



# Duquesne Light

Nuclear Construction Division  
Robinson Plaza, Building 2, Suite 210  
Pittsburgh, PA 15205

2NRC-4-068  
(412) 787-5141  
(412) 923-1960  
Telecopy (412) 787-2629

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 9

Gentlemen:

In Draft SER Section 7.3.3.12 (attached), the NRC identified the concern that the steam generator level control design did not meet the requirements of Paragraph 4.7 of IEEE 279. Duquesne Light Company (DLC) responded to this concern in letter 2NRC-4-032 to G. W. Knighton dated March 28, 1984. In the response, DLC explained that compliance with IEEE 279 is not required in this case because core protection is maintained even if the very specific failures postulated by the NRC were to occur. The NRC responded to this in a letter from Mr. G. W. Knighton to Mr. E. J. Woolever dated May 3, 1984, indicating that DLC would either need to modify the steam generator level control design to comply with IEEE-279 or need to provide an analysis showing that the consequences of feedwater addition are not safety significant.

The BVPS-2 PSAR describes the standard Westinghouse three channel design. This document provides the basis for the issuance of the BVPS-2 construction permit. Additionally, despite the existence of IEEE 279 since 1971, numerous operating Westinghouse PWR's have steam generator level systems similar to that provided for BVPS-2. Therefore, it appears that Mr. Knighton's May 8, 1984, letter transmits a new requirement without full implementation of NRR procedures based on 10CFR50.109; Generic Letter 84-08; and NRC Manual, Chapter 0514.

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

KAT/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)

8406050091 840530  
PDR ADOCK 05000412  
E PDR

13001  
1/1

#### 7.3.3.12 Steam Generator Level Control and Protection

Three steam generator level channels are used in a two-out-of-three logic for isolation of feedwater on high steam generator level. One of the three level channels is used for control. This design for actuation of feedwater isolation does not meet the requirements of Paragraph 4.7 of IEEE 279, "Control and Protection System Interaction," in that the failure of the level channel used for control could require protective action and the remainder of the protection system channels would not satisfy the single-failure criterion. The applicant has not responded to this concern. This is an open item.

#### ~~7.3.3.13 IE Bulletin 80-06 Concerns~~

~~IE Bulletin 80-06 requests a review of all systems serving safety-related functions to ensure that no device will change position solely because of the reset of a ESF actuation signal. The applicant was requested to respond to IE Bulletin 80-06.~~

~~The staff has reviewed the applicant's response in FSAR Amendment 4 and finds that the applicant has reviewed only the specific potential problems listed in IE Bulletin 80-06. The intent of IE Bulletin 80-06 and NRC question 420.3 was to require all safety-related systems to be reviewed. This item is open until a complete response is provided by the applicant.~~

#### ~~7.3.3.14 Independence Between Manual and Automatic Actions~~

~~The applicant's response to IE Bulletin 80-06 states: "All circuitry for components actuated by an ESF actuation signal have been designed such that the ESF signal cannot be overridden manually or automatically with an ESF actuation signal present. A component may be reset by first resetting the ESF actuation signal and then manually resetting the component." The staff's review of the transfer from the control room to the ESP revealed that safety injection pumps cannot be stopped manually if SI is initiated after the transfer.~~

~~The staff is concerned that, under accident conditions, as well as in the case of inadvertent initiation of safety actions, the inability of the operator to~~