



**Applied
Environmental
Services, LLC**

P.O. Box 174 • Athens, GA 30603-0174

March 12, 2012

Don Hambrick, Senior Project Manager
U. S. Department of the Army
Jacksonville District Corps of Engineers (Corps)
Gordon.a.hambrick@usace.army.mil
850/763-0717 ext. 25

Douglas Bruner, Project Manager
Nuclear Regulatory Commission (NRC)
Douglas.Bruner@nrc.gov
Levy.COLEIS@nrc.gov
800/368-5642 and 301/415-2730
<http://www.federalregister.gov/articles/2010/08/13/2010-20005/notice-of-availability-of-the-draft-environmental-impact-statement-for-the-combined-licenses-for>

Re: Second Supplemental Comments on Draft Environmental Impact Statement (DEIS) of Proposed Combined Licenses for Levy Nuclear Plant Units 1 and 2, Docket Nos. 52-029 and NRC-2008-0558 Project No. SAJ-208-00490 (IP-GAH)
Supplemental DEIS Required

Dear Project Managers Hambrick and Bruner:

On October 26, 2010 I submitted preliminary comments on the Draft Environmental Impact Statement (DEIS) for the proposed Combined Licenses for Levy Nuclear Plant Units 1 and 2 (“LNP” and “project”) referenced above. On November 27, 2010 I submitted my initial supplemental comments on the DEIS for the proposed project describing more of the myriad grave inadequacies of the LNP DEIS and failure to comply with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Clean Water Act (CWA), the Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (“Magnuson-Stevens Act”) and other federal requirements. That supplemental comment letter confirmed that although my comments were not comprehensive, they were sufficient to justify the necessity for a supplemental DEIS, pursuant to 40 C.F.R. § 1502.9(c)(1) & (2).

To date, no supplemental DEIS has been released, however significant new information relevant to environmental concerns and bearing on the proposed project and its impacts has been released since my first supplemental comment letter. That new information is summarized below.

A. Relevant Findings of New Peer-Reviewed Journal Publication

1. Subsequent to the submittal of my initial comment letter and first supplemental comments on the DEIS for the project referenced above a new peer-reviewed paper has been published with results relevant to the proposed project. A pdf copy of that publication is incorporated herein as **Exhibit A**. The full citation for that publication is:
Bachus, S., J. Masour, M. Madden, T. Jordan and Q. Meng. 2011. Geospatial analysis of depressional wetlands near Peace River watershed phosphate mines, Florida, USA. Environmental and Engineering Geoscience 17(4)391-415.

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	
Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2)	
ASLBP #: 09-879-04-COL-BD01	Identified: 10/31/2012
Docket #: 05200029 05200030	Withdrawn:
Exhibit #: INT349-00-BD01	Stricken:
Admitted: 12/3/2012	
Rejected:	
Other:	

2. One of the relevant aspects of that publication is the new documentation of adverse off-site environmental impacts from mining and groundwater withdrawals in Florida in excess of 5 kilometers (3 miles) from the site of mining and groundwater withdrawals due to altered hydroperiods.

3. The DEIS failed to confirm the location of the extensive fill and raw materials required for the proposed LNP project. Instead the DEIS stated:

24 To provide additional context for the potential impacts of fill mining, the review team considered
25 the impacts if the proposed Tarmac King Road Limestone Mine provided the source of fill. The
26 proposed mine would be located 1 mi west of the intersection of U.S. Highway 19 (US-19) and
27 King Road in Levy County, about 2 mi west of the LNP site. Additional information regarding
28 the mine is provided in Chapter 7. Tarmac America LCC (Tarmac) has applied for permits to
29 begin site development in 2011, with operations beginning in 2013. This limestone mine would
30 be located on a 9400-ac aggregate mining site. The mined portion would include 2700 ac of
31 wetlands and uplands. An additional 1300 ac would be used for the associated quarry,
32 processing plant, roads, and buffers; 800 ac would be set aside for wetlands; and 4500 ac
33 would be donated to the State of Florida for preservation. The Tarmac mine would not be
34 developed solely for providing fill material to the LNP site.

4. If the proposed Tarmac King Road ("Tarmac") mine will not be the source of those raw materials, a supplemental DEIS must be prepared to evaluate the adverse environmental impacts from the actual site of raw materials for the proposed LNP project. If the proposed Tarmac mine proposed to be excavated approximately 2 miles west of the proposed LNP project will be the source of the raw materials for the concrete and other aggregate materials needed to construct the proposed LNP project, the 2011 publication referenced above provides additional support that the proposed mine, in combination with: 1) the proposed excavations into the aquifer system for the LNP stormwater pits; 2) the proposed excavations into the aquifer system under units 1 and 2 that would be filled with concrete; and 3) the proposed groundwater withdrawals for the proposed LNP project all would contribute to significant adverse cumulative impacts on-site and surrounding the proposed project and mine.

5. Previous publications in other peer-reviewed journals also support the conclusion that such actions also result in catastrophic destructive wildfires and invasive species. See my 2006 and 2007 publications submitted to you previously for examples of those adverse impacts.

6. Results of the 2011 publication also confirmed that the spatial distribution of wetlands adversely effected by the mine was **not** consistent with the "cone of influence" generated by typical MODFLOW groundwater modeling. **The DEIS must take a hard look at the extensive adverse off-site and cumulative impacts described above and in that publication.**

B. No Minimum Flows and Levels Established for the Aquifer System

1. Section 373.042(1) of the Florida Statutes states:

373.042 Minimum flows and levels.—

(1) Within each section, or the water management district as a whole, the department or the governing board shall establish the following:

(a) Minimum flow for all surface watercourses in the area. The minimum flow for a given watercourse shall be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area.

(b) Minimum water level. The minimum water level shall be the level of groundwater in an aquifer and the level of surface water at which further withdrawals would be significantly harmful to the water resources of the area.

The minimum flow and minimum water level shall be calculated by the department and the governing board using the best information available. When appropriate, minimum flows and levels may be calculated to reflect seasonal variations. The department and the governing board shall also consider, and at their discretion may provide for, the protection of nonconsumptive uses in the establishment of minimum flows and levels.

2. On March 6, 2012 the Southwest Florida Water Management District (SWFWMD) confirmed that the agency still has not established minimum flows and levels (MFL) for the aquifer system in Levy County. A copy of the electronic mail with this confirmation is incorporated herein as **Exhibit B**. **The fact that no minimum flows and levels have been established for the aquifer system in Levy County makes it impossible for your agencies to take a hard look at the extensive adverse off-site and cumulative impacts described in Section A. above, as required by federal law.**

C. New Project Authorized in Project Vicinity Increasing Aquifer Depletion

1. On October 18, 2011 a new project by OLSC Land Ventures, LLC was approved in the impact zone of the proposed LNP project. This project requires a Consumptive Use Permit (CUP) for the proposed withdrawal and consumption of 13.267 millions of gallons per day (MGD) of groundwater from the same aquifer system that the proposed LNP project would adversely effect. A copy of the notice for that proposed project, "Adena Ranch" CUP is incorporated herein as **Exhibit C1** and is posted at:
<http://floridaswater.com/facts/AdenaSpringsRanchCUP.html>

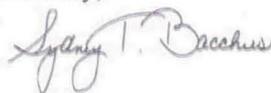
2. The same company apparently owns an "another 36,000 acres in Levy County for the operation" where additional water withdrawals would occur according to the report by Fred Hiers dated February 3, 2012. A copy of that report is incorporated herein as **Exhibit C2**.

3. It is my professional opinion the withdrawals of an additional 13.267 MGD from the Floridan aquifer system for the pending Adena Ranch WUP and additional withdrawals for "another 36,000 acres in Levy County for the operation" within the zone of impact of the proposed LNP project, whether alone or combined, will result in significantly greater adverse environmental impacts if the proposed LNP project is permitted and constructed. The adverse impacts will include, but not be limited to increased catastrophic destructive wildfires; premature decline and death of native trees, including those in Goethe State Forest and on private property off-site; increased saltwater intrusion into the aquifer system, decreased fresh groundwater discharges as springs and seeps; and subsequent adverse impacts to the manatee, other federally threatened and endangered species and all of the environmentally sensitive areas referenced in my previous comment letters.

4. The impacts of the proposed groundwater withdrawals for the permitted "Adena Ranch" in the adjacent county and/or the "another 36,000 acres in Levy County for the operation" were not considered when the SWFWMD approved the permit for the proposed LNP project or when the DEIS was released. **Therefore, a supplemental DEIS is required for your agencies to take a hard look at the extensive adverse off-site and cumulative impacts described above, as required by federal law.**

Thank you for the opportunity to provide additional supplemental comments regarding the grossly deficient DEIS. An electronic copy of each of the exhibits will be forwarded individually after my comment letter is forwarded electronically. Please contact me if you did not receive any of the four Exhibits referenced in this comment letter and listed below.

Sincerely,



Sydney T. Bacchus, Ph. D.
Hydroecologist
P.O. Box 174
Athens, GA 30603
appliedenvirserve@gmail.com

Proposed Levy Nuclear Plant Units 1 and 2, Project No. SAJ-208-00490 (IP-GAH)
March 12, 2012

Exhibits:

- A. Bacchus et al., 2011
- B. SWFWMD MFL electronic mail, 3/6/12
- C1. Notice of CUP application for 13.267 MGD in LNP zone of impact, 2/2/12
- C2. Fred Hiers report of additional 36,000 acres in Levy County for water withdrawals, 2/3/12

cc:

Ecology Party of Florida
Nuclear Information and Resource Service (NIRS)
Lt. General Robert Van Antwerp, Chief of Engineers, hq-publicaffairs@usace.army.mil
Cindy Dohner, US Fish & Wildlife Service Region 4 Director (fax: 404/679-4006)
Gwendolyn Keys Fleming, USEPA Region 4 Administrator (fax: 404/562-8174)
A. Stanley Meiburg, USEPA Region 4 Deputy Administrator (fax: 404/562-8174)
Heinz Mueller, USEPA Region 4 Chief, NEPA Program Office
Jennifer Derby, USEPA Region 4 Regulatory Section Chief, Wetlands & Oceans Division
Tom Welborn, USEPA Region 4 Wetlands Division
Paul Gagliano, USEPA Region 4
Traci Buskey, USEPA Region 4
Rick Button, USEPA Region 4
Lloyd Generette, USEPA Region 4
Ramona Mcconney, USEPA Region 4
Ron Miedema, USEPA Region 4
Karrie-Jo Shell, USEPA Region 4
Miles M. Croom, NOAA Assistant Regional Administrator Habitat Conservation Division
Mark Sramek, NOAA Habitat Conservation Division