5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

- 5.5.1 Offsite Dose Calculation Manual (ODCM)
 - a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents. in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
 - b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release reports required by Specification 5.6.2 and Specification 5.6.3.
 - c. Licensee initiated changes to the ODCM:
 - Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - (a) Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
 - (b) A determination that the change(s) maintain the levels of radioactive effluent control required pursuant to 10 CFR 20.1302. 40 CFR 190.
 10 CFR 50.36a, and 10 CFR 50. Appendix I, and do not adversely impact the accuracy or reliability of effluent. dose. or setpoint calculations;
 - 2. Shall become effective after review and acceptance by the Plant Operations Committee and the approval of the Plant General Manager: and

(continued)

5.5 Programs and Manuals

5.5.1 <u>Offsite_Dose_Calculation_Manual (ODCM)</u> (continued)

3. Shall be submitted to the NRC in the form of a complete. legible copy of the entire ODCM as a part of, or concurrent with. the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 <u>Primary Coolant Sources Outside Containment</u>

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Low Pressure Core Spray, High Pressure Core Spray, Residual Heat Removal. Reactor Core Isolation Cooling, hydrogen recombiner, process sampling (the program requirements shall apply to the Post Accident Sampling System until such time as administrative controls provide for continuous isolation of the assoicated penetration(s) or a modification eliminates the potential leakage path(s)), containment monitoring, and Standby Gas Treatment. The program shall include the following:

- Preventive maintenance and periodic visual inspection requirements; and
- Integrated leak test requirements for each system at 24 month intervals or less.

The provisions of SR 3.0.2 are applicable to the 24 month Frequency for performing integrated system leak test activities.

5.5.3 Deleted

(continued)

5.5 Programs and Manuals

Radioactive Effluent Controls Program 5.5.4

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This program. conforming to 10 CFR 50.36a. provides for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements: ۰.

- Limitations on the functional capability of radioactive a. liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology 'in the ODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents from the site to unrestricted areas, conforming to -10 -times the concentration values in Appendix B. Table 2, Column 2 to 10 CFR 20.1001 - 20.2402;
- Monitoring, sampling, and analysis of radioactive liquid and c. gaseous effluents pursuant to 10 CFR 20.1302 and with the methodology and parameters in the ODCM;
- Limitations on the annual and quarterly doses or dose d. commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix 1:
- Determination of cumulative and projected dose contributions e. from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

(continued)

Columbia Generating Station

5.5 Programs and Manuals

5.5.4 Radioactive_Effluent_Controls_Program (continued)

- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50. Appendix I;
- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary shall be limited to the following:
 - For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and
 - For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives
 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50. Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- J. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190; and
- k. Limitations on venting and purging of the primary containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable.

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