

JUN 18 1985

Docket No.: 50-412

Mr. John J. Carey  
Vice President, Nuclear  
Duquesne Light Company  
Robinson Plaza Building, No. 2, Suite 10  
PA Route 60  
Pittsburgh, Pennsylvania 15205

Dear Mr. Carey:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING POST-FIRE SAFE  
SHUTDOWN CAPABILITY - BEAVER VALLEY POWER STATION, UNIT 2

Enclosed please find the RAI relating to post-fire safe shutdown capability for review of SRP Section 9.5.1 (Appendix P). We understand that DLC has to provide supplemental information concerning safe shutdown and alternate shutdown by the end of June, 1985. Your prompt response to these requests along with the supplemental information will expedite the resolution of this issue in the SER.

Should you have any questions concerning the enclosed requests please contact the Project Manager, B. K. Singh at (301) 492-8423.

Sincerely,

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George W. Knighton, Chief  
Licensing Branch No. 3  
Division of Licensing

Enclosure:  
As stated

cc: See next page

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BEAVER VALLEY POWER STATION, UNIT 2  
REQUEST FOR ADDITIONAL INFORMATION  
GL 83-28, ITEMS 4.1, 4.2.1 AND 4.2.2.

INTRODUCTION

Duquesne Light, the applicant for Beaver Valley Power Station, Unit 2, submitted their response to Generic Letter 83-28 on March 30, 1984. The response has been reviewed with respect to Items 4.1, 4.2.1 and 4.2.2 of the Generic Letter. The applicant's response was not sufficiently detailed to permit an evaluation of the adequacy of the periodic maintenance and trending programs for the breakers. The following additional information is required to evaluate compliance with Items 4.2.1 and 4.2.2.

- I. Item 4.2.1 - Periodic Maintenance Program for Reactor Trip Breakers.

Criteria for Evaluating Compliance with Item 4.2.1

The Beaver Valley Unit 2 Reactor Trip System utilizes Westinghouse DS-416 circuit breakers. The primary criteria for an acceptable maintenance program for the DS-416 Reactor Trip Breaker (RTB) are contained in Westinghouse Maintenance Manual for the DS-416 Reactor Trip Circuit Breaker, Revision 0, October 1984. The NRC staff, Equipment Qualification Branch, has reviewed this document and endorsed the maintenance program described in it. More specifically, the criteria used to evaluate compliance include those items in this document that relate to the safety function of the breaker, supplemented by those measures that must be taken to accumulate data for trending.

#### Issues Relating to Item 4.2.1

The applicant's response states that he will review the Westinghouse program and adopt the preventive maintenance recommendations determined necessary to maintain the reactor trip breakers.

The Beaver Valley Unit 2 periodic maintenance program for the reactor trip breakers should include, on a six-month basis (or when 500 breaker operations have been counted, whichever comes first):

1. The retaining rings inspection, including those on the under-voltage trip attachment (UVTA) and shunt trip attachment (STA);
2. Arcing and main contacts inspection as specified by the Westinghouse Maintenance Manual;
3. UVTA check as specified by the Westinghouse Maintenance Manual, including replacement of UVTA if dropout voltage is greater than 60% or less than 30% of rated UVTA coil voltage;
4. STA check as specified by the Westinghouse Maintenance Manual;
5. Lubrication as specified by the Westinghouse Maintenance Manual;

The applicant should confirm that his Periodic Maintenance Program for the reactor trip breakers includes, on a refueling interval basis (or when 500 breaker operations have been counted, whichever comes first):

1. Pre-cleaning insulation resistance measurement and recording;
2. Post-cleaning insulation resistance measurement and recording, as specified by the Westinghouse Maintenance Manual;

3. Inspection of main and secondary disconnecting contacts, bolt tightness, secondary wiring, mechanical parts, cell switches, instruments, relays and other panel mounted devices;
4. UVTA trip force and breaker load check as specified by the Westinghouse Maintenance Manual;
5. Functional test of the breaker prior to returning to service as specified by the Westinghouse Maintenance Manual.

The maintenance procedure should include a caution to the maintenance personnel against undocumented adjustments or modifications to RTBs.

The applicant is to confirm that the periodic maintenance program includes these ten items at the specified intervals or commit to their inclusion.

## II. Item 4.2.2 - Trending of Reactor Trip Breaker Parameters to Forecast Degradation of Operability.

### Criteria for Evaluating Compliance with Item 4.2.2

Four parameters have been identified as trendable and are included in the criteria for evaluation. These are (a) undervoltage trip attachment dropout voltage, (b) trip force, (c) breaker response time for undervoltage trip, and (d) breaker insulation resistance.

### Issues Relating to Item 4.2.2

The applicant states that he will trend the "breakers operational response time." Any significant degradations found will be identified to Operations, Maintenance, and Upper Management for corrective action.

It is not clear what the applicant means by "breakers operational response time". The applicant is to commit to inclusion of trip force, breaker response time for undervoltage trip, dropout voltage for undervoltage trip and breaker insulation resistance as trending parameters.