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August 3, 1984

NUCLEAR LICENSING & SAFETY DEPARTMENT

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. Harold R. Denton, Director

Dear Mr. Denton:

SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416 & 50-417
License No. NPF-13
File: 0260/L-860.0
Supplemental Information -
Standby Diesel Generator
Combustion Air Intake and
Exhaust System
AECM-84/0393

Based on our discussions with your staff on August 2, 1984, we are submitting the attached information on the Grand Gulf standby diesel generator combustion air intake and exhaust system. This information supersedes that submitted to you in our letter AECM-84/0389, dated August 2, 1984.

If you have any further questions, please advise.

Sincerely,

L. F. Dale
Director, Nuclear Licensing & Safety

LFD/sad
Attachment

cc: (See Next Page)

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cc: Mr. J. B. Richard (w/o)
Mr. R. B. McGehee (w/o)
Mr. N. S. Reynolds (w/o)
Mr. G. B. Taylor (w/o)

Mr. Richard C. DeYoung (w/a)
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. J. P. O'Reilly (w/a)
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W., Suite 2900
Atlanta, GA 30323

SUPPLEMENTAL INFORMATION ON THE DIESEL GENERATOR COMBUSTION AIR INTAKE AND EXHAUST SYSTEM

The combustion air intake and exhaust system for the standby diesel generators was designed as seismic Category I and Quality Group D. Augmented Quality Group D requirements were not imposed on this system. (Reference AECM-75/11, dated February 14, 1975 and AECM-82/0459, dated August 9, 1982).

The piping specified for the system was seamless, schedule 20 (3/8" wall) ASTM A-53, Grade B or ASTM A-106, Grade B for the 24 inch diameter piping and welded, 3/8" wall, ASTM A-155, Grade C-55, Class 2 or ASTM A-134, Grade A-283C for the 42 inch diameter piping. This piping was butt welded by welders qualified to ASME Section IX. The piping was shop fabricated and assembled in the field. These welds were then visually inspected under shop fabrication conditions by Level II inspectors qualified in accordance with SNT-TC-1A. The individuals qualified to this standard are competent to visually inspect the subject welds.

As described in AECM-83/0724, dated November 15, 1983, the piping wall thickness was more than adequate to meet the system design conditions and was substantially greater than that required to meet the actual service conditions. Based on this substantial margin in the design of the piping for this system, the existing Quality Group D and seismic Category I classification is commensurate with the service conditions imposed on the system and adequately ensures the integrity of the system. The use of ASME Section IX qualified welders, the visual inspection performed on the welds, and the application of an operational quality assurance program for the piping provides additional assurance that the system is capable of performing its design function. The basic difference between the current design and installation and Quality Group C requirements is primarily the absence of certain quality records. With the exception of the difference noted, the system as designed and installed provides an equivalent level of operational reliability and substantially the same level of safety as a system designed to ASME, Quality Group C requirements.

Therefore, based on the conservative system design as described above, actual system service conditions, the use of ASME Section IX qualified welders, visual inspection performed on the welds, and application of the operational quality assurance program for piping, then the imposition of seismic Category I and Quality Group D requirements on the standby diesel generator combustion air intake and exhaust system provides a level of assurance that the system is capable of performing its function commensurate with the level of assurance that would be provided by requiring the use of Quality Group C requirements.