

2.1 SITE LOCATION

SCE&G proposes to construct and operate two Westinghouse AP1000 reactors at the VCSNS site in Fairfield County, South Carolina. The two AP1000 reactors are referred to as Units 2 and 3 in this report.

Units 2 and 3 and supporting infrastructure would be sited in the area delineated in [Figure 2.1-1](#). The centerline of Units 2 and 3 would be approximately 4,700 feet south and 1,800 feet west of the center of the existing Unit 1 containment building.

The center point between the Units 2 and 3 containment would be at latitude N34° 17' 08" and longitude W81° 19' 15". In Universal Transverse Mercator, Zone 17 grid coordinates, the center of the reactor buildings is northing 3,793,856 and easting 470,479.

The VCSNS site is on the east side of the Broad River in western Fairfield County. The Unit 1 power block area circle (generating facilities and switchyard) is on the south shore of the Monticello Reservoir. Units 2 and 3 are approximately 1 mile south-southwest of Unit 1. An exclusion area, defined as the area within approximately 1 mile of Unit 1 combined with the area 3,390 feet from the center of Units 2 and 3 (the exclusion area boundary), would be posted and access to land portions of this area would be controlled. The current Unit 1 nuclear exclusion area boundary is not a perfect circle—its western axis is slightly longer (5,850 feet, or 1.11 mile) than its eastern axis (5,350 feet, or 1.01 mile) (SCE&G 1978). The exclusion area boundary represents the ultimate site boundary and encompasses approximately 2,560 acres. It includes the southern portion of the Monticello Reservoir and parts of the Fairfield Pumped Storage Facility. As described in Section 4.1, areas outside the ultimate site boundary would also be impacted by construction activities ([Figure 2.1-1](#)).

The VCSNS site is approximately 15 miles west of the Fairfield County seat of Winnsboro. The closest population center (*i.e.*, having more than 25,000 residents) to the site is Columbia, South Carolina, approximately 15 miles southeast of the VCSNS site ([Figure 2.1-2](#)). The closest community is Jenkinsville, approximately 3 miles southeast of the site ([Figure 2.1-3](#)).

Road access to the site is via County Road 311, which intersects with State Route (SC) 215 approximately 1.5 miles east of Unit 1 ([Figure 2.1-3](#)). A railroad spur runs to the site from the Norfolk Southern Transportation track from Columbia to Spartanburg (Norfolk Southern, undated). [Figure 2.1-4](#) is an aerial photograph of the site.

Section 2.1 References

1. Norfolk Southern (Norfolk Southern Corporation) Undated. *Norfolk Southern Railway System in South Carolina*.
2. SCE&G 1978. *Virgil C. Summer Nuclear Station Operating License Environmental Report (Volume 1), Amendment 3*, Columbia, South Carolina, 1978.

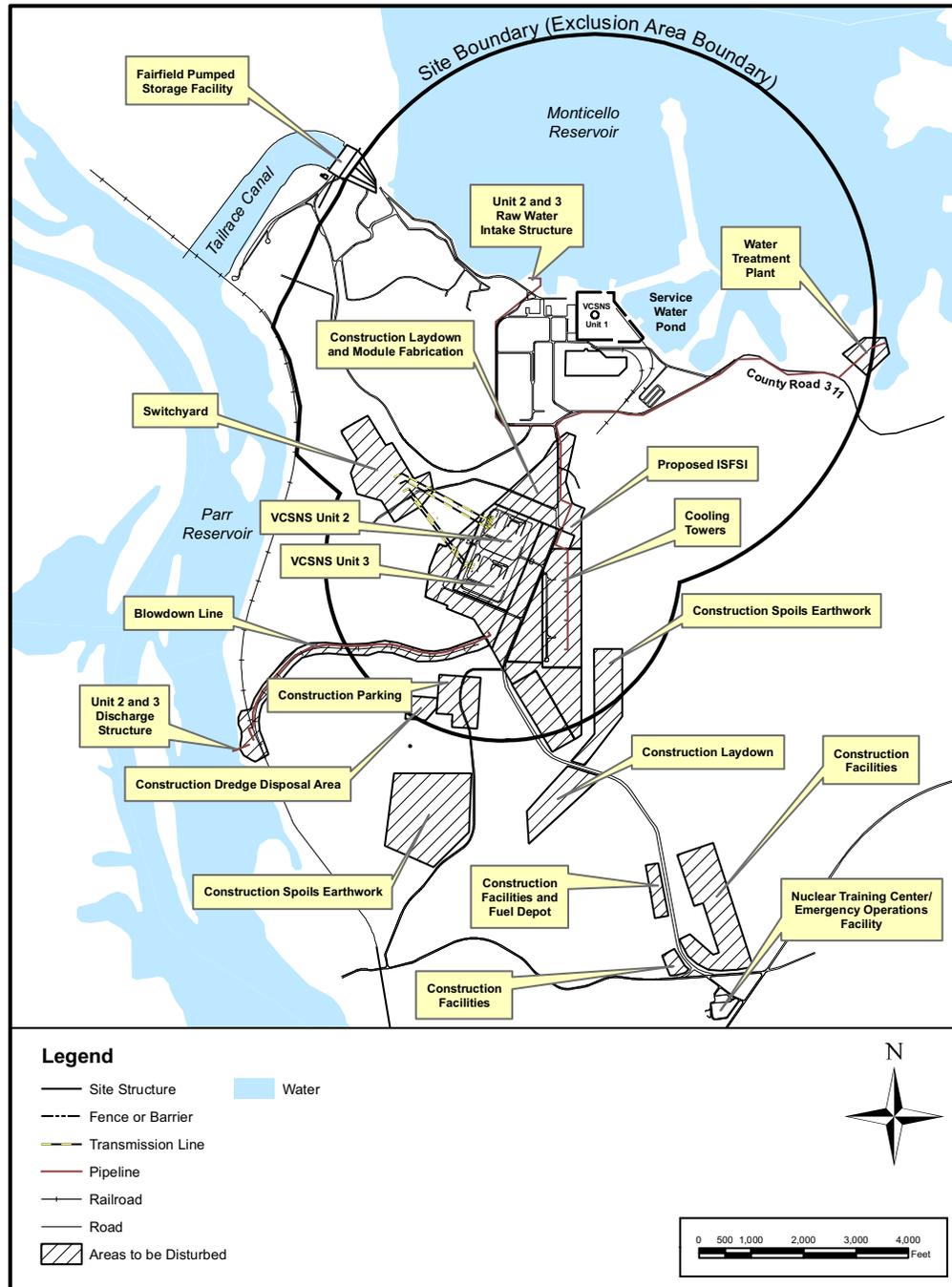


Figure 2.1-1. VCSNS Site and Proposed Plant Footprint

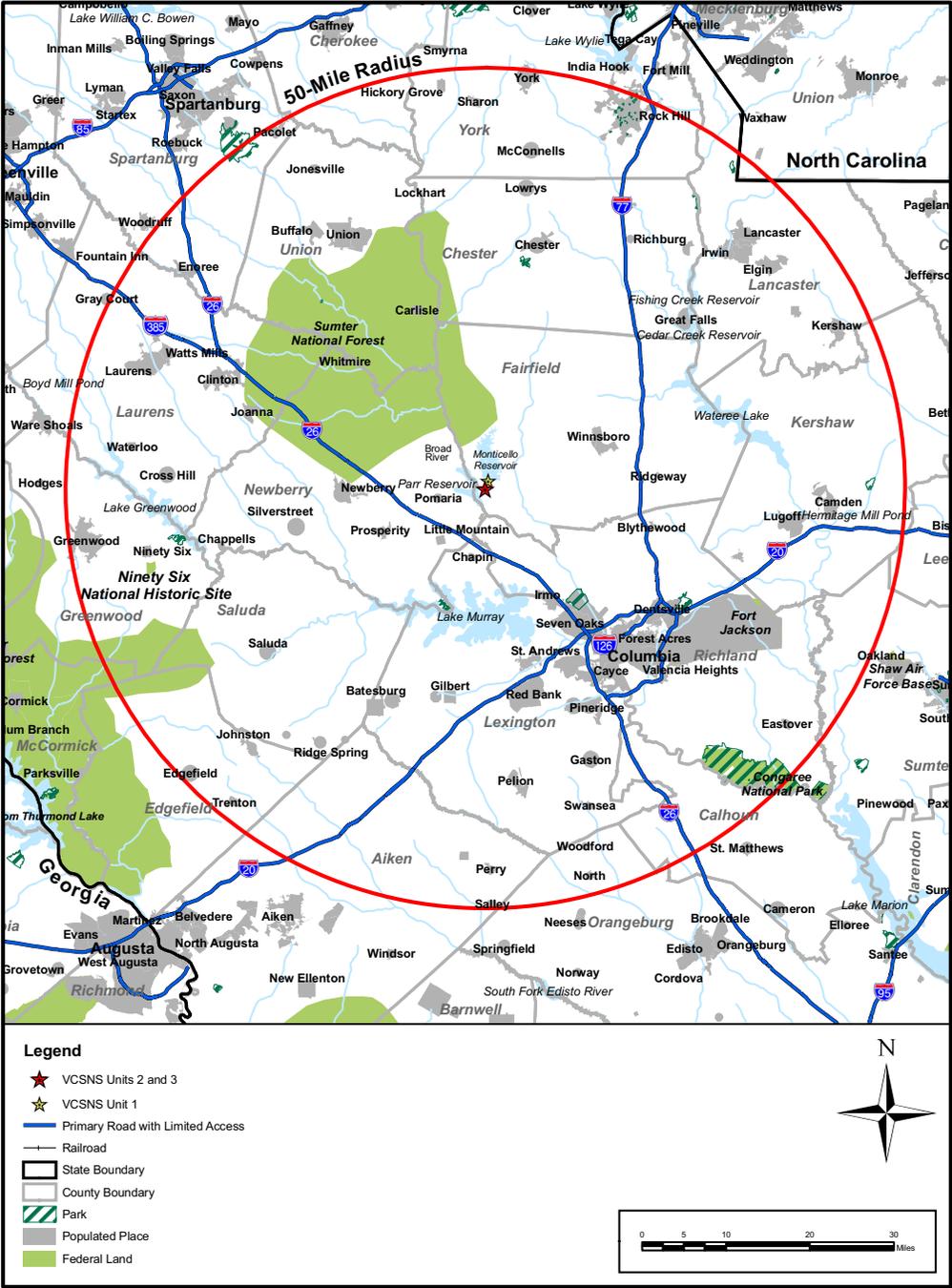


Figure 2.1-2. 50-Mile Vicinity

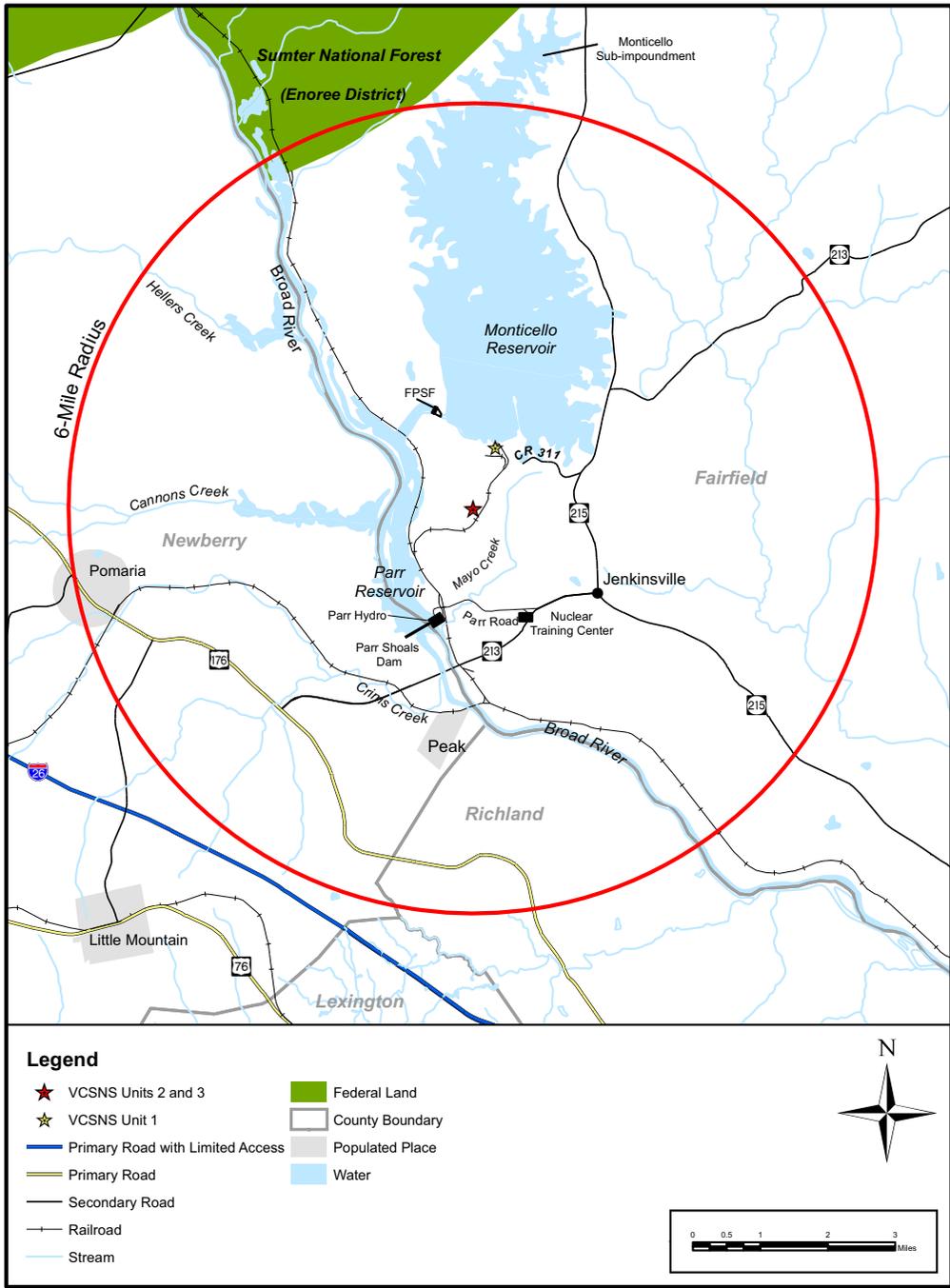


Figure 2.1-3. 6-Mile Vicinity

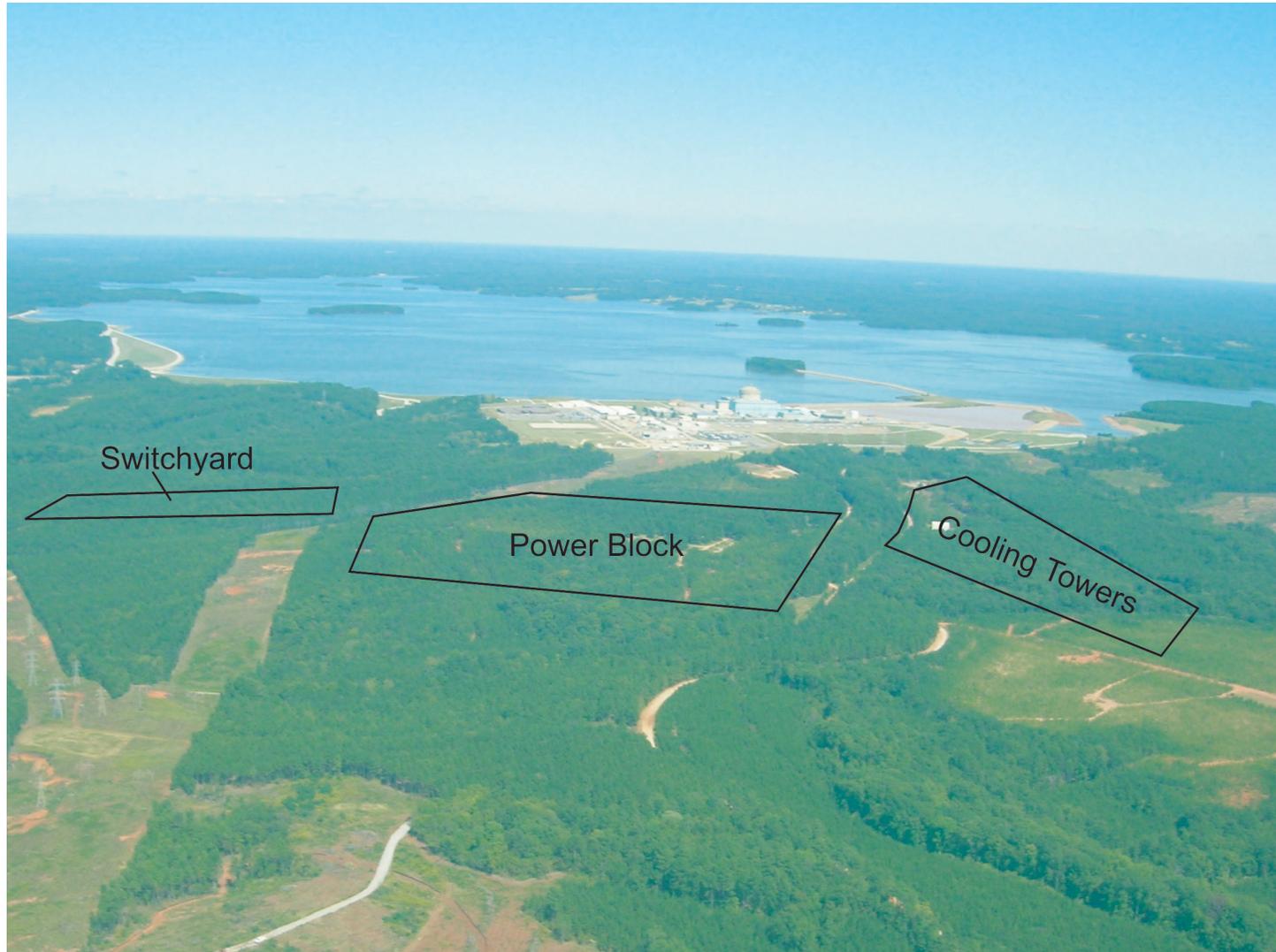


Figure 2.1-4. Oblique Aerial Photograph of VCSNS Site