



United States Department of the Interior

National Park Service

Biscayne National Park
9700 SW 328 Street
Homestead, FL 33033



Refer to:
N-16

June 2, 2008

Cindy Mulkey
Engineering Specialist
Florida Energy Office Siting Coordination
Florida Department of Environmental Protection

Ms. Mulky:

Thank you for the opportunity for Biscayne National Park to comment on the Turkey Point Nuclear Uprate project. As you know, the Turkey Point site lies immediately adjacent to Biscayne National Park and any activities at the site have the potential to provide beneficial or adverse impacts to the natural resources of the National Park.

Biscayne National Park has two main concerns which we do not believe have been adequately addressed to date during the certification process. The first concern is the increased need for fresh water which this uprate project would place on the limited freshwater resources which are critical to the natural resources of the park. The second concern is the potential impacts to natural resources due to increased temperature and higher saline levels of water which could be anticipated to migrate from the cooling ponds into Biscayne Bay via groundwater exchange.

Concerning both of these questions, the 1972 EIS for units 3 and 4 states that due to the cooling canals, both temperature and salinity increases would exist where the aquifer discharges into the Bay and Card Sound during most of the year.

We understand that the uprate project would increase the temperature of the existing cooling canals, which would undoubtedly increase evaporative loss. Another loss of water from the cooling canals would seem to be groundwater loss through the aquifer, as described in the 1972 EIS, due to normal groundwater transportation processes, and exacerbated by the higher density of saline water, which tends to sink. The park would like to better understand the amount and salinity of canal water currently migrating into the Bay via the aquifer. The park would also like to know the amount of cooling canal water currently lost due to evaporation (available data indicates there is greater loss to evaporation in the Bay, which is cooler than the canals, than is normally received by annual precipitation). The park would like the applicant to describe the increases in these amounts and levels which could be anticipated from this project, and finally, the park would like to better understand where the freshwater migrating into the cooling canals to replace these losses, would come from.

The second concern is a follow-up to the questions asked above. If, as seems plausible, this project does increase the temperature and salinity of water migrating from the cooling canals to the Bay, the park would like the applicant to specify the potential effects on important natural resources of the Bay, such as sponges, seagrass beds, and both adult and juvenile fish which normally inhabit the mangrove shoreline and near-shore waters.

Again, thank you for the opportunity to comment on this project, and we look forward to answers which help us better understand these important groundwater issues.

Sincerely,

A handwritten signature in blue ink that reads "Mark Lewis". The signature is written in a cursive, flowing style.

Mark Lewis
Superintendent