



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

August 15, 1997

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

SUBJECT: SECOND REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING REVIEW OF
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (BVPS-1 AND BVPS-2),
TECHNICAL SPECIFICATION CHANGE TO ALLOW USE OF STEAM GENERATOR TUBE
SLEEVES DESIGNED BY ABB/COMBUSTION ENGINEERING (CE) (TAC NOS. M98137
AND M98138)

Dear Mr. Cross:

By letter dated March 10, 1997, Duquesne Light Company (DLC) submitted a license amendment request to modify Technical Specification (TS) 3.4.5 to allow steam generator tube sleeving using the CE tube sleeving process. The Nuclear Regulatory Commission (NRC) staff has been reviewing DLC's March 10, 1997, submittal. By letter dated June 23, 1997, we forwarded an RAI regarding DLC's submittal. DLC responded to the NRC staff's RAI by letter dated July 28, 1997. The NRC staff has continued to review DLC's license amendment request and the RAI response. We have determined that further information is required for us to complete our review of this proposed license amendment. The additional information that we require is described below. DLC is requested to provide this additional information within 30 days of receipt of this letter so that we may complete our review of the proposed license amendment within a timely manner.

In DLC's July 28, 1997, response to our June 23, 1997, RAI, it was stated that it is not either necessary or appropriate to incorporate increased inspection sampling requirements in the technical specifications. In response to DLC's comment, the staff notes that the proposed amendment to the BVPS-1 and BVPS-2 TSs involves the application of a steam generator tube repair method. The NRC has approved steam generator tube alternate repair criteria (ARC) for BVPS-1 (and is reviewing such criteria for BVPS-2) such as the voltage-based plugging criteria based on guidance provided in Generic Letter 95-05. Approval of the voltage-based ARC was based, in part, on incorporation of expanded inspection requirements in the TSs (i.e., 100-percent bobbin coil examination). Although the voltage-based ARC is a method of dispositioning and not actually repairing steam generator tubes, the staff has required licensees that implement tube repairs in the tubesheet area (i.e., rerolling) under an F-star repair criterion to inspect the population of repaired tubes at each inspection. Finally, other licensees that have been approved to install CE tungsten inert gas welded sleeves have incorporated inspection and expansion criteria within the TSs beyond the minimum sample requirements.

9708210294 970815
PDR ADOCK 05000334
P PDR

210037



NRC FILE CENTER COPY

The staff's recommendation to DLC that it consider additional inspection sampling and expansion requirements stems from its recognition that the tube examination scope currently specified in pressurized water reactor (PWR) TSs, including those for BVPS-1 and BVPS-2, are not sufficient to address the current tube degradation problems facing the industry today. At the time the minimum sample requirements were originally approved, steam generator tube wastage was the primary mode of tube degradation facing the industry. However, since that time other forms of degradation such as stress corrosion cracking, intergranular attack, fatigue, and wear have emerged. The NRC staff has formally recognized the limitations of the existing requirements in PWR TSs and is working toward addressing these potential weaknesses. Industry guidelines have also addressed the shortcomings of the current inspection requirements. The Electric Power Research Institute's recommendations specified in PWR Steam Generator Tube Examination Guidelines include inspection sampling and expansion guidelines well beyond those currently required by the TSs. In light of the shortcomings in the existing TSs and considering the inspection requirements included in other steam generator tube repair criteria, the staff views the licensee's proposal to follow the existing TS inspection requirements as a change from the approach toward inspecting sleeves implemented throughout the industry.

The NRC staff recognizes that DLC may propose to utilize the existing sampling requirements in the TSs. However, the staff generally requires licensees to submit the technical bases for such proposals. The response to Item 3 in the July 28, 1997, submittal did not include such a discussion. Please readdress Item 3 of our June 23, 1997, RAI and include in the response, the technical bases for the adequacy of the minimum inspection sampling and expansion requirements currently in the TSs to address potential sleeve/tube degradation in future inspections.

In addition to responding to the above question, the staff requests additional information on one other issue in order to complete its review of the proposed amendment. Specifically, a recent welded sleeve inservice inspection at Kewaunee identified weld zone indications using a visual technique that were not detected using either ultrasonic or eddy current techniques. The proposed amendment does not specifically require a visual inspection of the upper weld for tubesheet sleeves. Discuss the basis for not requiring an upper weld visual inspection during the installation process in light of the findings at Kewaunee.

J. Cross

- 3 -

Should you have any questions on this matter, please contact me at
(301) 415-1409.

Sincerely,

/S/

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

cc: See next page

DISTRIBUTION

Docket File
PUBLIC
PDI-2 Reading
BBoger
JStolz
DBrinkman
TLiu
THarris (E-Mail SE)
MO'Brien
OGC
ACRS
PEselgroth, RGN-I
ESullivan
PRush
GHornseth

OFFICE	PDI-2/PM	PDI-2/LA	EMCB/SC	PDI-2/D	
NAME	DBrinkman:rb	MO'Brien	ESullivan	JStolz	
DATE	8/14/97	8/14/97	8/14/97	8/14/97	

OFFICIAL RECORD COPY
DOCUMENT NAME: BV98137.RAI

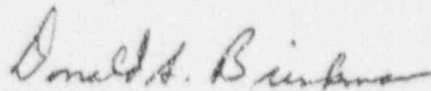
by comment

J. Cross

- 3 -

Should you have any questions on this matter, please contact me at
(301) 415-1409.

Sincerely,



Donald S. Brinkman, Senior Project Manager
Project Directorate 1-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-334/412

cc: 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)