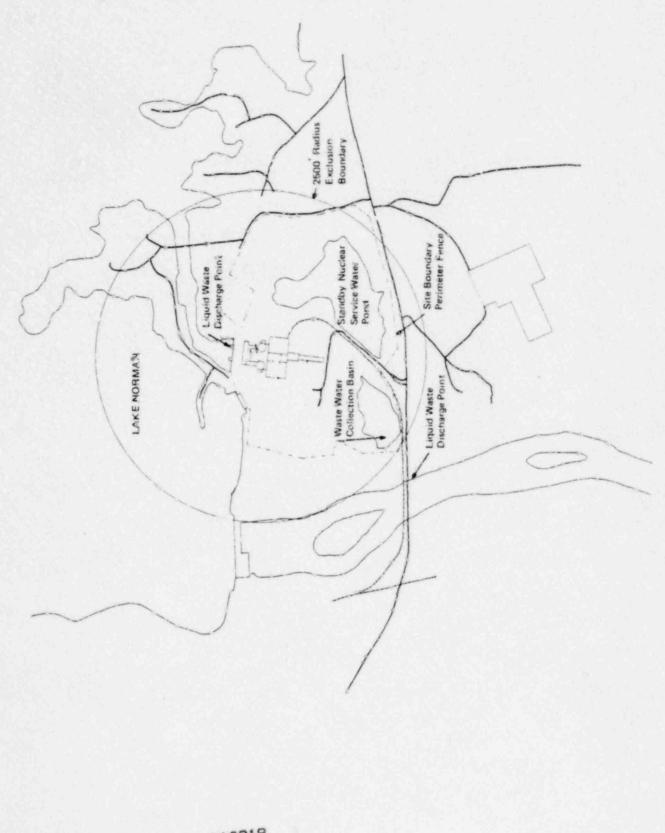
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ATTACHMENT II

Justification and Safety Analysis

The proposed change to the McGuire Technical Specifications, Section 5.0, Design Features, incorporates a second potential radioactive liquid effluent release point on Figure 5.1-4.

Normally the turbine building sumps are discharged to the conventional wastewater treatment system (WC) for treatment of chemical wastes and removal of oils through a system of basins with chemical addition and aeration; the treated wastes are discharged to the Catawba River in compliance with NPDES permit requirements. During primary to secondary leaks in steam generators, the turbine building sumps will become contaminated; depending on the magnitude of the leak and the level of contamination, the turbine building sumps may continue to be released to the WC system or may be routed to the normal liquid effluent discharge line for release to the condenser circulating water or to the waste collection tanks for processing prior to release.

The decision of which alternative should be used would depend on the level of activity, anticipated volumes of sump effluent, anticipated volumes of liquid waste requiring processing, potential for an oil spill, and on the need to process chemical wastes. There is a finite volume of effluent which can be processed by the liquid radwaste system, 27,500 gallons per day; the system normally processes 12,200 gallons per day. Depending on the type of primary to secondary leak, a weeper for example, a long run time with the leak could be anticipated; the turbine building sumps add 120,000 gallons per day which would exceed the system capacity.

All releases will be made in accordance with present effluent release technical specifications and, therefore, will not result in unacceptably higher concentrations of radioactive effluents released offsite. Each effluent release path is currently monitored to ensure that instantaneous radioactive release rates remain within 10 CFR 20 Appendix B limits. No radioactive effluent monitors are affected by this change, either by physical modification or by setpoint change, so that assurance will be maintained that instantaneous release rates remain within 10 CFR 20 limits. Technical Specification 3.3.3.8 (Table 3.3-12) lists operability requirements for radioactive liquid effluent monitoring instrumentation. Table 3.3-12 lists the following instrumentation which is provided in the conventional wastewater treatment line:

Item					

- 2 EMF-31 (Radioactivity Monitor)
- 3.b Continuous Composite Sampler and Sampler Flow Meter

Description

4.d Flow Rate Measurement Device

The table also requires compensatory action in the event any of these instruments are inoperable.

This instrumentation, together with concentration and dose limits for liquid effluent releases (Tech Spec 3.11.1.1 and 3.11.1.2) will assure that the addition of a second release pathway will not result in increased risk to public health and safety. As noted in Specification 4.11.1.1.2 and 4.11.1.2.2, the methodology and parameters for use in determining the impact of effluent releases are contained in Duke Power's Offsite Dose Calculation Manual (ODCM), which will be revised to include the second release point. Site-specific characteristics make groundwater monitoring unnecessary. Groundwater recharge is supplied from lake Norman and local precipitation. The groundwater gradient flows directly to the Catawba River; therefore, contamination of groundwater from liquid effluents is highly improtable.

The laboratory performing the radiological environmental analyses shall participate in an interlaboratory comparison program which has been approved by the NRC. This program is the Environmental Protection Agency's 'EPA's) Environmental Radioactivity Laboratory Intercomparison Studies (Crosscheck) Program.

In summary, the revisions to the Technical Specifications change only the physical descriptions of the station to reflect a second release point and do not affect either the instantaneous liquid effluent release rates or the annual dose resulting form all liquid effluent releases. Also unaffected is the existing radiological environmental monitoring program (Tech. Spec. 3/4.12-1, Table 3.12-1).

Analysis of Significant Hazards Consideration

The following evaluation, required by 10 CFR 30.91, concludes that the proposed changes do not involve a significant hazards consideration, as determined by the criteria presented in 10 CFR 50.92.

The proposed revision consists only of a figure change to show an additional potential radioactive effluent release point, to more accurately reflect station design and practice when operating with a primary to secondary steam generator leak.

The proposed changes will not alter existing procedures or equipment; therefore, no impact on the probability or consequences of any accident whether previously analyzed in the Final Safety Analysis Report or not, is possible.

The proposed amendment will also not involve a significant reduction in a margin of safety because no setpoints of effluent monitors are affected, and limits on the release of radioactive effluents are not changed.

Based upon the above, Duke Power Company concludes that the proposed amendments do not involve a significant hazards consideration.