



**Commonwealth Edison**

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August 5, 1983

Mr. James G. Keppler, Regional Administrator  
- Region III  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: Byron Generating Station Units 1 and 2  
Braidwood Generating Station Units 1 and 2  
Process Protection System Heat Sinks and  
Relays  
NRC Docket Nos. 50-454, 50-455, 50-456,  
and 50-457

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Dear Mr. Keppler:

On July 6, 1983, Commonwealth Edison notified Mr. James Konklin of a deficiency reportable pursuant to 10 CFR 50.55(e) regarding the Westinghouse 7300 process protection systems at Byron and Braidwood stations. For your tracking purposes this deficiency was assigned number 83-09 for Byron and 83-09 for Braidwood. This letter fulfills the thirty-day reporting requirement of the regulation.

DESCRIPTION OF DEFICIENCY

The adhesive bond in the heat sink assembly on loop power supply (NLP) cards is subject to failure. Failure of the bond can cause the separation of the heat sink plate from the thermal links such that it falls off of the printed circuit board.

The second potential deficiency involves contact bounce as experienced in seismic testing of the temperature channel test (NTC) card. This will result in signal saturation of the RTD Amplifier (NRA) card in the  $T_{hot}$  and  $T_{cold}$  circuits. The deficiency could delay initiation of the overtemperature - delta T and overpower-delta T trips.

ANALYSIS OF SAFETY IMPLICATIONS

The heat sink plate is conductive metal and under certain circumstances could cause shorting of the low-level signal if it became wedged between cards in the card frame.

The relay chatter deficiency could delay initiation of the overtemperature-delta T and overpower-delta T trips as described above.

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J. G. Keppler

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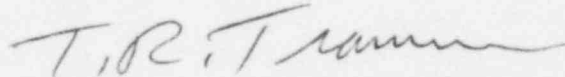
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CORRECTIVE ACTION

The heat sinks on the NLP cards will be replaced. Installation at Byron Station is projected for the end of September, 1983. Installation at Braidwood Station is expected to be complete by the end of October, 1983. Replacement relays for the NTC cards are being developed by Westinghouse. If they are not installed prior to fuel load, existing filter circuits will be adjusted to compensate.

Please address questions regarding this matter to this office.

Very truly yours,



T. R. Tramm  
Nuclear Licensing Administrator

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cc: Director of Inspection and Enforcement

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