



50-454

**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

June 26, 1997

Ms. Irene Johnson, Acting Manager  
Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO REVISION OF ULTIMATE  
HEAT SINK TECHNICAL SPECIFICATIONS FOR BYRON STATION, UNITS 1 AND 2  
(TAC NOS. M98754 AND M98755)

Dear Ms. Johnson:

By letter dated May 6, 1997, Commonwealth Edison Company (ComEd) proposed changes to Technical Specification 3/4.7.5, "Ultimate Heat Sink" to support steam generator replacement at Byron Station, Unit 1. The planned steam generator replacement required reanalysis of the ultimate heat sink (UHS) capability due to the increased mass and energy releases associated with the new generators. In order to complete the review and make an acceptability determination regarding this issue, the staff needs the following additional information related to your single failure analysis:

1. In your UHS basin temperature evaluations for the various scenarios considered, you discuss the single active failure of one of the cooling tower fans. It is not clear to the staff that you have considered the worst case single active failure during your analyses. Please describe why the single active failure of a cooling tower fan is the most limiting single active failure. In your response you should discuss the possibility of single electrical failures (e.g., loss of bus, breaker trip, loss of diesel generator) that can result in the loss of more than one fan.
2. In your UHS basin water level evaluation you describe two scenarios. Both of these scenarios identify the failure of one of the makeup pumps as an example of a single active failure. Similar to Item 1 above, please provide information to verify that you have considered the worst case single active failure that could affect UHS basin level. In your response you should discuss the possibility of electrical failures that

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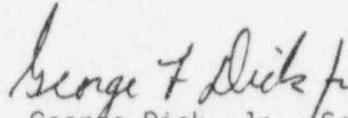
I. Johnson

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may result in the loss of one or more fans, in addition to the loss of one of the makeup pumps (i.e., loss of bus that supplies power to fan(s) and makeup pump).

Please provide the additional information so that we may continue our review of your request.

Sincerely,



George Dick, Jr., Senior Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-454 and STN 50-455

cc: see next page

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Original signed by:

George Dick, Jr., Senior Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

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Commonwealth Edison Company

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