



# Duquesne Light

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May 30, 1984

United States Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Mr. Darrell G. Eisenhut, Director  
Division of Licensing  
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2  
Docket No. 50-412  
Identification of Backfit Requirement Number 17

Gentlemen:

Beaver Valley Power Station Unit 2's (BVPS-2) primary fire suppression system in the cable spreading room is an automatic, total flooding, carbon dioxide system. Backup suppression is provided by permanent hose stations. The NRC staff has informed DLC in Attachment 1 (Draft SER pages 9-26 and 9-27) that this approach to fire suppression in the cable spreading room "does not meet staff guidelines." The staff is requiring ". . . the applicant to provide protection of the cable spreading room in accordance with Section C.7.c of the BTP CMEB 9.5-1." The guidance in the BTP CMEB 9.5-1 suggests that the primary fire suppression system should be an automatic water system, however, gas system review guidance is provided. The use of carbon dioxide as the primary means of fire suppression in the cable spreading room was originally presented in the BVPS-2 PSAR and was not identified as unacceptable by the NRC in the CP-SER.

DLC believes the fire suppression system in BVPS-2's cable spreading room meets the intent of the BTP-CMEB 9.5-1 guidelines and complies with the requirements of General Design Criteria 3 and 5, 10CFR50.48, and 10CFR50, Appendix R (applicable to plants with OL's prior to January 1, 1979). Unless the basis for this new requirement can be demonstrated as an existing regulation, the controls of 10CFR50.109, GNLR 84-08, and NRC Manual Chapter 0514 identify the requirement as a backfit.

DLC requests that the proposed requirement be submitted to NRC management for approval, in accordance with the Office of Nuclear Reactor Regulation (NRR) procedure for management of plant specific backfitting, prior to transmittal as a licensing requirement.

DUQUESNE LIGHT COMPANY

By E. J. Woolever  
E. J. Woolever  
Vice President

RW/wjs  
Attachment

cc: Mr. H. R. Denton (w/attachment)  
Mr. G. W. Knighton, Chief (w/attachment)  
Ms. M. Ley, Project Manager (w/attachment)  
Mr. M. Licitra, Project Manager (w/attachment)  
Mr. G. Walton, NRC Resident Inspector (w/attachment)

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~~complex meet staff guidelines. The staff will require these rooms to be separated from the main control room by 1-hour-rated barriers, and provided with automatic suppression and detection in accordance with Section C.7.b of BTP CMEB 9.5-1.~~

~~All cables entering the control room terminate there. No cables are routed through the control room from one area to another. There is a section of raised floor between the main control board and the benchboard. All cables in the underfloor are in conduits. This is acceptable because cables completely enclosed in metal conduits do not add to the combustible loading in the area.~~

~~Ionization smoke detectors have been installed in the control room as well as inside the individual cabinets and consoles within the control room.~~

~~The applicant has provided an alternate shutdown system for the control room. The alternate shutdown system is reviewed in Section 9.5 of this report.~~

~~The outside air intakes for the control room's ventilation system are equipped with smoke detectors that alarm in the control room. In the event of a fire, the smoke venting system can be manually initiated to purge smoke from the control room, or isolated to keep smoke from entering the control room.~~

#### Cable Spreading Room

The cable spreading room is separated from the balance of the plant by 3-hour-fire-rated walls and floor/ceiling assemblies. All penetrations through fire-rated barriers are fitted with 3-hour-fire-rated dampers and/or 3-hour-fire-rated penetration seals.

An alternate shutdown system has been provided for the cable spreading room. The alternate shutdown system is reviewed in Section 9.5 of this report.

The primary fire suppression system in the cable spreading room is an automatic redundant total flooding carbon dioxide system. Backup suppression capability for the cable spreading room is provided by the plant fire brigade. This does not meet the staff guidelines. The staff will require the applicant to provide

protection of the cable spreading room in accordance with Section C.7.c of BTP CMEB 9.5-1.

#### Switchgear Rooms

The Division I and Division II switchgear rooms are separated from each other and from other plant areas by 3-hour-fire-rated walls and floor/ceiling assemblies.

Automatic fire detection is provided by ionization smoke detectors. Manual protection is provided by standpipe hose stations and portable extinguishers. Floor drains have been provided in the switchgear rooms. On the basis of its review, the staff concludes that the protection provided for the switchgear room is in accordance with Section C.7.e of BTP CMEB 9.5-1, and is, therefore, acceptable.

#### Remote Safety-Related Panels

Redundant safety-related panels remote from the main control room will be separated by barriers having a minimum fire rating of 3 hours. On the basis of its review, the staff concludes that the protection provided for remote safety-related panels meets Section C.7.f of BTP CMEB 9.5-1, and is, therefore, acceptable.

#### Safety-Related Battery Rooms

The battery rooms are separated from each other and from the balance of the plant by 3-hour-fire-rated barriers. Ionization smoke detection systems are provided in each battery room. Hose stations and portable fire extinguishers are available in the areas for manual fire suppression. The ventilation system is designed to maintain the hydrogen levels below 2%. Loss of ventilation alarms have been provided for each battery room. On the basis of its review, the staff concludes that the protection provided for the battery rooms meets Section C.7.g of BTP CMEB 9.5-1, and is, therefore, acceptable.