

PMFermiCOLNPEm Resource

From: Eudy, Michael
Sent: Tuesday, August 02, 2011 1:19 PM
To: Honcharik, John; Makar, Gregory; Norato, Michael; Nicholas A Latzy
Cc: Muniz, Adrian; FermiCOL Resource
Subject: Final 8/3/11 Turbine Rotor Audit Plan
Attachments: Fermi3 rotorauditplan(rev 1).docx

I have made some minor revisions based on feedback. This is the audit plan we will use for tomorrow afternoon's audit. I will provide copies at the audit for the participants.

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

Hearing Identifier: Fermi_COL_NonPublic
Email Number: 1456

Mail Envelope Properties (9E28710E0B702149AEC66397286364408C4E4071CE)

Subject: Final 8/3/11 Turbine Rotor Audit Plan
Sent Date: 8/2/2011 1:18:37 PM
Received Date: 8/2/2011 1:18:39 PM
From: Eudy, Michael

Created By: Michael.Eudy@nrc.gov

Recipients:

"Muniz, Adrian" <Adrian.Muniz@nrc.gov>
Tracking Status: None
"FermiCOL Resource" <FermiCOL.Resource@nrc.gov>
Tracking Status: None
"Honcharik, John" <John.Honcharik@nrc.gov>
Tracking Status: None
"Makar, Gregory" <Gregory.Makar@nrc.gov>
Tracking Status: None
"Norato, Michael" <Michael.Norato@nrc.gov>
Tracking Status: None
"Nicholas A Latzy" <latzyn@dteenergy.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	304	8/2/2011 1:18:39 PM
Fermi3 rotorauditplan(rev 1).docx		23085

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

**Final Audit Plan for Reviewing the Turbine Rotor Material Specification
Fermi Unit 3 Combined License Application, FSAR Section 10.2
August 3, 2011**

A. Background

The applicant (DTE Energy) provided its turbine missile probability analysis for the Fermi Unit 3 COLA by way of General Electric Hitachi (GEH) submission of MFN 09-484 letter, Supplement 1, dated September 30, 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 3, 2011, 1:00 – 3:00 pm at the Nuclear Power Oversight Committee's (NPOC) office at the following address:

11426 Rockville Pike
Suite 230
Rockville, MD 20852
(301) 231-6093 phone
(301) 231 6912 fax

G. Deliverable

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