10.2.2 NPDES Permit Application

Once intermingled with the CWS basin, this stormwater becomes part of the blowdown discharge.

Stormwater associated with the access and haul roads, and barge slip will not be collected, but will be permitted under the ERP program as applicable. The facilities for stormwater treatment from the power generation pad will also be sized to ERP program standards, prior to reuse.

ANTIDEGRADATION DEMONSTRATION

The permitting requirements in Chapter 62-4.242 F.A.C. list the antidegradation factors that must be considered in making a determination that a discharge is necessary and desirable under federal standards and is in the public interest, which include:

- Whether the proposed project is important to and is beneficial to the public health, safety, and welfare

  The LNP meets the public interest test because the project will provide electric power in compliance with all applicable regulatory requirements. Ultimately a decision about the need for this new power plant will be made by the Public Service Commission of the State of Florida. Without a Determination of Need from the PSC, the project will not go forward.

- Whether the proposed discharge will adversely affect conservation of fish and wildlife, including endangered or threatened species

  By having an internal discharge to the CREC facility, the potential environment impacts have already been accounted for in an existing permit. The expected LNP discharge temperature is lower than the CREC permit limits and, in fact, the LNP discharge is expected to cool the existing flows.

  Provisions will be made to minimize impacts during construction and the facilities have been designed to comply with applicable regulatory criteria.

- Whether the proposed discharge will adversely affect the fishing or water-based recreational values or marine productivity in the area

  By having an internal discharge to the CREC facility, the potential environment impacts have already been accounted for in an existing permit. The expected LNP discharge temperature is lower than the CREC permit limit. The LNP discharge is expected to have a minor affect on existing CREC discharge conditions and no significant impacts to aquatic biota in the CREC discharge canal vicinity are expected.

- Consistency with any Surface Water Improvement and Management (SWIM) Plan

There is no SWIM plan for the portions of the water bodies near the LNP facilities. The Lower Withlacoochee River is an Outstanding Florida Water and it requires special consideration. The LNP site has no streams that directly discharge stormwater off-site. The runoff from the site will be by sheet flow, and it is located approximately 4 miles from the river. Stormwater from impervious areas at LNP will be treated prior to release to the level that the rules require. The predominant water supply for the cooling water will come from the Gulf of Mexico (via the CFBC), thus avoiding the river. The discharge will be to the CREC discharge to the Gulf. Therefore, the project is designed to avoid any SWIM or other sensitive water bodies.

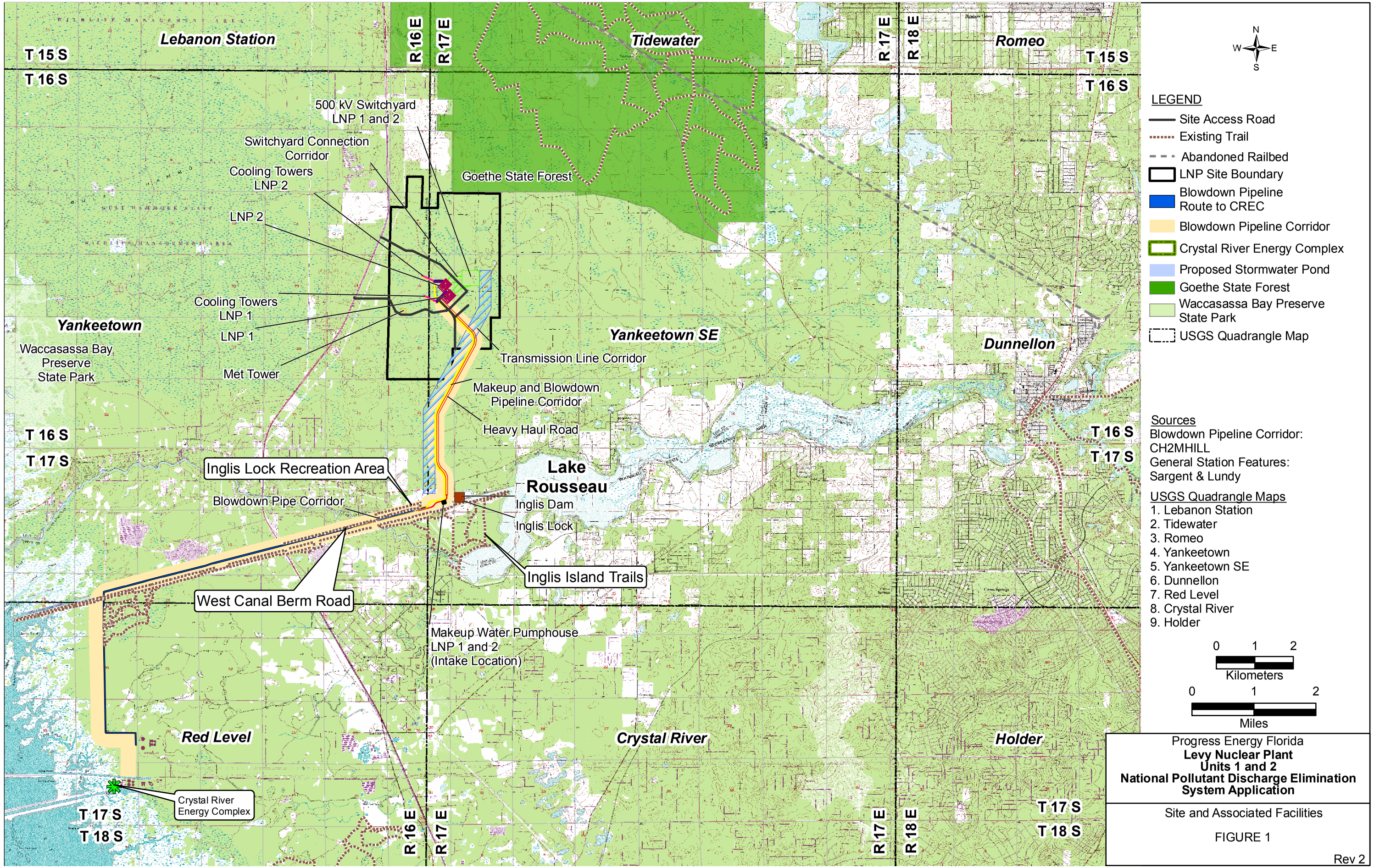
- Demonstration that other discharge locations, land application, or recycling, are not feasible

  The LNP amply fulfills the objective of providing for beneficial reuse of industrial wastewater. No off-site additional reuse alternative or land application options appear to be feasible. Similarly, no alternative discharge locations appear to be preferable to the currently utilized, previously approved, outfall at CREC.

- Verification of waste minimization and source reduction

  The LNP design inherently features waste minimization and source reduction concepts. Best Management Practices for stormwater and other treatment requirements will be met. The Professional Engineer signature affixed to this NPDES application confirms that the cited rule requirement will be met.

Since the LNP discharge will be permitted as an internal discharge to the CREC facility, the affect on the CREC permits is currently being assessed further by PEF. Additional permit modifications for CREC facility are anticipated as a result of this application, but will be filed separately when those permits are renewed in their next cycle. The proposed LNP project is consistent with the applicable antidegradation considerations listed above.

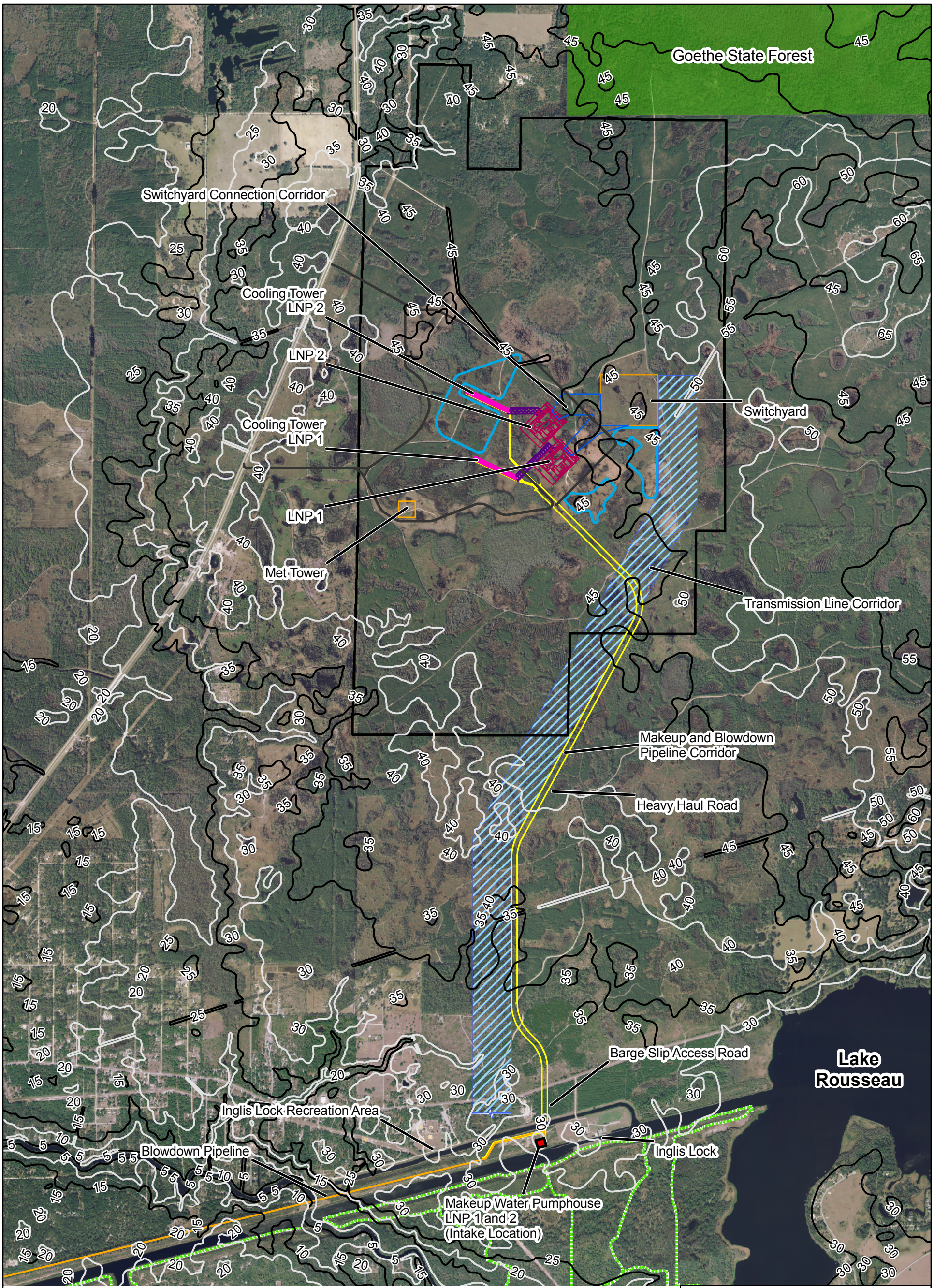


Progress Energy Florida
Levy Nuclear Plant
Units 1 and 2
National Pollutant Discharge Elimination System Application

Site and Associated Facilities

FIGURE 1

Rev 2



LEGEND

- Elevation Contour
- Elevation Contour
- Site Access Road
- Existing Trail
- Pond
- Goethe State Forest
- LNP Site Boundary

N W E S

0 0.5 1 Kilometer

0 0.5 1 Mile

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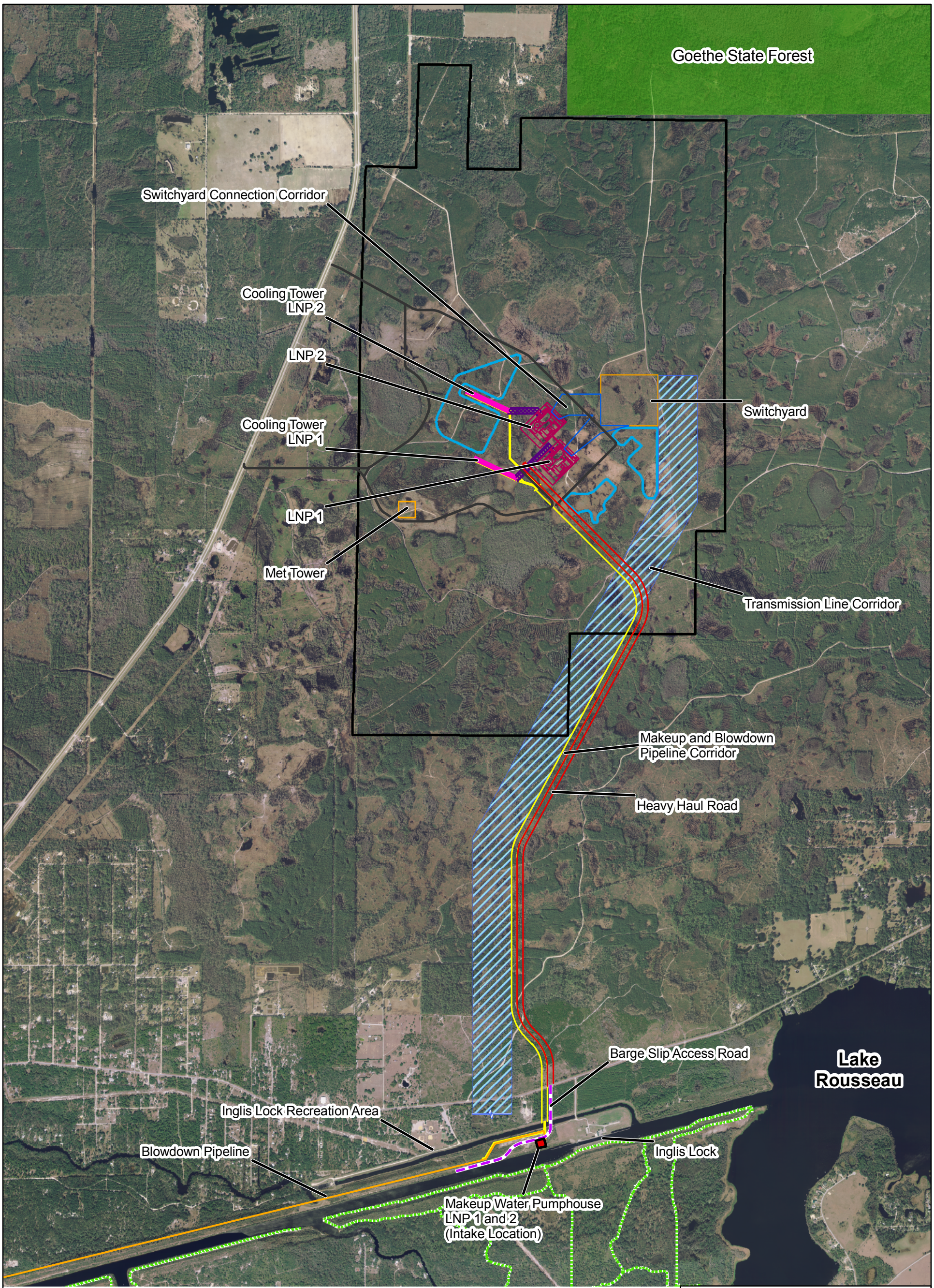
Levy Nuclear Plant
LNP Units 1 and 2
316(b) Demonstration

LNP Major Station Features

FIGURE 1-3 Rev 2

10.2.5 PSD Air Construction Permit Application



LEGEND

- Site Access Road
- Existing Trail
- Pond
- Goethe State Forest
- LNP Site Boundary

N
W E
S

0 0.5 1
Kilometer

0 0.5 1
Mile

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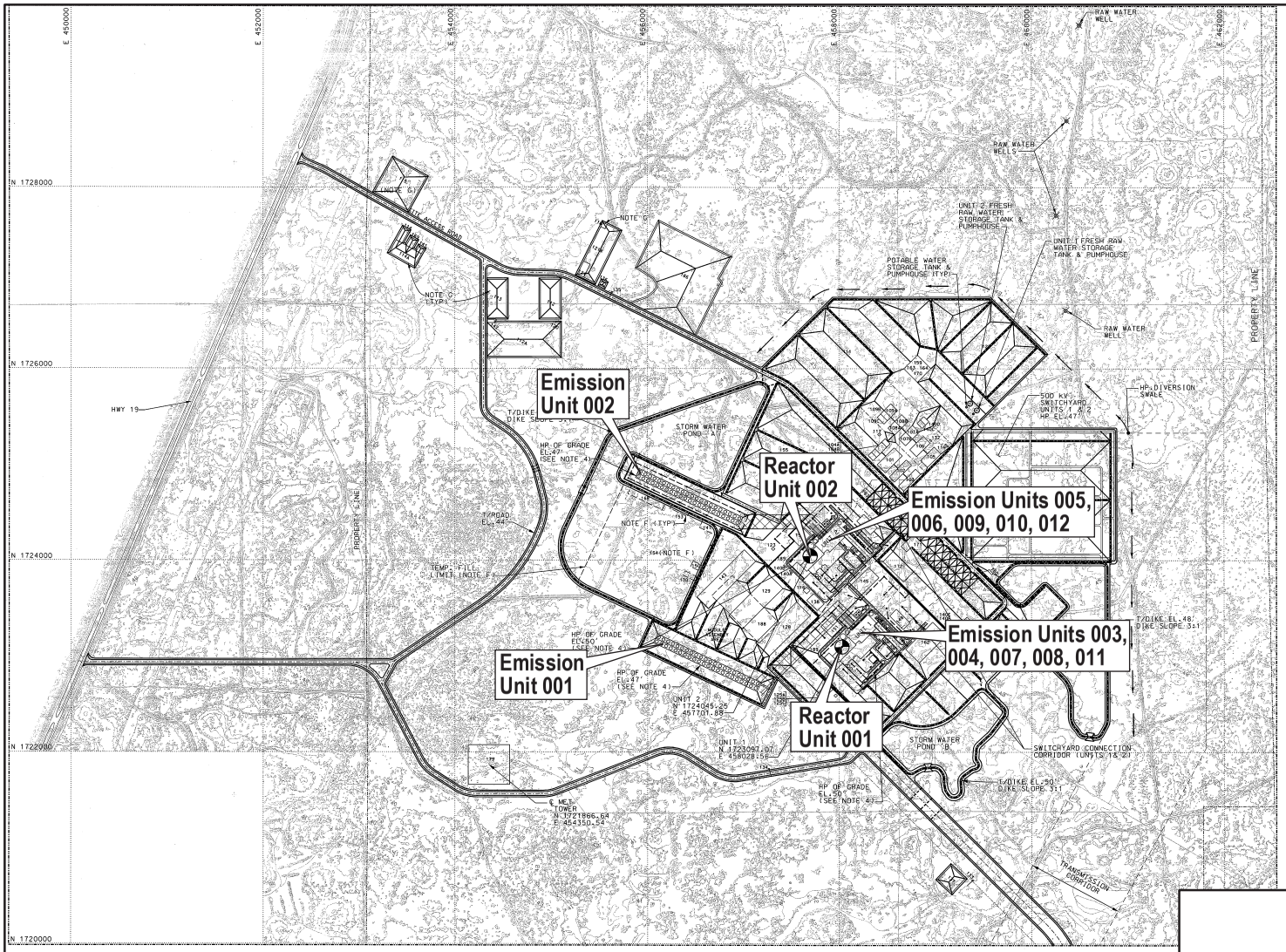
Levy Nuclear Plant
Units 1 and 2
Prevention of Serious Deterioration
Permit Application

Site Location Map

FIGURE 2-1

Rev 2



N
W E
S

0 900 1800
Feet

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Units 1 and 2
Prevention of Serious Deterioration
Permit Application

Proposed Facility Layout

FIGURE 2-2

Rev 2