

Part 21 (PAR)

Event # 48844

<b>Rep Org:</b> TENNESSEE VALEY AUTHORITY	<b>Notification Date / Time:</b> 03/22/2013 17:06 (EDT)
<b>Supplier:</b> ENGINE SYSTEMS, INC.	<b>Event Date / Time:</b> 03/22/2013 (CDT)
	<b>Last Modification:</b> 03/22/2013
<b>Region:</b> 1	<b>Docket #:</b>
<b>City:</b> DECATUR	<b>Agreement State:</b> Yes
<b>County:</b>	<b>License #:</b>
<b>State:</b> AL	
<b>NRC Notified by:</b> K J POLSON	<b>Notifications:</b> JAMES TRAPP R1DO
<b>HQ Ops Officer:</b> PETE SNYDER	DANIEL RICH R2DO
<b>Emergency Class:</b> NON EMERGENCY	DAVE PASSEHL R3DO
<b>10 CFR Section:</b>	GREG WERNER R4DO
21.21(a)(2) INTERIM EVAL OF DEVIATION	PART 21 REACTORS EMAIL

#### DIESEL FUEL INJECTORS FAILED A PRESSURE TEST

"The Tennessee Valley Authority (TVA) recently identified that three (3) fuel injectors that were to be used on the 3A Emergency Diesel Generator failed a pressure test. Corrective Action Program documents were written to document the failure of the fuel injectors to pass a pressure test and to require performance of an engineering evaluation of the condition. It was concluded that this condition has the potential to constitute a reportable condition pursuant to Title 10 of the Code of Federal Regulations (CFR), 10 CFR 21, 'Reporting of Defects and Noncompliance,' and, as such, requires additional evaluation.

"The TVA is working with Engine Systems, Inc., to determine the cause of failure of the fuel injectors. At this time, the evaluation is not expected to be complete until May 31, 2013. Pursuant to the reporting requirements of 10 CFR 21.21(a)(2), if the evaluation of the deviation or failure to comply potentially associated with a substantial safety hazard cannot be completed within 60 days (i.e. by March 23, 2013), an interim report must be submitted to the NRC.

"Name and Address of the Individual Making the Interim Report:

Mr. K. J. Polson  
Vice President  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
Post Office Box 2000  
Decatur, Alabama 35609-2000.

"Identification of the firm supplying the basic component which fails to comply or contains a defect (under evaluation):

IE19  
mlr

Part 21 (PAR)  
Engine Systems, Inc (ESI)  
175 Freight Road  
Rocky Mount, North Carolina 27804."

Event # 48844

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Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

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March 22, 2013

10 CFR Part 21

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3  
Facility Operating License Nos. DPR-33, DPR-52, and DPR-68  
NRC Docket Nos. 50-259, 50-260, and 50-296

Subject: **10 CFR Part 21 Interim Report - Diesel Generator Fuel Injectors  
Failed a Pressure Test**

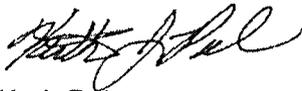
The Tennessee Valley Authority (TVA) recently identified that three (3) fuel injectors that were to be used on the 3A Emergency Diesel Generator failed a pressure test. Corrective Action Program documents were written to document the failure of the fuel injectors to pass a pressure test and to require performance of an engineering evaluation of the condition. It was concluded that this condition has the potential to constitute a reportable condition pursuant to Title 10 of the Code of Federal Regulations (CFR), 10 CFR Part 21, "Reporting of Defects and Noncompliance," and, as such, requires additional evaluation.

The TVA is working with Engine Systems, Inc., to determine the cause of failure of the fuel injectors. At this time, the evaluation is not expected to be complete until May 31, 2013. Pursuant to the reporting requirements of 10 CFR Part 21.21(a)(2), if the evaluation of the deviation or failure to comply potentially associated with a substantial safety hazard cannot be completed within 60 days (i.e., by March 23, 2013), an interim report must be submitted to the NRC. The enclosure to this letter provides information required by 10 CFR Part 21.21(a)(2) for the interim report of this condition.

U.S. Nuclear Regulatory Commission  
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There are no new regulatory commitments contained in this letter. Should you have any questions concerning this submittal, please contact J. E. Emens, Jr., Nuclear Site Licensing Manager, at (256) 729-2636.

Respectfully,



K. J. Polson  
Vice President

Enclosure: 10 CFR Part 21 Interim Report - Diesel Generator Fuel Injectors  
Failed a Pressure Test

cc (w/ Enclosure):

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant

**Enclosure**

**Browns Ferry Nuclear Plant,  
Units 1, 2, and 3**

**10 CFR Part 21 Interim Report  
Diesel Generator Fuel Injectors Failed a Pressure Test**

## 10 CFR Part 21 Interim Report - Diesel Generator Fuel Injectors Failed a Pressure Test

### Name and Address of the Individual Making the Interim Report

Mr. K. J. Polson  
Vice President  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
Post Office Box 2000  
Decatur, Alabama 35609-2000

### Identification of the facility, the activity, or basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect (under evaluation)

The Tennessee Valley Authority (TVA) recently identified that three (3) fuel injectors that were to be installed on the 3A Emergency Diesel Generator at the Browns Ferry Nuclear Plant failed a pressure test. The fuel injectors were to be installed as part of a maintenance activity on the 3A emergency diesel generator. However, these injectors could have been installed on any emergency diesel generator at the Browns Ferry Nuclear Plant.

### Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect (under evaluation)

Engine Systems, Inc (ESI)  
175 Freight Road  
Rocky Mount, North Carolina 27804

### Description of the Deviation or Failure to Comply that is being Evaluated

There are twenty fuel injectors on each diesel generator in use at the Browns Ferry Nuclear Plant. Three fuel injectors failed to pass a pressure test prior to their installation on the 3A emergency diesel generator and were returned to ESI for a failure analysis.

It should be noted that an ESI Service Advisory (MR H-2005-0007) on fuel injectors is located on the NRC web site and is dated February 16, 2005. This service advisory addresses the possible failure of fuel injectors due to sticking and seizing of the needle in the spray tip.

### Evaluation Status

ESI is performing tests on the fuel injectors to determine the cause of failure. ESI has advised that a failure report is expected to be sent to TVA near the end of April, 2013.

### Date on which Evaluation will be Completed

The evaluation being performed by TVA is expected to be completed on or before May 31, 2013. TVA will submit a Part 21 report in accordance with regulatory requirements if it is concluded that a reportable condition exists.