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NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPR-109
VOGTLE ELECTRIC GENERATING PLANT-UNITS 1 AND 2
SUPPLEMENT 1 TO NUREG-0737 (GENERIC LETTER NO. 82-33)

Dear Ms. Adensam:

This letter is to provide the U.S. Nuclear Regulatory Commission a proposed schedule for completion of the basic requirements for the items identified in Supplement 1 to NUREG-0737. These items include the Safety Parameter Display System (SPDS), Detailed Control Room Design Review, Regulatory Guide 1.97 (Rev. 2), Upgrade of Emergency Operating Procedures and Emergency Response Facilities. These items will be fully integrated in order to enhance the operator's ability to comprehend plant conditions and cope with emergencies. Plant Vogtle is currently under construction and the detailed design of the various items addressed in Supplement 1 to NUREG-0737 has not been completed. However, the items addressed will be completed and implemented prior to initial fuel load. The documentation associated with each individual item will be provided to the NRC Staff on a time frame consistent with the operating license review schedule. The following is a brief description and current status of implementation of the NUREG-0737 Supplement 1 items at Plant Vogtle.

The Safety Parameter Display System (SPDS) being designed for Plant Vogtle will utilize redundant computer systems with CRT displays that are separate from the plant process computer system. The system will display information from which the plant operators can readily assess the plant safety status. This information will provide, as a minimum, information related to reactivity control, reactor core cooling and heat removal capability, reactor coolant system integrity, radioactivity control, and containment conditions. The specific design of the displays will incorporate the experience gained from the development of Westinghouse Generic Emergency Procedure Guidelines by providing the information required to assess the status of the critical safety functions associated with the plant. The design and implementation of the SPDS, including operator training, will be completed prior to fuel load. The safety analysis which describes the basis for parameter selection and the verification and validation program will be submitted for staff review approximately one year prior to fuel load. A description of the SPDS system will be included in FSAR Section 9.5.10. A preimplementation review of the SPDS is not requested at this time.

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A detailed control room design review will be conducted for Plant Vogtle to identify any modifications of control room configurations that would contribute to a significant reduction of risk and enhancement in the safety of operation. This review will be performed by a multidisciplinary review team skilled in human factors engineering and risk analysis. A preliminary control room design review has been performed using the guidance provided in NUREG/CR-1580. This review was performed to identify and analyze any human engineering deficiencies during the early stage of control room design so that they could be corrected in the final design or accommodated in the administrative and training procedures. A description of the preliminary design review will be contained in Chapter 18 of the Plant Vogtle FSAR. A program plan for conducting the detailed control room design review will be submitted to the NRC Staff approximately 24 months prior to fuel load. A summary report of the completed review outlining any proposed control room changes will be submitted approximately six months prior to fuel load. A description of the final design review will be incorporated into FSAR Chapter 18.

The safety-related display instrumentation at Plant Vogtle is used by the operator to monitor the plant throughout all operating conditions including anticipated operational occurrences and accident and post-accident conditions. The instrumentation described in Regulatory Guide 1.97 provides data to assist control room operators in preventing and mitigating the consequences of reactor accidents. Section 7.5 of the Plant Vogtle FSAR will contain a description of the Post-Accident Monitoring System (PAMS) at Plant Vogtle and summary table which compares the instrumentation to the requirements of Regulatory Guide 1.97 (Rev. 2). Deviations from the guidance of R.G. 1.97 (Rev. 2) will be identified and supporting justification or alternatives provided. The PAMS instrumentation described in Section 7.5 is part of the plant design and will be installed prior to fuel load. The Plant Vogtle FSAR is scheduled for submittal to the NRC in July, 1983.

The Emergency Operating Procedures (EOPs) for Plant Vogtle will be generated using the Generic Emergency Procedure Guidelines (EPGs) developed by the Westinghouse Owners Group for use by all Westinghouse plants. These EPGs are based upon the reanalysis of transients and accidents performed by Westinghouse for the Owners Group in response to NUREG-0737, Item I.C.1. These EPGs provide the operator with the ability to mitigate the consequences of a broad range of initiating events and subsequent multiple failures or operator errors, without the need to first diagnose specific events. The Generic EPGs are currently under review by the NRC Staff. A procedure generation package which will include the EPGs, Writer's Guide, description of verification and validation program, and a brief description of the training program will be submitted to the NRC Staff for review approximately twenty-eight (28) months prior to fuel load. The EOPs will be developed and implemented for operator training approximately twenty-four (24) months prior to fuel load. A description of the training plan and procedures development will be included in FSAR Sections 13.2, 13.5, and 13.5.2. Training of the plant operators in the use of the EOPs and SPDS will be completed prior to fuel load.

The Emergency Response Facilities (ERFs) at Plant Vogtle consist of the Technical Support Center (TSC), Operational Support Center (OSC), and Emergency Operations Facility (EOF). The TSC provides plant management and technical support personnel with a dedicated facility from which they can assist plant operating personnel located in the control room during an emergency. The TSC is located adjacent to the control room and is shared by both units. The EOF is located in the South Wing of the Simulator Building, approximately 1.5 miles southeast of the plant, and will serve as a command post for the overall management of the emergency response, the coordination of radiological assessment, and the management of recovery operations when it is activated. A backup EOF will be provided. The OSC is an area in the Service Building where operational support personnel will assemble to aid in the response to an emergency. The Emergency Response Facilities at Plant Vogtle are presently under construction and a detailed description of the facilities will be provided in FSAR Section 9.5.10. The facilities will be fully functional prior to fuel load.

The implementation of the NUREG-0737, Supplement 1 items described above will be integrated to obtain the maximum possible enhancement of the operators' ability to comprehend plant conditions and cope with emergencies. The human factors review which will be performed as part of the detailed control room design review will also cover the other aspects of the supplement. The purpose of the review is to ensure that all aspects of the implementation are coordinated for use by the plant operators in a logical and efficient manner. This integration review will be completed prior to fuel load. Fuel load is presently scheduled for September, 1986 for Unit 1 and March, 1988 for Unit 2.

Yours truly,

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