



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

October 6, 2010

Chief  
Rules, Rulemaking and Directives Branch  
Mail Stop TWB-05-B01M  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Sir or Madame:

**Subject: Progress Energy Levy Nuclear Plant Units 1 & 2  
Draft Environmental Impact Statement  
Combined License Application Review**

Thank you for providing the South Florida Water Management District (SFWMD) with the opportunity to participate in the review of the Draft Environmental Impact Statement (DEIS) for this project. The SFWMD is a regional governmental agency that oversees the water resources in the southern half of Florida, including 16 counties from Orlando to the Florida Keys with a population of more than 7.5 million. The SFWMD is the oldest and largest of the state's five water management districts.

Charged with safeguarding the region's water resources, the SFWMD is responsible for managing and protecting water quality, flood control, natural systems and water supply. The SFWMD operates and maintains the Central and Southern Florida (C&SF) Project, one of the world's largest water management systems. The C&SF Project consists of many miles of canals, levees, water storage areas, pump stations, and other water control structures.

The SFWMD is also the lead state agency in the Federal-State initiative to restore America's Everglades through the Comprehensive Everglades Restoration Plan (CERP), the largest environmental project in North America. The CERP is a framework for restoring, protecting and preserving the water resources of central and southern Florida. The CERP is a 30-year, 50-50 partnership between the State of Florida and the Federal government. The State of Florida and the SFWMD have invested approximately \$2.4 billion toward this effort, including approximately \$300 million in construction, as of June 30, 2010.

The alternative power plant site referred to in the DEIS as the "Highlands Site" is located in the SFWMD's jurisdictional boundaries. The SFWMD offers the following comments which focus on this alternative site:

### Ecosystem Restoration

- The Kissimmee River Restoration Project is an ongoing effort to restore approximately 40 miles of river and associated floodplains at the headwaters of America's Everglades. The Highlands Site would impact the Kissimmee River Restoration Project. To date, the SFWMD has invested over \$259 million to acquire 104,542 acres of land for the Kissimmee River Restoration Project. Total project costs are currently estimated at \$640 million dollars.
- Although water would not be withdrawn directly from the restoration area, artificial lowering of Pool E (i.e., any condition that does not mimic the climatic cycle at the time) could negatively impact hydrological conditions of the restoration area that is immediately upstream. A section of restored river channel will pass the S-65D structure to the west and link to the C-38 Canal in Pool E. The premise of the restoration project is to re-create historic hydrological conditions on a restored physical habitat template that will allow functional, physical, chemical, and biological attributes of the ecosystem to respond naturally. The SFWMD must conduct ecological response monitoring under a 1994 Project Cooperative Agreement with the United States Army Corps of Engineers (USACE) to document restoration progress. The artificial lowering of Pool E, if it was to occur, could change the slope of the water surface profile, causing the restored river reach to drain portions of the associated floodplain more quickly, thus shortening floodplain hydroperiods and increasing recession rates. Re-establishing historic floodplain hydroperiods is critical to the re-establishment of wetland plant communities that will provide habitat for over 300 species of responding fish and wildlife. In addition, this section of the river must be managed carefully, following restoration construction, to minimize scouring due to naturally occurring gradient issues.
- The Northern Everglades and Estuaries Protection Program (NEEPP) promotes a comprehensive, inter-connected watershed approach to protecting Lake Okeechobee and the Caloosahatchee and St. Lucie Rivers and estuaries and recognizes the importance and connectivity of the entire Everglades ecosystem from the Kissimmee Chain of Lakes south to Florida Bay. The primary goal of the legislation is to restore and protect surface water resources by addressing water quality, quantity, and the timing and distribution of water to the natural system. Prior to construction of a power plant and associated facilities at this location, it must be demonstrated that construction, operation, and maintenance activities can be performed in a manner consistent with the NEEP legislation. The power plant should not adversely impact water quality and storage targets for the Lake Okeechobee watershed. The project will need to be consistent with

the necessary nutrient load reductions identified in Section 373.4595, Florida Statutes, including the Lake Okeechobee Watershed Construction Project Phase II Technical Plan and the established Total Maximum Daily Load (TMDL) for Lake Okeechobee and NEEPP. Existing water quality in the Lake Okeechobee watershed is significantly influenced by the various land use and land management practices within the individual sub-watersheds and drainage basins of the watershed. The Lake Okeechobee watershed is subject to NEEPP, the Lake Okeechobee Watershed Comprehensive Everglades Restoration Plan, the Lake Okeechobee Watershed Construction project Phase II Technical Plan, and the established phosphorus TMDL for Lake Okeechobee.

#### Water Supply

- The SFWMD is currently in rule development to reserve water in the Kissimmee River, floodplain, and chain of lakes. The reservation water bodies subject to rule development extend south to the S-65E structure. The intent of the rule is to ensure that existing surface water necessary for fish and wildlife will not be allocated for consumptive use. Additional details concerning this proposed water reservation are available at the following web link:

[http://www.sfwmd.gov/portal/page/portal/pg\\_grp\\_sfwmd\\_koe/pg\\_sfwmd\\_koe\\_kwr](http://www.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_koe/pg_sfwmd_koe_kwr)

- Based on review of diagrams provided by the U.S. Army Corps of Engineers, the plant intake pipe would be located downstream of the restoration area in Pool E, near the confluence of the C-41A and C-38 Canals. The plant withdrawals would be 45 MGD. The proposed withdrawals may negatively impact navigation in a canal used by the River Acres community during dry or drought conditions. The River Acres community is located at the southern end of Pool D adjacent to the S-65D water control structure. As part of the flood protection and mitigation engineering, in lieu of land acquisition, the navigation canal for this community will be linked hydrologically to Pool E after completion of construction. The navigation canal for the community is being dredged to a depth to allow for continued navigation at the lower surface water elevation associated with Pool E.
- The Kissimmee River discharges into Lake Okeechobee. Any plant withdrawals from the Kissimmee River south of the S-65E structure could also impact water availability in Lake Okeechobee, which is a source of limited availability.
- Although withdrawals are proposed from the Kissimmee River, the project site is located within the Indian Prairie Basin, which is a Restricted Allocation Area, pursuant to Section 3.2.1 of the SFWMD's Water Use Basis of Review. Within this Basin, no additional surface water will be allocated from SFWMD controlled

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surface water bodies over and above existing allocations. In addition, there is a Water Rights Compact between the SFWMD and the Seminole Tribe of Florida for the Brighton Indian Reservation, located two miles south of the project site, whereby the Seminole Tribe of Florida is entitled to fifteen percent of the surface water within the Indian Prairie Basin. Therefore, the availability of water from this basin is limited. It should also be noted that the availability of ground water from the surficial or Floridan aquifers in large quantities is also problematic. The SFWMD is currently investigating ground water availability within this area.

- Any proposed construction of withdrawal or other facilities within SFWMD right-of-way including, but not limited to, the C-38, the C-41A, or any other designated Work of the District, will require prior SFWMD review and approval to ensure that there will be no interference with SFWMD operation and maintenance activities.

If you have any questions concerning the above, please do not hesitate to contact me at (561) 682-6862.

Sincerely,



James J. Golden, AICP  
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Intergovernmental Policy and Planning Division  
South Florida Water Management District

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