

May 22, 1995

Mr. J. E. Cross  
Senior Vice President and  
Chief Nuclear Officer  
Nuclear Power Division  
Duquesne Light Company  
Post Office Box 4  
Shippingport, PA 15077

SUBJECT: ENVIRONMENTAL ASSESSMENT OF REQUEST FOR EXEMPTION FROM CERTAIN  
REQUIREMENTS OF 10 CFR 73.55(d)(5), REQUIREMENTS FOR PHYSICAL  
PROTECTION AGAINST RADIOLOGICAL SABOTAGE - BEAVER VALLEY POWER  
STATION, UNIT NOS. 1 AND 2 (TAC NOS. M91708 AND 91709)

Dear Mr. Cross:

Enclosed is a copy of the Environmental Assessment and Finding of No  
Significant Impact related to your application for exemption dated February 8,  
1995. The proposed exemption would allow you to implement a hand geometry  
biometric system for access control at the Beaver Valley Power Station site  
such that picture badges may be taken offsite.

The assessment is being forwarded to the Office of the Federal Register for  
publication.

Sincerely,

Original signed by

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  
and 50-412

Enclosure: Environmental Assessment

cc w/encl: See next page

**DISTRIBUTION:**

Docket File            DBrinkman  
PUBLIC                    OGC  
PDI-2 Reading        EJordan, D/AEOD  
SVarga                    ACRS (4)  
JZwolinski              OPA  
JStolz                    JLinville, RGN-I  
MO'Brien

OFFICE	PDI-2/PA	PDI-2/PM	OGC	PDI-2/D	
NAME	MO'Brien	DBrinkman:mw		JStolz	
DATE	5/14/95	5/14/95	5/15/95	5/15/95	

OFFICIAL RECORD COPY  
DOCUMENT NAME: BVM91708.ENV

9505240435 950522  
PDR ADOCK 05000334  
PDR

2400008

**NRC FILE CENTER COPY**

DF01



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 22, 1995

Mr. J. E. Cross  
Senior Vice President and  
Chief Nuclear Officer  
Nuclear Power Division  
Duquesne Light Company  
Post Office Box 4  
Shippingport, PA 15077

SUBJECT: ENVIRONMENTAL ASSESSMENT OF REQUEST FOR EXEMPTION FROM CERTAIN REQUIREMENTS OF 10 CFR 73.55(d)(5), REQUIREMENTS FOR PHYSICAL PROTECTION AGAINST RADIOLOGICAL SABOTAGE - BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (TAC NOS. M91708 AND 91709)

Dear Mr. Cross:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated February 8, 1995. The proposed exemption would allow you to implement a hand geometry biometric system for access control at the Beaver Valley Power Station site such that picture badges may be taken offsite.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

A handwritten signature in cursive script that reads "Donald S. Brinkman".

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  
and 50-412

Enclosure: Environmental Assessment

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

Nelson Toner, Manager  
Nuclear Safety  
Duquesne Light Company  
Post Office Box 4  
Shippingport, PA 15077

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

John D. Borrows  
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

Bureau of Radiation Protection  
Pennsylvania Department of  
Environmental Resources  
ATTN: R. Barkanic  
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 181  
Shippingport, PA 15077

George S. Thomas  
Vice President, Nuclear Services  
Nuclear Power Division  
Duquesne Light Company  
P.O. Box 4  
Shippingport, PA 15077

Roy Denmark (5 copies)  
Environmental Protection Agency  
Environmental Review Coordinator  
841 Chestnut Street  
Philadelphia, PA 19107

UNITED STATES NUCLEAR REGULATORY COMMISSION  
DUQUESNE LIGHT COMPANY  
OHIO EDISON COMPANY  
PENNSYLVANIA POWER COMPANY  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY  
THE TOLEDO EDISON COMPANY  
DOCKET NOS. 50-334 AND 50-412  
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2  
ENVIRONMENTAL ASSESSMENT AND FINDING OF  
NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from certain requirements of its regulations to Facility Operating Licenses No. DPR-66 and NPF-73, issued to Duquesne Light Company, et al. (the licensee), for operation of the Beaver Valley Power Station, Unit Nos. 1 and 2, located in Beaver County, Pennsylvania.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action is in accordance with the licensee's application dated February 8, 1995, for exemption from certain requirements of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The exemption would allow implementation of a hand geometry biometric system for site access control such that combined picture badges/keycards for certain non-employees can be taken offsite.

The Need for the Proposed Action:

Pursuant to 10 CFR 73.55, paragraph (a), the licensee shall establish and maintain an onsite physical protection system and security organization.

Paragraph (1) of 10 CFR 73.55(d), "Access Requirements," specifies that "licensee shall control all points of personnel and vehicle access into a protected area." Paragraph (5) of 10 CFR 73.55(d) specifies that "A numbered picture badge identification system shall be used for all individuals who are authorized access to protected areas without escort." Paragraph (5) of 10 CFR 73.55(d) also states that an individual not employed by the licensee (i.e., contractors) may be authorized access to protected areas without escort provided the individual "receives a picture badge upon entrance into the protected area which must be returned upon exit from the protected area..."

Currently, employee and contractor combined identification badges/keycards are issued and retrieved on the occasion of each entry to and exit from the protected areas of the Beaver Valley Power Station site. Station security personnel are required to maintain control of the badges while the individuals are offsite. This practice has been in effect at the Beaver Valley Power Station since the operating license was issued. Security personnel retain each identification badge/keycard, when not in use by the authorized individual, within appropriately designed storage receptacles inside a bullet-resistant enclosure. An individual who meets the access authorization requirements is issued an individual picture identification card/keycard which allows entry into preauthorized areas of the station. While entering the plant in the present configuration, an authorized individual is "screened" by the required detection equipment and by the

issuing security officer. Having received the badge/keycard, the individual proceeds to the access portal, inserts the badge/keycard into the card reader and passes through the turnstile which unlocks if the badge/keycard is valid.

This present procedure is labor intensive since security personnel are required to verify badge/keycard issuance, ensure badge/keycard retrieval, and maintain the badges/keycards in orderly storage until the next entry into the protected area. The regulations permit employees to remove their badges from the site, but an exemption from 10 CFR 73.55(d)(5) is required to permit contractors to take their badges offsite instead of returning them when exiting the site.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the licensee's application. Under the proposed system, all individuals authorized to gain unescorted access will have the physical characteristics of their hand (hand geometry) recorded with their badge/keycard number. Since the hand geometry is unique to each individual and its application in the entry screening function would preclude unauthorized use of a badge/keycard, the requested exemption would allow employees and contractors to keep their badges at the time of exiting the protected area. The process of verifying badge/keycard issuance, ensuring badge/keycard retrieval, and maintaining badges/keycards, could be eliminated while the balance of the access procedure would remain intact. Firearm, explosive, and metal detection equipment and provisions for conducting searches will remain as well. The security officer responsible for

the last access control function (controlling admission to the protected area) will also remain isolated within a bullet-resistant structure in order to assure his or her ability to respond or to summon assistance.

Use of a hand geometry biometrics system exceeds the present verification methodology's capability to discern an individual's identity. Unlike the combined photograph identification badge/keycard, hand geometry is nontransferable. During the initial access authorization or registration process, hand measurements are recorded and the template is stored for subsequent use in the identity verification process required for entry into the protected area. Authorized individuals insert their badge/keycard into the card reader and the biometrics system records an image of the hand geometry. The unique features of the newly recorded image are then compared to the template previously stored in the database. Access is ultimately granted based on the degree to which the characteristics of the image match those of the "signature" template.

Since both the badge/keycard and hand geometry would be necessary for access into the protected area, the proposed system would provide for a positive verification process. Potential loss of a badge/keycard by an individual, as a result of taking the badge offsite, would not enable an unauthorized entry into protected areas.

The access process will continue to be under the observation of security personnel. The system of identification badges/keycards will continue to be used for all individuals who are authorized access to protected areas without

escorts. Badges/keycards will continue to be displayed by all individuals while inside the protected area. Addition of a hand geometry biometrics system will provide a significant contribution to effective implementation of the security plan at the site.

The change will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does involve features located entirely within the restricted area as defined in 10 CFR Part 20. It does not effect nonradiological plant effluents and has no other environmental impact. Accordingly, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed action, the staff considered denial of the proposed action. Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statements for the Beaver Valley Power Station Units Nos. 1 and 2.

Agencies and Persons Consulted:

In accordance with its stated policy, on April 18, 1995, the staff consulted with the Pennsylvania State official, Robert C. Maiers of the Bureau of Radiation Protection, Department of Environmental Resources, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated February 8, 1995, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located

at the B. F. Jones Memorial Library, 663 Franklin Avenue, Aliquippa,  
Pennsylvania 15001.

Dated at Rockville, Maryland, this 22nd day of May 1995.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, Director  
Project Directorate 1-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation