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March 17, 1994

Document Control Desk  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555

**Subject:** Notification of Possible Product Anomaly  
Namco Controls EA740 and EA750 Series Limit Switches

Gentlemen:

The purpose of this letter is to follow up on the letter sent to you on March 2, 1994 on the above subject.

This matter was brought to our attention by Commonwealth Edison via Namco Control's Return Goods Authorization Numbers RGA 013971NC and RGA 013991NC. The customer reported that the operating levers on EA740-86700 Limit Switches would not always return to their initial position. Namco has been able to verify this condition in only one of the returned units. Namco has determined the root cause to be a reaction between the oil used to lubricate the limit switch shaft and the O-ring. The O-ring is used to seal the shaft connected to the operating lever. This reaction resulted in the enlargement of the O-ring which placed additional friction in the area of the shaft and the bushing in which the shaft rotates. Namco has further determined, with the help of two outside test labs, that the O-ring was not made from the material specified by Namco. A second O-ring from the same lot was also tested and found to be of the correct family of material (EP/EPDM).

The approved manufacturer of the O-ring, Parker Hannifin Corporation, has reviewed and performed additional tests to determine whether or not they were the original manufacturer of this incorrect O-ring material found in the returned switch. Information received from Parker Hannifin stated that the material was not of the EP/EPDM family and that they were not the manufacturer of the O-ring which caused this problem. At this time, based on our review, we believe this situation to be isolated.

All O-rings used in Nuclear Qualified Limit Switches, for the purpose of this shaft seal, have been specified to be manufactured by Parker Hannifin Corporation, using their E740 material, which is in the EP/EPDM family of material, since approximately 1977. As part of this review, we asked Parker Hannifin to analyze O-ring material from four batches of material that were supplied to Namco with the required certifications from Parker Hannifin and purchased from various Parker Hannifin distributors.

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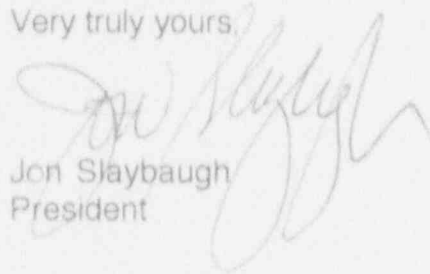
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On March 14, 1994 Parker Hannifin advised us that two of the four batches of material were not from Parker Hannifin, one batch may be from Parker Hannifin but not the correct material, and one batch may be from Parker Hannifin and may be the correct material. All products using this O-ring remain on hold at Namco.

Although we believe that we have determined the root cause for the problem initially reported to Namco by the customer and that the problem is isolated, our analysis has lead us to another issue concerning the actual O-ring material supplied to Namco by our vendor.

We continue to work with Parker Hannifin to define both the nature and scope of this new issue. We will advise you by March 31, 1994, of our status and plans to resolve this situation.

Very truly yours,



Jon Slaybaugh  
President

cc: H. Everson - VP Engineering  
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