

ORGANIZATION: STEWART & STEVENSON SERVICES, INC.
HOUSTON, TEXAS

REPORT NO.: 99900760/85-01	INSPECTION DATE(S): 2/25-26/85	INSPECTION ON-SITE HOURS: 22
CORRESPONDENCE ADDRESS: Stewart & Stevenson Services, Inc. ATTN: Mr. T. Michael Andrews Vice President Engineering/Manufacturing Post Office Box 1637 Houston, Texas 77251-1637 ORGANIZATIONAL CONTACT: Stephen W. Bowman, Nuclear Projects Manager TELEPHONE NUMBER: (713) 923-2161		
PRINCIPAL PRODUCT: Engineering services and diesel generators. NUCLEAR INDUSTRY ACTIVITY: Less than 1%.		
ASSIGNED INSPECTOR: <u>N. J. Mierdel</u> <u>5/14/85</u> N. J. Mierdel, Reactive Inspection Section (RIS) Date		
OTHER INSPECTOR(S): T. F. Burns, Consultant, BNL		
APPROVED BY: <u>E. W. Merschoff</u> <u>5/14/85</u> E. W. Merschoff, Chief, RIS, Vendor Program Branch Date		
INSPECTION BASES AND SCOPE: A. <u>BASES</u> : 10 CFR Part 21. B. <u>SCOPE</u> : Determine how Stewart & Stevenson Services, Inc. (S&S) notifies customers of pertinent design modifications, maintenance instructions, and changes to general operating procedures; and obtain a customer list to verify that customers receive the information from S&S and properly implement the recommended actions.		
PLANT SITE APPLICABILITY: Arkansas Nuclear 1 (50-313), Braidwood 1 and 2 (50-456, 457), Byron 1 and 2 (50-454, 455), Clinton 1 and 2 (50-461, 462), LaSalle 1 and 2 (50-373, 374), Nine Mile Point 2 (50-410), Perry 1 and 2 (50-440, 441), River Bend 1 and 2 (50-458, 459), San Onofre 2 and 3		

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PLANT SITE APPLICABILITY (continued):

(50-361, 362), WPPSS (50-397), St. Lucie 1 (50-335), Dresden (50-10), Prairie Island 1 and 2 (50-282, 306).

A. INSPECTION OBJECTIVES:

1. Determine how Stewart and Stevenson Services, Inc. (S&S) notifies customers of pertinent design modifications, maintenance instructions, and changes to general operating procedures.
2. Obtain a customer list to verify that customers receive the information from S&S and properly implement the recommended action.

B. INSPECTION FINDINGS:

1. Diesel generator units assembled by S&S for commercial nuclear use are powered by engines manufactured by either General Motors Electro-Motive Division (EMD) or Detroit Diesel.
 - a. EMD engines - EMD issues "Maintenance Instructions" (MIs) and "Power Pointers" to their diesel engine customers. The MIs and Power Pointers cover recommended maintenance procedures and design changes for EMD engines. S&S receives the MIs and Power Pointers from EMD and in turn distributes them to their own customers having diesel generator units powered by EMD engines. The S&S Service Department maintains a master list of all S&S customers. The list is revised as needed to reflect address changes, and customers remain on the list until S&S receives notice that the unit has been sold. S&S does not have a written procedure covering how these notifications are processed, nor do they have an official means to confirm receipt of the literature by their customers and/or implementation of the recommendations. EMD does not generally send maintenance information directly to end users of their engines unless EMD supplied the engine directly, or the end user specifically requested EMD to forward the information. EMD does not have a system by which end users can register engines with them. Proper dispersal of information from EMD to the end user is dependent upon S&S maintaining accurate and up to date records.

EMD does not require that the action recommended by the MIs or Power Pointers be performed, nor does EMD state that engine operation and/or reliability will be jeopardized if the MIs and Power Pointers are not followed. For this reason, MIs and Power Pointers should be evaluated by knowledgeable personnel (i.e., a

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maintenace engineer) to determine the applicability of the instructions to a particular engine.

- b. Detroit Diesel engines - Unlike EMD, Detroit Diesel has a system by which end users of their engines register the units directly with them. S&S is an area distributor for Detroit Diesel. When S&S receives information pertaining to Detroit Diesel engines, S&S forwards the information to all Detroit Diesel engine owners that are located within the area served by S&S, regardless of whether or not the unit was purchased from S&S. If S&S has supplied a Detroit Diesel unit to a customer outside of their region, S&S does not send them the information. S&S relies on their customers properly registering the unit with Detroit Diesel, and the distributor that serves the customer's particular area correctly passing on information, to ensure that proper notification of design changes and maintenance information is made. S&S has sold twelve Detroit Diesel units for nuclear use. Nine of the twelve are in service, three are not. S&S advises their customers to maintain a rapport with the local Detroit Diesel distributor to be sure they receive all pertinent information.

C. BACKGROUND INFORMATION:

S&S takes a basic diesel engine and tailors it with subsystems to meet each customer's particular requirements. For a typical nuclear order, S&S will generally design the unit, purchase the diesel engine and all other components needed, (such as heat exchangers, generators, etc.) and assemble the components per the unit's design. S&S neither designs nor manufactures components, instead they assemble or "package" diesel generator units.

S&S currently will not accept new purchase orders which reference either 10 CFR 50 Appendix B or 10 CFR Part 21. However, they will certify that a part is the same as one supplied earlier when an Appendix B quality program was in place. S&S maintains a Part 21 program to meet their responsibilities under old purchase orders.

D. 10 CFR PART 21:

S&S "Procedure for Reporting of Defects and Noncompliance in Accordance with 10 CFR Part 21" dated February 8, 1983, was reviewed. The inspector verified that the procedures were adequate and in compliance with Part 21. The inspector also discussed with the S&S Nuclear Projects Manager

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three potentially reportable defects found with S&S units. Corrective action and/or deficiency reports covering these incidents were not available for review. The inspector was informed verbally that the evaluations of the defects by S&S determined that they were not reportable because they were isolated incidents, i.e., unique to a particular plant and unit.

E. PERSONS CONTACTED:

T. Michael Andrews, Vice President, Engineering/Manufacturing, Stewart & Stevenson.

*Stephen W. Bowman, Nuclear Projects Manager, Stewart & Stevenson.

Jim Sutherland, QA Manager, Stewart & Stevenson

John Fine, Warranty Administrator, Stewart & Stevenson

David Whisenhunt, Branch Service Manager, Stewart & Stevenson

*Mick Lay, Stewart & Stevenson

F. DOCUMENTS EXAMINED:

1. Index, dated 1984, GM-EMD Maintenance Instruction (MI) Index
2. QAM, dated 1/85, S&S QAM (Draft)
3. PRO, dated 2/8/83, Procedure for Reporting of Defects and Noncompliance in Accordance with 10 CFR 21.
4. REP, document no. 70-84, dated 11/1/84, INPO Significant Event Report.
5. LTR, dated 1/21/85, S&S Letter from S. Bowman to R. F. Pariani of GE.
6. MI, 23 GM-EMD MIs.
7. PP, 9 GM-EMD Power Pointers.

*Attended exit meeting