

**Levy Nuclear Plant Units 1 and 2
COL Application
Part 2, Final Safety Analysis Report**

filled to a nominal grade of 15.2 m (50 ft.) NAVD88, affecting the current drainage pattern. The LNP site will drain by a stormwater sewer system and the peripheral areas of the LNP site will drain through open ditches and culverts to stormwater retention ponds. Stormwater from the retention ponds will be pumped to the cooling water tower basins, if needed. If the drainage system becomes blocked, the LNP site can be drained by overland flow directly to the Lower Withlacoochee River or the Gulf of Mexico.

Seismic Category I structures that should be considered from the hydrologic standpoint include safety-related structures such as the following nuclear island structures: basemat, the containment interior, the shield building, the containment air baffle, and the auxiliary building. [Section 3.2](#) of this Final Safety Analysis Report (FSAR) provides details related to these structures.

Wherever possible, elevations presented in this section are presented with a consistent vertical datum of NAVD88. Where elevation information is not available with a vertical datum of NAVD88, elevation information is presented with a vertical datum of NGVD29. For the LNP site, there is an approximate -0.3 m (-1 ft.) difference between elevations measured with these datums. At the LNP site, elevations measured with a NAVD88 datum are lower than those measured with a NGVD29 datum; therefore, to convert an elevation given with a NGVD29 datum to an elevation with a NAVD88 datum, add the conversion factor to the NGVD29 elevation. Specific conversions are sometimes given at known points.

LNP COL 2.4-1

2.4.1.2 Hydrosphere

2.4.1.2.1 Levy Nuclear Plant Site

The majority of the LNP site lies within the Waccasassa River Drainage Basin, but a small portion of the site lies in the Withlacoochee River Drainage Basin ([Figures 2.4.1-209](#) and [2.4.1-210](#)). The northern portion of the LNP site lies within the Spring Run Subbasin of the Waccasassa River Basin. The central portion of the LNP site, which includes LNP 1 and LNP 2, lies within the Direct Runoff to Gulf Subbasin of the Waccasassa River Basin. The southeastern corner of the LNP site lies within the Withlacoochee River Basin. In addition, Lake Rousseau and the CFBC, along with the Withlacoochee River, lie within the Withlacoochee River Basin.

There are no named streams at the LNP site. Runoff from the site is primarily overland, with storage provided by wetlands. The general direction of overland flow is to the southwest toward the Lower Withlacoochee River and the Gulf of Mexico ([Reference 2.4.1-203](#)). Major freshwater bodies in the vicinity of the LNP site include the Withlacoochee River and Lake Rousseau. Lake Rousseau is located approximately 4.8 km (3 mi.) south of the LNP site. The Withlacoochee River and the Rainbow River are the primary sources of water to Lake Rousseau. The CFBC contains mostly saline water from the Gulf of Mexico. The Gulf of Mexico is located approximately 12.8 km (7.9 mi.) west of the LNP site.

Rev. 2 |