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 AUTH.NAME AUTHOR AFFILIATION  
 HILL,T.D. Phillips Industries, Inc.  
 RECIP.NAME RECIPIENT AFFILIATION  
 NRC - No Detailed Affiliation Given

SUBJECT: Part 21 rept re dampers supplied by ITT actuators.Ruskin Div  
 evaluating Loctite compound following verification.

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**PHILIPS  
INDUSTRIES INC.**

**Air Distribution Group  
Ruskin Division**

Manufacturing Quality Components for Better Building

February 2, 1989

Director, Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 10555

Dear Sir:

In accordance with the requirements of 10 CFR part 21, Ruskin Manufacturing Company, located at 3900 Dr. Greaves Road, Grandview, Missouri, 64030, is herewith reporting that we have discovered a deficiency with equipment furnished by Ruskin Manufacturing Company for Nuclear Power Plant application.

On December 19, 1988, Ruskin Division received letter notification from Arizona Nuclear Power Project (ANPP) requesting Ruskin input for completion of Reportability Evaluation Request 88-18. The identified problem on Ruskin supplied dampers with ITT actuators was the rotation of extension shaft into or out of the damper yoke assembly which results in misadjustment of the damper blade stop position. The reason for rotation was identified as no securing mechanism (ie. set screw) between the extension shaft and the yoke.

This problem was originally identified as affecting Bubbletight Dampers, which were supplied only to the Palo Verde jobsite, equipped with ITT actuators. Resolution of the problem was accomplished by ANPP, with Ruskin, by applying Loctite 277 to the threads which attached the yoke to the extension shaft. ANPP has evaluated this fix and found it to be acceptable with no impact on original damper qualifications.

Subsequent to the above, a review was conducted to determine if the conditions existed for other Nuclear sites where Ruskin has supplied dampers with ITT actuators utilizing same extension shaft and yoke design, without locking mechanism.

On February 2, 1989, sufficient information was available which reasonably indicated a deficiency may exist. The deficiency discovered indicated that the extension shaft may rotate, causing damper misadjustment which may cause actuator to overstroke or understroke, which may cause insufficient blade closure resulting in excessive leakage. In some cases this misadjustment could result in potential failure of linkage attachments and operability of linkage system.

8905180154 890202  
PDR ADDCK 0500052B  
S PNU

P.O. Box 129 • Grandview, Mo 64030 • 816/761-7476 • FAX: 816/765-8955

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Director; Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
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Ruskin Division is currently evaluating a Loctite compound which may be applied, following verification of proper damper adjustment, to the threads of the extension shaft in place. Loctite 277 used at Palo Verde is also being evaluated for use at other jobsites, however, this compound requires disassembly and reassembly of the yoke extension shaft.

Attachment I to this letter identifies the affected jobsites by location and the number of units supplied for each.

Upon completion of evaluations referenced above, results will be immediately transmitted to your office and all affected jobsites.

In closing, please find enclosed a copy of the letter describing the situation contained in this letter, which will be sent to each affected site.

If further questions should arise, please contact us at once.

Thank you for your cooperation.

Sincerely,

RUSKIN MANUFACTURING DIVISION

  
Thomas D. Hill  
President

Enclosures  
Attachment I  
Notification Form Letter

Note: For further discussions, questions or concerns on this matter, please contact:

Richard J. Yarges  
Vice President, Quality  
1-816-761-7476

RY/rlm



ATTACHMENT I

Shearon Harris Nuclear Plant  
Carolina Power & Light Co.  
P.O. Box 101  
New Hill, NC 27562  
36 operators

Attn: L.I. Loflin  
Manager, Engineering

Palo Verde Nuclear Gen. Plant  
Arizona Nuclear Power Project  
P.O. Box 52034  
Phoenix, AZ 85072-2034  
42 operators

Attn: E.C. Sterling  
Engineering Manager

Oconee Nuclear Plant  
Duke Power Co.  
P.O. Box 33189  
Quality Assurance Dept.  
Charlotte, NC 28242  
9 operators

Attn: Q.A. Manager, Vendors Div.

Catawba Nuclear Plant  
Duke Power Co.  
See Above  
57 operators

Attn: Q.A. Manager, Vendors Div.

Enrico Fermi Nuclear Plant  
Detroit Edison Co.  
Fermi 2  
6400 N. Dixie Highway  
Newport, MI 48166  
40 operators

Attn: Gregory Brooks  
Materials Manager, Warehouse  
Bldg. 105 TAC





**PHILIPS**  
**INDUSTRIES INC.**

**Air Distribution Group**  
**Ruskin Division**

Manufacturing Quality Components for Better Building

Attention:

Subject: Dampers with ITT Actuators

It has recently come to our attention that dampers supplied to you with ITT Actuators may, in some instances, become out of adjustment due to the extension shaft from the actuator rotating in the yoke. This misadjustment could result in excessive leakage or possible failure of linkage attachments and operability of linkage system.

We have supplied safety related dampers with a total of ITT operator linkage systems. We are evaluating potential fixes which would allow in place correction.

Ruskin Division has notified the Nuclear Regulatory Commission of this situation in accordance with the requirements of 10 CFR part 21.

We will be contacting you with further information and making arrangements to rework the dampers as soon as possible.

Sincerely,

RUSKIN MANUFACTURING DIVISION

