

## PMFermiCOLPEm Resource

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**From:** Eudy, Michael  
**Sent:** Monday, July 25, 2011 11:43 AM  
**To:** Nicholas A Latzy  
**Cc:** FermiCOL Resource  
**Subject:** (DRAFT) FERMI Chp 10 Rotor Audit Plan  
**Attachments:** Fermi3 rotorauditplan.docx

Nick,

Here is the staff's draft audit plan for the rotor material specifications. Please let me know if you have any revisions or comments. Thanks.

Michael A. Eudy - Project Manager  
U.S. Nuclear Regulatory Commission  
NRO/DNRL/NGE1&2  
301-415-3104

**Hearing Identifier:** Fermi\_COL\_Public  
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**From:** Eudy, Michael

**Created By:** Michael.Eudy@nrc.gov

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"Nicholas A Latzy" <latzyn@dteenergy.com>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

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## **Audit Plan for Reviewing the Turbine Rotor Material Specification Fermi Unit 3 Combined License Application, FSAR Section 10.2**

### **A. Background**

The applicant (DTE Energy) provided its turbine missile probability analysis for the Fermi Unit 3 COLA by submitting a General Electric Company (GE) technical report, GE ST-56834/P, Revision 2, dated September 2010. This report identified the rotor material specification as B50A373B8 (B8) or a more restrictive equivalent. In a letter dated April 28, 2010, the staff requested the applicant to provide the GE material specification B50A373B8 for review. The applicant's response, dated October 5, 2010, stated that the GE material specification would be available for NRC review. In addition, in a letter dated April 27, 2011, in response to RAI 10.02.03-1, the applicant stated that GE is changing the material specification for nuclear rotors to B50A373B12 (B12). The staff determined it is necessary to review these material specifications (B8 and B12) in order to complete its review of Section 10.2 (Turbine Generator) of the COLA FSAR. The staff will evaluate the specified material composition and properties with respect to the ESBWR DCD Section 10.2.3, GE ST-56834/P, and SRP Section 10.2.3.

### **B. Regulatory Audit Bases**

General Design Criterion 4, "Environmental and dynamic effects design bases," and the turbine rotor materials selection and properties criteria in SRP Section 10.2.3, "Turbine rotor integrity."

### **C. Regulatory Audit Scope**

The audit team will review the General Electric turbine rotor material specification to evaluate the version proposed for the Fermi Unit 3 turbine (B50A373B12) and the previous version used for nuclear LP solid rotors (B50A373B8) stated in the GE report GE-ST-56834/P, Revision 2.

### **D. Information Required**

- GE Specification B50A373B12
- GE Specification B50A373B8

### **E. Audit Team**

- John Honcharik, Senior Materials Engineer, NRO (Audit Team Lead)
- Gregory Makar, Materials Engineer, NRO
- Michael Eudy, Project Manager, NRO

### **F. Logistics**

The audit will be performed on August X, 2011, XX:00 – XX:00 am/pm at the General Electric office in \_\_\_\_\_.

Address line 1....

Address line 2.....

Telephone:

### **G. Deliverable**

The audit team will issue a regulatory audit summary within 90 days after completing the audit.