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Charles M. Dugger
Vice President, Operations
Waterford 3

W3F1-98-0024
A4.05
PR

February 26, 1998

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

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Request for Additional Information (RAI) Regarding
Quality Assurance Program Manual Update (Revision 19)

Gentlemen:

On January 7, 1998, Walter P. Haass of your office verbally requested additional information regarding Waterford 3's Quality Assurance Program Manual Update (Revision 19) submittal. The Waterford 3 submittal was provided by a letter dated November 14, 1997 (W3F1-97-0211). In this submittal, Waterford 3 identified four (4) separate Quality Assurance (QA) Program Changes. The request for additional information pertains to the change which provided general clarifications on electric motor insulation resistance tests and sought identification of alternative tests that are employed in lieu of megger testing for electric motors rated at less than 460 volts. Waterford 3 performs alternate tests on the lower voltage motors per specific plant procedures. These actions avoid damaging motor insulation and verify equipment operability. In accordance with the request of Mr. Haass, the associated 10 CFR 50.54 Quality Assurance Program Change Review Form was revised to include the additional information and is attached. All affected sections are noted with revision bars in the right margin next to the changes.

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If you have any questions concerning this submittal, please contact Early Ewing at (504) 739-6242 or Tim Gaudet at (504) 739-6666.

Very truly yours,

C.M. Dugger
Vice President, Operations
Waterford 3

CMD/PRS/ssf
Attachments

cc: (w/Attachments)
E.W. Merschoff (NRC Region IV)
NRC Resident Inspectors Office

(w/o Attachments)
C.P. Patel (NRC-NRR)
J. Smith
N.S. Reynolds

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of	)	
	)	
Entergy Operations, Incorporated	)	Docket No. 50-382
Waterford 3 Steam Electric Station	)	

AFFIDAVIT

Charles Marshall Dugger, being duly sworn, hereby deposes and says that he is Vice President, Operations - Waterford 3 of Entergy Operations, Incorporated; that he is duly authorized to sign and file with the Nuclear Regulatory Commission the attached 10 CFR 50.54 Quality Assurance Program Change Review Form; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

Charles Marshall Dugger
Vice President, Operations
Waterford 3

STATE OF LOUISIANA	)	
	)	ss
PARISH OF ST. CHARLES	)	

Subscribed and sworn to before me, a Notary Public in and for the Parish and State above named this 26th day of February, 1998.

Notary Public

My Commission expires at death.

QUALITY ASSURANCE PROGRAM
CHANGE REVIEW FORM

PROPOSED CHANGE: Chapter 2 Attachment 7.2

Add paragraph to section 6 - "Insulation resistance tests will be conducted upon receipt - only on motors equal to or greater than 460V, in accordance with IEEE Std. 43 and/or NEMA Std. MG1.

10CFR50.54 REVIEW:

1. **Does the proposed change represent a reduction of commitment to the QA Program description previously accepted by the NRC?** ☒ Yes ☐ No

Explain:

Appendix A, Rev. 6.0 - section 6 (Now Chap. 2 Attach. 7.2 after format change) - This change represents a lessening of commitment. The current wording of this section, which seems to imply that all motors, regardless of voltage, will be tested for insulation resistance, is not sufficiently detailed to reflect our intention to follow the guidance of IEEE Std. 43.

2. **If item 1 above is YES, does the proposed change include the basis to conclude that the revised program incorporating the change continues to meet the criteria of 10CFR50 Appendix B and other previously accepted FSAR commitments?** ☒ Yes ☐ No ☐ N/A

Explain:

IEEE Std. 43 cautions against insulation resistance testing of low-potential machines if the test potential is too high. The next smallest motor size available for use at Waterford, after 460V, is 230V. A motor of 230V tested with a megohmmeter at the lowest test voltage setting of 500V would constitute a "dc hi-potential test," not an insulation resistance test, and may cause insulation overstress and failure.

Electrical motors 230V and smaller do not receive insulation resistance testing at receipt but are subjected to in-storage and pre-installation electrical testing .

Smaller voltage motors are subject to in-storage megger and insulation resistance testing under procedure ME-004-703, "Routine Electrical Equipment Inspection and Maintenance." Test Frequency is once every six months and is controlled by Repetitive Task 002661.

Pre-installation run-in tests are performed in accordance with procedures ME-007-006, "480VAC and Less Squirrel Cage Induction Motors" and ME-007-014, "DC Motors" to ensure equipment operability.

Small motors used in instrumentation (such as strip chart recorders), computers (such as fans, printers, and disk drives), and fractional motors are not covered by IEEE Std. 43 and do not require megger testing.

Changing the wording of Chapter 2 Attachment 7.2, Section 6 to clarify our adherence to IEEE Std. 43, with regard to the insulation resistance testing of motors, will not detract from our compliance to 10CFR50, Appendix B or FSAR commitments.

Reviewed By: Gary L. Bourgeois (QA Representative) 2/9/98 (Date)

RECOMMENDATION:

☐ **Does not represent a lessening of commitment and it can be implemented immediately.**

☒ **Represents a lessening of commitment, however, the change has sufficient basis to demonstrate continued compliance with Appendix B and other FSAR commitments. Therefore, it should be submitted to the NRC for acceptance prior to implementation.**

☐ **Represents a lessening of commitment with insufficient basis to determine continued compliance. Therefore, the change should not be processed.**

Recommended By: QA Supervisor 2/9/98 Date

DISPOSITION:

☐ Approved for implementation ☐ Disapproved

☒ Approved for submittal to the NRC for acceptance

Approved By: Director, Quality 2/19/98 Date