

ACCELERATED DOCUMENT DISTRIBUTION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9303180014 DOC. DATE: 93/03/09 NOTARIZED: NO DOCKET #

FACIL: 50-261	H.B. Robinson Plant, Unit 2, Carolina Power & Light C	05000261	
50-324	Brunswick Steam Electric Plant, Unit 2, Carolina Powe	05000324	
50-325	Brunswick Steam Electric Plant, Unit 1, Carolina Powe	05000325	
50-400	Shearon Harris Nuclear Power Plant, Unit 1, Carolina	05000400	
50-416	Grand Gulf Nuclear Station, Unit 1, Mississippi Power	05000416	R
50-413	Catawba Nuclear Station, Unit 1, Duke Power Co.	05000413	
50-414	Catawba Nuclear Station, Unit 2, Duke Power Co.	05000414	
50-445	Comanche Peak Steam Electric Station, Unit 1, Texas U	05000445	I
50-446	Comanche Peak Steam Electric Station, Unit 2, Texas U	05000446	
50-424	Alvin W. Vogtle Nuclear Plant, Unit 1, Georgia Power	05000424	D
50-425	Alvin W. Vogtle Nuclear Plant, Unit 2, Georgia Power	05000425	
50-440	Perry Nuclear Power Plant, Unit 1, Cleveland Electric	05000440	S

AUTH. NAME	AUTHOR AFFILIATION
LABRUN, H.A.	Cooper Industries, Inc.
RECIP. NAME	RECIPIENT AFFILIATION
	Document Control Branch (Document Control Desk)

SUBJECT: Part 21 rept re unusual wear pattern found on mating idler gear in DSRV Enterprise standby DG sys. Caused by incorrect machining by supplier. Vendor will change critical characteristic worksheet & add quality insp plans.

DISTRIBUTION CODE: IE19D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 7

TITLE: Part 21 Rept (50 DKT)

NOTES: Application for permit renewal filed.	05000400
ASLB lcy.	05000413
ASLB lcy.	05000414
	05000445
Application for permit renewal filed.	05000425
Application for permit renewal filed.	05000440

RECIPIENT ID CODE/NAME	COPIES	L	T	R	RECIPIENT ID CODE/NAME	COPIES	L	T	R
PD2-1 PD	1		1		PD4-1 PD	1		1	
PD2-3 PD	1		1		PD4-2 PD	1		1	
PD3-3 PD	1		1		MOZAFARI, B	1		1	
MILANO, P	1		1		LE, N	1		1	
O'CONNOR, P.	1		1		MARTIN, R	1		1	
BERGMAN, T.	1		1		HOLIAN, B	1		1	
HOOD, D	1		1		HALL, J.R.	1		1	
INTERNAL: AEOD/DSP/ROAB	1		1		NRR/DRIL/RVIB	1		1	
<u>REG FILE</u> 01	1		1		RES/DSIR/EIB	1		1	
RGNT	1		1		RG2	1		1	
RGN3	1		1		RG4	1		1	
RGN5	1		1		SECY VANDERMEL	1		1	
EXTERNAL: INPO RECORD CTR	1		1		NRC PDR	1		1	
NSIC SILVER, E	1		1						
NOTES:	1		1						

TOTAL NUMBER OF COPIES REQUIRED: LTR 28 ENCL 28

Cooper Industries
Cooper-Bessemer
Reciprocating Products Division
150 Lincoln Avenue
Grove City, PA 16127-1898
412 458-8000

March 9, 1993



Cooper Energy Services

Our Ref: QCG-9345

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Enterprise
Report #163

Dear Sir:

In accordance with the requirements of the Nuclear Regulatory Commission Title 10, Chapter 1, Code of Federal Regulations, Part 21, Cooper-Bessemer Reciprocating Products Division, a division of Cooper Industries, hereby notifies the Commission of a potential defect in a component of a DSRV Enterprise Standby Diesel Generator System. There exists a potential problem with the jacket water pump gear, part number 02-425-03-AB, which is assembled into the gear carrier assembly 1A-6114, 1A-6109, and 1A-6664.

Duke Power Company reported on February 26, 1993, that subsequent to their recent replacement of the 02-425-03-AB gear per Cooper 10 CFR 21 letter #158 dated October 29, 1991, an unusual wear pattern was found on the mating idler gear. The wear pattern was described as two lines of contact on the idler gear that corresponds to the gear tooth ends of the water pump drive gear. The inspection at Duke Power indicated that the teeth on the new pump gear was noticeable shallower at the ends than the old gear previously removed.

Further investigation by Cooper with its supplier, The Gear Works, has revealed that root cause is a result of incorrect machining by the supplier, in that the root form is shallow at the ends of the gear tooth which would cause the wear pattern as described by Duke Power (see attached sketch). Our investigation of this deficiency was completed on March 8, 1993.

The gears which have been manufactured incorrectly are identified by the part number 02-425-03-AB with "Rev. C" or "Rev. D" stamped. These gears were manufactured by The Gear Works after 6/20/90.

170055
9303180014 930309
PDR ADOCK 05000261
S PDR

JE 19 11

They are in engines or in customer storerooms at the following facilities:

<u>UTILITY</u>	<u>SITE</u>	<u>SERIAL NO.</u>	<u>MODEL</u>
ENTERGY	Grand Gulf	74033-36	DSRV-16-4
CP&L	Shearon Harris	74046-49	DSRV-16-4
DUKE	Catawba	75017-20	DSRV-16-4
CLEVELAND ELEC	Perry	75051-54	DSRV-16-4
*TU ELECTRIC	Comanche Peak	76001-04	DSRV-16-4
*GEORGIA POWER	Vogtle	76021-24	DSRV-16-4

* Only TU Electric and Georgia Power are known to have these gears installed in units.

Corrective actions by our supplier are to correct machining procedures on replacement gears to ensure the correct tooth form over the entire length of the gear. In addition, Cooper will change critical characteristic worksheets and add to quality inspection plans to include this gear tooth feature.

Corrective action by our customers should be replacement of this gear in a scheduled manner based on the availability of acceptable replacement parts. Until these are replaced, idler gears should be visually inspected monthly through the available gear case openings.

Gears/assemblies in customer storerooms should be returned to Cooper for replacement/rework/inspection. Replacement/ rework gears shipped by Cooper will be identified as 02-425-03-AB, Rev. E.

If you have any questions regarding this issue, please contact John R. Schneider, Quality Assurance Manager or Ron G. Billig, Supervisor Enterprise Engineering at 412-458-8000.

Sincerely,


H. A. LaBrun

Vice President and
General Manager

HAL/kll

Attachment

Copies To:

J. R. Schneider - CES/GC
B. R. Sedelmyer - CES/GC
A. D. Gillette - CES/GC
D. T. Blizzard - CES/GC
J. M. Horne - CES/GC
R. G. Billig - CES/GC
J. A. Manno - CES/Alameda
B. C. Guntrum - CES/Alameda
R. L. Nimmo - CES/Alameda
Lee Duck - CES/Alameda
S. S. OwYoung - CES/Alameda
J. R. Andrews - CES/Alameda
R. A. Johnston - CES/Alameda
File: K-5fa25

Mr. Walter Haass - NRC
One White Flint North
Mailstop 9D4
Washington, DC 20555

Entergy Operations
P. O. Box 429
Echelon One
1340 Echelon Parkway
Jackson, MS 39286-1995
Attn: T. H. Cloninger
Vice Pres. Nucl. Eng.

Carolina Power and Light Co.
Harris Nuclear Project
P. O. Box 165
New Hill, NC 27562
Attn: Gerald Vaughn
Dept. Mgr.

Carolina Power and Light Co.
Harris Nuclear Project
P. O. Box 165
New Hill, NC 27562
Attn: Mr. William Robinson
Plant Gen. Mgr.

Carolina Power and Light Co.
P. O. Box 1551
Raleigh, NC 27602
Attn: R. A. Watson
Sr. Vice President

Carolina Power and Light Co.
Shearon Harris Nuclear Project
P. O. Box 1551
Raleigh, NC 27602
Attn: Robert Prunty
Mgr. RNP/HNP Licensing

Carolina Power and Light Co.
Shearon Harris Nuclear Project
P. O. Box 165
New Hill, NC 27562
Attn: Mr. Mickey Hamby
Acting Mgr. of Regulatory Committee

Carolina Power and Light Co.
Shearon Harris Nuclear Plant
P. O. Box 165
New Hill, NC 27562
Attn: Jerry R. Cribb
Mgr, Quality Control

Carolina Power and Light Co.
Manager, Nuclear Licensing
P. O. Box 1551
Raleigh, NC 27602
Attn: David C. McCarthy

Carolina Power and Light Co.
Brunswick Nuclear Project
NC Hwy. 87-2-1/2 Mi. North
Box 10429
Southport, NC 28461
Attn: Mr. Roy A. Anderson
Vice President

Carolina Power and Light Co.
Robinson Nuclear Project
SC Hwy. 151 and 23 Box 790
Hartsville, SC 29550
Attn: Mr. Charles R. Dietz
Vice President

Cleveland Electric Illuminating
Perry Nuclear Power Plant
P. O. Box 97
Perry, OH 44081
Attn: M. Lister

Cleveland Electric Illuminating
Perry Nuclear Power Plant
P. O. Box 97
Perry, OH 44081
Attn: Russell J. Tadych
Manager, Quality Control

Cleveland Electric Illuminating
Perry Nuclear Power Plant
P. O. Box 97
Perry, OH 44081
Attn: Harold M. Coon

Cooper-Enterprise Clearinghouse
Duke Engineering & Service
230 South Tryon St.
P.O. Box 1004
Charlotte, NC 28201-1004
Attn: R. C. Day

Duke Power Co.
Nuclear Generation Dept.
P. O. Box 1007
Charlotte, NC 28201-1007
Attn: Mgr., Nuclear Safety

Duke Power Co.
Nuclear Generation Dept.
P. O. Box 1007
Charlotte, NC 28201-1007
Attn: W. T. Robertson
Vice President, Procurement

Entergy
P. O. Box 429
Port Gibson, MS 39150
Attn: Fred Titus
Dir., Nuclear Plant Eng.

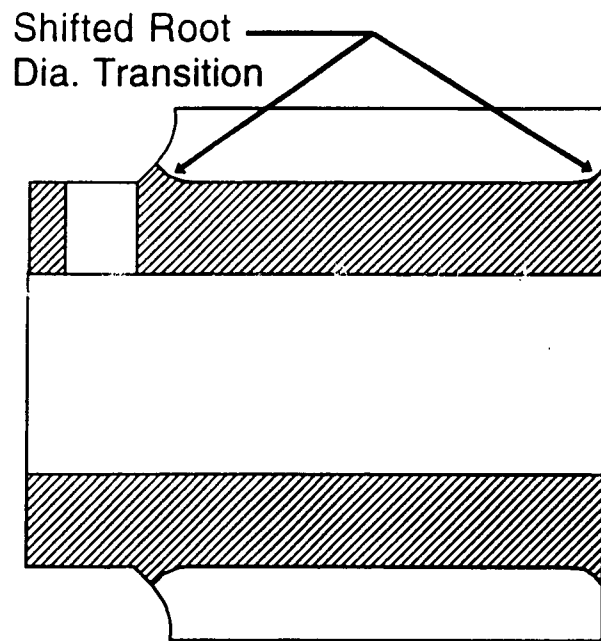
Entergy
P. O. Box 756
Port Gibson, MS 39150
Attn: Vice Pres., Nuclear Operations

Entergy
P. O. Box 756
Port Gibson, MS 39150
Attn: D. L. Pace
Design Engineering

Georgia Power Co.
Plant Vogtle
P. O. Box 1295
Birmingham, AL 35201
Attn: Mr. T. Green
Mgr., Engineering
and Licensing

Georgia Power Co.
Plant Vogtle
P. O. Box 1600
Waynesboro, GA 38030
Attn: Mr. W. B. Shipman
Gen. Mgr.
Manager, Quality Control

Texas Utilities Electric
400 North Olive Street, L.B. 81
Dallas, TX 75201
Attn: W. J. Cahill
Group Vice President



02-425-03-AB
JACKET WATER PUMP GEAR