

**Victoreen, Inc.**

~~93-349~~  
P21 93348



September 13, 1993

U.S. Nuclear Regulatory Commission  
Attention: Mr. Dan Carter  
OWFN - 10D4  
Washington, D.C. 20555

Subject: Close-out of a noncompliance on a Class 1E monitor, dated July 31, 1993  
Incorrect gasket material used on P/N 960CC-100-30  
LCU Card Lock Rail

Reference: Notification of Noncompliance dated July 31, 1993  
10CFR21 Section 21.3 (4)

Gentlemen:

Further to our above referenced notification, the purpose of this letter is to notify you of our corrective action and close-out of the subject 10CFR21 Report of Notification.

General Description:

Model 960 local control unit (LCU) contains a P/N 960CC-100-30 card lock rail assembly used to retain the Model 960 electronic modules in their card cage during a seismic event. This part is used in both the LCU and the control room located remote display unit (RDU). A neoprene rub strip ( i.e. gasket, P/N 960CC-100-33) is attached to a metal card lock rail to restrain the 960 modules. The non-conformance report was written against the rub strip material used on the card lock assemblies manufactured after November, 1990.

Corrective Action Summary:

1.0 Victoreen Action:

1.1. Following the initial NRC notification, a list of potential users of the equipment was prepared, and individual customer notification letters were prepared. A list of the utilities that have received notification letters is provided in Attachment A to this letter.

6000 Cochran Road  
Cleveland, Ohio 44139-3395  
(216) 248-9300  
FAX (216) 248-9301  
DATA (216) 248-9043

U.S. Nuclear Regulatory Commission  
September 13, 1993  
Page 2 of 3

1.2. Next, an internal analysis of the problem was performed. The result of our analysis was that the LCU card lock assemblies supplied after November, 1990 were manufactured with the incorrect rub strip (gasket) installed. A soft, cellular, neoprene gasket, instead of a hard neoprene (durometer 40) was supplied. Internal non-conformance report (NCR) numbers 13294 and 13356 were issued to correct discrepant materials presently in our stockroom and on our factory floor.

1.3 Design Change Request (DCR) No. 7CR38-93 was issued to add specific requirements for the rub strip (gasket) material to the final assembly drawing, and to more clearly specify the durometer requirements for the rub strip. This will ensure that our in-coming inspection personnel have specific criterion for inspection when the card lock is purchased as a complete assembly. DCR 8CR34-93 was later issued to remove the requirement for the secondary 8-32 x .25 rail lock retaining screw (which was shown to not be necessary during actual seismic testing) and to change the rub strip (gasket) adhesive from Duhesive 300 (a rapid setting, high tensile strength adhesive) to Pliobond 20 (a thermosetting adhesive for use on porous surfaces). The drawings affected were 960CC-100-30, card lock assembly and 960CC-100-33, gasket.

1.4 Based upon the customer list in Attachment A, replacement gaskets are being ordered for shipment to the utilities identified, and individual close-out letters are being prepared.

## 2.0 Customer Action:

2.1 In our close-out letters, we are suggesting that the existing card lock assemblies be visually examined for physical damage, and the gap between the 960 modules and the card lock rail rub strip. The maximum gap permitted is 1/8 inch. If no physical damage has occurred, and the gap is within the above limit, the user may then determine if seismic equivalence is met. If seismic equivalence is met, the existing card locks may be used until replacement gaskets are received.

2.2 Within the constraint of item 2.1 above, installation of the replacement card lock gaskets may be performed as a part of the plant's normal maintenance schedule.

## Victoreen, Inc.

---



### Attachment A

#### Potential Customer List, Card Lock Rail

Customer/Plant:	P.O. Number:	P.O. Date:	Sales Order:	Ship Date:
GPU/TMI-1	033122	12/85	960024	1987
PG&E/Diablo/Canyon 1/2	ZS-7204-A/B	5/90	33554/556	1993-93
KEPCO/KORI3/4/Yo'ng 1/2	KH902N N287E	6/90	36726	1992
KAERI/KMMR	90-399	12/90	41806	1992
KAERI/IMEF	F91-120	3/91	44499	1992
Proray/Jose Cabrera	29-II-3751	3/92	55885	1993
KEPCO/KORI 1/2/Wolsung	KH912N N409	5/92	58047	1993
KEPCO/KORI 1-4/Y'g 1/2	KH912N N440	7/92	59620	1993

6000 Cochran Road  
Cleveland, Ohio 44139-3395  
(216) 248-9300  
FAX (216) 248-9301  
DATA (216) 248-9043

U.S. Nuclear Regulatory Commission  
September 13, 1993  
Page 3 of 3

Root Cause Analysis:

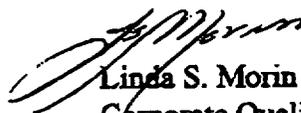
From a review of the purchase history of the affected material, the action of procuring the completed assembly, instead of the individual components, was the main reason for the receipt of the discrepant material. By procuring the assembly, our in-coming inspection personnel did not have available to them the specific information on the material or durometer for the rub strip (gasket) supplied. This has been corrected by adding the rub strip material requirements to the final assembly drawing.

Please advise if you have any questions on this matter.

Sincerely yours,



Andrew W. Lasko  
Reliability Engineering Manager



Linda S. Morin  
Corporate Quality Assurance Manager

AWL/LSM/rjp