



# Duquesne Light

Nuclear Division  
P.O. Box 4  
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May 3, 1982

Director of Nuclear Reactor Regulation  
United States Nuclear Regulatory Commission  
Attn: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing  
Washington, DC 20555



Reference: Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
Emergency Bus Transient Voltage Regulation

Gentlemen:

This letter has been prepared at the request of W. Ross of your staff to document conversation between A. Udy of EG and G and K. D. Grada and T. A. Mayers of Duquesne Light Company.

The design of the Valueline contactors supplied with the linestarters manufactured by Allis Chalmers Controls are 460 volts in accordance with NEMA standard ICS1-112.22. The turns ratio on the control power transformers is 4:1.

We have tested eight of the linestarters and verified that the contactor coil will pick up at 80 percent of the nominal supply voltage and drop out at 55 percent. We do not find it necessary to qualify these values further since sustained operation of the 4160V bus at 90 percent of the nominal voltage will separate the IE buses from the non IE supply. Since the contactor coils would remain pulled in at this voltage, the continuous rating of the coils is not exceeded, we find this design adequate with regard to its transient voltage response. The coils of the contactor are designed in accordance with NEMA standard ICS-70, part ICS 2-110.41.3 which requires that the coils pull-in and hold, in the range of 85%-110% of the rated voltage. The vendor, however, has provided us with a letter stating that the size 2 and 3 starter coils will pull in at values below the 80 percent voltage value at which we tested the coils.

If you have any further questions in this regard, please contact my office.

Very truly yours,

J. J. Carey  
Vice President, Nuclear

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Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
Emergency Bus Transient Voltage Regulation  
Page 2

cc: Mr. D. A. Beckman, Resident Inspector  
U. S. Nuclear Regulatory Commission  
Beaver Valley Power Station  
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U. S. Nuclear Regulatory Commission  
c/o Document Management Branch  
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