Nuclear Regulatory Commission
Washington D.

July 12, 2010

Re: Florida Power and Light, Turkey Point, Units 6 and 7

The sighting of the proposed Florida Power and Light (FPL) nuclear reactors 6 and 7 adjacent to FPL's existing power plants on the sight abutting Biscayne Bay approximately 25 miles south of the city of Miami, is ill conceived and short sighted. According to the latest United Nations Intergovernmental Panel on Climate Change (IPCC) estimates, a sea level rise between 18 and 59 cm (7.1 to 23.2 inches) can be expected *before* the turn of the century. Unfortunately the IPCC did not factor in global land ice melt into this equation. The new IPCC report, due to be released in 2014, will include land ice melt sea level rise forcings.

This scenario may not be the reality of the situation. Dr. Stefan Rahmstorf, a leading and respected authority on the subject notes that, "land ice (glacial melt) has, in fact, contributed 80 per cent of the observed sea level rise over the past five years" [1], and, "if two-thirds of glacier ice were lost, this would add 40 centimeters to the global sea level" [2], then, "The big ice sheets would then need to contribute only about 50 centimeters (19.7 inches) — corresponding to less than one per cent of their mass — to bring sea level rise up to 114 centimeters (44.9 inches)". [3] This does not include any thermal expansion of ocean water which the IPCC admits will increase due to rising global temperatures. [4] The only debate among climate scientists is not if, but when these changes will occur.

Additionally and closer to home, the Science Committee of the Miami Dade County Climate Change Advisory Task Force (CCATF), Co-chaired by Dr. Hal Wanless, Chairman of the University of Miami's Geology Department and Dr. Stephen Leatherman, Director of the International Hurricane Center at Florida International University, have predicted that sea level rise will be between 91.4 cm and 152.4 cm (3 to 5 Feet) by the end of the century and possibly as early as 2070. [5]

It should be plain to see, especially when sighting a 23 billion dollar facility with a useful working life of up to 100 years, that the proposed site presents inherent risks that place not only the financial investment of FPL's rate payers but also their safety in extreme jeopardy. A sea level rise of just one foot would inundate 17% of Miami Dade County's land mass, most of which would be in south Dade,

[1] Nature Reports, Climate Change, April 6, 2010
[2] Rahmstorf, S. Science 315, 368–370 (2007).
[3] Nature Reports, Climate Change, April 6, 2010
[4] PCC. Climate Change 2007: The Physical Science Basis (eds Solomon, S. *et al*.)
[5] CCATF Second Report to the Miami Dade Board of County Commissioners, April 2008

including the area around Turkey Point and the access road to the facility.[6] A two foot rise covers 28% of Miami Dade County's land mass. Turkey Point generating facility effectively becomes an island. The current cooling canals for the existing nuclear generating facility become unusable as they are breached by rising bay waters. [7]

At the full predicted 5 foot range of sea level rise, occurring sometime between 2070 and the turn of the century, only 54% of Miami Dade County remains high and dry. FPL's proposed power lines running down the western side of the County's Urban Development Boundary (UDB) are miles from dry land as that part of the Everglades is flooded with both fresh water, used to hold back the rising sea, and salt water which is fast encroaching. The coastal ridge is now divided by tidal channels into a series of independent islands displacing a million or more county residents. The effect of any hurricane storm surge will force an additional million or more residents to leave the county for higher ground as they have already had to do on the barrier islands of Miami Beach and Key Biscayne. [8]

Even as bad as this scenario seems, it will get worse. Sea levels are expected to continue to rise for centuries to come and if they reach historic levels of past melts, could exceed 20 meters (66.61 feet). This may happen faster than expected due to accelerated climate forcings as countries have not only failed to reduce greenhouse gas emissions, but actually have accelerated them.

The bottom line, the Nuclear Regulatory Commission and the Army Corps of Engineers should withhold permitting for FPL's proposed generating facilities 6 and 7 due to concerns that:

1. Predicted sea level rise would first, isolate the facility on an island, then

2. Cause the access road to be undermined and overrun by sea water causing it to become unstable and unusable, then

3. Overrun and alter the current cooling canals and possibly cause the proposed cooling-water radial wells to function differently than now proposed and possibly cease to function as planned, then

4. Increase the effects of storm surges from hurricanes and other tropical events on the facilities and access roads, then

5. Place maintenance constraints on power transmission lines that now will be water bound, then

[6] Attachment slide 2
[7] Attachment slide 3
[8] Attachment slide 6

6. Unfairly burden rate payers in funding a project that will not reach its projected life span, then

7. Have an insufficient client base to support the facilities operations when much of south Florida's population is forced to relocate due to sea level rise, tidal surge events, pollution concerns, altered wet and dry seasons, increased chance of tropical diseases and all the other predicted effects of climate change.

Surely enough issues relating to the sighting of Florida Power and Light's Turkey Point nuclear generating plants 6 and 7 have been raised by many concerned entities from not only the general public, but other county, state and federal agencies as well as a host of non-governmental agencies, to give pause while examining FPL's application for these plants.

It is the Nuclear Regulatory Commission's and the Army Corps of Engineers duty to protect not only the citizens of south Florida, but the future sustainability of its changing environment in the coming face of global climate change. Please deny the application.

Thank you for your time,

Captain Dan Kipnis

President, Florida Billfish, Inc.
President, The Green Gallon. Inc.
Member, Miami Dade County Climate Change Advisory Task Force
Member, Biscayne Bay Restoration Review Coordination Team
Vie Chairman, City of Miami Beach Marine Authority

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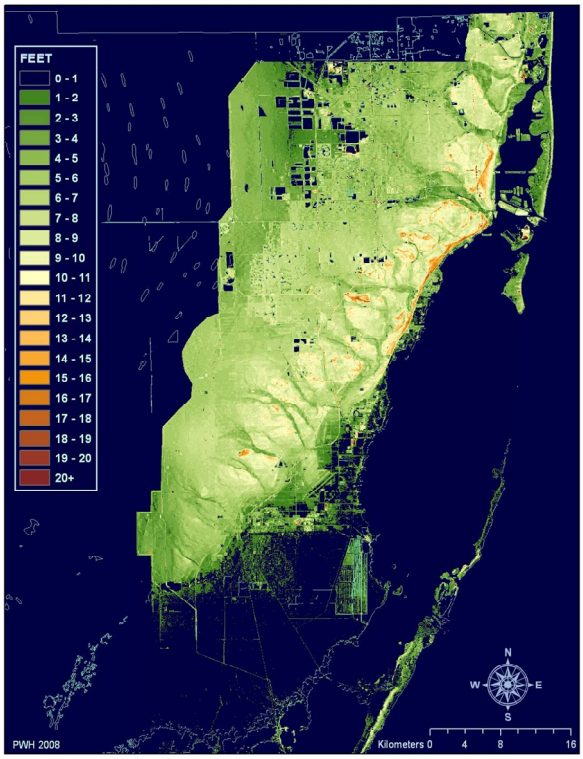
Attachment Slide 2



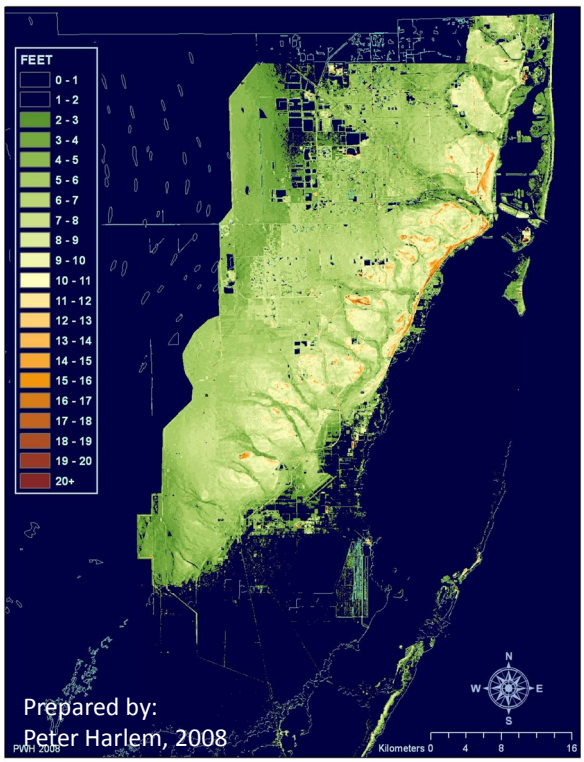
+ 1 Ft.

DATE = 2042

- 83% of land surface remains above mean high tide.
- Coastal plain and marshes inundated at high tides.
- Mangrove swamps deepen, coastal vegetation migrates upslope.
- Beach erosion increases.
- Levees like the L-31E expected to restrict encroachment - delaying salt water intrusion in south Miami-Dade.
- Southern Everglades not protected by equivalent structure.

Prepared by:
Peter Harlem, 2008

Attachment Slide 3

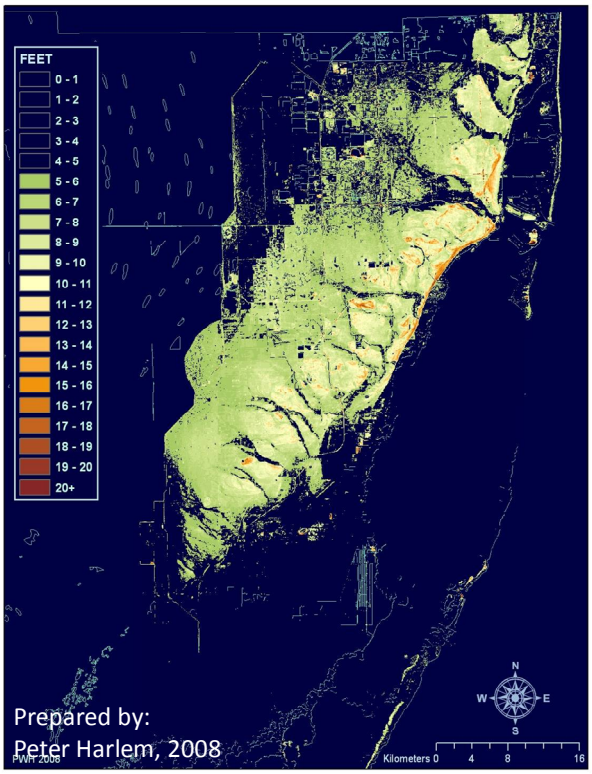


+ 2 Ft.

DATE = 2066

- 72% of land surface remains.
- Sandy barrier islands challenging to live on: fill areas eroding; beach front rapidly eroding; storm channeling.
- Existing mangrove swamps collapse; inundation and collapse of lower freshwater marshes.
- Much of upper and lower Keys inundated.
- Coastal levees under wave attack.
- Access to barrier islands and publics works becomes difficult – Turkey Point, South Dade landfill.

Attachment Slide 6



+ 5 Ft.

DATE = 2110

- 54% of land surface remains.
- Most transverse glades flooded at high tide.
- Coastal ridge now divided by tidal channels into a series of independent islands.
- Everglades inundated to north of Broward County with major tidal channels through ridge in north Miami-Dade and Broward.
- Rainfall greatly reduced.