

# PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4502

NOV 28 1983

JOHN S. KEMPER  
VICE-PRESIDENT  
ENGINEERING AND RESEARCH

Mr. Thomas E. Murley, Director  
Office of Inspection and Enforcement - Region I  
United States Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Subject: Limerick Generating Station, Units 1 & 2  
Interim Significant Deficiency Report No. 96 (Attachment 1)  
Anti-rotation Collars on Anchor Darling Valves

Reference: Telecon-P. K. Pavlides/PECo to Walt Baunock/  
Don Capton/NRC, dated 10/31/83 (Attachment 2)

File: QUAL 2-10-2 (SDR No. 96)

Dear Mr. Murley:

In compliance with 10CFR50.55e, enclosed is an interim report on the subject potential deficiency (Attachment 1). This matter was transmitted to your office on October 31, 1983 by referenced telecon (Attachment 2).

Our evaluation of the reported problem is continuing and we expect to submit a resolution by April 1, 1984.

Sincerely,

*John S. Kemper*

Copy to: Director of Inspection and Enforcement  
United States Nuclear Regulatory Commission  
Washington, DC 20555

S. Chadhary, Resident NRC Inspector (Limerick)

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LIMERICK GENERATING STATION, UNITS 1 & 2  
INTERIM SIGNIFICANT DEFICIENCY REPORT NO. 96  
CONCERNING VALVE STEM ANTI-ROTATION DEVICES  
ANCHOR DARLING GLOBE VALVES

1.0 Introduction

This is an interim report regarding the loosening of the set screw on valve stem anti-rotation collars on Anchor Darling globe valves. An initial notification was given to the USNRC by telephone on October 31, 1983.

2.0 Description of Problem

The stems of subject Anchor Darling valves are prevented from rotating by an anti-rotation collar which is fastened to the valve stem by means of one (1) or two (2) set screws depending on valve size. As long as the stem is prevented from rotating, the operator of the valve will drive the disk through its full stroke as desired. When the anti-rotation collar becomes loose, it may slip out of its locking position, permitting the locking key to drop out. With the disengagement of the locking arrangement, the stem will rotate when driven by the operator and the disk will no longer move to its proper position. This malfunction has been observed in several instances during start-up tests of various systems at Limerick Generating Station.

3.0 Corrective Action(s) to be Taken

An investigation has been started to determine how the problem might best be resolved. The investigation is being jointly undertaken by Anchor Darling (the valve manufacturer) and Bechtel Corp. It is expected that the investigation will be completed and a report describing the required corrective actions will be submitted to the USNRC by April 1, 1984.



QUALITY ASSURANCE

## TELECON RECORD

LGS - Units 1&amp;2

Project

QUAL 2-10-2

File No.: SDR-96

INFO 7

FROM P. K. Pavlides PECo TO Walt Baunack US NRC  
 Name Organization Name Organization  
 DATE 10-31-83 TIME 3:59 PM

SUBJECT: Limerick Generating Station  
 10CFR50.55(e) Significant Deficiency Anti-rotation Collars  
 on Anchor Darling Valves

## DISCUSSION SUMMARY (Commitments, Problems, Agreements, Etc.)

PKP: PECO wishes to report the following as a 10CFR50.55(e), reportable condition.

Several Anchor Darling valves failed to operate properly during recent start-up operations. The valve failures involved a valve stem anti-rotation collar which is held in place by a set screw. The set screw loosened allowing the valve stem to rotate. This prevented the valve from fully closing and resulted in an erroneous valve position indication. The problem seems to be generic with Anchor/Darling globe valves.

PECo has reviewed this problem and considers it to be a significant deficiency as defined in 10CFR50.55(e). We are therefore advising you as required and will submit a written report on this matter by November 30, 1983.

PECo plans no press release on this matter. Please notify us in the event the NRC plans to issue a press release.

WB: Thank you. Has the resident been informed?

PKP: We'll do so.

WB: Thanks, we plan no press release.

*P.K. Pavlides*

Copy to: V.S. Boyer J.M. Corcoran H.R. Walters (c/o Bechtel)  
 J.S. Kemper J. Moskowitz W.C. McDaniel (Bechtel)  
 R.A. Mulford J.N. Mollick E.R. Klossin (Bechtel)  
 E.J. Bradley E.C. Kistner  
 R.L. Harper P.A. Tutton  
 J.P. Evans  
 P.K. Pavlides G.R. Hutt/Local File  
 DAC (NG-8)