



Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

Mike Bellamy  
Site Vice President

October 11, 2002

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

SUBJECT: Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station  
Docket: 50-292  
License: DPR-35

10 CFR Part 21 Report for a Defective Fuel Injector Pump

REFERENCE: Initial 10 CFR Part 21 Notification dated September 18, 2002

LETTER NUMBER: 2.02.088

Dear Sir or Madam:

This letter is submitted in accordance with 10 CFR 21.21(d)(3)(ii) to report a defect within the meaning of 10 CFR 21.3(d). The referenced notification reported the defect to the NRC Operations Center in accordance with 10 CFR 21.21(d)(3)(i) because it was not known whether the defect had been previously reported to the NRC.

The specific reporting requirements of 10 CFR 21.21(d)(4) are addressed in the enclosure to this letter.

Please feel free to contact Mr. Bryan Ford, (508) 830-8403, if there are any questions regarding this subject.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Bellamy".

Robert M. Bellamy

DWE/dd

Enclosure: 10 CFR Part 21 Report for Defective Fuel Injector Pump (3 pages)

IEA

Entergy Nuclear Operations, Inc.  
Pilgrim Nuclear Power Station

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cc:

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U.S. Nuclear Regulatory Commission  
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Mr. Hubert H. Miller  
Region I Administrator  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

NRC Senior Resident Inspector

ENCLOSURE

10 CFR Part 21 Report for a Defective Fuel Injector Pump

This enclosure addresses the reporting requirements of 10 CFR 21.21(d)(4).

1. Name and address of the individual informing the Commission.

Robert M. Bellamy  
Site Vice President  
Pilgrim Nuclear Power Station  
600 Rocky Hill Road  
Plymouth, MA 02360

2. Identification of the facility, the activity, or the basis component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

Facility: Pilgrim Nuclear Power Station (Pilgrim Station)

Component: Fuel injector pump, Part Number 23200127, Serial Number 9611071 for ALCo (Fairbanks Morse) Model 251F Emergency Diesel Generator.

3. Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

Supplier: Coltec Industries (currently EnPro Industries Company)  
Fairbanks Morse Engine Division  
701 White Avenue  
Beloit, WI 53511-5492

4. Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

The fuel injector pump was found to be leaking excessively through a nameplate rivet hole that had been drilled through-wall in the pump body. The drilled hole allowed fuel to leak through the pump wall.

The pump was installed on the safety-related Emergency Diesel Generator 'A' (EDG) while the EDG was out of service for overhaul. It was through visual observation of the pump during post work testing of the EDG that the fuel leak through the nameplate rivet hole was detected. If the leak had not been identified during the post work test, the leak could have gone unnoticed during subsequent EDG operation.

The failure of the fuel injector pump to supply sufficient fuel to the respective EDG engine cylinder could have adversely impacted EDG operation and prevented the EDG from being able to supply all of the electrical loads that are necessary for an accident. The evaluation that determined this conclusion included the following assumptions: EDG 'A' was returned to service with the defective fuel injector pump installed, the worst case design basis accident occurs (a large pipe break loss of coolant accident and a total loss of offsite power), and an independent, single, active failure of EDG 'B' occurs. The assumptions are consistent with the assumptions specified in the plant procedure that governs the performance of 10 CFR Part 21 evaluations.

5. The date on which the information of such defect or failure to comply was obtained.

The defect was discovered during post work testing on July 19, 2002 while the EDG was out of service for the overhaul. The fuel injector pump was installed as part of the overhaul. The evaluation that determined the defect could create a substantial safety hazard was completed on September 12, 2002.

In accordance with 10 CFR 21.21(a)(3) and Pilgrim Station procedure, the Pilgrim Station Site Vice President was notified of the conclusion. The Site Vice President was notified on September 17, 2002.

6. In the case of a basic component which contains a defect or fails to comply, the number and location of all such components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations of this part.

At Pilgrim Station, there are two EDGs and one Station Blackout Diesel Generator (SBODG). There are 18 fuel injector pumps installed on each

EDG and 12 fuel injector pumps on the SBODG. Except for the defective fuel injector pump that was installed while EDG 'A' was out service for the overhaul, none of the fuel injector pumps installed on either EDG or the SBODG have exhibited a similar leak (through-wall rivet hole leak in the pump body).

7. The corrective action which has been taken, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

The fuel injector pump that contained the through-wall rivet hole in the pump body was removed from the EDG and was replaced with a spare fuel pump. After the replacement, the spare fuel pump was visually inspected for leak tightness with satisfactory results when the EDG was post work tested. The EDG was returned to operable status on July 21, 2002.

The defective pump was not retained.

There are currently no (zero) spare fuel injector pumps located in the Pilgrim Station warehouse.

8. Any device related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

Pilgrim Station personnel discussed the condition of the defective pump on September 16, 2002, with the fuel injector pump supplier. The supplier (Fairbanks Morse) acknowledged modifying (replacing) the fuel injector pump nameplate label mounting in lieu of returning the pump to its fuel injector pump supplier for nameplate replacement. Pilgrim Station has not supplied any spare fuel injector pumps to a purchaser or other licensee.