

Duke Power Company
Oconee Nuclear Station

Attachment 1

Proposed Technical Specification Revision

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PDR ADOCK 05000269
P PDR

where A_j = pond inventory limit for single radionuclide "j"
(curies)

C_j = 10 CFR 20, Appendix B, Table II, Column 2, concentration
for single radionuclide "j" (curies)

- b. After a primary to secondary leak is detected, the initial batch of used Powdex resin shall not be transferred to the CTP.
- c. No batch of used powdex resin shall be transferred to the CTP unless the sum of the ratios of the activity of the radionuclides identified in the preceeding batch from any powdex cell in the same unit is less than 0.1% of the limit identified in 3.9.4.a.

$$\sum_j \frac{Q_j}{A_j} < 1.0 \times 10^{-3}$$

where Q_j = radionuclide activity in the batch

A_j = pond inventory limit for radionuclide 'j'

3.9.5 Liquid Holdup Tanks

- a. The quantity of radioactive material contained in each outside temporary tank shall be limited to less than or equal to 10 curies, excluding tritium and dissolved or entrained noble gases. Tanks included in this specification are those outdoor tanks that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the liquid radwaste treatment system.
- b. The quantity of radioactive material contained in each of the outside temporary tanks shall be determined to be within the above limit by analyzing a representative sample of the tanks contents at least once per 7 days when radioactive materials are being added to the tank.
- c. If the quantity of radioactive material in any outside temporary tank exceeds the above limit, suspend all additions to radioactive material to the tank without delay.

3.9.6 The provisions of Technical Specification 3.0 do not apply.

Bases

The concentration specification is provided to ensure that the concentration of radioactive materials released in liquid waste effluents from the site to unrestricted areas will be less than the concentration levels specified in 10 CFR Part 20, Appendix B, Table II. The concentration limit for noble gases is based upon the assumption that Xe-135 is the controlling radioisotope and its MPC in air (submersion) was converted to an equivalent concentration in water using the methods described in International Commission on Radiological Protection (ICRP) Publication 2.

The dose specification is provided to assure that the release of radioactive material in liquid effluents will be kept "as low as is reasonably achievable." Also, for fresh water sites with drinking water supplies which can be potentially affected by plant operations, there is reasonable assurance that the operation of the facility will not result in radionuclide concentrations in the finished drinking water that are in excess of the requirements of 40 CFR 141. The dose calculations in the ODCM implement the requirements in Section III.A of Appendix I that conformance with the guides of Appendix I is to be shown by calculational procedures based on models and data such that the actual exposure of an individual through appropriate pathways is unlikely to be substantially underestimated.

Section IV of Appendix I of 10 CFR 50 states that the licensee is permitted the flexibility of operation during unusual operating conditions, to assure the public is provided with a dependable source of power when compatible with considerations of health and safety of the public. Section I of Appendix I of 10 CFR 50 states that this appendix provides specific numerical guides for design objectives and limiting conditions for operation, to assist holders of licenses for light-water-cooled nuclear power reactors in meeting the requirements to keep releases of radioactive material to unrestricted areas as low as practical, and reasonably achievable, during normal reactor operations, including expected operational occurrences. Using the flexibility granted during unusual operating conditions, and the stated applicability of the design objectives for the Oconee Nuclear Station, Appendix I dose limits for radioactive liquid effluent releases (T.S. 3.9.2), are concluded to be not applicable during unusual operating conditions that result in the activation of the Oconee Emergency Plan.

For units with shared radwaste treatment systems, the liquid effluents from the shared system are proportioned among the units sharing that system.

The requirements that the appropriate portions of this system be used when specified provides 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 Criterion 60 of Appendix A to 10 CFR Part 50 and design objective Section II.D of Appendix A to 10 CFR Part 50.

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Attachment 2

No Significant Hazards Consideration Evaluation

No Significant Hazards Consideration Evaluation

Duke Power has made the determination that this amendment request poses no significant hazards as defined by NRC regulations in 10 CFR 50.92. This ensures that operation of the facility in accordance with the proposed amendment would not:

- 1) involve a significant increase in the probability or consequences of an accident previously evaluated; or
- 2) create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) involve a significant reduction in a margin of safety.

The proposed amendment request calls for the deletion of only part (c) of Technical Specification 3.9.4; parts (a) and (b) would remain. Build-up of activity is still controlled by the remaining parts; therefore, the total activity allowed by the Technical Specification would not change. For this reason, there would be no increase in the probability or consequences of an accident previously evaluated, no increase in the possibility of a new or different kind of accident, and no significant reduction in a margin of safety.

In addition, Part b of Section 3.9.4 is being divided into two parts. The first sentence would remain as Part b, but the remaining part of the restriction would become a new Part C. This change is purely administrative in nature and is being made for clarity and easier reference.

Based on the preceding analysis, Duke Power Company concludes that the proposed amendment does not involve a significant hazard consideration.

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Attachment 3

Technical Justification

Technical Justification

The proposed Technical Specification revision addressed in this submittal concerns the deletion of Part C of Oconee Technical Specification 3.9.4, "Chemical Treatment Ponds (CTP 1 and 2)." The specification is based on the assumption that most or all of powdex resin transfers are to the CTP. In a situation where most or all resin transfer are to the Powdex Backwash Tank (PBT) (as has been the case at Oconee for the past five years), this specification can restrict transfers to the CTP far beyond the original intent of the specification.

Transfers to the CTP are allowed by Technical Specification 3.9.4(c) if the total radioactivity in each batch does not exceed 0.01% of the pond radio-nuclide inventory average quantity transferred to the pond during the previous thirteen weeks. In cases where no transfers have occurred during the previous thirteen weeks, the allowable activity transferred to the pond is restricted well-beyond the standard requirement stated in Technical Specification 3.9.4(b), which limits transfers to the pond in excess of 0.1% of the inventory limit (e.g., 5.1 μCi of I-131 per batch).

Consider the following examples of two separate thirteen week periods.

	<u>A</u>	<u>B</u>
Resin transfers to the CTP during previous 13 weeks:	20	1
Resin transfers to the PBT during previous 13 weeks:	<u>0</u>	<u>19</u>
Total transfers per 13 week period	20	20

Part C would allow all 20 resin transfers in period 'A' to be transferred to the CTP with an activity of 4.9 μCi of I-131 in each resin batch. This would result in a total transfer of 98 μCi during the thirteen week period.

Part C would not allow a single resin transfer of 5.2 μCi I-131 to the CTP in period 'B', and such a transfer during the thirteen week period would be a violation to Technical Specification 3.9.4(c).

This example shows that the intent of this specification is distorted in a situation wherein most or all of the resin transfers are to the PBT. The specification would allow 98 μCi of I-131 to be transferred in one period, but would not allow 5.2 μCi of I-131 to be transferred in another period. The intent of this restriction is outmoded and unnecessary and therefore should be deleted.

In addition, McGuire and Catawba Nuclear stations do not have these restrictions in their Technical Specification. Therefore, its deletion will more closely conform to the NRC's desire for standardized Technical Specifications per NUREG 0472.