The Woodard Corporation

Emergency Diesel Generator Specialist

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Mr. Samuel J. Collins, NRR/OD
United States Nuclear Regulatory Commission
Mail Stop 5E7
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Dear Mr. Collins:

This letter is submitted to you because of my concerns for potentially unanalyzed conditions, events, and postulated accidents which could cause the Emergency Diesel Generators to become inoperable, thus unable to perform their intended functions.

Emergency Diesel Generators are the ultimate reactor safety system's electrical power source in the event of loss of the preferred offsite power sources. Both the offsite power and emergency diesel generator power sources are redundant in order to (1) power safety systems from their preferred offsite power source and (2) assure that an emergency diesel generator power source is immediately available in the event that both offsite power sources are lost (LOOP) . Both systems were designed to meet the criteria of 10CFR50, Appendix A, Criteria 17, which states that:

> "The safety function for each system (assuming the other system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents."

The design, construction, operation, testing, and safety evaluations of these power sources may not have considered (in depth) their own susceptibility "to other than anticipated operational occurrences and postulated accidents." Because of almost exponential advances in technology since plant licensing and due to recent changes in the world political climate, there is some reason to suspect that there are unanalyzed conditions, occurrences, and postulated accidents of the Emergency Diesel Generators which require consideration. Compliance with Station Blackout criteria may cover much of this except that new types of accidents may require a longer coping duration time.

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With my extensive background, experience, and available resources, I may be able to help the NRC in addressing this issue. My assistance could include:

1. Developing criteria to be used to identify and assess any new unanalyzed conditions, postulated accidents, and failures of the Emergency Diesel Generators.

2. Developing an action plan including generic communication to all licensees. This communication would require licensee identification, evaluations, and proposed actions to address these previously unanalyzed occurrences and postulated failures of the Emergency Diesel Generators. This could include licensee commitments for changes in programs, procedures, people, and/or equipment.

3. Developing an inspection plan and procedures to be used by NRC in assessing the adequacy of licensee responses and compliance with commitments.

4. Inspecting/determining the adequacy of licensees' responses and compliance with commitments.

5. Performing in other areas as assigned by the NRC.

An abbreviated summary of relevant experience which provides qualification for me to do this work is enclosed. If there are any questions or if I can assist NRC in addressing this matter, please let me know.

Sincerely,

Carl H. Woodard

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Enclosure

Qualifications of Carl H. Woodard

A relevant abbreviated summary of my experience which provides qualifications for me to assist NRC in performing this work are as follows:

1. Participated in the design, construction, testing, licensing, and operation of PWR power reactors with Westinghouse all the way from Shippingport to the aborted Floating Nuclear Reactor project.

2. Managed facets of the design, manufacture, testing, qualification, installation, and maintenance of Emergency Diesel Generators as Vice President of Overall Control for Fairbanks Morse/Colt Large Engine Division (Suppler of Colt, Fairbanks Morse, and Alco Emergency Diesel Generators).

3. As the Emergency Diesel Generator Specialist for NRC Region I, conducted inspections and evaluations of EDG units at all sites.

4. As an Emergency Diesel Consultant to much of the industry, have performed root cause analysis troubleshooting and provided for corrective actions. Have provided licensee with expertise to improve EDG reliability by changes in design, hardware, procedures, and operational methodology.

5. As an Emergency Diesel Generator consultant to the NRC, developed and periodically conduct a "hands-on" Emergency Diesel Generator training course for NRC management, engineering, and inspection personnel. Was awarded a five-year contract; three years remain.

6. Currently involved in design changes and upgrade modifications/replacements of the engine governing and generator excitation and control systems.

7. My library includes vendor manuals and other documentation which covers all makes of EDG units at all sites.