



August 23, 1995

U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Document Control Desk

Subject: Braidwood Station Units 1 and 2  
Byron Station Units 1 and 2  
Dresden Station Units 2, and 3  
LaSalle County Station Units 1 and 2  
Quad Cities Station Units 1 and 2  
Zion Station Units 1 and 2

10 CFR Part 21 Second Interim Report 95-007  
ComEd Amerace E7000 Series Relay Timers May  
Be Used in Unqualified Configurations

NRC Dockets 50-456 and 50-457  
NRC Dockets 50-454 and 50-455  
NRC Dockets 50-237 and 50-249  
NRC Dockets 50-373 and 50-374  
NRC Dockets 50-254 and 50-265  
NRC Dockets 50-295 and 50-304

Reference: (1) ComEd letter dated June 21, 1995, "10 CFR Part 21 Interim Report 95-007  
ComEd Amerace E7000 Series Relay Timers May  
Be Used in Unqualified Configurations"

Applicability

This notification is submitted in accordance with the requirements of 10 CFR Part 21. Section 21.21(a)(2).

Identification of Facilities and Components

Byron Nuclear Generating Station Units 1 and 2  
Braidwood Nuclear Generating Station Units 1 and 2  
Dresden Nuclear Generating Station Units 2 and 3  
LaSalle Nuclear Generating Station Units 1 and 2  
Quad Cities Nuclear Generating Station Units 1 and 2  
Zion Nuclear Generating Station Units 1 and 2

Amerace E7000 Series Relay Timers used in various safety related applications at all 6 ComEd nuclear generating stations

IE19  
1/0

Identification of Component Manufacturer/Supplier

Amerace Electronic Components  
7474 Utilities Road  
Punta Gorda, FL 333982

Nature of Defect

The defect is related to a notification from Amerace of a reduction in contact rating for Amerace's E7000 Series relay timers. The published rating was reduced for circuits serving loads rated at 1.0 amp at 125 VDC. The new rating is 0.5 amps at 125 VDC. Amerace requested that ComEd review any DC applications with the E7000 series timer that may be required to switch 125 VDC at 1.0 amp. Amerace indicated that, per test data, the fragility level of the contact blocks was determined to be between 0.68 amps and 0.71 amps at 125 VDC.

Time of Discovery

Commonwealth Edison Company first determined that the potential misapplication of the Amerace E7000 relays could potentially adversely affect safety related equipment and that the defect could be reportable per 10CFR21 on April 25, 1995. An interim notification of 10CFR21 potential reportability was made to the NRC on June 21, 1995. This letter provides additional information concerning the status of ComEd's 10CFR21 evaluation.

Number and Location of All Defective Components:

The Amerace relay timers are used in various safety related applications at all six ComEd sites. The approximate applications range from 24 at LaSalle Station, 33 at Quad Cities, 93 at Dresden, 55 at Zion, to 250 at Byron and Braidwood Stations.

Corrective Actions:

Conversations were held with the vendor (Amerace) and Southern California Edison (utility who performed the original testing which determined the new contact ratings). ComEd has determined that the information transmitted from Amerace regarding the contact rating may not be sufficiently substantiated. The "make" ratings, according to Southern California Edison, were not directly tested for maximum rating, but the contacts were tested at 1 amp switching applications. Since there appears to be discrepant information regarding the ratings, ComEd has not been able to fully disposition all of the applications at four (4) of our stations, Byron, Braidwood, Dresden, and Quad Cities. ComEd will pursue testing the relay contacts to demonstrate the capability of the contacts. This testing will provide sufficient information to allow an appropriate 10CFR21 reportability determination.

August 23, 1995

To date, ComEd has been able to fully disposition all potentially affected applications at Zion and LaSalle, 97 of the 141 at Byron/Braidwood, 83 of the 93 at Dresden and 27 of the 33 at Quad Cities. For the remaining potentially affected applications, 44 at Byron/Braidwood, 10 at Dresden and 6 at Quad Cities, ComEd will pursue further evaluation and testing to demonstrate the capability of the contacts at the existing plant configurations. In the interim, ComEd has determined, based on past operations of the relay contacts as well as past failure history of the relay contacts, that the remaining affected relay contacts do not pose a substantial safety hazard.

#### 10 CFR 21 Evaluation

At this time, the ComEd review indicates that there is a potential 10 CFR Part 21 notification related to the Amerace E7000 series relay timers. To date, no applications have been determined to meet the reportability requirements of 10 CFR Part 21. However, the evaluation of all applications at ComEd has not been completed. It is estimated that this evaluation will be completed for all sites by 10/23/95.

#### Contacts

Questions pertaining to this notification should be addressed to:

Eric S. Steckhan  
Nuclear Engineering Services  
ComEd  
1400 Opus Place, Suite 300  
Downers Grove, IL 60515  
(708) 663-7437

Sincerely,



I. M. Johnson  
Licensing Operations Director  
Nuclear Regulatory Services

cc: H. Miller, Regional Administrator-RIII  
G. Dick, ComEd Generic Issues Project Manager, NRR  
S. Ray, Senior Resident Inspector (Braidwood)  
H. Peterson, Senior Resident Inspector (Byron)  
M. Leach, Senior Resident Inspector (Dresden)  
P. Brochman, Senior Resident Inspector (LaSalle)  
C. Miller, Senior Resident Inspector (Quad Cities)  
R. Roton, Senior Resident Inspector (Zion)