



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NOV 30 1983

Docket Nos: 50-424
50-425

MEMORANDUM FOR: Eleanor Adensam, Chief
Licensing Branch No. 4, DL

FROM: Frank J. Congel, Chief
Radiological Assessment Branch, DSI

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR VOGTLE
ELECTRIC GENERATING PLANT, UNITS 1 AND 2

PLANT NAME: Vogtle Electric Generating Plant - Units 1 and 2
LICENSING STAGE: OL
DOCKET NUMBERS: 50-424/425
RESPONSIBLE BRANCH: LB #4; M. Miller, LPM
DESCRIPTION OF RESPONSE: Review Questions
REVIEW STATUS: Continuing

The Radiation Protection Section of the Radiological Assessment Branch has completed its review of Chapter 12 and other pertinent sections of the Vogtle Electric Generating Plant Units, 1 and 2 FSAR. A request for additional information is enclosed. We are willing to discuss these items with the applicant if required. We plan to make a site visit to resolve the questions in the attachment and will be contacting the project manager to arrange the details.

This review was performed by M. A. Lamastra, RPS/RAB.

Frank J. Congel

Frank J. Congel, Chief
Radiological Assessment Branch
Division of Systems Integration

Attachment:
As stated

cc: R. Mattson
D. Muller
M. Miller
O Lynch
M. Lamastra

dup of

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VOGTLE ELECTRIC GENERATING PLANT
UNITS 1 AND 2
DOCKET NOS. 50-424 and 425
REQUEST FOR ADDITIONAL INFORMATION

- 471.02 (12.5) As specified in Regulatory Guide 1.70, Section 12.5.2, submit a detailed diagram of the station's health physics facilities.
- 471.03 (12.5) As specified in Regulatory Guide 1.70, section 12.5.2, you should modify Tables 12.5.2.1 through 12.5.2.4 to include the minimum number of each type of health physics instruments. In addition, provide information on the quantity and types of respirators provided for the Vogtle Electric Generating Plant.
- 471.04 (13.1) Figure 12.5.1-1 should be modified to include the minimum staffing levels for one unit and two unit operation (see section 12.5, Regulatory Guide 1.70).
- 471.05 (13.1) In accordance with the criteria contained in NUREG-0731, it is our position that your organization chain should contain a qualified individual to provide backup in the event of the absence of the Radiation Protection Manager (RPM). The December 1979 revision of ANSI 3.1 specifies that individuals temporarily filling the RPM position should have a B.S. degree in science or engineering, two years experience in radiation protection, one year of which should be nuclear power plant experience, six months of which should be onsite. It is our position that such experience be professional experience. Identify and provide an outline of the qualifications of the individual who will act as the backup for the RPM in his absence.

- 471.06 (13.1) In accordance with NUREG-0800, section 12.5, provide a resume of the education, training, and experience of your Health Physics Superintendent.
- 471.07 (12.3) In section 12.3.4.1 of the FSAR, you have stated that "Critically Monitors, as stated in 10 CFR 70.24 and Regulatory Guide 8.12, are not needed." Provide a commitment date, when an application for an exemption to 10 CFR 70.24(b) will be filed with the NRC. This exemption request should be filed as part of your application for a Special Nuclear Materials license.
- 471.08 (12.5) As requested in NUREG-0800, section 12.5 and 13.1, indicate how radiation protection training will be conducted for health physics professionals and health physics technicians at Vogtle. Radiation protection training programs for the levels of Health Physics technicians should be generally described to include initial qualification and retraining/requalification programs and should verify that selection, qualification and training requirements for contractor health physics technicians and contractor radiation workers are the same as or equivalent to the requirements for Vogtle radiation control technicians and radiation workers.
- 471.09 As required in Regulatory Guide 1.70, section 12.5.3, verify that a routine alpha monitoring program which includes routine contamination, airborne and direct surveys for alpha will be conducted for Vogtle.

- 471.10 (12.1) Provide a discussion of the Radiation Protection Plan (RPP) intended for Vogtle, as described in section 12.1 of your FSAR.
- 471.11 Your portable radiation monitoring instrument list (table 12.5.2-2) and area radiation monitor list (12.3.4-1) show no instruments capable of measuring exposure rates greater than 1000 R/hr. Such instruments are necessary to determine the effects of a TMI-type accident. Regulatory Guide 1.97 (Revision 2) specified the area radiation monitors in areas requiring access after an accident and portable survey meters should have a range up to 10,000 R/hr. Provide a commitment in your FSAR to have portable radiation monitoring instruments and specify locations of area radiation monitors in accessible post-accident areas. These monitors should be capable of measuring Exposure rates up to 10,000 R/hr at Vogtle.
- 471.12 (12.5) Section 12.5.3.9 of the FSAR states, "sealed radionuclide sources having activities greater than the quantities of radionuclides defined in Appendix C of 10 CFR 20 and schedule B of 10 CFR 30 will be subject to material controls for radiological protection." Since, (1) the radionuclides and activities listed in Appendix C are associated with allowable sewerage release limits authorized in 10 CFR 20.303, and not intended as deminimus quantities, and (2) sealed sources obtained under 10 CFR 30.18 may be redistributed only under a specific licensee issued in accordance with 10 CFR 32.18, you should revise your FSAR and procedures to require that all licensed sources be subject to material controls.

- 471.13 Provide additional information regarding the sensitivity of airborne radioactivity monitors in accordance with section 12.3 of Regulatory Guide 1.70. Verify that the airborne radioactivity monitors described in section 12.3 of the FSAR are capable of detecting 10 MPC-hours of particulate and iodine radioactivity in compartments which may be occupied and may contain airborne radioactivity (the acceptance criteria in Standard Review Plan section 12.3).
- 471.14 Section II.B.2 of NUREG-0737 requests that the applicant provide (12.3) the projected doses to individuals for necessary occupancy times in vital areas following an accident and dose rate zone maps for potentially occupied areas. Figures 12.3.1-2 of the Vogtle FSAR show the radiation levels for various plant areas at twenty-four hours after an accident. Provide a table giving the post-accident dose rates to vital areas for various times following an accident: e.g. 1 hour, 1 day, 1 week, and 1 month.
- 471.15 Section II.F.1-3 of NUREG-0737 requests the applicant to provide (12.3) plant layout drawings showing the location of the containment monitors. In addition, either provide the manufacture name and model number of these instruments or provide their specification.
- 471.16 The PWR exposure data used in Chapter 12.4 does not include plant (12.4) exposures after 1977. Update your exposure estimates to include more recent exposure information (NUREG-0713, Vol. 3 contains exposure data up through 1981).

471.17 Section C.4.e.(4) of Regulatory Guide 8.8 recommends that change rooms be equipped with sufficient lockers to accommodate permanent and contract maintenance workers who may be required during major outages. Show that your change and locker room facilities have this capability. Also, show that you have made provisions for both male and female employees.