

Ohio EPA-DERR
ATTN: Zack A. Clayton
Post Office Box 1049
Columbus, OH 43266-0149

Dr. Judith Johnsrud
National Energy Committee
Sierra Club
433 Orlando Avenue
State College, PA 16803

Duquesne Light Company
Beaver Valley Power Station
PO Box 4
Shippingport, PA 15077
ATTN: R. L. Grand, Division Vice
President, Nuclear Operations Group
and Plant Manager (BV-SOSB-7)

Bureau of Radiation Protection
Pennsylvania Department of
Environmental Resources
ATTN: Michael P. Murphy
Post Office Box 2063
Harrisburg, PA 17120

Mayor of the Borough of
Shippingport
Post Office Box 3
Shippingport, PA 15077

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Resident Inspector
U.S. Nuclear Regulatory Commission
Post Office Box 298
Shippingport, PA 15077

Duquesne Light Company
Beaver Valley Power Station
PO Box 4
Shippingport, PA 15077
ATTN: S. C. Jain, Vice President
Nuclear Services (BV-A)

REQUEST FOR ADDITIONAL INFORMATION REGARDING
PROPOSED EXEMPTION TO ACCIDENTAL CRITICALITY MONITOR
REQUIREMENTS OF 10 CFR 70.24

BEAVER VALLEY POWER STATION, UNIT NO. 1 (BVPS-1)

DOCKET NO. 50-234

Please provide responses to the following criteria for granting exemptions to 10 CFR 70.24 requirements.

1. Only 1 pressurized water reactor fuel assembly is allowed out of a shipping cask or storage rack at one time.
2. With the fresh fuel storage racks filled with fuel of the maximum permissible U-235 enrichment and flooded with pure water, the maximum k-effective shall not exceed 0.95, at a 95% probability, 95% confidence level.
3. With the fresh fuel storage racks filled with fuel of the maximum permissible U-235 enrichment and flooded with moderator at the (low) density corresponding to optimum moderation, the maximum k-effective shall not exceed 0.98, at a 95% probability, 95% confidence level.
4. With the spent fuel storage racks filled with fuel of the maximum permissible U-235 enrichment and flooded with pure water, the maximum k-effective shall not exceed 0.95, at a 95% probability, 95% confidence level.
5. The quantity of other forms of special nuclear material, such as sources, detectors, etc., that are stored on site is small enough to preclude achieving a critical mass.
6. Radiation monitors, as required by General Design Criterion 63, are provided in fuel storage and handling areas to detect excessive radiation levels and to initiate appropriate safety actions.
7. The maximum nominal U-235 enrichment is limited to 5 weight percent.