



Mr. J. J. Carey  
Duquesne Light Company

Beaver Valley Power Station  
Unit 1

cc: Mr. W. S. Lacey  
Station Superintendent  
Duquesne Light Company  
Beaver Valley Power Station  
Post Office Box 4  
Shippingport, PA 15007

Mr. Thomas J. Czerpah  
Mayor of the Burrough of  
Shippingport  
Post Office Box 26  
Shippingport, PA 15077

Mr. K. Grada, Superintendent  
of Licensing and Compliance  
Duquesne Light Company  
Post Office Box 4  
Shippingport, PA 15077

Pennsylvania Power Company  
Ray E. Sempler  
One E. Washington Street  
New Castle, PA 16103

Mr. John A. Levin  
Public Utility Commission  
Post Office Box 3265  
Harrisburg, PA 17120

Ohio Environmental Protection Agency  
Division of Planning  
Environmental Assessment Section  
Post Office Box 1049  
Columbus, Ohio 43216

Gerald Charnoff, Esquire  
Jay E. Silberg, Esquire  
Shaw, Pittman, Potts and Trowbridge  
1800 M Street, N.W.  
Washington, DC 20036

Office of the Governor  
State of West Virginia  
Charleston, West Virginia 25305

Karin Carter, Esquire  
Special Assistant Attorney General  
Bureau of Administrative Enforcement  
5th Floor, Executive House  
Harrisburg, PA 17120

Charles A. Thomas, Esquire  
Thomas and Thomas  
212 Locust Street  
Box 999  
Harrisburg, PA 17108

Marvin Fein  
Utility Counsel  
City of Pittsburgh  
313 City-County Building  
Pittsburg, PA 15219

Regional Radiation Representative  
EPA Region III  
Curtis Building - 6th Floor  
Philadelphia, PA 19106

Resident Inspector  
U.S. Nuclear Regulatory Commission  
Post Office Box 298  
Shippingport, PA 15077

Governor's Office of State Planning  
and Development  
ATTN: Coordinator, Pennsylvania  
State Clearinghouse  
Post Office Box 1323  
Harrisburg, PA 17120

Department of Environmental Resources  
ATTN: Director, Office of Radiolo-  
gical Health  
Post Office Box 2063  
Harrisburg, PA 17105

Mr. Joseph H. Mills, Acting Commissioner  
State of West Virginia Department  
of Labor  
1900 Washington Street  
East Charleston, West Virginia 25305

Beaver Valley Power Station  
Unit 1

- 2 -

cc: N. H. Dyer, M.D.  
State Director of Health  
State Department of Health  
1800 Washington Street, East  
Charleston, West Virginia 25305

Irwin A. Popowsky, Esquire  
Office of Consumer Advocate  
1425 Strawberry Square  
Harrisburg, PA 17120

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406



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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 75  
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
- A. The application for amendment by Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees) dated July 14, 1983 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

8401120176 831213  
PDR ADOCK 05000334  
P  
PDR

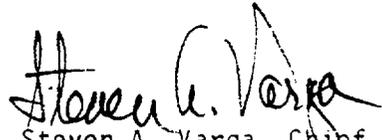
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 75, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: December 13, 1983

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO.75 TO FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Revise Appendix A as follows:

Remove Pages

3/4 8-6

6-2

Insert Pages

3/4 8-6

6-2

ELECTRICAL POWER SYSTEMS

3/4.8.2 ONSITE POWER DISTRIBUTION SYSTEMS

A.C. DISTRIBUTION - OPERATING

LIMITING CONDITION FOR OPERATION

---

3.8.2.1 The following A.C. electrical busses shall be OPERABLE and energized from sources of power other than the diesel generators with tie breakers open between redundant busses:

- 4160 volt Emergency Bus #IAE and 480V Emergency Bus 8N
- 4160 volt Emergency Bus #IDF and 480V Emergency Bus 9P
- 120 volt A.C. Vital Bus #I
- 120 volt A.C. Vital Bus #II
- 120 volt A.C. Vital Bus #III
- 120 volt A.C. Vital Bus #IV

APPLICABILITY: MODES 1, 2, 3 and 4

ACTION:

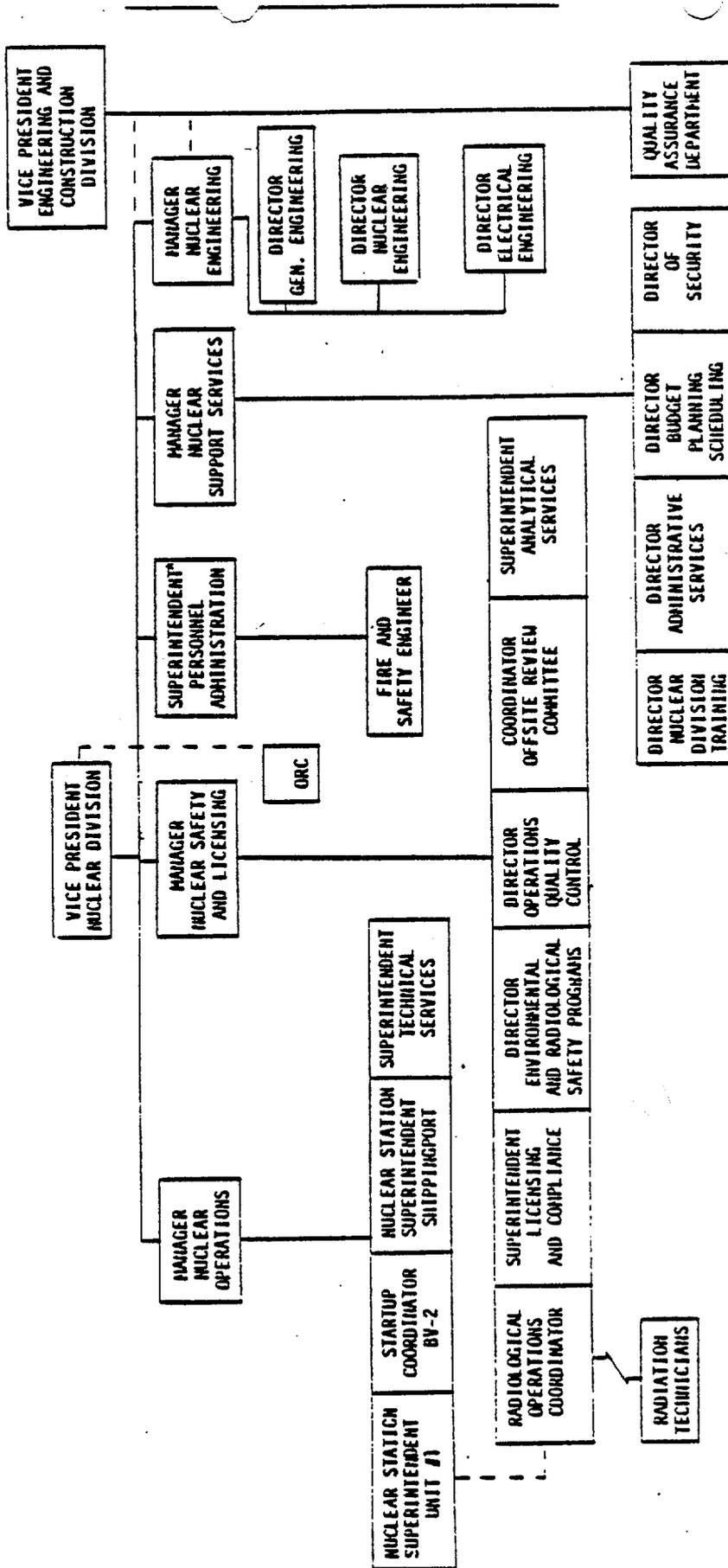
With less than the above complement of A.C. busses OPERABLE, restore the inoperable bus to OPERABLE status within 8 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

---

4.8.2.1 The specified A.C. busses shall be determined OPERABLE and energized from A.C. sources other than the diesel generators at least once per 7 days by verifying correct breaker alignment and indicated power availability.

DUQUESNE LIGHT COMPANY  
Nuclear Division



\* Indicates Fire Protection Responsibility

Figure 6.2-1  
Offsite Organization (Partial)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 75 TO FACILITY OPERATING LICENSE NO. DPR-66

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 1

DOCKET NO. 50-334

BACKGROUND

As result of two consecutive incidents that occurred at Beaver Valley Unit No. 1 on May 24, 1983 which affected both redundant trains (A & B) of the onsite AC power distribution, the resident inspector requested the licensee to review the pertinent portion of the limiting condition for operation (LCO) of the technical specification (TS) for clarity and to evaluate whether it is clearly stated which one of the two action statements (LCO 3.8.2.1 vs 3.0.3) is appropriate. Subsequent review by the licensee resulted in a TS change request dated July 14, 1983.

SYSTEM DESCRIPTION

To supply power to the safety related Class 1E equipment, Beaver Valley's onsite AC distribution system employs a typical redundant division (Train A & B) where each train consists of a 4160-volt bus (IAE for Train A and 1DF for Train B). Each bus is powered by an emergency diesel generator. Bus IAE

8401120179 831213  
PDR ADOCK 05000334  
PDR

supplies 480-volt emergency bus 8N while the redundant 4160-volt (1DF) bus supplies power to 480-volt emergency bus 9P. The 480-volt emergency (8N) bus serves the two 120-volt AC vital bus channels I and III of Train A while channel II and IV are served by bus 9P of Train B.

#### EVENT

On May 24, 1983 the normal power supply to the 4160-volt bus 1DF was interrupted at 9:55AM when a stray test signal was passed through inadvertently and operated 1D10 circuit breaker (incoming power supply to 1DF 4160V bus) while performing the station service transformer (TR-1B) test. When breaker 1D10 opened (Train B lost its power supply), the No. 2 emergency diesel generator started and emergency loads were properly sequenced on without initiating a reactor trip. Since offsite power was available, normal system alignment routine followed which required stripping emergency load, tripping No. 2 diesel generator output breaker, and closing the 4160-volt 1D10 bus circuit breaker.

Based on that event, the LCO 3.8.2.1 was applicable and its action statement calls for the inoperable bus to be restored to operable status within 8 hours. Consequently, Beaver Valley returned to normal system condition within the prescribed time interval. The inspection report (83-10) dated June 14, 1983 by the Region I indicated that the licensee's action was adequate.

However, at about 1:27 PM on the same day, the licensee received a vital bus channel I (Train A) trouble alarm. An investigation indicated that the

channel I vital bus voltage dropped to 110 volts due to a blown capacitor in the inverter. Later the power supply was restored by switching to the alternate power source while replacing the blown capacitor with a spare. The system returned to normal about 3:00 PM.

#### EVALUATION

In view of two unrelated events which affected both trains under two different causes, the resident inspector requested the licensee to review their existing LCO and applicable action statement. They found that their existing LCO lacks clarity on the assignment of trains. As an example, because each of the 480-volt emergency buses is designed to deenergize upon a loss of its respective 4160-volt emergency bus, there is a remote possibility for an operator to misinterpret the above event with one 4160-volt emergency bus (Train A) and one 480-volt bus on Train B as a single train failure. To prevent occurrence of such a postulated event, the licensee requested a change to clearly identify the affected trains(s), thus the operator can decide which action statement is appropriate.

The proposed amendment (8N) will clearly identify the assigned ESF train boundary with respect to the 480-volt buses and allow the operator to respond according to a proper action statement. In addition, this change conforms with the LCO 3.8.3.1 of the standard TS.

In addition, the licensee has requested that Figure 6.2-1 of the Technical Specifications be upgraded to include the organization under the Manager of Nuclear Engineering, and to change the job title of the Director of Personnel Administration to Superintendent, Personnel Administration. These changes are all administrative in nature, have no safety significance, and are thus acceptable.

Other changes requested in the licensee's July 14, 1983 letter will be addressed in future amendments.

#### Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §1.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 13, 1983

Principal Contributor:  
P. Kang



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

NOV 10 1983

MEMORANDUM FOR: Gus C. Lainas, Assistant Director  
for Operating Reactors, DL

FROM: L. S. Rubenstein, Assistant Director  
for Core and Plant Systems, DSI

SUBJECT: SAFETY EVALUATION OF BEAVER VALLEY UNIT 1  
TECHNICAL SPECIFICATION CHANGE REQUEST FOR  
ONSITE AC POWER DISTRIBUTION SYSTEM (TAC 52070)

In response to work request dated August 9, 1983, PSB has reviewed the subject technical specification (TS) change request on limiting condition for operation (LCO) 3.8.2.1 for Beaver Valley Unit 1.

Based on our review of the existing LCO 3.8.2.1, PSB finds that the requested change clarifies onsite AC power distribution division configuration according to its power sources and allows the operator to recognize which one of two action statements (LCO 3.8.2.1 vs 3.0.3) is applicable if there should be more than one bus failure. Furthermore this change conforms with the standard technical specification (STS) format (3/4.8.3 Onsite Power Distribution). Therefore, PSB recommends that the licensee's request for the LCO change for Beaver Valley Unit 1 should be granted. PSB's evaluation is enclosed. This action closes out TAC 52070.

L. S. Rubenstein, Assistant Director  
for Core and Plant Systems  
Division of Systems Integration

Enclosure:  
As stated

cc: R. Mattson  
D. Eisenhut  
[REDACTED]  
M. Srinivasan  
P. Tam

R. Capra  
J. E. Knight  
A. Ungaro  
P. Kang  
W. Troskoski (RI)

Contact:  
P. Kang  
x29423

8401120186 831213  
PDR ADOCK 05000334  
P PDR

EVALUATION OF BEAVER VALLEY UNIT 1 ONSITE AC POWER  
DISTRIBUTION TECHNICAL SPECIFICATION CHANGE REQUEST

BACKGROUND

As result of two consecutive incidents that occurred at Beaver Valley Unit No. 1 on May 24, 1983 which affected both redundant trains (A & B) of the onsite AC power distribution, the resident inspector requested the licensee to review the pertinent portion of the limiting condition for operation (LCO) of the technical specification (TS) for clarity and to evaluate whether it is clearly stated which one of the two action statements (LCO 3.8.2.1 vs 3.0.3) is appropriate. Subsequent review by the licensee resulted in this TS change request.

SYSTEM DESCRIPTION

To supply power to the safety related Class 1E equipment, Beaver Valley's onsite AC distribution system employs a typical redundant division (Train A & B) where each train consists of a 4160 volt bus 1AE for Train A and 1DF for Train B. Each bus is powered by an emergency diesel generator. Bus 1AE supplies 480 volt emergency bus (8N) while the redundant 4160 volt (1DF) bus supplies power to 480 volt emergency bus (9P). The 480 volt emergency (8N) bus serves the two 120 volt AC vital bus channels I and III of Train A while channel II and IV are served by bus 9p of Train B.

EVENT

On May 24, 1983 the normal power supply to the 4160 volt bus 1DF was interrupted at 9:55AM when a stray test signal was passed through inadvertently and operated 1D10 circuit breaker (incoming power supply to 1DF 4160V bus) while performing the station service transformer (TR-1B) test. When breaker

1D10 opened (Train B lost its power supply), the No. 2 emergency diesel generator started and emergency loads were properly sequenced on without initiating a reactor trip. Since the offsite power was available, normal system alignment routine followed which required stripping emergency load, tripping No. 2 diesel generator output breaker, and closing the 4160 volt 1D10 bus circuit breaker.

Based on that event, the LCO 3.8.2.1 was applicable and its action statement calls for the inoperable bus to be restored to operable status within 8 hours. Consequently, Beaver Valley returned to normal system condition within the prescribed time interval. The inspection report (83-10) dated June 14, 1983 by the Region I indicated that the licensee's action was adequate.

However, at about 1:27 PM on the same day, the licensee received a vital bus channel I (Train A) trouble alarm. An investigation indicated that the channel I vital bus voltage dropped to 110 volts due to a blown capacitor in the inverter. Later the power supply was restored by switching to the alternate power source while replacing the blown capacitor with a spare. The system returned to normal about 3:00 PM.

#### EVALUATION

In view of two unrelated events which affected both trains under two different causes, the resident inspector requested the licensee to review their existing LCO and applicable action statement, they found that their

existing LCO lacks clarity on the assignment of trains. As an example, because each of the 480 volt emergency buses is designed to deenergize upon a loss of its respective 4160 volt emergency bus, there is a remote possibility for an operator to misinterpret the above event with one 4160 volt emergency bus (Train A) and one 480 volt bus on Train B as a single train failure. To prevent occurrence of such a postulated event, the licensee requested a change to clearly identify the affected trains(s), thus the operator can decide which action statement is appropriate.

#### CONCLUSION

PSB recommends that the licensee's request should be granted since it does not reduce the LCO and it will clearly identify the assigned ESF train boundary with respect to the 480 volt buses and allow the operator to respond according to a proper action statement. In addition, this change conforms with the LCO 3.8.3.1 of the standard TS.