

ATTACHMENT TO AEP:NRC:0975C

PROPOSED BASES CHANGES

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RADIOACTIVE EFFLUENTS

BASES

This specification applies to the release of liquid effluents from each reactor at the site. The liquid effluents from the shared system are proportioned among the units sharing the system.

3/4.11.1.3 LIQUID WASTE TREATMENT. The operability of the liquid radwaste treatment system ensures that this system will be available for use whenever liquid effluents require treatment prior to release to the environment. The requirements that the appropriate portions of this system be used when specified provide assurance that the releases of radioactive materials in liquid effluents will be kept "as low as is reasonably achievable." This specification implements the requirements of 10 CFR Part 50.36a, General Design Criteria Section 11.1 of the Final Safety Analysis Report for the Donald C. Cook Nuclear Plant, and design objective Section II.D of Appendix I to 10 CFR Part 50. The specified limits governing the use of appropriate portions of the liquid radwaste treatment system were specified as a suitable fraction of the dose design objectives set forth in Section II.A of Appendix I, 10 CFR Part 50, for liquid effluents.

3/4.11.1.4 LIQUID HOLDUP TANKS

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR Part 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area. This specification, being applicable to outside temporary tanks, does not apply to the refueling water storage tank, primary water storage tank, or the condensate storage tank, since they are a part of the permanent plant design basis.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 DOSE RATE. This specification is provided to ensure that the dose rate at any time at the SITE BOUNDARY from gaseous effluents from all units on the site will be within the annual dose limits of 10 CFR Part 20 for unrestricted areas. The annual dose limits are the doses associated with the concentrations of 10 CFR Part 20, Appendix B, Table II. These limits provide reasonable assurance that radioactive material discharged in gaseous effluents will not result in the exposure of an individual in an unrestricted area, to annual average concentrations exceeding the limits specified in Appendix B, Table II of 10 CFR part 20 (10 CFR Part 20.106 (b)). For individuals who may at times be within the site boundary, the occupancy of the individual will be sufficiently low to compensate for any increase in the atmospheric diffusion factor above that for the site boundary. The specified release rate limits restrict, at all times, the corresponding gamma and beta dose rates above background to an individual at or beyond the site boundary to ≤ 500 mrem/year to the total body or to ≤ 3000 mrem/year to the skin. These release rate limits also restrict, at all times, the corresponding thyroid dose rate above background to an infant via the cow-milk-infant pathway to ≤ 1500 mrem/year for the nearest cow to the plant.

This specification applies to the release of gaseous effluents from all reactors at the site. The gaseous effluents from the shared system are proportioned among the units sharing that system.

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