

ENCLOSURE 2

**Summary of Comments on the Draft Environmental Assessment and
Draft Finding of No Significant Impact**

Background:

The U.S. Nuclear Regulatory Commission (NRC) staff published a notice in the *Federal Register* requesting public review and comment on the draft Environmental Assessment (EA) and draft Finding of No Significant Impact (FONSI) on November 17, 2011 (76 FR 71379), and established December 19, 2011, as the deadline for submitting public comments. By letters dated December 9, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11347A194), and December 12, 2011 (ML12027A023), comments were received from Florida Power & Light Company (FPL) and Mr. Steve Torcise, Jr., of the Atlantic Civil, Inc., respectively. FPL comments provided new estimates on the number of additional workers needed to support the outage work implementing the proposed Extended Power Uprate (EPU) and revised the projected outage times necessary to implement the EPU. FPL comments have been incorporated into this final EA with no change to the FONSI conclusion. Atlantic Civil, Inc., comments have been incorporated into this final EA with no change to the FONSI conclusion and are summarized below. Also, by letter dated January 12, 2012 (ML12019A348), the Southeast Regional Office of the U.S. Department of the Interior's National Park Service provided comments on the draft EA and draft FONSI. Since these comments were received after the comment period deadline of December 19, 2011, the NRC will address these comments using separate correspondence.

Disposition of Atlantic Civil, Inc. Comments

Summary of Comments:

1. FPL claims that the cooling canal is a closed system, but obviously it is not. FPL's monitoring data shows that the unlined cooling canal system exchanges water with adjacent

ground water. FDEP designated the groundwater within the cooling canal system as G-III waters (non-potable aquifer not subject to compliance with groundwater standards) and the NPDES Permit only authorized a discharge to those G-III waters. FPL's groundwater monitoring data shows that contaminants from the cooling canals have migrated west of L-31E and the interceptor ditch into G-II waters (See the attached figures).

2. In anticipation of directly causing saltwater intrusion, the interceptor ditch was intended " . . . *to restrict movement of saline water from the cooling water system westward of Levee 31E adjacent to the cooling water system to those amounts which would occur without the existence of the cooling canal system.*" (SFWMD, 1983). The interceptor ditch has not been effective and has not contained the hypersaline water of the cooling canal system. FPL's monitoring data confirms this (See the attached figures 2 & 3). These figures show the chloride and tritium data collected by FPL in December 2010 and February 2011 respectively as an overlay on Figure 1 [Figures 1, 2, & 3 are provided in the December 12, 2011 letter]. This indicates water quality violations and warrants remedial action by FPL to correct the problem before the uprate is initiated.
3. FPL has not acknowledged, controlled or adequately addressed the existing water quality violation. The proposed uprate will increase the salinity in the cooling canal system, which will exacerbate the existing water quality violation.
4. Because of this unaddressed water quality violation, other property owners have had to go to extraordinary efforts and costs to prove that saltwater intrusion has not reached their property. The NPDES permit did not authorize any injury to the public or private property or any invasion of personal rights, nor authorize infringements of federal, state or local laws or regulations. The rights of nearby property owners clearly have been violated by the cooling system's influence on saltwater intrusion.

5. Until FPL addresses the existing water quality violations, the facility should not be allowed to increase its output and there should not be a Finding of No Significant Impact for the proposed uprate without mitigating the existing significant adverse impacts of the CCS. This Draft Environmental Assessment must mandate a solution to the impacts being cause by the CSS today and the increased impacts that will result from the uprate.

NRC Response:

As discussed in the EA, the closed-cycle cooling canal system (CCS), permitted by the State of Florida as an industrial wastewater facility, is used for the cooling of heated water discharged from the main condensers and auxiliary systems of Turkey Point (PTN) Units 1 through 4. The CCS is operated under an industrial wastewater facility “No Discharge” National Pollutant Discharge Elimination System (NPDES) permit issued by the State of Florida Department of Environmental Protection (FDEP) for water discharges to an onsite closed-loop recirculation cooling canal system. In this case, closed-loop recirculation means that the cooling canal does not have a pipeline connection with water bodies surrounding the PTN site such as Biscayne Bay for receiving or discharging its water. Monitoring data show that there is indirect surface water communication between the CCS and Biscayne Bay. The NRC staff revised the surface water and aquatic resources sections in the final EA to clarify that there is some water exchange between the cooling canal and other water systems and that aquatic species within the cooling canal are unable to travel into or out of the canal system.

The FDEP completed a thorough and comprehensive review under the Florida Electrical Power Plant Siting Act and issued a site certification to FPL approving the proposed EPU for PTN Units 3 and 4. In accordance with the FDEP site certification process for the proposed EPU, FPL must meet state imposed requirements contained in the Conditions of Certification (CoC). The CoC was developed based on interactions by FPL with the FDEP and other stakeholders during the FDEP site certification process. The inclusion of stakeholders’

recommendations into the CoC formed the basis for FDEP recommending approval of the site certification application for the proposed EPU. The CoC requires FPL to have a program to monitor and assess the potential direct and indirect impacts to ground and surface water from the proposed EPU. The monitoring includes measuring water temperature and salinity in the CCS and monitoring the American crocodile populations at the PTN site. The monitoring plan expands FPL's monitoring of the CCS's ground and surface water to include the land and water bodies surrounding the PTN site such as Biscayne Bay. The implementation of the CoC monitoring plan is an ongoing program coordinated by FDEP. The results of the monitoring will be publicly available via a South Florida Water Management District (SFWMD) website. If the proposed EPU is approved by the NRC, the CoC monitoring plan would continue to assess the environmental impacts. Among other measures, the CoC allows FDEP to impose additional measures if the monitoring data is insufficient to adequately evaluate environmental changes, or if the data indicates a significant degradation to aquatic resources by exceeding State or County water quality standards, or the monitoring plan is inconsistent with the goals and objectives of the Comprehensive Everglades Restoration Plan Biscayne Bay Coastal Wetlands Project. Additional measures could include enhanced monitoring, modeling, or mitigation. Abatement actions provided in the CoC include: mitigation measures to comply with State and local water quality standards, which may include methods to reduce and mitigate salinity levels in groundwater; operational changes to the PTN cooling canal system to reduce environmental impacts; and other measures required by FDEP in consultation with SFWMD and Miami-Dade County to reduce the environmental impacts to acceptable levels.

Non-radiological conditions in the PTN cooling canal system are the responsibility of the State of Florida and its regional regulatory agencies. The implementation of the CoC monitoring plan is an ongoing program coordinated by FDEP. FDEP is responsible for evaluating the

monitoring data and has authority to impose mitigation measures, as appropriate, to ensure aquatic resources are adequately protected.

All radiological effluent discharges into the cooling canal are monitored and controlled in accordance with NRC regulations. NRC regulations require that radioactive gaseous and liquid releases from nuclear power plants be monitored and must meet radiation dose-based limits specified in 10 CFR Part 20, the “as low as is reasonably achievable” (ALARA) dose criteria in Appendix I to 10 CFR Part 50, and the Environmental Protection Agency’s radiation protection standards in 40 CFR Part 190. These regulations limit the radiation dose that members of the public might receive from radioactive material released by a nuclear power plant. Nuclear power plants are required to submit an annual report to the NRC on the types and amounts of radioactive gaseous and liquid effluents released into the environment each year. The annual radioactive effluent release reports submitted to the NRC are available to the public through the NRC’s ADAMS electronic reading room on the NRC website (www.nrc.gov).

The NRC provides continuous oversight of each plant under the NRC’s inspection and enforcement programs. The NRC’s Reactor Oversight Process integrates the NRC’s inspection, assessment, and enforcement programs. The operating reactor assessment program evaluates the overall safety performance of operating commercial nuclear reactors and communicates those results to licensee management, members of the public, and other government agencies. The assessment program collects information from inspections and performance indicators in order to enable the NRC to arrive at objective conclusions about a licensee’s safety performance. Based on this assessment information, the NRC determines the appropriate level of agency response, including supplemental inspection and pertinent regulatory actions ranging from management meetings up to and including orders for plant shutdown. The NRC conducts follow-up actions, as applicable, to ensure that the corrective actions designed to address performance weaknesses are effective.

Clarifying and corrective changes were made to the EA based on the comments received. No changes were made to the EA's finding of no significant environmental impact.