Date:

February 5, 2016

To:

Florida Public Service Commission; Florida Power and Light Company

From:

Sonja Peterson-Lewis, Homeowner, Lewis Subdivision, MacClenny, F

6200 Wayne Avenue A-102, Philadelphia PA 19144

Re:

Florida Power and Light's proposed power transmission expansion plans from

Duval to Columbia County (Docket # 150263-El)

Dear Florida Public Service Commission/Florida Power and Light:

On Tuesday, November 10, 2015, I received a letter--dated as *October 2015* with no specific date or postmark on the enveloper-from Florida Power and Light (FPL) announcing a Thursday November 12, 2015 informational Open House at the Baker County Agricultural Center. The stated purpose of the Open House was to allow FPL to answer questions about FPL's planned Duval-to-Columbia County electric grid expansion. The plan includes erecting 230-kilovolt overhead transmission lines through some residential communities, including my neighborhood in Baker County. If my understanding of kilovolts is correct, then FPL is planning to add *overhead high-voltage power transmission lines* in select residential communities, including my community in Baker County. I write under that assumption. The Open House was a good idea; however, receiving the letter only two days before the event did not allow sufficient time for meand probably many others--to arrange to attend. The short notice also did not allow sufficient time to study the issues related to FPL's plans. During the Open House, I called and spoke to Mr. David G. Cobb--from whom the FPL letter came--to introduce myself, to state that I had questions and concerns about FPL's high-voltage plans, and to say that I would be in touch once I had a chance to study the issues. My purpose in writing is to express those concerns.

Since receiving FPL's letter, I have devoted time to studying issues associated with high-voltage wires, substations and similar installations. Based on experiences living near high- voltage wires and my studies, I have listed below some of my concerns. It is critical that FPL and other decision-making bodies address these concerns with answers that are true, clear, transparent, and accountable—not just for me, but for all citizens. Although many industries and their representatives strategize to ignore, discredit, or dismiss concerns about the effects of various industrial projects, I ask and trust that FPL and decision-making bodies will <u>not</u> do the same in this case.

1. <u>Effects of High-Voltage Installations</u>. Research has established that high-voltage wires produce electromagnetic fields (EMFs)--radiation. Of course, EMFs are all around us from various personal electronic devices and appliances. However, there is growing medical and environmental evidence about risks associated with high-voltage installations/radiation. People in such areas tend to experience elevated risks for certain types of diseases and ailments. These ailments include but are not limited to childhood leukemia (Sohrabi, Targoman, Abadi and

Yavari (2010), diabetes (Havas, 2006), and several types of cancers, including thyroid- and uterine- and other blood disorders (Milham and Morgan, 2008). Group (2014) concluded that EMFs can interfere with brain function and produce brain-related ailments such as memory lost and lack of concentration. I have seen evidence of most of these issues in my community. Although there is debate about how strongly and through what mechanisms EMFs pose various medical risks, no one believes that exposure to random EMFs/radiation is healthy for people or animals. In 2006, the World Health Organization (WHO) had enough concern about the effects of electromagnetic fields on people's health--for example, on the functions of cardiac pacemakers, defibrillators, and other electro-medical devices--that the WHO produced the booklet, *Model Legislation for Electromagnetic Fields Protection*. The booklet deals with responsibly governing and creating regulations about such exposures. Beyond health, there are issues of how high voltage installations affect aesthetics, property values, and vegetation. High-voltage installations negatively affect all. In this vein, it is important to know what information FPL has and what information has shared about the effects of its high-voltage wiring systems on residents and properties near existing installations.

- 2. Existing FPL Research: In view of the concerns stated above, what research has FPL/its affiliates conducted on the effects of high-voltage lines on residents, animals, and the environment—ground water, soil, vegetation, and property values? What measurements/ assessments has FPL taken? What were the findings? What has FPL shared with community residents? Where can the public see findings in clear and understandable language? With what community residents and representatives has FPL spoken?
- 3. <u>Future/Planned FPL Research</u>: What studies are FPL officials or affiliates planning to conduct on the effects of existing transmission lines and the planned expansions? When, where, with whom, and how will FPL conduct these? What measures will be taken to ensure that you ask all the relevant questions to the relevant people in clear, understandable terms that yield valid, reliable, and relevant results? I have some experience with research design; let me know if I can be of assistance, as I believe such research must be completed before expansions. How will FPL analyze the data and ensure that the public has easy access to clear, easily understandable findings?
- **4.** Less Hazardous Alternatives: If the citizenry and city planners have found high voltage transmission truly necessary, then what have FPL and other parties done to eliminate potentially harmful effects and/or direct dangers <u>away from</u> all residents/residential areas? Research shows that some power companies, ethical developers and city planners, unwilling to put citizens in harm's way and harm in citizens' way, opt to use <u>underground cables</u> and other measures to avoid exposing residents to high voltage dangers. I have learned that FPL uses underground cables in <u>some</u> communities, but not others. On what basis does FPL decide underground versus overhead? Might FPL be proactive in minimizing hazards to all communities? Further, given that low-cost and safer energy sources are growing concerns, might FPL position itself to be a national leader in breaking down the barriers between electric and green-energy advocates?
- 5. <u>Demographics</u>: What are the <u>specific</u> demographics or characteristics of the residential communities through which high voltage lines run? By *demographics*, I mean resident variables such as income levels, education levels, ethnicity and race. Numerous studies reveal that

environmentally hazardous dynamics—for example, trash-dumping, chemical treatment plants, electric substations, polluting roadways and the like--are very often placed in communities that planners perceive as being unable or not informed enough to question, resist, or fight back and such dynamics disproportionately affect communities of color and low income people. Few of us want to think that anyone, especially ourselves—would make critical decisions for and about others based on qualities as superficial and coincidental as color of skin or income. Thus, such patterns of hazardous placement may not be intentional targeting. Yet, the statistical evidence is clear; communities of color and/or low-income residents tend to bear disproportionate burdens.

## **Historic Lewis Subdivision**

One area targeted for FPL's transmission expansion plans is Lewis Subdivision, a historic community named for Walker Lewis. Walker Lewis walked into Baker County over in the 1850s from North Carolina where he had been born in slavery. Walker worked as herdsman for the McClennys, the family for whom MacClenny is named, traveling to the Carolinas and Virginia to walk livestock back to Florida. He later became stock handler for Griffin's Nurseries and the practical veterinarian for the town. While working and living at the Nursery with his wife and children, he saved and purchased (twice) the property now called Lewis Subdivision. The family cultivated and farmed the area for years. Then, in the 1960s, Edgar L. Lewis—Walker Lewis's son and my father—made a conscious humanitarian decision to let a developer build houses in the Subdivision so that African Americans could buy homes that they could pass on to their descendants. This was not the regular pattern of opportunity for African Americans in the County. I know this based on research I am conducting for a documentary and historic designation in the area. L. Smallwood's historical collection, *Once Upon a Lifetime in and Near Baker County FL*, writes of Walker Lewis. Walker Lewis is also the title subject of *The Carolina Herdsman*, a musical suite performed at Temple University in 2013.

Lewis Subdivision and High Voltage Wires: While traveling west on Interstate 10, one reaches a clearing in a field where large cement poles run diagonally through an undeveloped field and through other non-residential areas. However, once in Macclenny, one sees that these mammoth poles run *directly* through highly residential Lewis Subdivision and the surrounding neighboring streets. Whether this was a feat of targeted engineering or bad luck, I do not know. However, I know that people live within feet of and children play in clearings directly beneath those wires.

My concerns about high voltage dangers do <u>not</u> come merely from reading research. While working to upgrade my house and backyard on Lewis Street over the years, I experienced sudden, unexplained nosebleeds. My mother, before suffering a fatal stroke at the same house, experienced uncharacteristic and severe headaches. There is also a pattern of Alzheimer's disease in the area; at least four residents on Lewis Drive along which wires run had Alzheimer's-related dementia. A young man who grew up on Lewis Drive near the transmission line died of colon cancer in his 20s. As I prepared to write this letter, a young mother in her 20s lay in hospice care due to an aggressive form of cancer; she came of age in the neighborhood. Although some will attempt to dismiss these cases as anecdotal, in view of the research cited earlier, these cases raise concerns about hazards already in the community and those now in the planning stages. News of FPL's expansions plans caused me to put on hold a critical home improvement project at considerable costs. Being put at risk in one's home is <u>not</u> acceptable.

## When We Know Better, We [Should] Do Better

Baker County is my home; it is the <u>only</u> place I own a house and property. All lives are connected in the county; we have one high school where all lives converge. I do <u>not</u> object to social and economic progress. What I <u>do</u> object to are plans that expose some residents, their children, and property to risks that endanger their health, lower their quality of life, lower the value of their property, and negatively affect soil, water, and animal life—forever—usually in the name of making or saving money. I believe that FPL and other decision makers <u>should</u> do better by citizens because you <u>can</u> do better. With the very smart people FPL employs and its list of consultants, you can, if you will, find a way to make <u>necessary</u> improvements without posing risks to residents' health and legacies. I ask that you plan cleaner and do better/act better, not just by my community, but by all communities. As other agencies look into lowering their carbon footprint and practicing social justice, why does FPL not take the bold step of being a true leader in energy and ethics? When we know better, we <u>should</u> do better.

Please put me directly on the mailing list for future notices about this issue. My mailing address appears below. I wish you the best in planning better for the citizenry. Let me know how I can help.

Sincerely,

Sonja Peterson-Lewis, Ph.D. 6200 Wayne Avenue, #A-102 Philadelphia PA 19144

## Some Sources Cited in or Examined for this Letter

- Banks, R. S. (1984). On effects of high-voltage transmission lines. *American Journal of Public Health*. September; <u>74(9)</u>: 1042–1043.
- Campbell, H. E., Kim, Y., and Eckerd, A. (2015). Rethinking environmental justice in sustainable cities: Insights from agent-based modeling. NY: Routledge Press.
- Group, E. (2014). Neuroscientist confirms the danger of electromagnetic radiation. http://www.globalhealingcenter.com/natural-health/neuroscientist-confirms-the-danger-of-electromagnetic-radiation/
- Haupt, R. C. and Nolf, J. R. (1984). The effects of high voltage transmission lines on the health of adjacent resident populations. *American Journal of Public Health*, 74(1): 76–78.
- Havas, M. (2006). Electromagnetic hypersensitivity: Biological effects of dirty electricity with emphasis on diabetes and multiple sclerosis. *Electromagnetic Biological Medicine*, <u>25</u>(4) 259-68.
- McDowall, M. E. (1986). <u>Mortality of persons resident in the vicinity of electricity transmission facilities</u>. *British Journal of Cancer*, <u>53(2)</u>: 271–279.

- Milham, S. and Morgan (2008). A new electromagnetic exposure metric: High frequency voltage transients associated with increased cancer incidence in teachers in a California school. *American Journal of Industrial Medicine*, August 2008, Vol 51(8):579-86. doi: 10.1002/ajim.20598.
- Moen, B. E., Drablos P. A., Pedersen, S. Sjøen. M., and Thommesen, G. (1995). <u>Symptoms of the musculoskeletal system and exposure to magnetic fields in an aluminum plant.</u>

  Occupational Environmental Medicine, <u>52</u>(8): 524–527.
- Segell, M. (2011) Is Dirty Electricity Making You Sick? http://www.prevention.com/health/healthy-living/electromagnetic-fields-and-your-health
- Sohrabi, M. R., Targoman, T., Abadi A. and Yavari, P. (2010). Living near high voltage overhead transmission lines as a risk factor for acute childhood lymphoblastic leukemia: A case-control study. *Asian Pacific Journal of Cancer Prevention*, 11(2) 423-427.