



## Duquesne Light

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

2NRC-4-120  
(412) 787-5141  
(412) 923-1960  
Telecopy (412) 787-2629  
August 10, 1984

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  
Materials Engineering Branch Open Items

Gentlemen:

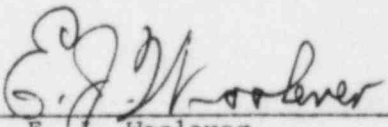
This letter forwards responses to draft SER Open Item 156 and Confirmatory Item 22 provided by the Material Engineering Branch (MTEB). This draft SER material was officially transmitted from the NRC to Duquesne Light Company (DLC) on May 30, 1984.

Informal response to these open items were transmitted to you on August 6, 1984. Responses to MTEB Open Items 49, 50, and 51, which were transmitted from the NRC to DLC on March 1, 1984, were submitted on April 30, 1984, by letter 2NRC-4-049. MTEB Open Items 48 and 54, which were also included in the March 1, 1984, NRC transmittal, are addressed by the PSI program submitted via letter 2NRC-4-096, dated June 29, 1984.

The attached responses and above-referenced submittals address all of the MTEB draft SER items.

DUQUESNE LIGHT COMPANY

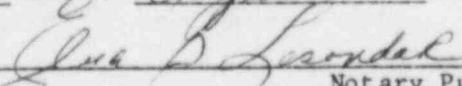
By

  
E. J. Woolever  
Vice President

JJS/wjs  
Attachment

cc: Ms. M. Ley, Project Manager (w/a)  
Mr. E. A. Licitra, Project Manager (w/a)  
Mr. G. Walton, NRC Resident Inspector (w/a)


SUBSCRIBED AND SWORN TO BEFORE ME THIS  
10th DAY OF August, 1984.

  
Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC  
ROBINSON TOWNSHIP, ALLEGHENY COUNTY  
MY COMMISSION EXPIRES OCTOBER 20, 1986

COMMONWEALTH OF PENNSYLVANIA )  
 ) SS:  
COUNTY OF ALLEGHENY )

On this 9<sup>th</sup> day of August, 1984, before me, a  
Notary Public in and for said Commonwealth and County, personally appeared  
E. J. Woolever, 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.

  
Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC  
ROBINSON TOWNSHIP, ALLEGHENY COUNTY  
MY COMMISSION EXPIRES OCTOBER 20, 1986

THE APPLICANT HAS NOT ADDRESSED THE STAFF POSITION ON LIMITING RCPB COMPONENTS CONSTRUCTED OF AUSTENITIC STAINLESS STEEL TO A MAXIMUM YIELD STRENGTH OF 90,000 PSI.

## RESPONSE

THE AUSTENITIC STAINLESS STEELS USED IN THE CONSTRUCTION OF THE RCPB COMPONENTS ARE USED IN THE ANNEALED CONDITION AND THEREFORE DO NOT HAVE A YIELD STRENGTH GREATER THAN 90,000 PSI.

OI 156

THE CONTROLS IMPOSED DURING WELD CLADDING OF FERRITIC STEEL COMPONENTS ARE NOT IN CONFORMANCE WITH THE RECOMMENDATIONS OF REG. GUIDE 1.43, "CONTROL OF STAINLESS STEEL WELD CLADDING OF LOW-ALLOY STEEL COMPONENTS." THE APPLICANT MUST PROVIDE ASSURANCE THAT UNDERCLAD CRACKING DID NOT OCCUR DURING THE WELD CLADDING OF ASME SA-508 CLASS 2 FORGINGS.

## RESPONSE

THE REACTOR VESSEL MANUFACTURER PERFORMS A SPECIAL PROCEDURE QUALIFICATION CONSISTENT WITH REG. GUIDE 1.43 AS DESCRIBED IN REG. GUIDE 1.43 REG. GUIDE POSITION C.2 WHEN "HIGH HEAT INPUT" CLADDING PROCEDURES ARE USED.

"HIGH-HEAT-INPUT" WELDING PROCESSES THAT INDUCE UNDERCLAD CRACKING, SUCH AS SINGLE LAYER SUBMERGED WIDE STRIP WELDING PROCESS AND THE SUBMERGED ARC 6-WIRE PROCESS, WERE NOT USED TO CLAD THE ASME SA508 CLASS 2 FORGINGS (REACTOR VESSEL PARTS WHICH INCLUDE REACTOR VESSEL NOZZLES, VESSEL FLANGE, AND HEAD FLANGE). MULTIPLE LAYER CLADDING WAS APPLIED FOR THESE VESSEL PARTS MADE FROM SA508 CLASS 2 FORGINGS; MULTI-LAYER CLADDING RESULTS IN A FINE GRAIN HEAT AFFECTED ZONE IN THE SA508 CLASS 2 BASE METAL.

STAINLESS STEEL WELD CLADDING OF LOW-ALLOY STEEL IS NOT USED FOR OTHER NSSS COMPONENTS OR BALANCE-OF-PLANT COMPONENTS.