July 20, 1984

Docket No. 50-334

Mr. J. J. Carey, Vice	President
Nuclear Division Duquesne Light Compan	у
Post Office Box 4 Shippingport, PA 1507	7

DISTRIBUTION Docket File NRC PDR EJordan L PDR JNGrace Gray File DWigginton ORB#1 Rdg CTrammel CParrish JNorris PTam DEisenhut OELD ACRS 10

Dear Mr. Carey:

SUBJECT: BEAVER VALLEY UNIT NO. 1 - OPERATION WITH TWO OUT CF THREE REACTOR COOLANT LOOPS - SAFETY EVALUATION

By letter dated October 27, 1978, Duquesne Light Company requested a number of technical specification changes. One of these requested changes would permit Beaver Valley Unit No. 1 to operate with only two of its three coolant loops, with the third one isolated by loop isolation valves. The enclosed Safety Evaluation discusses in detail results of our reivew.

Our review of the request has concentrated on the impact of this proposed change on the performance of safety related systems, the loop isolation valves, the design-basis accidents, as well as our evaluation of the impact on certain generic safety issues. We have sent out several rounds of questions and have visited the site on issues concerning human factors. You responded to such staff efforts by letters listed as References 10 through 20 in the enclosed Safety Evaluation Report.

We conclude that (1) the proposed method of loop isolation provide adequate protection for the integrity of the primary pressure boundary, (2) the likelihood of accidents and transients would not be significantly increased, (3) the isolation of one loop will not seriously degrade the performance of safety related systems, the instrumentation and control systems or that of the closed loop isolation valves, and (4) no major safety problems would result from two-loop operation (these include core thermal hydraulics, pressurized thermal shock, and SG tube damage).

You have reanalyzed the full spectrum of transients and accidents using acceptable codes and assumptions. The results demonstrate compliance with the acceptance criteria of the regulations and the Standard Review Plan.

As a result of our reivew, some changes to your proposed technical specifications will be necessary to ensure safe operation with one isolated loop. These changes are summarized in Section V of the SER. All except one (asymmetric LOCA blowdown load) have already been addressed by you in your letters. We will evaluate the adequacy of your revised technical specification changes against these concerns. Issuance of an amendment authorizing two-loop operation will be contingent upon satisfactory resolution of these concerns.

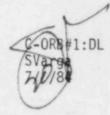
8408010218 840720 PDR ADOCK 05000334 P PDR On the basis of the considerations discussed above, we conclude that N-1 loop operation at Beaver Valley Unit No. 1 does not constitute a threat to public health and safety. Please discuss with your Project Manager, Mr. Peter Tam, the proposed schedule of submittal of your revised amendment request.

/s/SVarga

Steven A. Varga, Chief Operating Reactors Branch #1 Division of Licensing



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Mr. J. J. Carey Duquesne Light Company

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Beaver Valley Power Station Unit 1

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