OCT 30 1981

Docket Nos.: STN 50-454, STN 50-455
and STN 50-456, STN 50-457

Mr. Louis O. DelGeorge
Director of Nuclear Licensing
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. DelGeorge:

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We have made an initial review of the auxiliary feedwater system (AFWS) reliability analysis report for Byron which you submitted by letter dated September 18, 1981 and have identified the following area of major concern with the reliability of your AFWS. Your analysis indicates that for a loss of offsite power, AFWS reliability will not be in the high range (10 to 10 per demand) as identified in the criteria of SRP Section 10.4.9 for meeting the requirements of Criterion 44 of the General Design Criteria. We believe this is primarily due to the fact that the system does not have three AFW pumps capable of functioning in a loss of offsite power condition.

We have recently been informed by members of your staff that although your current reliability analysis uses the methodology of NUREG-0611, it does not use NUREG-0611 failure rate data in all instances as required by the staff. We were further advised that you plan to revise your reliability analysis to correct these shortcomings and that you expect this reanalysis to result in a reliability for your AFWS consistent with the criteria of SRP Section 10.4.9.

We will review your revised analysis when it becomes available. However, we are not encouraged that the renanlysis will show compliance with the above criterion. We therefore encourage you to begin the engineering design effort at this time for implementation of a third AFWS pump capable of providing at least the minimum flow necessary to the steam generators for decay heat removal during a loss of offsite power condition and submit the design details of the AFWS modification as they become available.

Contact W. Kane, who will be the acting Byron Project Manager on (301)492-7050 if you desire to discuss this matter further.

Sincerely,

Original signed by
Darrell G. Eisenhut

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

*SEE PREVIOUS CONCURRENCE FOR INITIALS

CC: See next page

OFFICE	DL:LB#1*	DL:LB#1*	ASB*	DSI:C&CS*	DL:LB#1*	DL:AD/L*	DL:DIR
SURNAME	WKane/vt	KKiper	JWermiel	LRubenstein	BJYoungblood	RLTedesco	DEisenhut
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We have recently been informed by members of your staff that although your current reliability analysis uses the methodology of NUREG-0611, it does not use NUREG-0611 failure rate data in all instances as required by the staff. We were further advised that you plan to revise your reliability analysis to correct these shortcomings and that you expect this reanalysis to result in a reliability for your AFWS consistent with the criteria of SRP Section 10.4.9.

We will review your revised analysis when it becomes available. However, we are not encouraged that the reanalysis will show compliance with the above criterion. We therefore encourage you to begin the engineering design effort at this time for implementation of a third AFWS pump capable of providing at least the minimum flow necessary to the steam generators for decay heat removal during a loss of offsite power condition and submit the design details of the AFWS modification as they become available.

Contact W. Kane, Byron Project Manager on (301)492-7050 if you desire to discuss this matter further.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing

cc: See next page

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OFFICE	DL:LB#1*	DL:LB#1*	ASB*	DSI:C&CS*	DL:LB#1*	DL:L	DL
SURNAME	WKane:yt	KKiper	JWermiel	LRubenstein	BJYoungblood	RLTedesco	DGEisenhut
DATE	10/21/81	10/20/81	10/21/81	10/21/81	10/21/81	10/22/81	10/ /81

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NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-960

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We have recently been informed by members of your staff that although your current reliability analysis uses the methodology of NUREG-0611, it does not use NUREG-0611 failure rate data in all instances as required by the staff. We were further advised that you plan to revise your reliability analysis to correct these shortcomings and that you expect this reanalysis to result in a reliability for your AFWS consistent with the criteria of SRP Section 10.4.9.

We will review your revised analysis when it becomes available. However, we are not encouraged that the renanlysis will show compliance with the above criterion. We therefore encourage you to begin the engineering design effort at this time for implementation of a third AFWS pump capable of providing at least the minimum flow necessary to the steam generators for decay heat removal during a loss of offsite power condition and submit the design details of the AFWS modification as they become available.

Contact the Byron Project Manager if you desire to discuss this matter further.

Sincerely,

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

*See previous yellow.
cc: See next page

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We have recently been informed by members of your staff that although your current reliability analysis uses the methodology of NUREG-0611, it does not use NUREG-0611 failure rate data in all instances as required by the staff. We were further advised that you plan to revise your reliability analysis to correct these shortcomings and that you expect this reanalysis to result in a reliability for your AFWS consistent with the criteria of SRP Section 10.4.9. We are not encouraged that the reanalysis will obviate the need for a third pump. We will, of course, review your revised analysis as it becomes available.

Accordingly, we believe you should commit, as soon as possible, to provide a third AFW pump capable of providing at least the minimum flow necessary to the steam generators for decay heat removal during loss of offsite power conditions, and submit the design details of the AFWS modifications as they become available.

Contact the Byron Project Manager if you desire to discuss this matter further.

Sincerely,

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

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