

APPENDIX A

Exxon Nuclear Company
Docket No. 99900081/85-01

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on July 8-12, 1985, it appears that certain of your activities were not conducted in accordance with NRC requirements.

1. Section 2.2 of ENC QA Procedure QAP #2, states in part, that personnel performing activities affecting quality be appropriately qualified and "receive the necessary training to achieve suitable proficiency."

Contrary to the above, Licensing and Safety Engineering personnel, engaged in performing safety-related computer code calculations, are not formally indoctrinated and trained.

2. Section 3.6 of ENC Topical Report XN-XF-608, Revision 5, "Procedure for Control and Administration of Computer Codes for Engineering Design Calculations," requires the following when reporting computer code errors:

- a. Written notice be sent by the cognizant Section Manager to the Manager of Fuel Engineering and Technical Services.
- b. Formal notification to all affected users.
- c. Incorporation of a written notice into the Software Department Record (SDR).

Contrary to the above, ENC failed to comply with these requirements of Section 3.6 for a coding error discovered by them for St. Lucie, Unit 1.

3. 10 CFR 50, Appendix B, Criterion III, requires, in part, that design control measures shall provide for verifying or checking the adequacy of design, such as by the performance of design reviews.

ENC Quality Assurance Procedure XN-NF-P00-002, Section 3.3.2, requires that adequate documentation, such as a calculation notebook or other form of design analysis documentation, be maintained for safety-related analyses.

Contrary to the above, ENC's documentation and independent review of analyses performed in relation to the TOODEE-2 computer code was not adequate and failed to satisfy the requirements of Procedure XN-NF-P00-002.

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4. ENC Quality Assurance Topical Report XN-NF-608, Revision 5, Section 1.2.7, requires that qualification and verification calculations be performed to substantiate computer code modifications. In addition, these calculations shall be included in the SDR.

Contrary to the above the qualification and verification calculations performed for the UJUL84 version of the TOODEE-2 computer code were not included in the SDR nor were they retrievable.

5. Criterion V of Appendix B to 10 CFR Part 50 states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Section 6.0 of ENC Analytical Procedure, "Spectrochemical Determination of Impurities in Uranium," Revision 7, dated November 28, 1983, requires uranium samples be subject to a 900°C temperature, for a minimum of one hour, in order to obtain valid chemical analyses.

Contrary to the above, ENC laboratory technicians, responsible for oxidizing uranium, failed to raise samples to a 900°C state for a minimum period of one hour (one minute vs. one hour).

6. ENC Analytical Procedure #P69268, "Calibration of the Quantometer," Revision 4, dated November 28, 1983, states, "Detection limits and calibration curves are to be formally approved by the spectroscopist prior to being placed into service."

Contrary to the above, ENC failed to formally approve detection limits and calibration curves prior to placing equipment into service.