

ARIZONA



PUBLIC SERVICE COMPANY

P. O. BOX 21666 • PHOENIX, ARIZONA 85036

March 23, 1982
ANPP-20512-GHD/BSK

U. S. Nuclear Regulatory Commission
Region V
Creskide Oaks Office Park
1450 Maria Lane - Suite 210
Walnut Creek, California 94596-5368

Attention: Mr. B. H. Faulkenberry, Chief
Reactor Construction and
Engineering Support Branch

Subject: Final Report - DER 82-3
A 50.55(e) Report Relating to Diesel Generators Lube Oil
Strainer Baskets Require Replacement Per 10CFR21 Report
By Cooper Energy Services
File: 82-019-026
D.4.33.2

Reference: (A) Telephone Conversation between T. Bishop and G. Duckworth
on February 22, 1982

Dear Sir:

Attached, is our final written report of the deficiency referenced above,
which has been determined to be Reportable under the requirements of 10CFR
50.55(e).

Very truly yours,

E. E. Van Brunt, Jr.
APS Vice President
Nuclear Projects
ANPP Project Director

EEVBJr/GHD:skc

Attachment

cc: See Attached Page 2

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U. S. Nuclear Regulatory Commission
Attention: Mr. B. H. Faulkenberry, Chief
ANPP-20512-GHD/BSK
March 23, 1982
Page 2

cc: Richard DeYoung, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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FINAL REPORT - DER 82-3
DEFICIENCY EVALUATION 50.55(e)
ARIZONA PUBLIC SERVICE COMPANY (APS)
PVNGS UNITS 1, 2 AND 3

I. Description of Deficiency

The project received Cooper Energy Services' 10CFR Part 21 Notification dated February 1, 1982 (copy attached) which indicated the mesh strainer basket on each engine has been found to tear and disintegrate. The metal particles can then enter the engine and cause bearing failures, resulting in loss of engine operability. Cooper Energy Services is in the process of supplying replacement baskets.

II. Analysis of Safety Implications

This condition is evaluated as Reportable under the requirements of 10CFR50.55(e).

III. Corrective Action

Nonconformance Reports MG-1143, 1144 and 1145 have been issued to track and document replacement of the defective baskets after receipt from the supplier.

**COOPER ENERGY SERVICES**

AJAX COOPER-BESSEMER PENN PUMP SUPERIOR

February 1, 1982

Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Director of Inspection and Enforcement

Gentlemen:

In accordance with 10CFR Part 21, this letter is notice of a deficiency that has been determined to exist in standby diesel generator sets manufactured and supplied by Cooper Energy Services. The affected units are as follows:

Four sets at Pennsylvania Power and Light Company's Susquehanna Steam Electric Station at Berwick, Pa.

Four sets at Commonwealth Edison's Byron Station Units 1 and 2 in Byron, Illinois.

Four sets at Commonwealth Edison's Braidwood Station Units 1 and 2 in Braidwood, Illinois.

Six sets at Arizona Public Service's Palo Verde Nuclear Generating Station in Palo Verde, Arizona.

Two sets at Niagara-Mohawk's Nine Mile Point Nuclear Station, Unit 2, in Scriba, New York.

One set already shipped to Houston Light and Power's South Texas Project, Nuclear Power Plants 1 and 2. There are five additional units remaining to be shipped on this order.

The defect exists in the strainer basket located in the lube oil strainer manufactured by Zurn Industries, Inc. After performance testing at Cooper Energy Services, it was found that the mesh strainer basket liner was torn loose at the top of the basket where the perforated sidewall and the liner were sandwiched between two flanges. The tear propagates in an axial direction.

AND NOT Designated

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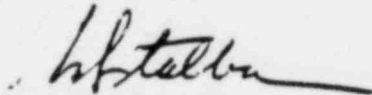
This problem was originally discovered in December of 1980, but based upon information available at that time, was deemed not reportable under the provisions of 10CFR Part 21, since a failure of this type would not prevent the generator unit from performing its designated function in a safe manner.

However, based upon recent testing conducted at our Grove City plant, it is now apparent that the strainer mesh disintegrates after it tears, and would then be capable of passing through the engine bearings. If this were to occur, a bearing failure would be probable and the unit would be incapable of performing.

The baskets in the four units at Pennsylvania Power and Light's Susquehanna Steam Electric Station have already been replaced with new baskets of an improved design manufactured for Zurn by Michigan Dynamics. These baskets were examined after performance of a 300 start test at the site, and no deterioration of the mesh was observed.

A new basket design, different from the Michigan Dynamics basket, has just been qualified by test in Grove City and will be provided as a replacement for units at the remaining locations listed above. Replacement of all remaining baskets should be completed within the next six months.

Sincerely,



F. B. Stolba

Vice President, & General Manager, Reciprocating Products

cc: C. C. Bemiller
H. F. Curren
G. A. Dorton
H. T. Gardner
M. J. Helmich
T. W. Kearns
R. A. Miklos
R. O. Wells
Per Attached Copy Distribution



COOPER ENERGY SERVICES

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