

General Information or Other (PAR)

Event # 36778

<b>Rep Org:</b> PUBLIC SERVICE ELECTRIC AND GAS CO.		<b>Notification Date / Time:</b> 03/09/2000 12:15 (EST)	
<b>Supplier:</b> BFGOODRICH COMPANY		<b>Event Date / Time:</b> 03/09/2000 (EST)	
<b>Last Modification:</b> 03/09/2000			
<b>Region:</b> 1	<b>Docket #:</b>		
<b>City:</b> HANCOCK'S BRIDGE	<b>Agreement State:</b> No		
<b>County:</b>	<b>License #:</b>		
<b>State:</b> NJ			
<b>NRC Notified by:</b> SUE SIMPSON	<b>Notifications:</b> GREG CRANSTON	R1	
<b>HQ Ops Officer:</b> BOB STRANSKY	VERN HODGE (via fax)	NRR	
<b>Emergency Class:</b> NON EMERGENCY			
<b>10 CFR Section:</b>			
21.21	UNSPECIFIED PARAGRAPH		

10 CFR PART 21 REPORT

Replacement emergency diesel generator (EDG) air start motors were supplied to PSE&G with grease on the bendix drive shafts. This did not meet the requirements of the purchase order which stated: "Do not grease the bendix drive: as per the vendor manual this is to be lubricated with SAE 10 oil." Excessive grease on the bendix shaft could harden and prevent the drive pinion from engaging the ring gear on the EDG flywheel during starting.

The air start motors were supplied by:

BFGoodrich Company (formerly Coltec Industries)  
Fairbanks Morse Engine Division  
701 White Avenue  
Beloit, WI 53511

Affected FMED Part #s: 21800136-1, 21800145, 21800146 and 21800147

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**PSEG**

Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

**Nuclear Business Unit**

**MAR 09 2000**

United States Nuclear Regulatory Commission  
Operations Center  
Facsimile Number 301-816-5151  
Telephone Number 301-816-5100

**Subject: INITIAL 10 CFR 21 NOTIFICATION  
SALEM GENERATING STATION UNITS 1 AND 2  
FACILITY OPERATING LICENSE NO. DPR-70 AND DPR-75  
DOCKET NOS. 50-272 AND 311**

In accordance with 10 CFR 21.21(c)(3)(i), the attached initial notification is provided.  
Written notification in accordance with 10 CFR 21.21(c)(3)(ii) will be provided by  
April 7, 2000.

Sincerely,

D. Garchow  
Vice President - Technical Support

**Initial 10 CFR 21 Notification**  
**Fairbanks Morse Engine Division Emergency Diesel Generator Air Start Motors**

**I. NAME AND ADDRESS OF THE INDIVIDUAL(S) INFORMING THE COMMISSION.**

**NAME:** D. Garchow  
Vice President - Technical Support

**ADDRESS:** Public Service Electric and Gas Company  
P.O. Box 236  
Hancock's Bridge, NJ 08038

**II. IDENTIFICATION OF THE FACILITY, ACTIVITY OR COMPONENT WHICH FAILS TO COMPLY OR CONTAINS A DEFECT.**

The basic components are emergency diesel generator (EDG) air start motors, Fairbanks Morse Engine Division (FMED) Part Nos. 21800136-1; 21800145; 21800146; and 21800147. The air start motors were purchased for use on Alco model 18-251 diesel engines.

**III. IDENTIFICATION OF THE FIRM SUPPLYING THE BASIC COMPONENT WHICH FAILS TO COMPLY OR CONTAINS A DEFECT.**

The air start motors were supplied by:

BFGoodrich Company (formerly Coltec Industries)  
Fairbanks Morse Engine Division  
701 White Ave.  
Beloit, Wisconsin 53511

**IV. NATURE OF THE DEFECT OR FAILURE TO COMPLY AND THE SAFETY HAZARD WHICH IS CREATED OR COULD BE CREATED.**

Replacement air start motors were supplied to PSE&G and were accepted with grease on the bendix drive shafts. This did not meet the requirements in PSE&G's purchase order which specified:

Do not grease the bendix drive: as per the vendor manual this is to be lubricated with SAE 10 oil.

Excessive grease on the bendix drive shaft can harden and prevent the drive pinion from engaging the ring gear on the emergency diesel generator flywheel during starting.

Each diesel generator is equipped with two pairs of start motors. If necessary, the diesel can be started within the required time by any one pair of air start motors. Failure of redundant air start motors could prevent EDGs from starting within the required time in response to a loss of all offsite power.

- V. THE DATE ON WHICH THE INFORMATION OF SUCH DEFECT OR FAILURE TO COMPLY WAS OBTAINED.

The information was obtained on January 28, 2000.

- VI. IN THE CASE OF A BASIC COMPONENT WHICH CONTAINS A DEFECT OR FAILS TO COMPLY, IDENTIFY THE NUMBER AND LOCATION OF ALL SUCH COMPONENTS IN USE AT OR SUPPLIED FOR PSE&G FACILITIES SUBJECT TO THE REGULATIONS OF 10 CFR 21.

Four air start motors are used on each emergency diesel generator. Salem Unit 1 and Unit 2 each have three emergency diesel generators.

- VII. THE CORRECTIVE ACTION WHICH HAS BEEN, IS BEING, OR WILL BE TAKEN; THE NAME OF THE RESPONSIBLE INDIVIDUAL OR ORGANIZATION; AND THE LENGTH OF TIME THAT HAS BEEN OR WILL BE TAKEN TO COMPLETE THE ACTION.

PSE&G removed the excess grease from the bendix drives on the replacement air start motors before installation. The air start motors installed in Salem Units 1 and 2 have been inspected, cleaned and lubricated.

PSE&G has issued a corrective action request to FMED. The supplier has stated to PSE&G that it has added an inspection step to the dedication process to verify the bendix drive does not contain excessive grease and the pinion turns freely by hand.

- VIII. ANY ADVICE RELATED TO THE DEFECT OR FAILURE TO COMPLY THAT HAS BEEN, IS BEING, OR WILL BE GIVEN TO PURCHASERS OR LICENSEES.

None.