APPENDIX A

Farwell & Hendricks, Inc. Docket No. 99900918/90-01

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on June 25-27, 1990, it appears that certain of your activities were not in accordance with NRC requirements which were imposed on you through purchase order contracts with NRC licensees:

A. Criterion III of Appendix B to 10 CFR Part 50, "Design Control," requires, in part, that measures shall be established for the selection and review for suitability of application of materials, parts, equipment, and processes that are essential to the safety-related functions of the structures, systems and components. Criterion III also requires, in part, that design control measures shall provide for verifying or checking the adequacy of design. One of the methods of design verification stated is performance of a suitable testing program.

Farwell & Hendricks (F&H) Technical Procedure (TP) 3-001, Revision 0, "Procedure for Establishment and Procurement of Commercial-Grade Items For Use as Basic Component," Section 5.2, "Dedication" describes the dedication process used by F&H. Ten subsections go into detail in areas as such as: determination of critical characteristics, supplier/manufacturer selection, design, materials of construction, manufacturing process, environmental and seismic qualification, and QA verification.

Section 5.2.2.1, Determination of Critical Characteristics, requires that the engineer identify and quantify critical characteristics essential to the item's performance of its safety function and lists "dimensions" as an example of such characteristics.

Section 5.2.2.3, Design, requires the engineer to determine any inspection, condition, and/or functional test requirements necessary to assure the item will perform its function.

Section 5.2.2.4, Materials of Construction, states that the manufacturer of replacement parts may provide the materials of construction or a test analysis can be performed to determine the materials of the replacement item.

Contrary to the above, Farwell and Hendricks sold the following items as nuclear safety-related without completely evaluating their suitability for use in such applications:

1. Data Packages 60447.1, 74000, 74001, and 74003.3 - FåH procured molded case circuit breakers (MCCBs) as commercial-grade, items (CGIs), processed them through their program for dedication of commercial-grade MCCBs for Class 1E (safety-related) nuclear plant service, and sold them to a nuclear utility, certifying their suitability for such service, without conducting a complete review for suitability of application to the safety-related functions. Also, FåH did not completely verify the adequacy of design through a suitable testing program in that (1) not all critical characteristics were verified by the program, (2) the acceptance criteria for some testing were inadequate to verify the applicable critical characteristics, (3) not all MCCBs to be dedicated were tested at all, and (4) not all items' performance was consistent with the stated basis for the acceptance criteria.

Also, F&H's measures for control of purchased material were not adequate to assure that commercial-grade MCCBs to be dedicated for safety-related service conformed to the procurement documents in that verifiable, documented traceability of a certain MCCB to the original circuit breaker manufacturer (CBM) and to objective quality evidence furnished by the CBM was not established.

- 2. Data Package 60500 FåH purchased 20 amp Bussmann fuses as commercial-grade items and sold them as safety-related dedicated items without verifying the actual dimensions of the fuses. The dimensions are critical characteristics which should have been verified. FåH did verify the dimensions of the fuse holders. This dedication was completed in April 1989.
- 3. Data Package 60058 F&H purchased Norgren poppet valves as commercial-grade items and sold them as a safety-related dedicated items without verifying that the coil materials were suitable for a mild environment or a seismic application. This dedication was completed in September 1986. Data Package 60600 for a coil purchased from Norgren and dedicated in May 1989 did attempt to verify the coil materials as part of verification.

Dated	at Rockville, Maryland						
This_	9th	day	of	November	19 90		

Mr. John R. Hendricks

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In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice." a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely.

Uldis Potapovs, Acting Chief Vendor Inspection Branch Division of Reactor Inspection and Safeguards Office of Muclear Reactor Regulation

sakw.

Enclosures:

1. Appendix A -- Notice of Nonconformance

2. Appendix B -- Inspection Report No. 99900918/90-01

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