ATTACHMENT 1
SURRY POWER STATION
PROPOSED TECHNICAL SPECIFICATION CHANGE
RADWASTE FACILITY GASEOUS EFFLUENT

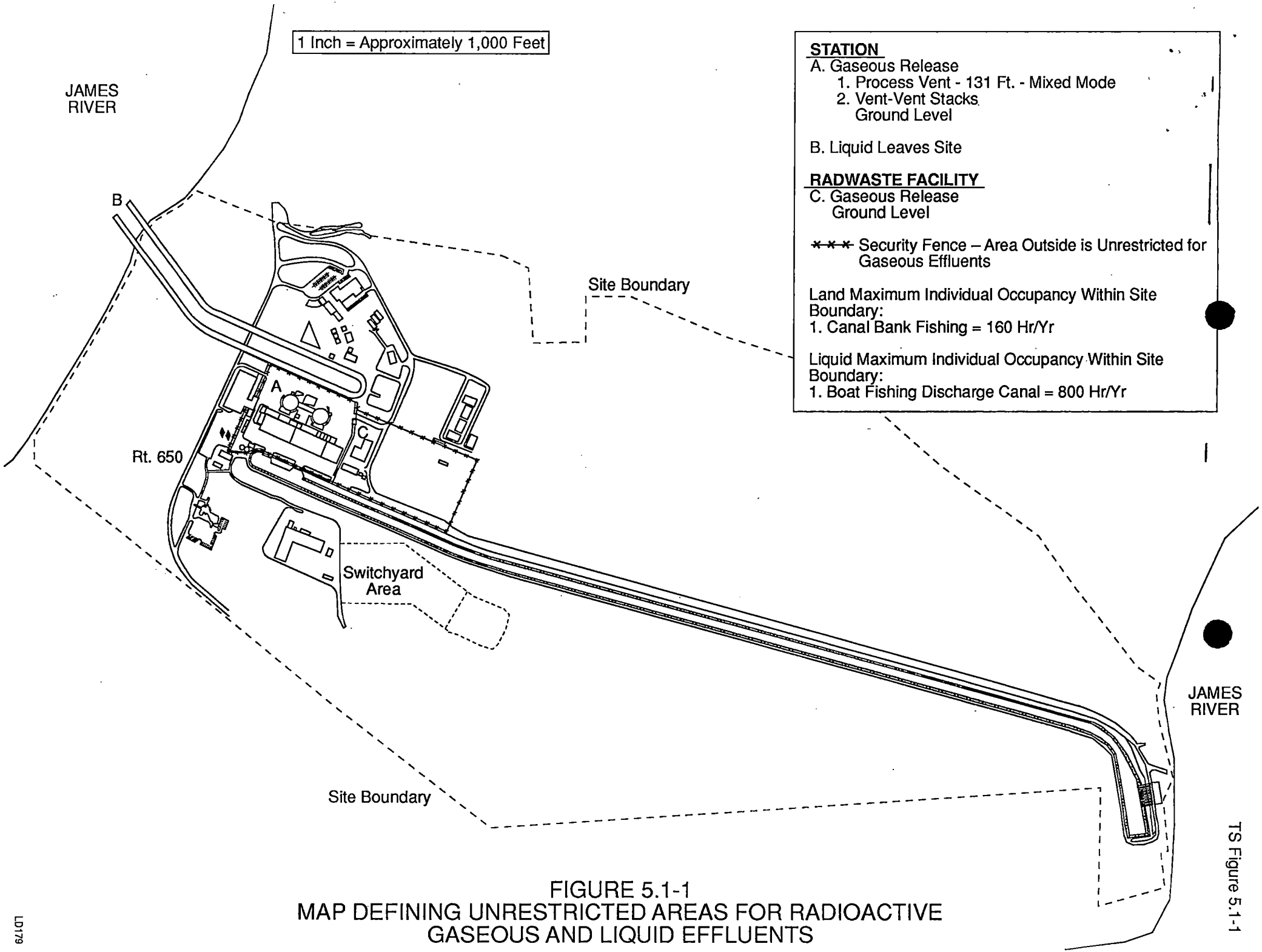

FIGURE 5.1-1
MAP DEFINING UNRESTRICTED AREAS FOR RADIOACTIVE GASEOUS AND LIQUID EFFLUENTS

ATTACHMENT 2
SURRY POWER STATION
PROPOSED TECHNICAL SPECIFICATION CHANGE
RADWASTE FACILITY GASEOUS EFFLUENT
SIGNIFICANT HAZARDS CONSIDERATION

BACKGROUND

The Radwaste Facility is being constructed to supplement the radwaste systems at Surry Power Station. The purposes of the installation are to treat liquid and solid waste, to provide a decontamination facility, and to store packaged processed radwaste prior to shipment. A safety evaluation has been developed with the results being that there is no increase in the radiological effluents or the risk of an accident. Therefore, the construction of the Radwaste Facility is being accomplished under the provisions of 10 CFR 50.59.

The Radwaste Facility is located east of the station just outside the protected area fence in the construction area. The Radwaste Facility has a radiation monitoring system to ensure the radiological protection of the facility personnel and members of the general public, as well as monitor, record, and control the release of radioactive materials.

The overall design approach in the construction of the Radwaste Facility was to ensure that quantity of radioactive effluents generated would be less than or equal to the amount presently generated. Our evaluation concludes that lower total station releases of radioactive materials in liquid effluents is achievable. Although the thyroid component of calculated dose from routine liquid radwaste increases slightly, the overall calculated Appendix I exposure would decrease with the use of the radwaste facility. The GI-LLI remains the most limiting organ with respect to dose. The liquid effluent discharge point for the Radwaste Facility is the same as the existing plant discharge point. In addition, the total gaseous release of radioactive material from the station will not increase as a result of the Radwaste Facility.

DISCUSSION OF CHANGE

Construction of a Radwaste Facility at Surry Power Station is being performed under the provisions of 10 CFR 50.59. Formal reporting of these station modifications will be made in accordance with Technical Specification 6.9 and by inclusion into the UFSAR after the facility becomes operational.

The proposed Technical Specification change incorporates the location of the gaseous effluent release point associated with the Radwaste Facility into the site map

Figure 5.1-1 in the Design Features section of the Technical Specifications. The purpose of that figure in Technical Specifications is to define the unrestricted areas with respect to the plant effluent release points. The proposed change is administrative in nature in that it simply identifies the gaseous release point for the Radwaste Facility. There are no limiting conditions for operation, action statements, or surveillance requirements associated with this section of the Technical Specifications. Since the liquid effluent discharge point for the site remains unchanged, no similar changes of Figure 5.1-1 are needed for the liquid effluents from the Radwaste Facility.

Additionally, the Station's Process Vent at 131 feet is being identifed as a mixed mode release point. The vent has been treated as a mixed mode release point but never identified as such in the Technical Specifications.

SIGNIFICANT HAZARDS CONSIDERATION

Virginia Electric and Power Company has reviewed the proposed changes against the criteria of 10 CFR 50.92 and has concluded that the changes as proposed do not pose a significant hazards consideration. Specifically, the proposed change is administrative in nature, in that it merely adds the Radwaste Facility gaseous release point to the Design Features section (Section 5) of the Technical Specifications. Thus, operation of the Surry Power Station in accordance with the proposed administrative changes will not:

1. Involve a significant increase in the probability of occurrence or consequences of any accident or malfunction of equipment which is important to safety and which has been evaluated in the UFSAR. The Radwaste Facility has been designed as a facility enhancement to improve the existing radwaste processing capabilities of the plant with the intent of reducing the overall quantity of radioactive effluents discharged from the plant. As part of off-gasing during liquid radwaste processing, a small portion of normal plant gaseous effluents will be discharged by way of the Radwaste Facility vent. This effluent would otherwise be discharged by way of the vent-vent stack. Processing radwaste in the Radwaste Facility rather than using the existing station's processes involves no significant increase in the probability or consequences of any accident previously evaluated in the UFSAR and is bounded by the Chapter 14 analyses. As for the specific proposed change to Technical

Specifications to incorporate the gaseous release point into Figure 5.1-1, it is administrative in nature and has no effect on analyzed accident probabilities or consequences.

2. Create the possibility of a new or different type of accident from those previously evaluated in the safety analysis report. As noted above, the Radwaste Facility is designed to improve upon existing radwaste processing capabilities. An evaporation process as well as a demineralization process will be used to process liquid radwaste. The original evaporation process has not been in use at Surry for several years, but a radioactive release due to failure of the evaporator had been previously considered in the original design basis. The calculated release is negligible with respect to the rupture of a waste gas decay tank. Within the scope of radwaste processing, the Radwaste Facility does not introduce any new or different type of accident. As for the specific proposed change, it is administrative in nature and has no effect on creating a new or different type of accident.

3. Involve a significant reduction in the margin of safety. Safety system operations are not being changed nor are any of the accident analysis assumptions being modified or exceeded by this change. As stated above, the Radwaste Facility has been designed to reduce the overall quantity of radwaste generated for discharge and its operation is bounded by the existing UFSAR analyses. As for the specific proposed change, it is administrative in nature and involves no overall change to safety system operations. The margin of safety is not changed by the administrative identification of the location of the Radwaste Facility gaseous release point in Figure 5.1-1.