PMLevyCOLPEm Resource

From: Wilkins, Tillie [tillie.wilkins@pgnmail.com]
Sent: Tuesday, December 01, 2009 10:21 AM
To: Anderson, Brian; Bruner, Douglas
Cc: Snead, Paul
Subject: Levy - Supplemental Environmental RAI Response
Attachments: NPD-NRC-2009-233 - Final Response to NRC.pdf

A supplemental response to two Levy environmental RAIs (2.4.1-3 and 4.3.1-1) is attached.

Tillie Wilkins
Nuclear Plant Development Licensing
Progress Energy
VNet: 770-6754
Bell: 919-546-6754

Hearing Identifier: Levy_County_COL_Public
Email Number: 554

Mail Envelope Properties (6C41D4F052927D40B4C29447F64854B807100AB1)

Subject: Levy - Supplemental Environmental RAI Response
Sent Date: 12/1/2009 10:21:13 AM
Received Date: 12/1/2009 10:21:29 AM
From: Wilkins, Tillie

Created By: tillie.wilkins@pgnmail.com

Recipients:
"Snead, Paul" <paul.snead@pgnmail.com>
Tracking Status: None
"Anderson, Brian" <Brian.Anderson@nrc.gov>
Tracking Status: None
"Bruner, Douglas" <Douglas.Bruner@nrc.gov>
Tracking Status: None

Post Office: NT000832.oak.zone1.progress-energy.com

Files	**Size**	**Date & Time**
MESSAGE	220	12/1/2009 10:21:29 AM
NPD-NRC-2009-233 - Final Response to NRC.pdf	3050963	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Progress Energy

Serial: NPD-NRC-2009-233
November 23, 2009

10CFR52.79

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

LEVY NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 52-029 AND 52-030
SUPPLEMENT 6 TO RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING THE ENVIRONMENTAL REVIEW

References:

1. Letter from Douglas Bruner (NRC) to James Scarola (PEF), dated February 24, 2009, "Request for Additional Information Regarding the Environmental Review of the Combined License Application for the Levy Nuclear Power Plant, Units 1 and 2"
2. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated March 27, 2009, "Response To Request For Additional Information Regarding The Environmental Review", Serial NPD-NRC-2009-042
3. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated June 12, 2009, "Supplement 1 to Response to Request for Additional Information Regarding the Environmental Review", Serial NPD-NRC-2009-107
4. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated July 24, 2009, "Supplement 2 to Response to Request for Additional Information Regarding the Environmental Review", Serial NPD-NRC-2009-172
5. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated July 29, 2009, "Supplement 3 to Response to Request for Additional Information Regarding the Environmental Review", Serial NPD-NRC-2009-166
6. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated August 31, 2009, "Supplement 4 to Response to Request for Additional Information Regarding the Environmental Review", Serial NPD-NRC-2009-192
7. Letter from Garry D. Miller (PEF) to the U. S. Nuclear Regulatory Commission dated September 3, 2009, "Supplement 5 to Response to Request for Additional Information Regarding the Environmental Review", Serial NPD-NRC-2009-203

Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits a supplemental response to the Nuclear Regulatory Commission's (NRC) request for additional information provided in Reference 1.

Progress Energy Florida, Inc.
P.O. Box 14042
St. Petersburg, FL 33733

A supplemental response to two of the NRC questions (2.4.1-3 and 4.3.1-1) is addressed in the enclosure. The enclosure also identifies changes that will be made in a future revision of the Levy Nuclear Plant Units 1 and 2 application.

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (727) 820-4481.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on November 23, 2009.

Sincerely,

John Elnitsky
Vice President
Nuclear Plant Development

Enclosure/Attachment

cc : U.S. NRC Region II, Regional Administrator
Mr. Brian C. Anderson, U.S. NRC Project Manager
Mr. Douglas Bruner, U S Environmental Project Manager

Levy Nuclear Plant Units 1 and 2
Supplement 6 to Response to Request for Additional Information Regarding the Environmental Review, dated February 24, 2009

NRC RAI #	Progress Energy RAI #	Progress Energy Response
2.7-1	L-0076	March 27, 2009: NPD-NRC-2009-042
3.3-1	L-0077	March 27, 2009: NPD-NRC-2009-042
4.5-1	L-0078	March 27, 2009: NPD-NRC-2009-042
5.4.4-1	L-0079	March 27, 2009: NPD-NRC-2009-042
7.1-1	L-0401	June 12, 2009; NPD-NRC-2009-107
2.7.5-1	L-0508	July 24, 2009; NPD-NRC-2009-172
3.6.3-1	L-0082	March 27, 2009: NPD-NRC-2009-042
5.3.3-1	L-0083	March 27, 2009: NPD-NRC-2009-042
2.3.1-1	L-0398	June 12, 2009; NPD-NRC-2009-107
2.3.1-2	L-0085	March 27, 2009: NPD-NRC-2009-042
2.3.1-3	L-0399	June 12, 2009; NPD-NRC-2009-107
2.3.1-4	L-0087	March 27, 2009: NPD-NRC-2009-042
2.3.1-5	L-0088	March 27, 2009: NPD-NRC-2009-042
2.3.1-6	L-0089	March 27, 2009: NPD-NRC-2009-042
2.3.3-1	L-0090	March 27, 2009: NPD-NRC-2009-042
2.3.3-2	L-0091	March 27, 2009: NPD-NRC-2009-042
4.6-1	L-0092	March 27, 2009: NPD-NRC-2009-042
4.6-2	L-0093	March 27, 2009: NPD-NRC-2009-042
5.2.2-1	L-0396	June 12, 2009; NPD-NRC-2009-107
5.2.2-2	L-0095	March 27, 2009; NPD-NRC-2009-042
5.2.2-3	L-0522	July 29, 2009; NPD-NRC-2009-166
5.3.2.1-1	L-0097	March 27, 2009: NPD-NRC-2009-042
2.4.2-1	L-0098	March 27, 2009: NPD-NRC-2009-042
2.4.2-2	L-0099	March 27, 2009: NPD-NRC-2009-042
2.4.2-3	L-0100	March 27, 2009: NPD-NRC-2009-042
4.7-1	L-0101	March 27, 2009: NPD-NRC-2009-042
2.4.1-1	L-0402	June 12, 2009; NPD-NRC-2009-107
2.4.1-2	L-0403	June 12, 2009; NPD-NRC-2009-107
2.4.1-3	L-0533 & L-0674	September 3, 2009; NPD-NRC-2009-203 & supplemental response enclosed; see following pages
2.4.1-4	L-0405 & L-0538	June 12, 2009; NPD-NRC-2009-107; & August 31, 2009; NPD-NRC-2009-192
2.4.1-5	L-0106	March 27, 2009: NPD-NRC-2009-042
4.3.1-1	L-0406 & L-0675	June 12, 2009; NPD-NRC-2009-107 & supplemental response enclosed; see following pages
4.3.1-2	L-0407	June 12, 2009; NPD-NRC-2009-107

NRC RAI #	Progress Energy RAI #	Progress Energy Response
4.3.1-3	L-0535	August 31, 2009; NPD-NRC-2009-192
4.3.1-4	L-0110	March 27, 2009: NPD-NRC-2009-042
4.3.1-5	L-0408	June 12, 2009; NPD-NRC-2009-107
4.3.1-6	L-0112	March 27, 2009: NPD-NRC-2009-042
4.3.1-7	L-0409	June 12, 2009; NPD-NRC-2009-107
4.7-2	L-0114	March 27, 2009: NPD-NRC-2009-042
5.3.3.2-1	L-0410	June 12, 2009; NPD-NRC-2009-107
2.5.1-1	L-0116	March 27, 2009: NPD-NRC-2009-042
2.5.2-1	L-0412	June 12, 2009; NPD-NRC-2009-107
2.5.2-2	L-0118	March 27, 2009: NPD-NRC-2009-042
2.5.2-3	L-0119	March 27, 2009: NPD-NRC-2009-042
2.5.2-4	L-0120	March 27, 2009: NPD-NRC-2009-042
2.5.4-1	L-0413	June 12, 2009; NPD-NRC-2009-107
4.4.2-1	L-0524	July 29, 2009; NPD-NRC-2009-166
4.4.2-2	L-0123	March 27, 2009: NPD-NRC-2009-042
4.4.2-3	L-0124	March 27, 2009: NPD-NRC-2009-042
4.4.2-4	L-0125	March 27, 2009: NPD-NRC-2009-042
4.4.2-5	L-0126	March 27, 2009: NPD-NRC-2009-042
4.4.2-6	L-0127	March 27, 2009: NPD-NRC-2009-042
4.4.2-7	L-0128	March 27, 2009: NPD-NRC-2009-042
4.4.2-8	L-0129	March 27, 2009: NPD-NRC-2009-042
4.4.2-9	L-0523	July 29, 2009; NPD-NRC-2009-166
4.4.2-10	L-0131	March 27, 2009: NPD-NRC-2009-042
4.7-1	L-0132	March 27, 2009: NPD-NRC-2009-042
5.11-1	L-0133	March 27, 2009: NPD-NRC-2009-042
5.8.2-1	L-0134	March 27, 2009: NPD-NRC-2009-042
9.4.1-1	L-0135	March 27, 2009: NPD-NRC-2009-042
9.4.1-2	L-0136	March 27, 2009: NPD-NRC-2009-042
9.4.2-1	L-0521	July 29, 2009; NPD-NRC-2009-166
9.4.2-2	L-0138	March 27, 2009: NPD-NRC-2009-042
9.4.2-3	L-0139	March 27, 2009: NPD-NRC-2009-042
9.3-1	L-0140	March 27, 2009: NPD-NRC-2009-042
9.3.2.1-1	L-0141	March 27, 2009: NPD-NRC-2009-042
3.7-1	L-0142	March 27, 2009: NPD-NRC-2009-042
3.7-2	L-0143	March 27, 2009: NPD-NRC-2009-042
4.8.3-1	L-0144	March 27, 2009: NPD-NRC-2009-042
6.2-1	L-0145	March 27, 2009: NPD-NRC-2009-042

NRC Letter No.: ER-NRC

NRC Letter Date: February 24, 2009

NRC Review of Environmental Report

NRC RAI #: 2.4.1-3

Text of NRC RAI:

Provide additional information needed to update and complete the baseline characterization and impact assessment for wetland resources.

Wetlands descriptions in ER Section 2.4.1 were based on the Florida Land Use and Cover Classification System (FLUCCS), as interpreted and mapped by SWFWMD and field verified by PEF. Wetland delineations for the Levy site and verification by the U.S. Army Corps of Engineers is ongoing. Reference is made in ER Sections 5.2.1.5 and 5.2.2.3 to groundwater pumping that could adversely affect wetlands, but little detail is provided. Provide the following items:

- A new wetlands map (clearly reproducible in black-and-white) for the site and south of the site that includes jurisdictional and non-jurisdictional wetlands, as well as an overlay of the limits of ground disturbance. Identify the project facilities and features depicted on the map.
- A new table with the existing acreage of wetlands, including jurisdictional and non-jurisdictional wetlands.
- A new wetland impacts table with the acreage of jurisdictional and non-jurisdictional wetlands broken out by temporary and permanent impacts and by facilities (see ER Land Use Tables 4.1-4 and 4.1-5 for a breakdown of facilities).
- A discussion to explain the Unified Mitigation Assessment Method (UMAM) functional assessment for impact wetlands and for mitigation wetlands.
- A qualitative discussion on the effects of construction dewatering on wetlands, including the disposition of water during construction.
- Discussions addressing groundwater drawdown due to operations and any wetlands monitoring that would be implemented.
- Estimated groundwater drawdown isopleths (minimum 1-foot elevation interval) resulting from operational water withdrawal overlaid on the wetland delineation map (clearly reproducible in black-and-white).
- A discussion to describe and explain estimates of wetland loss due to the drawdown, as well as information on how impacts can be minimized and why impacts are unavoidable.
- Updated estimates of wetland and upland impacts along the transmission lines (up to the first substation).

PGN RAI ID #: L-0674

PGN Response to NRC RAI:

This RAI was previously responded to in NPD-NRC-2009-203 (September 3, 2009). In a teleconference held on October 30, 2009, the NRC requested further clarification on the apparent discrepancies between Tables 2.4.1-3-002, 2.4.1-3-004, and 2.4.1-3-005. The specific teleconference agenda items (in quotations) and responses are provided below.

"Table 2.4.1-3-005 (pages 17 -19 of the 9-3-09 supplemental response) indicates that transmission line impacts would occur to Cypress-Pine-Cabbage Palm (Segment 1), Sand Pine (Segments 4 & 5), Xeric Oak (Segments 4 & 5), and Live Oak (Segment 4) cover types. Yet the baseline conditions for the off-site corridors (Table 2.4.1-3-002, pages 6-8 of the 9-3-09 supplemental response) do not list these cover types as occurring in the off-site facilities corridors. The Golder 2008 report (USACE Environmental Resource Permit Application for the Transmission Corridors Associated with the Levy Nuclear Plant) does list these cover types as being present in the off-site corridors. So this would suggest that the error is with the baseline conditions table (Table 2.4.1-3-002). The sand pine and xeric oak cover types provide suitable habitat for several federal and state listed plants and animals, so resolution of this discrepancy is needed."

The apparent discrepancy in these two tables results from the use of more detailed data to develop the table of impacts for the off-site routes. Table 2.4.1-3-002 uses FLUCCS data from the Southwest Florida Water Management District's 2007 database and the St John's Water Management District's 2004 database. These two databases were merged to provide full coverage of the corridor areas. Table 2.4.1-3-005 was developed from information based on the FLUCCS codes from the Water Management District's (WMD's) databases and then modified based on field and aerial interpretation. This level of specificity was not available for the entire corridor width, so the more general data were used for Table 2.4.1-3-002. The Golder 2008 report included only information on the impacts of the transmission line routes and is consistent with the impacts presented in Table 2.4.1-3-005.

"The Hardwood Conifer Mixed cover type (FLUCCS 434) appears to occur twice in Table 2.4.1-3-002 (on page 7 of the 9-3-09 supplemental response). The second repeat is named Upland Mixed Coniferous/Hardwood, but is identified as FLUCCS 434. There is no FLUCCS cover type named Upland Mixed Coniferous/Hardwood in the FDOT (1999) FLUCCS manual. Can the acreage for Upland Mixed Coniferous/Hardwood (FLUCCS 434) be combined with Hardwood Conifer Mixed (FLUCCS 434), or is there an error (e.g., Upland Mixed Coniferous/Hardwood [FLUCCS 434] should actually have been a different FLUCCS cover type)."

Table 2.4.1-3-002 uses FLUCCS data from the Southwest Florida Water Management District's 2007 database and the St John's Water Management District's 2004 database. Occasionally two WMDs will describe the same FLUCCS code differently. In the case of Code 434, the data from the two WMDs were presented exactly as received from the WMDs; no effort was made to modify the data, which resulted in duplication of the FLUCCS code with two different descriptions. Individual WMDs will also modify the descriptions of the FLUCCS codes referenced in the FDOT manual (1999). The FLUCCS system is designed to be customized by agencies and users, which results in differences between their descriptions and the FLUCCS manual. Descriptions from the location-specific WMD were selected as being more precise than the general descriptions in the FLUCCS manual. It is recommended that the acreages not be combined since the two WMDs describe the habitat types in different ways, even though they share the same FLUCCS numeric code.

"Baseline conditions Table 2.4.1-3-002 identifies two FLUCCS plantation cover types on the off-site corridors (page 7 of the 9-3-09 supplemental response) - an abundant acreage of Tree Plantations (FLUCCS 440), and a much lesser acreage of Coniferous (Pine) Plantations (FLUCCS 441). The plantation impacts due to the transmission lines (Table 2.4.1-3-005 - pages 17 -19 of the 9-3-09 supplemental response) are identified as Coniferous Plantations (FLUCCS 441). [Note the impacts for Segments 1-4, which represent transmission lines up to the first substation, exceed the amount of Coniferous Plantations identified as available in these segments in Table 2.4.1-3-002.] The plantation impacts for the off-site corridors excluding the transmission lines (Table 2.4.1-3-004 - pages 14 & 15 of the 9-3-09 supplemental response) are identified as Tree Plantations (FLUCCS 440). If PEF can confirm that all of the plantation cover types that lie within the off-site corridors are planted to pine, then the NRC will consolidate all plantation categories into the Coniferous Plantations (FLUCCS 441) cover type for the Draft EIS. Most managed forest stands in this region are planted to pine, but hardwood stands are occasionally planted. If PEF cannot confirm this, the NRC will consolidate the plantation categories into the Tree Plantations (FLUCCS 440) cover type which would encompass all plantation types"

The data presented in Table 2.4.1-3-002 were obtained from the WMDs and the discrepancies are due to the reasons presented in the first response. Since PEF cannot confirm that all plantation cover types are planted to pine, the FLUCCS 440 cover type should be described generally as "Tree Plantations."

References

Florida Department of Transportation (FDOT), 1999, Florida Land Use, Cover and Forms Classification System, Surveying and Mapping Office Geographic Mapping Section, 3rd Edition.

Associated LNP COL Application Revisions:

No COLA revisions have been identified associated with this response.

Attachments/Enclosures:

None.

NRC Letter No.: ER-NRC

NRC Letter Date: February 24, 2009

NRC Review of Environmental Report

NRC RAI #: 4.3.1-1

Text of NRC RAI:

Provide additional information needed to complete the impact assessment for terrestrial and wildlife resources.

ER Section 4.3.1 provides an impact assessment for terrestrial resources. However, several important pieces of information were missing and some project features have since been modified or dropped (e.g., rail line). Provide the following information:

- An updated habitat impacts table (Tables 4.3-1 and 4.3-2) with the acreage of temporary and permanent impacts broken out by facility (see ER Land Use Tables 4.1-4 and 4.1-5 for a breakdown of facilities).
- A figure (clearly reproducible in black-and-white) showing the limits of construction disturbance overlaid onto habitats. Identify the project facilities and features depicted on the figure.
- The proposed best management practices (BMPs) for restoration of temporary impacts on the Levy site, including information on seed mixtures for erosion control, and on invasive species monitoring and control.
- An approximate quantitative assessment of the proportion of habitats on-site that would be impacted compared to availability of similar habitats in the vicinity (6-mile radius).
- A qualitative discussion of the relative abundance of habitats along the transmission corridors (up to the first substation) compared to the ½-mile buffer.
- A qualitative assessment of potential wildlife impacts (including important species) resulting from new roads and traffic associated with plant construction and operation.
- A qualitative discussion of the potential for the three stormwater retention ponds to provide habitat for waterfowl, shorebirds, amphibians and other wildlife.

PGN RAI ID #: L-0675

PGN Response to NRC RAI:

This RAI was previously responded to in NPD-NRC-2009-107 (June 12, 2009). In a teleconference on October 30, 2009, the NRC requested further clarification on apparent discrepancies between Table 4.3.1-1-002 and Attachment 4.3.1-1B in the RAI response. Specifically, the agenda item for the teleconference stated:

"Column 4 of Table 4.3.1-1-002 from the 6-12-09 RAI supplemental response (page 94) provides the acreage of FLUCCS cover types that lie within the LNP site vicinity (i.e., a 6-mile radius). A quick examination of the accompanying figure (001 Attachment 4.3.1-1B – FLUCCS

Habitat Types in Vicinity of LNP site) identifies substantial areas of Residential, Low Density (FLUCCS 110) and Residential, Medium Density (FLUCCS 120) cover types not accounted for in Table 4.3.1-1-002. Numerous other inconsistencies are noted between the table and figure (i.e., FLUCCS cover types in the table not shown on the figure; FLUCCS cover types shown on the figure not represented in the table). Please explain these discrepancies and provide a revised table or figure as warranted."

The discrepancies noted in the agenda item are due to the use of different levels of FLUCCS codes in the table and figure. The table reflects Level 3 FLUCCS codes and descriptions; the figure reflects the more general codes of Level 2 FLUCCS codes. The Level 2 FLUCCS descriptions were intended to accommodate the differences in source data and present a more relevant comparison of habitat types across different Water Management Districts (WMDs). Additionally, the original request was to analyze impacts that occurred on-site and the relative abundance of those land use types. A revised table and figure are attached to this response to replace the previous table and figure using Level 3 FLUCCS codes for the table and figure for consistency. The revised table and figure are based on FLUCCS data obtained from the Suwannee River Water Management District (2004) and the Southwest Florida Water Management District (2007). The FLUCCS descriptions are based on the descriptions provided by the WMDs and may be slightly different than descriptions described by the FLUCCS Manual (Florida Department of Transportation, 1999). Any discrepancies are due to modification by the individual WMDs.

[The following provides further clarification to the original NRC RAI bullet: An approximate quantitative assessment of the proportion of habitats on-site that would be impacted compared to availability of similar habitats in the vicinity (6-mile radius).]

The amount of habitat potentially impacted on the LNP site was compared with the amount of similar habitat available in the vicinity (6-mile radius), and the ratio of the two was determined. Land uses (FLUCCS) within a 6-mile radius of the project site are presented in Attachment 4.3.1-1B, which replaces the previous attachment. For all major FLUCCS classifications, on-site areas of potentially impacted habitats were less than 5 percent of the similar habitat areas available in the vicinity. The majority of the habitats on-site have been disturbed by land use practices in the past. Due to the prevalence of similar habitats in the surrounding area and previous disturbance of on-site habitats, the impacts to habitats on-site should not significantly reduce the availability of those habitats in the vicinity of the LNP. This determination does not include the enhancement to a variety of habitats on and near the LNP site that are expected to result from implementation of the wetland mitigation program. A summary table is provided below.

Table 4.3.1-1-002 (Sheet 1 of 2)
Onsite Impacts and Availability of Similar Land Uses in the Vicinity of the LNP

FLUCCS		Onsite Impacts (ac.)	Vicinity Totals[a] (ac.)	Impact/ Vicinity (%)
110	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	-	4,963.2	
111	MDC - LOW DENSITY, FIXED SINGLE FAMILY UNITS	-	3.0	
112	MDC - LOW DENSITY, MOBILE HOME UNITS	-	20.3	
120	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	-	1,086.1	
122	MEDIUM DENSITY, MOBILE HOME UNITS	-	2.9	
130	RESIDENTIAL HIGH DENSITY	-	85.7	
140	COMMERCIAL AND SERVICES	-	184.7	
150	INDUSTRIAL	-	10.6	
160	EXTRACTIVE	-	132.2	
170	INSTITUTIONAL	-	60.3	
180	RECREATIONAL	-	119.5	
190	OPEN LAND	-	2,697.3	
210	CROPLAND AND PASTURELAND	-	2,801.8	
250	SPECIALTY FARMS	-	346.0	
260	OTHER OPEN LANDS <RURAL>	40.2	5,251.7	0.8%
320	SHRUB AND BRUSHLAND	-	951.1	
330	MIXED RANGELAND	-	68.3	
410	UPLAND CONIFEROUS FORESTS	0.1	8,187.9	0.0%
411	PINE FLATWOODS	-	848.9	
412	LONGLEAF PINE - XERIC OAK	-	1,507.9	
420	UPLAND HARDWOOD FORESTS - PART 1	-	5.5	
434	HARDWOOD CONIFEROUS - MIXED	-	3,884.0	
440	TREE PLANTATIONS[b]	508.5	18,730.8	2.7%
441	CONIFEROUS PLANTATIONS	-	993.7	
443	FOREST REGENERATION AREAS	-	362.8	
510	STREAMS AND WATERWAYS	-	309.5	
520	LAKES	-	123.5	
530	RESERVOIRS	-	2,471.6	
540	BAYS AND ESTUARIES	-	0.3	
610	WETLAND HARDWOOD FORESTS	-	201.1	
611	BAY SWAMPS	-	1.7	
613	GUM SWAMPS	-	3.3	
615	STREAM AND LAKE SWAMPS (BOTTOMLAND)	-	1,504.8	
617	MIXED WETLAND HARDWOODS	12.9	262.8	4.9%
620	WETLAND CONIFEROUS FORESTS	-	81.3	

Table 4.3.1-1-002 (Sheet 2 of 2)
Onsite Impacts and Availability of Similar Land Uses in the Vicinity of the LNP

	FLUCCS	Onsite Impacts (ac.)	Vicinity Totals[a] (ac.)	Impact/ Vicinity (%)
621	CYPRESS	67.0	5,331.5	1.3%
630	WETLAND FORESTED MIXED	36.5	5,245.5	0.7%
641	FRESHWATER MARSHES[c]	105.1	2,218.8	4.7%
642	SALTWATER MARSHES	-	2.8	
643	WET PRAIRIES	6.5	313.0	2.1%
644	EMERGENT AQUATIC VEGETATION	-	243.0	
646	MIXED SCRUB-SHRUB WETLAND	-	8.2	
646	MIXED SCRUB-SHRUB WETLAND	-	8.2	
653	INTERMITTENT PONDS	-	23.1	
740	DISTURBED LAND	-	66.7	
741	RURAL LAND IN TRANSITION WITHOUT POSITIVE INDICATORS OF INTENDED ACTIVITY	-	37.6	
810	TRANSPORTATION	-	285.3	
814	ROADS AND HIGHWAYS	-	21.2	
830	UTILITIES	-	311.9	
832	ELECTRICAL POWER TRANSMISSION LINES	-	6.7	
	Total	**776.8**	**72,381.6**	

Notes:

a) Vicinity includes up to a 6-mile radius of the LNP site.

b) This category and acreage total includes 629 - Wet Planted Pine (174.4 acres), a custom description applied in analysis based on modified FLUCCS descriptions.

c) This category and acreage total includes 646 - Treeless Hydric Savannah (92.5 acres), a custom description in analysis based on modified FLUCCS descriptions.

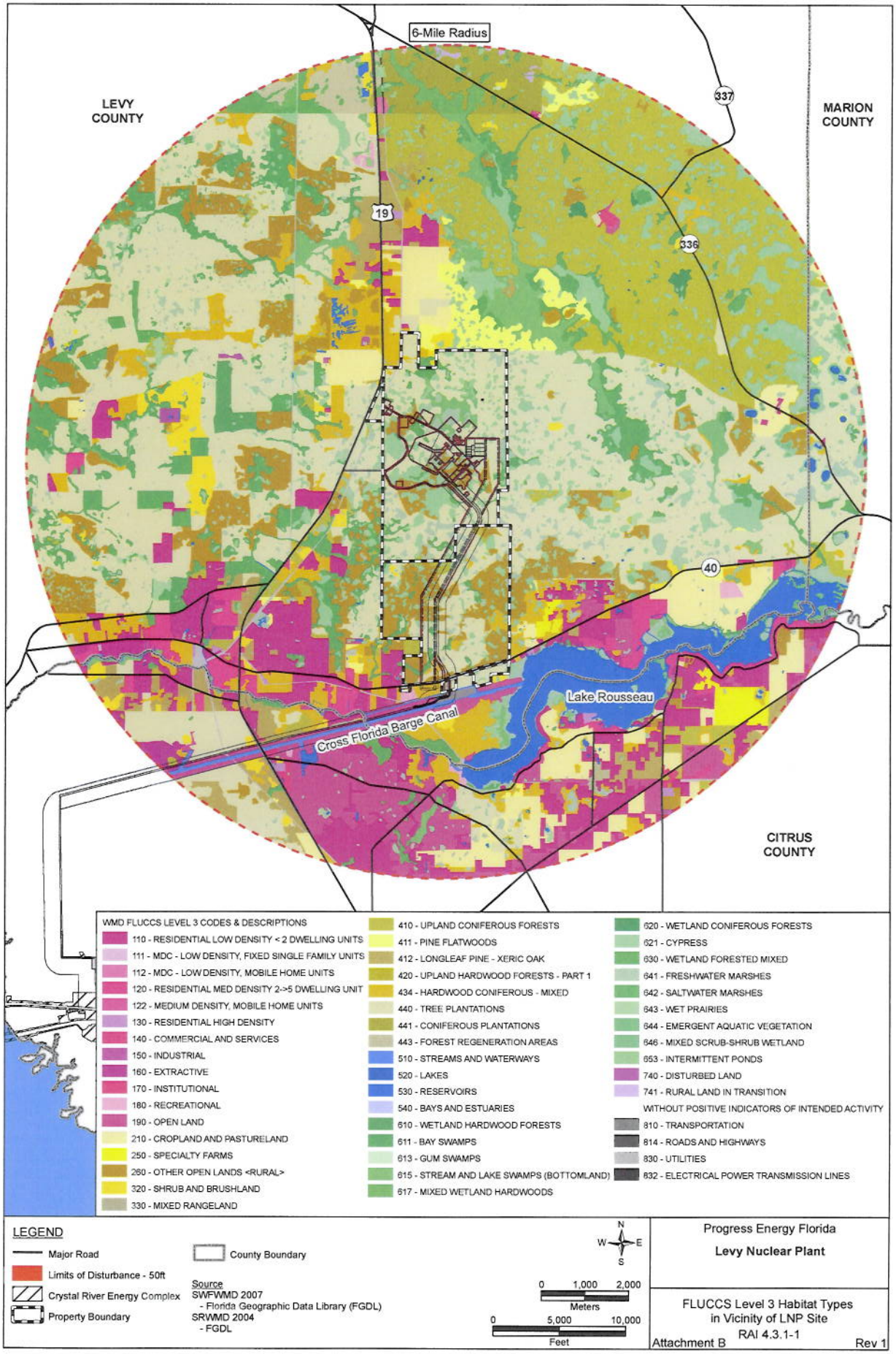
Associated LNP COL Application Revisions:

The following changes will be made to the Levy COLA in a future revision:

1. Replace ER Tables 4.3-1 and 4.3-2 with the information provided in this response and the original RAI response.
2. Revise the text in ER Section 4.3 to reflect the revised FLUCCS values included in the revised tables.
3. Revise the source data on ER Figures 2.4-6 and 2.4-8 to match the source data on the revised tables.
4. Add figure shown as Attachment 4.3.1-1B.

Attachments/Enclosures:

Attachment 4.3.1-1B (1 page)


6-Mile Radius
LEVY COUNTY
MARION COUNTY
CITRUS COUNTY
337
19
336
40
Lake Rousseau
Cross Florida Barge Canal
WMD FLUCCS LEVEL 3 CODES & DESCRIPTIONS
110 - RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS
111 - MDC - LOW DENSITY, FIXED SINGLE FAMILY UNITS
112 - MDC - LOW DENSITY, MOBILE HOME UNITS
120 - RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT
122 - MEDIUM DENSITY, MOBILE HOME UNITS
130 - RESIDENTIAL HIGH DENSITY
140 - COMMERCIAL AND SERVICES
150 - INDUSTRIAL
160 - EXTRACTIVE
170 - INSTITUTIONAL
180 - RECREATIONAL
190 - OPEN LAND
210 - CROPLAND AND PASTURELAND
250 - SPECIALTY FARMS
260 - OTHER OPEN LANDS <RURAL>
320 - SHRUB AND BRUSHLAND
330 - MIXED RANGELAND
410 - UPLAND CONIFEROUS FORESTS
411 - PINE FLATWOODS
412 - LONGLEAF PINE - XERIC OAK
420 - UPLAND HARDWOOD FORESTS - PART 1
434 - HARDWOOD CONIFEROUS - MIXED
440 - TREE PLANTATIONS
441 - CONIFEROUS PLANTATIONS
443 - FOREST REGENERATION AREAS
510 - STREAMS AND WATERWAYS
520 - LAKES
530 - RESERVOIRS
540 - BAYS AND ESTUARIES
610 - WETLAND HARDWOOD FORESTS
611 - BAY SWAMPS
613 - GUM SWAMPS
615 - STREAM AND LAKE SWAMPS (BOTTOMLAND)
617 - MIXED WETLAND HARDWOODS
620 - WETLAND CONIFEROUS FORESTS
621 - CYPRESS
630 - WETLAND FORESTED MIXED
641 - FRESHWATER MARSHES
642 - SALTWATER MARSHES
643 - WET PRAIRIES
644 - EMERGENT AQUATIC VEGETATION
646 - MIXED SCRUB-SHRUB WETLAND
653 - INTERMITTENT PONDS
740 - DISTURBED LAND
741 - RURAL LAND IN TRANSITION
WITHOUT POSITIVE INDICATORS OF INTENDED ACTIVITY
810 - TRANSPORTATION
814 - ROADS AND HIGHWAYS
830 - UTILITIES
832 - ELECTRICAL POWER TRANSMISSION LINES
LEGEND
Major Road
Limits of Disturbance - 50ft
Crystal River Energy Complex
Property Boundary
County Boundary
Source
SWFWMD 2007
- Florida Geographic Data Library (FGDL)
SRWMD 2004
- FGDL
N
W
E
S
0 1,000 2,000
Meters
0 5,000 10,000
Feet
Progress Energy Florida
Levy Nuclear Plant
FLUCCS Level 3 Habitat Types
in Vicinity of LNP Site
RAI 4.3.1-1
Attachment B
Rev 1