

## PMHarrisCOL PEmails

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**From:** Douglas Bruner  
**Sent:** Thursday, April 23, 2009 11:53 AM  
**To:** Snead, Paul  
**Cc:** LevyCOL Resource; HarrisCOL Resource  
**Subject:** Teleconference with Progress Energy - Harris and Levy  
**Attachments:** Teleconference Agenda 042309 Final.doc; Discussion on Levy RAIs.doc

Paul,

Attached is the agenda for this afternoon's teleconference. Although we will not be discussing Levy RAIs in detail this afternoon, I have provided staff questions in a separate attachment for a brief discussion prior to a call that I would like to plan for Monday. The call in information for today's teleconference, as provided to you by Don Palmrose earlier in the week, is presented below. Please call me if you have questions.

Thanks,

Doug

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**From:** Donald Palmrose  
**Sent:** Wednesday, April 22, 2009 9:21 AM  
**To:** Snead, Paul  
**Cc:** Douglas Bruner; HarrisCOL Resource; LevyCOL Resource  
**Subject:** FW: Conference Details (APR 23, 2009--01:00 PM ET--Conf# 3424964)

Paul,

For tomorrow's phone call, I estimated 8 lines for Progress Energy. Please let me know if you need any additional lines.

Thanks,

Don

**Donald Palmrose, PhD**  
Sr. Project Manager  
Environmental Projects Branch 3  
Division of Site and Environmental Reviews  
Office of New Reactors  
U.S. Nuclear Regulatory Commission  
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### Passcodes/Pin codes:

Participant passcode: 46976
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**Hearing Identifier:** ShearonHarris\_COL\_Public  
**Email Number:** 413

**Mail Envelope Properties** (5A7F273F3E481245BC055B36939D346323F7B3F122)

**Subject:** Teleconference with Progress Energy - Harris and Levy  
**Sent Date:** 4/23/2009 11:52:57 AM  
**Received Date:** 4/23/2009 11:52:59 AM  
**From:** Douglas Bruner

**Created By:** Douglas.Bruner@nrc.gov

**Recipients:**

"LevyCOL Resource" <LevyCOL.Resource@nrc.gov>  
Tracking Status: None  
"HarrisCOL Resource" <HarrisCOL.Resource@nrc.gov>  
Tracking Status: None  
"Snead, Paul" <paul.snead@pgnmail.com>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	2031	4/23/2009 11:52:59 AM
Teleconference Agenda 042309 Final.doc		64506
Discussion on Levy RAIs.doc	58362	

**Options**

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

**Teleconference Agenda with PEF/PEC  
Levy and Harris COLAs  
April 23, 2009, 1:00 PM EDT**

**Discussion Topic**

Introductions

**Levy County Environmental Review**

NRC and USACE

- Discussion on documents/data anticipated to be submitted to NRC
  - Update on Traffic Report due 2<sup>nd</sup> quarter 2009 (PGN RAI #: L-0127)  
PEF indicated on April 9 that this document is in draft form.
  - X/Q data was forwarded to PNNL this morning in response to FSAR RAI 02.03.03-4 (NRC Letter No. LNP-RAI-LTR-017). Related to HP NRC# 2.7-1 (PGN RAI #L0076). The following were needed:
    - X/Q values ¼-mile from the plant – worse case scenario
    - Regular sector averaged – maximum exposed individual and population dose.
  - One year's worth of sampling data (338884-TMEM-087)
  - 316 studies for the CFBC (338884-TMEM-088)
  - TM 338884-TMEM-080, Rev 0, "Assessment of Community Services near Proposed Levy Nuclear Plant, Florida"
- Crystal River extended power uprate  
To be addressed in EIS cumulative effects. NRC anticipates additional RAIs will be required to complete cumulative impacts analyses.
- NRC EIS figure request to be made prior to DEIS production - The objective of this request will be to obtain the best possible figure files for use in the EISs—figures that reproduce clearly in both black-and-white and color, and that can be modified as necessary by our GIS experts and in-house graphic specialists. To this end, we will make the following requests for specific figures anticipated to be used in the EIS:
  - GIS data for the map figures.
  - For non-GIS figures—i.e., those that are drawn or otherwise created by graphic designers, provide "original" files—e.g., native-platform vector files, working layered Photoshop files, Illustrator files, Cad files, Freehand files, etc.
  - In addition to the types of figure files requested in items 1 and 2, we will request high-resolution (300 dpi) editable PDFs in both black-and-white and color for each figure--PDFs made from original art. These are needed because the website version of the EIS will be in color, while hard copies printed by NRC are strictly in black-and-white.
- Teleconference on SME needs for PEF RAI responses to be held separately. Plan for Monday, April 27, 1:00 PM EDT.

Schedule

- Scoping Summary Report to be issued May 28, 2009.

#### Schedule for RAIs and DEIS

- |  |                     |
|--|---------------------|
| ○ Drafting sections of the DEIS (PNNL)         | 01/28/09 – 04/24/09 |
| ○ DEIS sections review and editing (PNNL)      | 04/27/09 – 06/22/09 |
| ○ Review and comment of preliminary DEIS (NRC) | 06/23/09 – 07/07/09 |
| ○ DEIS writing meeting at PNNL (NRC/PNNL)      | 07/13/09 – 07/17/09 |
| ○ Edit DEIS after writing meeting (PNNL)       | 07/20/09 – 08/07/09 |
| ○ NRC issues FR Notice of Availability of DEIS | 10/21/09            |
| ○ EPA issues FR Notice of Filing for DEIS      | 10/26/09            |

#### Shearon Harris Environmental Review

##### Updates on:

- Closing out of Accident RAI 7.1-1
- Status of Phase 1 cultural resource survey
- Noise impacts
- Hydrology items
  - Instream flow study meeting
  - Implementation of NEI 07-07
  - GW Table 2.3-54 and text in ER
- Submission date(s) for supplement RAI responses
  - Supplement responses to NRC RAIs are expected to be transmitted to the NRC on April 30, 2009. Supplement responses to USACE RAIs are expected to be transmitted around May 15, 2009.

##### Other

- Next Teleconference: May 7, 2009, 1:00pm EDT (proposed)
- Participants on last teleconference (April 9, 2009):

Paul Snead (PEC)	Doug Bruner (NRC)
Joseph Pavletich (PEC)	Don Palmrose (NRC)
Scott Freeman (CH2M Hill)	Don Hambrick (USACE)
Mitch Griffin (CH2M Hill)	Roger Dirkes (PNNL)
Wayne Scofield (CH2M Hill)	Tara O'Neil (PNNL)
Mike Cambria (Worley-Parson)	Steve Wyngarden (ISL/ICF)
	Ralph Grismala (ISL)
	Ann Miracle (PNNL)
	Jeremy Rishel (PNNL)

## **Discussion for Levy RAIs**

### **April 23, 2009**

Staff is reviewing the RAI responses from PEF to identify needs for further discussion and/or new RAIs. The following questions have been raised by staff:

- (1) Regarding CREC Unit 3 power uprate, provide details of PEF modeling for the CREC discharge canal and thermal plume in the Gulf.
- (2) Provide "salt balance" modeling that predicts how the CFBC and the relic arm of the Withlacoochee River may change after LNP intake starts to operate that can be referenced in the EIS for our impacts assessment.
- (3) Provide information regarding control measures used for biofouling of intake and discharge structures at CREC and proposed biofouling control measures to be used for the CWIS in the CFBC. (ESRP 5.3.2) For example, please provide a discussion of how intake structures are to be cleared of barnacle and mussel biofouling. Will biocides be used to control biofouling in the discharge structures?
- (4) Provide information on how blowdown pipelines from LNP will connect with the CREC discharge. Specifically, will the LNP blowdown outfall discharge directly into the CREC discharge canal, or will it connect to existing CREC discharge piping from units 4 and 5? (ESRP 4.3.2)
- (5) The response to NRC RAI 7.1-1 provided in PGN RAI ID L-0080 contains isotopic source terms for design basis accident calculations. The response is incomplete and in at least one instance contains source terms that are not consistent with doses listed in ER and the AP1000 DCD. Consequently, staff have the following 2 requests
  - a. Isotopic source terms were not provided for the worst 2-hr period for use in calculating EAB doses for 6 DBAs. Provide the worst 2-hr isotopic source terms for the following AP1000 design basis accidents:
    - I. main steam line break with accident initiated iodine spike
    - II. main steam line break with pre-existing iodine spike
    - III. locked rotor accident with feedwater
    - IV. rod ejection accident
    - V. steam generator tube rupture with accident initiated iodine spike
    - VI. steam generator tube rupture with pre-existing iodine spike.
  - b. Isotopic source terms provided in the response for the rod ejection accident for the 8 to 24 hr period and the 24 to 96 hr period are not consistent with the DCD and Levy County LPZ doses for those periods. Provide correct source terms or correct the doses.
- (6) PEF Response to NRC RAI 2.4.1-1:
  - a. The updated tables on seasonal observations of wildlife included the south property as part of the LNP site. Break out the wildlife observations for the south property as a separate category.
  - b. Table 2.4-5 Important Species. Provide a map showing the locations for all federal listed species, state listed species and state species of concern observed by PEF contractors on or adjacent to the LNP site, the south property and the blowdown pipeline corridor.
  - c. Provide the number of pedestrian surveys conducted monthly for wildlife and wildlife habitat between September 2006 and November 2008.
- (7) PEF Response to NRC RAI 2.4.1-2:
  - a. Justify why the remnant reach of the Withlacoochee River and the Cross Florida Barge Canal, which are crossed by the transmission corridor, do not represent waterfowl concentration areas.
  - b. Justify why the Withlacoochee River, which is crossed twice by the Central Florida

- South transmission corridor, does not represent a waterfowl concentration area.
- c. Provide the distance between the adjacent waterfowl concentration areas identified in the PEF response and the LNP site or associated facilities.

(8) PEF Response to NRC RAI 2.4.1-3:

- a. Provide a GIS file containing the delineated wetlands and project features that were used to produce the new wetlands map.
- b. Clarify whether the wetlands map is based upon the completed field delineations for wetlands or is based upon the existing FLUCCS mapping.
- c. The wetland acreages in Table 2.4.1-3-001 include the south property as part of the LNP site. Break out the wetland acreages for the south property as a separate category/column.
- d. The FLUCCS wetland cover types identified in Table 2.4.1-3-001 are not consistent with the FLUCCS wetland types noted in the ER Table 2.4-1. Examples – no Stream and Lake Swamps (Bottomland) (FLUCS 615) is identified in Table 2.4.1-3-001; no freshwater marshes (FLUCCS 641) is identified in Table 2.4.1-3-001; many acres of Wetland Forested Mixed (FLUCCS 641 is identified in ER Table 2.4-1, but less than an acre is noted in Table 2.4.1-3-001; Explain these discrepancies.
- e. According to the new wetlands map, much of the tree plantation cover type is now identified as wetland. Yet Wetlands Table 2.4.1-3-001 does not list any hydric tree plantation. Why is this and how is hydric tree plantation accounted for?
- f. Do the acreages of the FLUCCS wetland cover types identified in Table 2.4.1-3-001 reflect adjustments to the boundaries of the FLUCCS cover types derived from the on-the-ground wetland delineations that were completed? If not, what do the acreages represent?
- g. Table 2.4.1-3-002 combines temporary and permanent wetland impacts for the Pipeline LNP to CFBC, and the Pipeline CFBC to CREC facilities. Separate out the permanent and temporary wetland impacts for these facilities.
- h. Table 2.4.1-3-002 does not identify any impact to hydric tree plantation, yet a substantial portion of on-site tree plantation is wetland. Is this correct?
- i. Explain what the 50' Buffer to the CFBC is. Explain the nature of the temporary impacts that will occur here and whether it can or will be restored.
- j. Justify how enhanced herbaceous wetlands can attain full maturity and wetland functions in 5 years.
- k. Justify how enhanced planted pine wetlands can attain full maturity and wetland functions in 5-15 years.
- l. Provide interpretation and support for contention that grouting and reinforced diaphragm walls will prevent construction dewatering from impacting adjacent wetlands.
- m. Provide interpretation and support for contention that groundwater drawdown of up to ½ foot will not impact adjacent wetlands.
- n. Provide a GIS file containing groundwater drawdown isopleths.
- o. Table 2.4.1-3-003 (Wetland and Upland Impacts Along Transmission Lines) does not distinguish between wetland and upland impacts. Most of the FLUCCS cover types listed under Wetland Type appear to be upland communities. Revise this table to provide separate estimates of upland impacts and wetland impacts by FLUCCS cover types along the transmission lines.

(9) PEF Response to NRC RAI 2.4.1-4:

- a. The wetland mitigation plan identifies logging and thinning as major tools to restore/enhance disturbed pine plantations. Most of these plantations are young (less than 20 years old). Clarify whether nonmerchantable stands will be logged/thinned, or whether trees will be allowed to mature before implementing harvest prescriptions.
- b. The wetland mitigation plan identifies frequent controlled burning as major tool to restore/enhance disturbed pine plantations. Provide an assessment of how realistic the option of frequent controlled burning is for lands surrounding the LNP.
- c. PEF provides no firm commitment to restoring wetlands and uplands on remaining undeveloped lands on the LNP site. Without a firm commitment, the EIS analysis will assume that restoration and associated wildlife enhancement will not occur.

(10) PEF Response to NRC RAI 4.3.1-1:

- a. Table 4.3.1-1-001 fails to provide the acreage of temporary and permanent impacts for

upland plant communities; only wetland impacts are provided. Revise the table to include the missing information. Clarify whether the acreages of the FLUCCS cover types identified in Table 4.3.1-1-001 reflect adjustments to the boundaries of the FLUCCS cover types derived from the on-the-ground wetland delineations that were completed. If not, what do the acreages represent? Differentiate between the LNP site and the southern property.

- b. Figure 4.3.1-1 is illegible. Provide a GIS file containing cover types and project features so that the NRC may produce a legible figure for the EIS. The cover types to be provided must be for the individual FLUCCS types present on-site so that they match revised Table 4.3.1-1-001; they should not be combined into broad categories as presented in Figure 4.3.1-1. Clarify whether the acreages of the FLUCCS cover types identified in Figure 4.3.1-1 reflect adjustments to the boundaries of the FLUCCS cover types derived from the on-the-ground wetland delineations that were completed. If not, what do the cover types represent? Differentiate between the LNP site and the southern property.
- c. Based upon response to a request for BMPs to restore temporary impacts, the NRC will assume that PEF has not yet committed to any BMPs and will assess temporary impacts in the EIS accordingly.
- d. PEF indicates that no seed mix is needed for wetlands that are temporarily impacted because an adequate native seed bank is present. However, PEF did not provide its approach to upland areas that are temporarily impacted. Address the upland areas.
- e. PEF discussion of the value of the 3 stormwater ponds as habitat for wildlife is insufficient to determine benefits to wildlife. Provide the following additional information: acreage of each pond; the hydrological attributes of each pond (e.g., permanent surface water, seasonal surface water – the ER is contradictory on this matter; extent and manner of seeding and planting to be pursued in the littoral zone; potential value as an attractant to wildlife.

(11) PEF Response to NRC RAI 4.3.1-2:

- a. Explain how integrating new transmission lines into the existing grid system will reduce bird collisions.
- b. PEF identified a number of mitigation measures from the literature that can be implemented to reduce bird collisions with transmission lines. However, PEF did not commit to using any of these measures. A permitting condition proposed from the State of Florida is a requirement for an Avian Protection Plan, but PEF provides no measures to be included in the plan. Identify the measures PEF intends to employ to minimize bird collisions with transmission lines.

(12) PEF Response to NRC RAI 4.3.1-5:

- a. Clarify intent with regards to establishing a wildlife corridor between the Goethe State Forest and the south property.
- b. A commitment is made to use BMPs to minimize the spread of invasive species following land disturbance, including the use of native seed mixes. This seems to contradict the response to NRC RAI 4.3.1-1. Please clarify.
- c. PEF states that success criteria in the wetland mitigation plan include an invasive species component. No success criteria are provided in the wetland mitigation plan. Invasive species control in the plan is limited to one sentence on page 26 that says invasives will be removed. Please clarify.

(13) PEF Response to NRC RAI 4.3.1-7:

- a. PEF states that the source of off-site fill has not yet been determined, but that existing material stockpiled from construction of the CFBC would be used if needed. Describe the state of these existing stockpiled materials. If this material is represented by material sidecast from construction of the CFBC 40-50 years ago, this material now supports plant and wildlife communities. Excavation of this material would contribute to additional, substantial impacts to wildlife. Clarify the potential need, source and state of fill.

(14) PEF Response to NRC RAI 5.3.3.2-1:

- a. Add the LNP site boundary to the salt isopleths maps.
- b. Update the isopleths maps to account for the estimated deposition rates during normal operation and the conversion to kg/ha/mo.



- c. The Crystal River Salt Deposition Study PEF provided did not include the final annual report as an attachment. Rather, it included excerpts from a 1998 modeling study (with missing pages). It provides no assessment of impacts to vegetation from salt deposition. Provide the final annual report that addresses salt drift impacts to vegetation.