

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

86 JAN 27 P 3:12

January 16, 1986

Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Re: Catawba Nuclear Station, Unit 2
Docket No. 50-414
Significant Deficiency No. 414/86-02

Dear Dr. Grace:

Pursuant to 10 CFR 50.55(e), please find attached Significant
Deficiency Report No. 414/86-02.

Very truly yours,

H.B. Tucker

Hal B. Tucker

LTP:slb

Attachment

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

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

NRC Resident Inspector
Catawba Nuclear Station

8602040424 860116
PDR ADOCK 05000414
S PDR

11
IE27

Catawba Nuclear Station

REPORT NUMBER: SD 414/86-02

REPORT DATE: January 16, 1986

FACILITY: Catawba Nuclear Station, Unit 2

IDENTIFICATION OF DEFICIENCY: A commercial diesel application has experienced valve spring failures. This deficiency was identified by a 10 CFR 21 letter from Transamerica Delaval Inc. dated November 12, 1985.

INITIAL REPORT: On December 17, 1985, Mr. Chuck Burger of the NRC Region II, Atlanta, Georgia office, was notified of this deficiency by Mr. L. R. Davison, Mr. M. L. Sanger, Mr. R. L. Oakley, Mr. J. M. Lines, and Mr. R. O. Sharpe of Duke Power Company, Charlotte, N. C.

COMPONENT AND/OR SUPPLIER: Transamerica Delaval Inc., of Oakland, California, supplied the valve springs as a part of the Catawba diesels. The valve springs which failed were manufactured by Betts Spring Company, San Leandro, California.

DESCRIPTION OF DEFICIENCY: Recently, a total of 12 valve spring failures were experienced on a ship having Transamerica Delaval Inc. (T.D.I.) DMRV-16-4 diesel engines for propulsion. The failures occurred at approximately 5000-7000 hours of operation.

These failures were sporadic in nature, and do not necessarily indicate problems in other applications. The failures were restricted to Betts springs which are identifiable by a white stripe.

Since the failures are restricted to a single application, it is suspected the failures may be "batch" related, and not indicative of defects in all Betts valve springs with a white stripe.

ANALYSIS OF SAFETY IMPLICATIONS: Based on T.D.I.'s investigation results, the visual inspection results of the Catawba diesel valve springs (no indications of valve spring distress or failure), and the 5000-7000 hours of operation prior to the failure cited above, it is reasonable to expect the valve springs at Catawba to continue to perform satisfactorily. Since there is lack of information to substantiate that the valve springs will perform indefinitely without a failure, this item is evaluated reportable.

CORRECTIVE ACTION: As recommended by T.D.I., in their letter to us dated December 31, 1985, the existing valve springs are being run following a close visual inspection for any sign of distress or abnormality. Furthermore, as recommended by T.D.I., the Betts springs will be changed out with new springs, to be furnished by T.D.I. as they are available, during the first appropriate refueling outage.