#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010908-EI Order No. PSC-02-0788-PAA-EI; Issued June 10,2002 June 28, 2002 Petition

Complaint against Florida Power & Light Company ) regarding placement of power poles and transmission ) lines by Amy and Jose Gutman, Teresa Badillo ) and Jeff Lessera )

#### **PETITION**

In response to the receipt of the Order No. PSC-02-0788-PAA-EI issued on June 10,2002 by the Public Service Commission, Petitioners hereby request a hearing regarding the proposed agency action and final agency action.

Petitioners are responding to both point II and III of the Order No. PSC-02-0788-PAA-EI. Petitioners are timely since the order was mailed to petitioners and by Florida Statute and Rules, the time for response does not start accruing for about five days of the actual mailing. Petitioners received copies of the order at various dates.

Petitioners will agree to another form of mediation if a positive result can be obtained.

#### **INTRODUCTION**

Petitioners, Suzanne Terwilliger, Jose Gutman, Jeff Leserra, Donna Tennant and Teresa Badillo file this petition for a hearing pursuant to Florida Statutes Section 120.57, 120.569, and rule 28-106.201(2) FAC. The petition is timely, and has standing. The Petitioners have not waived their rights. The Petitioners reserve the right to amend this petition at a later date.

#### **I. AFFECTED AGENCY**

The agency affected is the Florida Public Service Commission (PSC), 2540 Shumard Oak Blvd, Tallahassee, Florida 32399. The concerns listed below affect Florida Power and Light's (FPL) Parkland Transmission Line. PSC Phone is 800-342-3552. The PSC, pursuant to section 120.52(1), F.S., is an agency and subject to the Administrative Procedures Act.

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#### II. PETITIONERS

- A. The petitioners are:
- 1. Suzanne Terwilliger 12590 Little Palm Lane, Boca Raton, Fl 33428 (561) 487-4123
- Amy and Jose Gutman 12643 Little Palm Lane, Boca Raton, Fl 33428 (561) 470-8676
- 3. Donna Tennant 12596 Little Palm Lane, Boca Raton, Fl 33428 (561) 883-0837
- 4. Jeff Leserra 7200 Loxahatchee Rd, Parkland, FL 33067 (954)753-4686
- 5. Teresa Badillo 12280 St. Simon Drive, Boca Raton, Fl 33428 (561)482-2885
- B. Petitioners will represent themselves.

# III. PETITIONERS' INTERESTS WILL BE SUBSTANTIALLY AFFECTED BY THE AGENCY DETERMINATION

The Notice of Proposed Agency Action Order Finding Transmission Facilities in Compliance with National Electrical Safety Code and Final Order Dismissing complaints on All Other Grounds for Lack of Jurisdiction, issued by the Florida Public Service Commission for Docket No. 010908-EI, Order No. PSC-02-0788-PAA-EI, as written will substantially affect the Petitioners' interests.

Petitioners believe that the original team of PSC staff that were assigned to this case and actually met with us in Boca Raton and personally heard our stories, were willing to come to an equitable solution for both the Petitioners and FPL. Obviously, this Proposed Order only benefits FPL. Petitioners contend that FPL has dealt unfairly with us and are trying to hold us up as an example for the general public. FPL wants to use us as an example and show other communities that FPL always wins. The Public Service Commission is responsible for price protection and fairness and welfare to consumers and is a regulatory body for public utilities.

Petitioners also believe that Mr. McLean has unfairly persuaded the Commission to dismiss this case based on lack of jurisdiction and has unfairly demanded that the Petitioners take their case to a civil court. Civil Court is prohibitively expensive and our own personal resources are no match for FPL's. Mr. McLean statements, "I want to persuade the Commission that this is not our battle. Once we enter this theatre, it will be impossible to avoid the sequels", is a poor excuse not to help the Petitioners. (Refer to Exhibit A) Mr. McLean published a recommended resolution on April 5, 2002, even though he did not attend the informal hearing held in Boca Raton and has never even consulted with the Petitioners.

New information has come to light regarding the safety issue for the Parkland Transmission Line. FPL has recently applied for a "modification" to its permit #11367 from the South Florida Water Management district. In their "modification letter" written by Florette Braun, (Exhibit B), FPL requests the replacement of four (4) existing poles (structures 211T12, 212T1, 212T2 and 214T1) and the installation of insulated braces on three (3) existing poles (structures 211T10, 211T11 and 212T7).

Specific representations were made by FPL experts pertaining to the safety elements of this project during the District of Administrative Hearing (DOAH) Case No. 01-1504. The FPL modification is in direct contrast to the safety assurances that FPL Experts testified to in Court. The PSC should require an independent engineer verify the safety of this Parkland Transmission Line project and verify that this project has met with the NESC and ASCE.

Petitioners have received public record documents from the PSC, specifically a document from Mr. Frank Paez, that says he simply visually inspected the project for compliance to NESC. (Exhibit C) It seems that a more substantial report would be required to verify compliance to the NESC.

Dr. Wong, FPL Staff Engineer in charge of the Transmission Line Design Section, testified under oath that FPL's own internal standards are more stringent than the National Electric Safety Code and the ASCE guidelines and the transmission line project met this internal standards. (Administrative Hearing Transcript Page 999 lines 4-15, Page 1011 line 21-24. Exhibit D) Dr. Wong also testified that when the poles for this project were designed, FPL took into account the depth that the poles would be installed into the ground and that the computer model helped to determine parameters based on wind speed. He also testified that the PSC verified this model. (Administrative Hearing Transcript page 1043 line 22- page 1044 line 7. Exhibit D) No evidence of this verification was found in the documents submitted by the PSC for the public records request. (Exhibit E)

Dr Wong testified that the gapping between the pole and ground is typical construction practice. (Administrative Hearing Transcript Page 1047 lines 16-25. Exhibit D) This "gapping" is something that Petitioners brought up at the Hearing as a safety concern. Dr. Wong also testified that when designing the power poles, FPL assumes that the ground where the project will be sited contains a very poor soil condition (Administrative Hearing Transcript Page 1048 lines 12-13. Exhibit D); and that the ground at this Parkland Transmission Line Siting is "gravel and it's really well graded gravel. But I was told that there's actually coral rock underneath." (Administrative Hearing Transcript Page 1048 lines 21-24. Exhibit D)

The letter from Florette Braun to the SFWMD dated May 6, 2002, states that FPL will "replace poles at permitted locations 12, 13, 14, and 37 (structures 211T12, 212T1, 212T2 and 214T1) to <u>ensure compliance with FPL's internal standards</u>". Dr. Wong's testified that the poles all met FPL's internal standards on October 12, 2001. Petitioners have received no discovery from FPL dealing with the safety of this project. Petitioners argued at the DOAH Hearing that this project was unsafe. FPL experts assured the court that all safety standards were met. If all safety standards were met, then why does FPL now need to replace poles to "ensure compliance with FPL's internal standards"? Petitioners feel that FPL is reacting to safety issues and concerns brought up by Petitioners and that were not considered during the original design of this project. FPL will continue to react to the problems that surface, as the systematic problem is that this project should never have been allowed here in the first place.

Florette Braun states that the insulated braces on the permitted locations are needed to "allow operation at a higher electrical load". With the current electrical loads running through the lines, Mr. Lessera has the ability to light a regular light bulb by merely standing on his driveway and holding the bulb in the air. The negative impact on Mr. Lessera's home due to the higher electrical loads must be considered. Mr. Lessera's pool is located in close proximity to this project. (The pool was installed before this project was sited.) Water is an electrical conductor. Even FPL won't allow a pool placed in close proximity to their ROW where a transmission line is located.

The increased electrical loads will increase the electric fields, magnetic fields, and the EMF levels for all Petitioners. Studies have shown a positive correlation between childhood leukemia and an exposure to EMF greater than 4mG. FPL refuses to provide the Petitioners with a statement of safety, and now there will be an increase in the electrical current with a resulting increasing of the EMFs. The PSC has the responsibility to provide for the safety of the general public. The Department of Environmental Protection merely establishes a guideline for FPL to follow.

The petitioners reserve the right to incorporate any other substantially affected interests that become apparent during these proceedings.

#### IV. NOTICE TO INTERESTED PARTY

Petitioners were sent a letter dated June 10<sup>th</sup>, 2002 regarding the PSC's Proposed Agency Action and Final Order with regard to Docket No. 010908-EI. The letters have been received by the various Petitioners on different dates after June 10, 2002. The letter contained a summary of the notice of rights and did not contain a copied reproduction of the Rules or Administrative Code or Florida Statutes.

#### V. DISPUTTED ISSUES OF MATERIAL FACT

1. In Florida, the PSC has broad authority under Sections 366.04(2)(c), and 366.05(8), Florida Statutes, over transmission grid-related matters (the Grid Bill). The PSC is vested with jurisdiction over the planning, development, and maintenance of a coordinated electric grid throughout Florida. Planning must take into consideration fairness. FPL chooses transmission routes that require the minimum investment risk to itself without any regard as to the effect that the route has on existing development.

2. FPL chose the location for the Parkland substation, approximately four years prior to its choice of transmission line site. In fairness to FPL's consumers and customers, and the residential communities it serves, the transmission line placement should be made approximately the same time and the public needs to be notified early to plan their lives accordingly. If families do not want to live next to transmission lines, then they should be given their fair opportunity to chose where they want to buy their homes.

3. At the hearing with the PSC representatives, in Boca Raton, when Petitioners asked FPL why they didn't seriously consider aligning the transmission line along the Hillsboro Road Extension, Mr. Newbold stated: "We didn't want to impact future development."

4. Petitioners were promised by Mr. Bob Elias and Ms. Lila Jaber that a mutually acceptable resolution and a fair resolution would be proposed by the Commission. After numerous post ponements, petitioners were promised that a resolution would be recommended since early November 2001. Mr. McLean published the recommended resolution on April 5, 2002. Mr.

McLean did not attend the informal hearing held in Boca Raton between FPL and the Petitioners. Also, Petitioners have never personally met with Mr. McLean. We feel that for our case, the PSC has failed to follow its own rules dealing with Customer complaints, specifically 25-22.032 Customer Complaints:

 Intent; Application and Scope. It is the Commission's intent that disputes between regulated companies and their customers be resolved as quickly, effectively, and inexpensively as possible. This rule establishes informal customer complaint procedures that are designed to accomplish that intent. This rule applies to all companies regulated by the Commission. It provides for expedited processes for customer complaints that can be resolved quickly by the customer and the company without extensive Commission participation. It also provides a process for informal Commission resolution of complaints that cannot be resolved by the company and the customer.
 Informal Conference (h) If a settlement is not reached within 20 days following the informal conference or the last post-conference filing, whichever is later, the staff member shall submit a recommendation to the Commission for consideration at the next available Agenda Conference. Copies of the recommendation shall be sent to the participants.

5. The Parkland Transmission Line was constructed to feed the fast growing city of Parkland. FPL has the authority to charge specific customers that will receive benefit from construction. It is unfair for the Petitioners to be charged an extravagant fee to relocate this Parkland line since we never had any input into the location of this line. We were also robbed of the opportunity to object to this project before the permit was granted to FPL, allowing them to place the transmission line on the Hillsboro canal right-of-way. Petitioners would not have purchased their homes if the line were already in place.

As recognized by the Administrative Law Judge in the DOAH case no. 01-1504, all of the publications to meet the minimal anonymous notice failed because they did not meet the requirements of Florida Statute section 120.542. This resulted in both:

1) The homeowners not receiving the constructive notice required by Florida law; and

2) The process by which the District granted the permit and two waivers to FPL being null and void from the start.

6. During the DOAH hearing, the homeowners have not received discovery proving that FPL has considered alternative routes. Petetioners have been substantially impacted and feel that it is unfair to select a few homeowners to carry the financial burden and imposition that these power lines present. Even at Mr. Butler's (for FPL) admission, the transmission line is a mere 180ft from the most of the homeowners' properties. Uncontested by FPL the transmission line is a mere 49feet to his property line. The power poles are 90ft above ground and carry a double circuit with two ground wires. Even though the

Hillsboro canal is between some of the homeowners' homes and the transmission lines, the canal hardly mitigates the view nor the negative effects from the EMFs. Mr. Leserra's home is on the same side of the canal as the transmission lines and is only about 69 feet from the transmission lines to his bedroom.

EMFs are a highly controversial subject. Many of the homeowners, when given the choice of where to buy their home, specifically chose to stay away from transmission lines and the EMFs associated with the lines. When we asked FPL for a statement of safety, they refused to give us one. Since there are no guarantees associated with EMFs, it is only fair and appropriate for each homeowner to chose whether or not they are willing to take any risk associated with EMFs. It is unfair for a homeowner to conscientiously make a decision and then have FPL decide the opposite for a group homeowners because their chosen route "minimizes customer impacts ".

There are studies that prove an increased risk of childhood leukemia for children living in close proximately to transmission lines. (Refer to Exhibit F) There are many small children in the Water's Edge development, which is the closest to the transmission line project. In addition, Mr. Leserra has two younger children.

7. Mr. Leserra's home and master bedroom are a mere 69 feet from the transmission line project. Mr. Leserra can light a bulb from the energy transmitted from the transmission lines while standing on his driveway. Increasing the current on these transmission lines will increase the hazards to Mr. Lessera's home and family. The Loxahatchee Road is traveled extensively by fast moving trucks and is quite narrow. This road is not enough to mitigate the view or effects from the transmission lines and poles.

8. Petitioners feel that it is extremely unfair and financially impossible for them to bear the burden of a million dollars or greater to relocate the transmission lines. Petitioners had absolutely no input into the placement of this project. Since, it was recognized by the Administrative Law Judge, that all of the publications in the Florida Administrative Weekly failed to meet the minimal notice required by Florida Statute section 120.542, the homeowners did not receive the constructive notice required by Florida law and were robbed of their opportunity to express their concern and objections before this line was constructed.

9. FPL has publicly stated that other options were considered when it made its request to the District for permit and waiver. In fact, one of the reasons that FPL states for granting the waiver was that the route chosen was the cheapest and alternative routes received objections from homeowners and political representation. Homeowners and Petitioners for this case have received support from political representatives. (Refer to Exhibit G)

10. Factors associated with power lines impacting property values include the proximity of homes to the line, the price range of the homes, the type of power line, lot sizes, and the public perception of transmission lines. The higher the price of the residence, the greater the potential impact on the residential value caused by a transmission line because purchasers of more expensive property favor and expect a more attractive visual environment. Unfortunately for the Petitioners and homeowners of this case, this transmission line is less than 15 miles, and thus does not have to undergo any of the scrutiny that the transmission Siting Act requires. Also, since we bought our homes before this line was in place and plans for this line were not disclosed, we have paid top dollar for our homes.

Our neighborhoods have underground power lines, thus the overhead high voltage transmission lines are inconsistent with our neighborhood's overall plan.

Our neighborhoods range in price from \$200,000 to greater than \$600,000. Realtors have told homeowners that property values decrease 20-30% when located so close to a major transmission line. Also, when we attempt to sell our homes, the home buying pool is reduced since many people will not consider homes near transmission lines, making our homes more difficult to sell.

11. When Petitioners made a complaint to FPL, we were told by Tony Newbold, don't even think about fighting FPL or taking us to court. We were also told that FPL has fought cases all the way to the Supreme Court of FL and that we didn't have a chance of winning.

It is hardly equitable for pro se homeowners to fight a legal battle with a multi-billion dollar corporation.

On December 14, 2000, when Petitioners first met with the South Florida Water Management District governing board, FPL had only installed the poles with no transmission lines. The total cost of such partial installation by FPL at the time was estimated by Mr. Daniel Hronec, FPL representative, to be approximately \$300,000.

12. Under Section 366.02(i), the legislature defines "public utility" as "every person, corporation, partnership, association, or other legal entity and their lessees, trustees, or receivers supplying electricity or gas to or for the public within this state." In compliance with Section 366.04(6), Florida Statutes, the Commission has implemented Rule 25-6.0345, Florida Administrative Code, incorporating the NESC standards for construction of new transmission and

distribution facilities. In addition, Rule 25-4.038, Florida Administrative Code, provides that all utilities shall at all times use reasonable efforts to properly warn and protect the public from danger, and shall exercise due care to reduce the hazards to which employees, customers, and the public may be subjected by reason of its equipment and facilities."

Under Florida Statute 366.05(1), the PSC has broad powers in the exercise of its "exclusive and superior" jurisdiction, including: "the power..... to require repairs, improvements, additions, and extensions to the plant and equipment of any public utility when reasonably necessary to promote the convenience and welfare of the public and secure adequate service or facilities for those reasonably entitled thereto; and to adopt rules... to implement and enforce the provisions of this chapter."

Under this statutory grant of authority, the PSC is given the broad authority to protect and promote the public welfare. Section 366.01, Florida Statutes, includes an express declaration that it is to be "deemed to be an exercise of the police power of the state for the protection of public welfare, and that all of its provisions be liberally construed for the accomplishment of that purpose."

13. In Florida Power Corp. v. Seminole County, 579 So. 2d 105 (Fla. 1991), the Florida Supreme Court addressed the scope of the PSC's jurisdiction in a local government situation. The Court stated that "requiring FPC to place its power lines underground clearly affects its rates if not its service . . . If FPC has to expend large sums of money in converting its overhead power lines to underground, these expenditures will necessarily be reflected in the rates of the customers." See id. at 107. Moreover, the Court in <u>Semin</u> Count@ found that the PSC, rather than a local community, is vested with the authority to require underground conversion where "feasible" and "cost-effective." See id. at 108.

14. In Complaint Irene Tabor against Florida Power & Light Company regarding relocation of facilities not on an easement, FPL facilities were located on the Tabors' property without an appropriate easement. FPL records indicate that the power lines crossing the Tabors' property were installed in 1959 and 1960. FPL asserts that the lines have been in place for longer than twenty years and therefore are covered by prescriptive rights. The Tabors purchased their property in 1968 and opened a case with the PSC in 1993. This case was dismissed due to the lack of subject matter jurisdiction over the issues presented relating to real property law. Clearly the current case before the Commission is distinguishable by the fact that the Petitioners bought their properties first and the high voltage transmission lines came second. Also, as soon as the Petitioners realized what was happening, they immediately contacted FPL.

15. The Petitioners are requesting lines or poles to be relocated because of their arrival or changes to existing property. For example, in the Samale

complaint, the customers built a new house which violated NESC standards because of the close proximity to exiting lines. See Order No. PSC-93-1029-FOF-EI, Docket No. 930361-EI (July 13, 1993). The Samales were forced to pay the cost of the relocation because the change was made solely for their benefit. See <u>id</u>. Likewise, in the Leon/Olazabal case, Mr. Olazabal was building a new residence. See Order No. PSC-98-1385-FOF-EI-, Docket No. 981216-EI (Oct. is, 1998). Based on the design of the house and local government restrictions, FPL was required to move an electrical pole that had been in place for decades. See id. The Commission found that the principle reason for moving the pole and associated facilities was to accommodate the construction of the residence as presently designed. See <u>id</u>. The Commission held that the costs should not be imposed on the ratepayers, since only the complainants would benefit. See <u>id</u>.

This case is clearly distinguishable for the following reasons. First, the Petitioners and their neighbors bought and had lived on their properties <u>prior</u> to the transmission line siting. Many of the Petitioners have stated that they would have bought houses in other neighborhoods had they been forewarned of the line. Second, rather than for the sole benefit of the complainants, the line in question serves an entire section of FPL customers. In fact, it serves mainly a Parkland community located in Broward county while most Petitioners live in Palm Beach county. To move the line would also be a positive policy statement by FPL benefiting future FPL customers; in essence, FPL could start showing its customers that it considers issues affecting surrounding homeowners, including the cost of devaluation to their properties.

16. The Commission has jurisdiction over this complaint. First, FPL is a "public utility" under Chapter 366, Florida Statutes. Rerouting the power lines effect FPL's rates and service and is included in the PSC's regulatory authority. Finally, the PSC has authority under Section 366.05(1) to promote the public welfare.

17. The placement of 100-foot concrete poles with 230 kV transmission lines running adjacent to a residential area has an effect on public welfare and convenience. The placement of large concrete support poles in a residential area has an effect on the public welfare and convenience. This situation comes under the Commission's duty to "promote the convenience and welfare of the public..."

The PSC has authority under Section 366.05(1) to promote the public welfare. The concept of public welfare is broad and inclusive, and the values it protects are spiritual, as well as physical, aesthetic as well as monetary. See <u>Day-Brite</u> <u>Lighting</u>, <u>Inc. v. Missouri</u>, 342 U.S. 421, 72 S. Ct. 405, 96 L. Ed. 469 (1952); <u>Berman et al., Ec. v. Parker et al.</u>, 348 U.S. 26, 75 S. Ct. 98, 99 L. Ed. 27 (1954). According to the courts, aesthetic considerations have a definite relation to the public welfare. See <u>Murphy, Inc v. Town of WestPort</u>, 131 Conn. 292, 40 A.2d 177, 156 A.L.R. 568 (1944); <u>Baddour v. City of</u> Long \_.Reach, 279 N.Y. 167, 18 N.E.2d 18, 124 A.L.R. 1003 (1938), reargument denied, 279 N.Y. 794, 19 N.E.2d 90, 124 A.L.R. 1003 (1939), appeal dismissed, 308 U.S. 503, 60 S. Ct. 77, 84 L. Ed. 431 (1939) and reargument denied, 18 N.E.2d 698 (N.Y. 1939); see also. State ex rel. Civello v. City of New OLleans, 154 La. 271, 97 So. 440, 33 A.L.R. 260 (1923) (maintaining the beauty of a fashionable residential neighborhood in a city is a matter of general welfare within the police power of the state).

18. Although the placement of the poles on Hillsboro canal Right of Way may have been the least expensive alternative to FPL, it has unfairly burdened (and without any notice or opportunity to object prior to installation) these homeowners with unreasonable safety and health concerns, and loss of their values in their residential properties, and it is likely there are other prudent alternatives for FPL to re-route a section of this transmission line away from the Petitioners' residences. The Commission has the authority to review this situation and determine what best promotes the public welfare.

### VI. ULTIMATE FACTS ALLEDGED; SPECIFIC FACTS THAT PETITIONERS CONTEND WARRANT REVERSAL

A. General Background

Petitioners are homeowners in family oriented community heavily concentrated with children. Petitioners reside in Palm Beach County and Broward County, Fl. Petitioners' properties are located from approximately 49 ft to 200 ft from the 230-240 kV transmission lines supported by the over 90 ft above ground poles that weigh approximately 45,000 Lbs.

This is the <u>first</u> time that FPL has used these type of power poles on a parallel run so close to a canal. (Refer to Exhibit H) There is a safety concern here that FPL has no safety track record with such type of an installation of the power poles next to the canal. As a matter of fact, FPL is now seeking a modification to their SFWMD permit to allow FPL to change their design of the transmission line project to make it "safer" and to meet FPL internal standards (which should have already been met before) by replacing four poles and adding braces to three other poles, which affects approximately close to 20% of the poles in the project along the permitted ROW on the bank of the Hillsboro canal.

B. The modification to the South Florida Water Management District permit #11367 requested by FPL, which deal with safety, installation and compliance begs the question as to whether this project has been in compliance with the NESC as stated by FPL's expert witness. Is it in compliance now? The PSC has a duty to investigate this and it has only done a cursory overview inspection without auditing of FPL internal engineering records or conducting any substantive engineering analysis of the transmission lines and poles along the bank of the canal.

FPL experts testified to the safety of the project, that it meets all NESC standards, and that the project complies with FPL internal standards. The point that FPL had experts testify is vital, as the ALJ based his decision on safety information from the FPL expert. At the time the FPL safety engineer said that the transmission line project met all of FPL internal standards, which were higher than that of the NESC. Now, following the conclusion of the DOAH hearing, FPL has stated that they need to make these design changes to be compliant with their own internal standards and to make the project "safer". [Note that FPL and the PSC should have performed the professionally prudent engineering analysis and required due diligence to certify the transmission line project as safe to all citizens. This has not happened yet.] The ALJ based findings of facts and conclusions of law based on expert testimony. Since FPL has now stated that these changes need to be made to meet their internal standards and to make the project "safer", which is in direct conflict with the FPL testimony of their expert witness at the DOAH hearing, the PSC needs to step in and demand that FPL prove their compliance with all NESC safety standards.

During the DOAH hearings and the various presentations made to the South Florida Water Management governing board, FPL represented safety as an issue for the exclusive jurisdiction of the PSC. Since some of the Petitioners concerns center around safetey for the case brought to the South Florida Water Management District, Mr. Little, at the February 14, 2001, governing board meeting stated to the District that that the PSC had exclusive jurisdiction over safety.

In the Administrative Law Judge's Recommended Order for the DOAH case 01-1504, which was adopted in toto the exclusive jurisdiction of the PSC over safety issues was relayed upon. Footnote 5 states: "As FPL points out, other agencies have exclusive jurisdiction in areas related to transmission lines. For example. EMF generated by the transmission of electricity are regulated by the Department of Environmental Protection (DEP), which has exclusive power to "establish requirements by rule that reasonably protect the public health and welfare from electric and magnetic fields associated with existing 230 kV or greater electrical transmission lines." Section 403.061(30). DEP has adopted such rules, which are codified in Rules Chapter 62-814. Similarly, the Public Service Commission (PSC) has "exclusive jurisdiction to prescribe and enforce safety standards for transmission and distribution facilities of all public electric utilities." Section 366.04(6). The Legislature has expressly made the PSC's jurisdiction over such facilities "superior to that of all other boards, agencies, political subdivisions, municipalities, towns, villages, or counties." Section 366.04(1) and (6). But the exclusive jurisdiction of other

agencies over those matters does not remove WMD's jurisdiction under its statutes and rules."

C. Also, according to Rule 25-6.0345 Safety Standards for Construction of New Transmission and Distribution Facilities state, FPL should have filed a report showing compliance with the NESC for this project. Petitioners have requested a copy of all safety reports submitted to the PSC by FPL. (Refer to Exhibit E)

#### Rule 25-6.0345:

(1) In compliance with Section 366.04(6)(b), F.S., 1991, the Commission adopts and incorporates by reference the 1997 edition of the National Electrical Safety Code (ANSI C-2), published August 1, 1996, as the applicable safety standards for transmission and distribution facilities subject to the Commission's safety jurisdiction. Each public electric utility, rural electric cooperative, and municipal electric system shall comply with the standards in these provisions. Standards contained in the 1997 edition shall be applicable to new construction for which a work order number is assigned on or after the effective date of this rule.

(2) Each public electric utility, rural electric cooperative and municipal electric utility shall report all completed electric work orders, whether completed by the utility or one of its contractors, at the end of each quarter of the year. The report shall be filed with the Director of the Commission's Division of Safety & Electric Reliability no later than the 30th working day after the last day of the reporting quarter, and shall contain, at a minimum, the following information for each work order:

(a) .....

(c) Estimated cost in dollars, rounded to nearest thousand.

#### VIIL STATEMENT OF RELIEF SOUGHT BY THE PETITIONERS

Petitioners are requesting the right to appear before an Administrative Law Judge, and have the ALJ determine (1) if in fact that FPL's Transmission Line project does indeed comply to the NESC before and after the "modifications" were made; and (2) if the PSC does indeed have a right to simply dismiss our other interests.

Petitioners will agree to another form of mediation if a positive result can be obtained.

Respectfully submitted this 28t<sup>h</sup> day of June 2002.

By. Denna Tennant

Donna Tennant for all Petitioners 12590 Little Palm Lane Boca Raton, FL 33428

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition has been furnished by mail to Mr. John W. Butler, P.A., this 28<sup>th</sup> day of June 2002 and sent by overnight courier to Ms. Blanca S. Bayo, Division of the Commission Clerk and Administrative Services.

By: Denna Timant

Donna Tennant 12590 Little Palm Lane Boca Raton, FL 33428

## Exhibit A

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Dan Hoppe

From:Edward MillsSent:Tuesday, January 15, 2002 9:48 AMTo:Dan HoppeSubject:FW: West Boca Transmission Line Complaints

Dan, FYI. - E

-----Original Message-----From: Harold McLean Sent: Tuesday, January 15, 2002 9:45 AM To: Bob Elias; Bev DeMello; Edward Mills; Leroy Rasberry; Mary Anne Helton Subject: RE: West Boca Transmission Line Complaints

I want to persuade the Commissioners that this is not our battle.

Once we enter this theatre, it will be impossible to avoid the sequels. Indeed, the strongest argument for our participation this time is Chairman Garcia's activity last time. I think the argument that our jurisdiction springs from a consideration of devaluation to neighborhoods is creative but unpersuasive.

I'm scheduled to talk to Chairman Jaber about this issue today. ----Original Message----From: Bob Elias Sent: Monday, January 14, 2002 1:22 PM To: Harold McLean; Bev DeMello; Edward Mills; Leroy Rasberry; Mary Anne Helton Subject: West Boca Transmission Line Complaints

I delivered a copy of a draft proposed resolution for these complaints to each of you this morning. I would very much like to issue this by the close of business Thursday. This is a case of first impression with some pretty unique circumstances. Please let me have your thoughts by the close of business tomorrow, if possible and let me know if you'd like to meet to discuss.

## Exhibit B

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May 6, 2002

Nay 0, \_\_\_ Rec. 5/7/02.

Mr. Tom Fratz Director of Right of Way South Florida Management District 3301 Gun Club Road West Palm Beach, FL 33406

#### RE: Parkland Transmission Line: Work within Hillsboro Canal Right-of-Way

Dear Mr. Fratz:

On July 13, 2000, the South Florida Management District issued to Florida Power & Light Company, Permit No. 11367, authorizing FPL to install 3.7 miles of overhead electric transmission lines on the District's Hillsboro Canal Right-of-Way. FPL has previously informed the District that it will undertake certain additional work on its facilities installed pursuant to the Permit as part of a post-construction assessment. To keep the District apprised of the scope of work, we offer the following summary of the potential activities to be completed:

1. Consistent with the direction given to FPL by District staff during the construction of its facilities, it was determined that a stabilized driving pad was not needed at permitted location 44A (Structure 214T8), since an adjacent cross-canal prevents any equipment from being driven around the poles. However, FPL will correct any perceived bank stabilization issues at this location with agreement of the District (see Attachment 1 for location). We understand that the District is reviewing the need for widening the berm at this location.

FPL, during its occupancy of the Right-of-Way and as part of the maintenance and operation of its facilities, may make adjustments and replacements to its facilities. Several technical adjustments were scheduled to be performed in March, but were delayed due to the administrative proceedings. Now that those proceedings have concluded, this work will go forward in the immediate future. The work will include the following:

- a. Replace poles at permitted locations 12, 13, 14 and 37 (structures 211T12, 212T1, 212T2 and 214T1) to ensure compliance with FPL's internal standards (see Attachment 1);
- b. Install insulated braces on permitted locations 10,11, 19 (structures 211T10, 211T11 and 212T7) to allow operation at higher electric loads in the future while still maintaining the required conductor clearances (see Attachments 1 and 2); and

an FPL Group company

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Page 2

The work noted above is scheduled to begin May 13, and to be completed on or before May 31, 2002.

3. At the request of the District, and given the unique circumstances of this situation, FPL has also agreed to adopt voluntary measures to mitigate the visual impact of its facilities by installation of a landscaped buffer of Sable Palm trees planted on the North side of the Right of Way as shown in Attachment 3. FPL will provide an opportunity for adjacent homeowners to review and discuss the plans prior to installation of any vegetation. FPL will be applying for all necessary permits to install this vegetative buffer and ancillary imigation, and will install such vegetation within ninety (90) days of issuance of the necessary permits and in coordination with any District activities. FPL will maintain all such landscaping on an annual basis, at FPL's expense.

4. FPL will also be working with the County and the District to adjust the guardrails along the Right-of-Way to meet applicable Palm Beach County criteria and to accommodate District needs. FPL will work with the District to finalize any District review and approvals that may required. We will diligently pursue obtaining the necessary approvals to commence such work, and will complete the work within 30 days of receiving all necessary approvals.

We will be happy to accommodate District inspectors on site while any of this work is in progress to ensure compliance with the terms and conditions of the permit.

If you have any questions or need any additional information please give me a call at 691-7059.

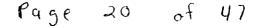
Sincerely

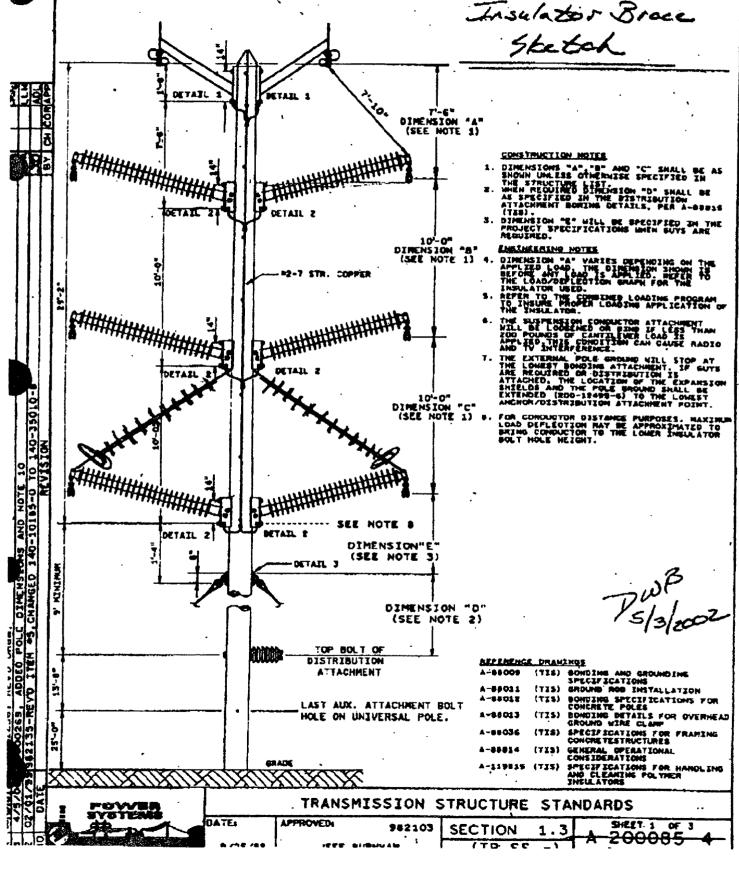
Florette Braun Principal Environmental Specialist Environmental Services

#### ATTACHMENTS

<u>Copy</u> Dean Busch --FPL Pam Rauch --FPL Henry Dean -- SFWMD

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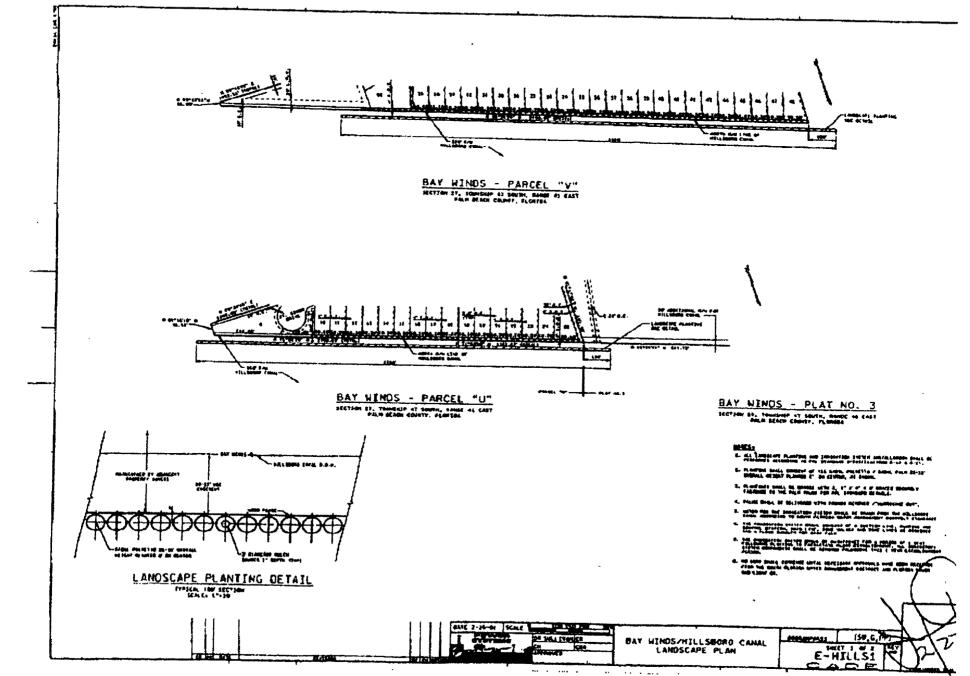
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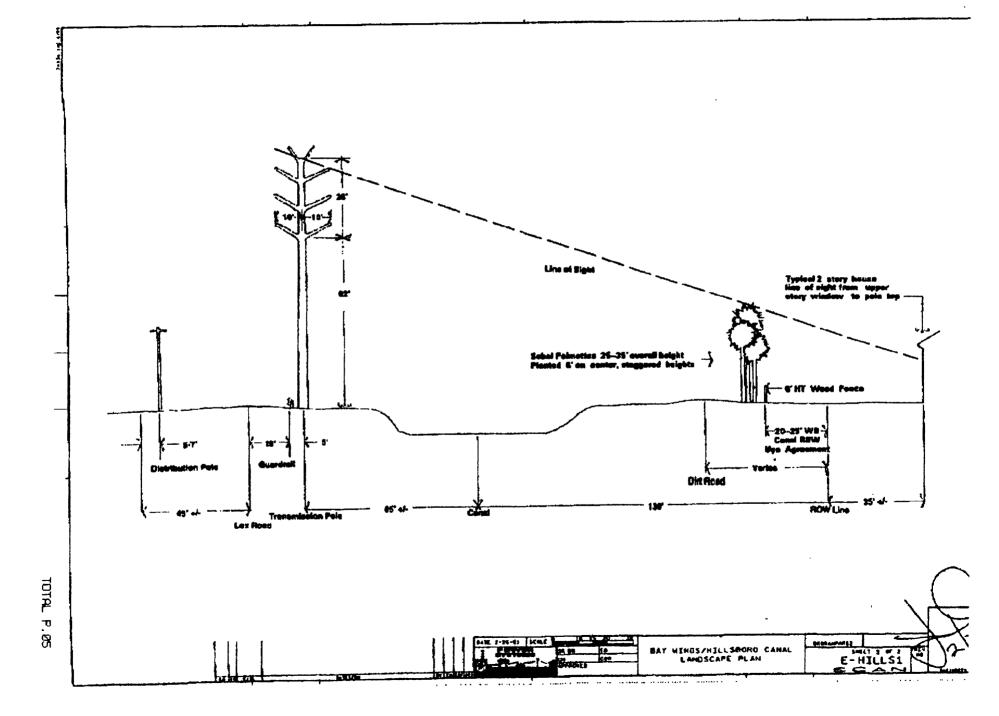
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**INSERTS** 



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Ruge 22 of 47

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# Exhibit C

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#### **Edward Mills**

From: Sent: To: Cc: Subject: Francisco Paez Tuesday, June 04, 2002 2:49 PM Jim Ruehl Edward Mills FW: Frank how many site visits did you make to the Boca Guttman site? Count ride bys just to eye ball things too. Thanks, E

-----Original Message-----From: Francisco Paez Sent: Tuesday, April 30, 2002 11:18 AM To: Edward Mills Subject: RE: Frank how many site visits did you make to the Boca Guttman site? Count ride bys just to eye ball things too. Thanks, E

I have made about six visits to the job site.

-----Original Message-----From: Edward Mills Sent: Tuesday, April 30, 2002 8:25 AM To: Francisco Paez Cc: Jim Ruehl; Alina Dieguez Subject: Frank how many site visits did you make to the Boca Guttman site? Count ride bys just to eye ball things too. Thanks, E Importance: High

C. Edward Mills - FPSC P850.413.6650 F850.413.6651 emills@psc.state.fl.us http://www.psc.state.fl.us 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

From:	Francisco Paez
Sent:	Friday, May 04, 2001 3:41 PM
To:	JIM RUEHI
Subject:	PSC INQUIRY-COMPLAINT ON TRANSMISSION LINES RUNNING ALONG LOX RD
	BROWARD AND PALM BEACH COUNTY LINE. (JEFF LESERRA)

MR. LESERRA'S IS CONCERN THAT A SPEEDING TRUCK WILL LOOSE CONTROL, COLLIDE WITH A TRANSMISSION POLE THAT IS LOCATED JUST ACCROSS THE STREET FROM HIM, CAUSING THE POLE TO TOPPLE AND CRASH INTO HIS HOUSE.

THESE TRANSMISION POLES RUN PARALLEL TO A TWO WAY ROAD MAYBE 20'WIDE A SMALL METAL AND WOOD BARRIER PROVIDES PROTECTION. THE POLES ARE ABOUT 9' FROM THE EDGE OF PAVEMENT. IT APPEARS THAT THIS ROAD IS HEAVILY TRAVELED BY COMMERCIAL VEHICLES. ACCORDING TO MR. LESERA, THERE ARE SEVERAL ROCK QUARRIES AT THE WEST END OF THIS ROAD. WHEN I WAS CONDUCTING MY FIELD INVESTIGATION WITH MR. LESERRA, I SAW SEVERAL DUMP TRUCKS ZOOM PAST ME AT A VERY HIGH RATE OF SPEED.I GUESS THIS IS WHAT FUELS MR. LESERRA'S FEAR THAT ONE OF THESE TRUCKS WOULD LOOSE CONTROL AND CRASH INTO ONE OF THESE CONCRETE TRANSMISSION POLES.

I DO NOT THINK THAT THE SMALL WOOD AND METAL BARRIERS WOULD PREVENT AN OUT OF CONTROL SPEEDING TRUCK FROM HITTING THE TRANSMISSION POLES.

VISUAL OBSERVATION OF THIS TRANSMISSION LINE, IT APPEARS THAT THIS TRANSMISION LINE CONFORMS TO NESC GUIDELINES. THIS COMPLAINT APPEARS TO ME MORE OF A LEGAL AND PERMITTING ISSUE RATHER THAN THE VIOLATION OF NESC GUIDELINES.

THANKS FRANK

Page 25 of 47

#### Jim Ruehl

From:	Francisco Paez	
Sent:	Tuesday, May 29, 2001 5:27 PM	
To:	Jim Ruehl	
Subject:	JOSE GUTMAN'S COMPLAINT (FIELD INVESTIGATIO	N)

VISUAL INSPECTION OF THE NEWLY INSTALLED 230KV TRANSMISSION CONCRETE POLE LINE APPEARS TO ADHERE TO NESC GUIDELINE.

I) DISTANCE FROM EDGE OF PAVEMENT OF ROAD.

THE CONCRETE POLE LINE RUNS PARRALLEL TO LOX RD (ROAD RUNS EAST AND WEST) LOX ROAD IS ABOUT 20' WIDE. THE TRANSMISSION POLES ARE ABOUT 5' BEHIND A GUARD RAIL THE GUARD RAIL RUNS ABOUT 5'FROM THE NORTH EDGE OF PAVEMENT OF ROAD. (POLES ARE ABOUT 10' FROM THE NORTH EDGE OF PAVEMENT)

II) GROUNDING.

THE POLES HAVE TWO SETS OF THREE PHASE CONDUCTORS (THREE CONDUCTORS) THAT ARE ATTACHED VERTICALLY TO THE POLES.ONE SET IS ATTACHED TO NORTH SIDE OF POLE, THE OTHER SET IS ATTACHED ON THE SOUTH SIDE OF POLE.UPON VISUAL OBSERVATION, I WAS ABLE TO CONFIRM THAT EACH OF THE THREE PHASES HAS A NEUTRAL (GROUND) WIRE RUNNING ALONG AT THE TOP OF EACH POLE.THIS GROUND CONDUCTOR PROVIDES PROTECTION, TO THE ENERGIZED CONDUCTORS, AGAINST LIGHTING STRIKES.

III) CLEARANCE FROM GROUND.

THE LOWEST CONDUCTOR IS ATTACHED AT 62'ABOVE GROUND.AT MIDSPAN THE LOWEST CONDUCTOR MIGHT BE ABOUT 40' A.G. (ACCORDING TO FPL SPECS.) FORTY FEET ABOVE GROUND WOULD NOT CREATE FORESEEABLE CLEARANCE PROBLEMS AND IS WITHIN NESC GUIDELINES.

9

IV) SETTING DEPTH OF POLES. CUSTOMERS WERE WORRIED THAT FPL INSTALLED THESE 91'POLES AT A DEPTH OF ONLY 10'.THEY WERE AFRAID THAT THESE GIGANTIC POLES MIGHT TOPPLE. FPL SPECS HAS THESE 91'POLES SET AT 19.5'. I THINK THESE POLES WERE SET AT THE SETTING DEPTH SPECIFIED BY FPL. FOR THE FOLLOWING REASONS: THESE TRANSMISSION POLES HAVE A TAG(TAG HAS SIZE OF POLE, WEIGHT OF POLE AND CATALOGUE NUMBER OF POLE.) THAT IS EMBEDDED INTO THE CONCRETE. THE TAG IS ABOUT 2'AG TO 5'AG. WHEN FPL SUBMITTED THE DESIGN SPECS TO THE MANUFACTURER, THE MANUFACTURER TAKES INTO CONSIDERATION THE SETTING DEPTH. FIELD INSPECTION VERIFIED THAT THE TAGS WERE ABOUT 2' TO 5' AG. IF THE CONTRACTOR WOULD HAVE SET THESE POLES AT A DEPTH OF ONLY 10', THE TAGS WOULD HAVE BEEN MORE THAN 12' AG.

V) WIND LOADING ON POLES. FPL DESIGN BOOKS AND COMPUTER DESIGN PROGRAMS ARE BASED ON FOLLOWING THE NESC GUIDELINES. IF THE FPL TRANSMISSION ENGINEER ADHERES TO THEIR DESIGN BOOKS OR THEIR DESIGN PROGRAMS, THEY WILL MEET NESC GUIDELINES.

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State of Florida



### Public Service Commission

-M-E-M-O-R-A-N-D-U-M-

1

DATE: May 31,2001

TO: Mr. Jim Ruehl, Supervisor Electric Safety, Tallahassee

FROM: Francisco Paez, Utility Engineer, Bureau of Safety Division of Safety and Electric Reliability, Miami District Office

RE: PSC Complaint #366172E (Mr. Jose Gutman)

#### ISSUES

Customers living in the v/o a newly installed 230kv Transmission Line along Lox Rd(Lox Rd. Is w/o U.S. 441 near the Palm Beach and Broward County line) are upset that FPL installed the transmission line with out their consent.

Customers want to know if FPL followed proper "code" procedures in setting the transmission poles and installing the transmission conductors.

#### **FIELD INVESTIGATION**

The following Safety Rules for the Installation and Maintenance of Overhead Electrical Supply were inspected for possible violations;

#### i)Distance from the edge of road.

The concrete pole line runs partallel to Lox Rd.(Road runs east and west) Lox. Rd. Is about 20' wide. The transmission poles are situated 5' behind a guard rail. The guard rail runs about 5' from the north edge of pavement of Lox. Rd.(Poles are about 10' from the north edge of pavement.

#### **ji)Clearance from ground.**

The lowest conductor is attached at 62' above ground, at midspan (According to FPL specs)the lowest conductor might be about 40'( a.g.). Forty feet above ground would not create foreseeable clearance problems and is within NESC guidelines.

#### III)Clearance from other Utilities.

There are no other utilities that are attach or cross these transmission poles.

#### IV)Tree Trimming.

There is no vegetation growing underneath the transmission lines.

#### V)Grounding.

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The poles have two sets of three phase conductors. (Three conductors) that are attached vertically to the poles. One set is attached to the north side of the pole and the other set is Attached to the south side of the pole. Upon visual inspection, I was able to confirm that each of three phases has the required neutral (ground) wire running along at the top of each pole.

#### VI)Setting depth of poles.

Customers are worried that FPL installed these 91' concrete poles at a depth of only 10'. Customers are afraid that these gigantic poles might topple. FPL specs has these poles set at a depth of 19.5'

I think the poles in question were set at the depth specified by FPL for the following reasons:

The transmission poles have a tag(The tag has the size of pole,weight of pole and catalogue number of pole.)that is embedded into the concrete.These tags,on existing poles, are usually about 3' to 5' above ground.

When FPL submitted the design specs to the manufacturer, the manufacturer takes into account the setting depth so the tags would be 3' to 5' a.g. when the poles are set. Field inspection verified that the tags were about 2' to 5' a.g.

The tags would have been about 12 a.g., if the contractor would have set these poles at a depth of only 10'.

#### VII)Wind loading on poles.

FPL design books and computer design programs are based on following the NESC. If the FPL transmission engineer adheres their design programs, they will meet NESC guidelines.

#### DISCUSSION

It appears that FPL has followed NESC guidelines when they installed this transmission pole line.

On the issue of pole placement, the municipality issuing the permit has the jurisdiction of pole placement.

The NESC has no clear ruling on how far the poles are to be from the edge of pavement of a road. .

Rule 231B4 states that "Where a governmental authority exercising jurisdiction over structure location has issued a permit for or other wise approved, specific locations for supporting structures, that permit shall govern."

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page 28 of 47

### Exhibit D

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### Pase 29 of 47

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	Page 998		Page 10
PROCEEDINGS		1	both to establish qualifications and also
	1	2	address some areas of relevance. So just to
MR. GUTMAN: Who's the first witness?	? I	3	tell you up front, I'm not just trying to
don't know if Mr. Adams is here. There	wasa	4	read the entire resume.
cross.		5	THE COURT: All right.
-		6	MR. LITTLE: Because I know you've told
		7	us
-	s not	8	THE COURT: Is this an exhibit number?
		9	MR. LITTLE: I had not marked this as an
MR. BARTOLONE: No.	1	10	exhibit, but certainly would be glad to do so
THE COURT: Mr. Adams has already	1	11	after we've gone through it and identified
testified.	1	12	it.
MR. GUTMAN: Okay. Right.	1	13	BY MR. LITTLE:
MR. LITTLE: My first witness is	1	14	Q Dr. Wong, going to Page 3 of your
Dr. Jerry Wong.	1	15	resume, this lists your educational background.
THE COURT: Would you raise your rig	ht 1	16	A Yes.
hand to be sworn.	1	17	Q In 1971, you received a Bachelor of
(Whereupon, the witness was duly swo	orn.)  1	8	Science degree from Tai-Pai Institution of
THE WITNESS: 1 do.	1		Technology in Taiwan, and it looks like you
DIRECT EXAMINATION	2	20	majored in civil engineering; is that correct?
BY MR. LITTLE:	2	21	A Yes.
Q Good morning.	2	22	Q How is that institute regarded?
Will you please tell us your name.	2	23	A It's one of the best engineering schools
A My name is Jerry Wong. The last nam	neis 2	24	in the nation.
spelled W-O-N-G.	2	25	Q And you graduated with honors from that
	Page 999		Page 10
Q And who are you employed by?	-	1	institute?
A Florida Power & Light.		2	A Yes, I'm on the dean's list.
Q What is your job title?		3	Q When you graduated, you went into the
A I'm a Staff Engineer for the Power		4	work force it looks like for a number of years?
Delivery Business Units.		5	A Yes.
Q In the hiearchy of engineering		6	Q And that was in Taiwan?
classifications at Florida Power & Light Cor	npany,	7	A Yes.
where is Staff Engineer in that hiearchy?	• • • •	8	Q Generally, what were you doing during
A Staff Engineer is the highest level of		9	that period that looks like from '71 till about
ingineering position that - a technical positi	on l	0	'77? <sup>¯</sup>
that an engineer can hold.			A I designed buildings and bridges.
÷	our 1	2	Q After that work experience, did you
duties and responsibilities as Staff Engineer.		3	return to school?
A I'm in charge of the so called	1		A Yes. I returned to school in '77 to get
•	J-	•••	my graduate degree.
	- 1		Q You obtained a Master's degree in
			Structural Engineering from the University of
hose things.			Cincinnati, it says?
<u> </u>			A Yes.
your resume?		-	Q And you were majoring in structural
A Ycs.	]		design at that time, right?
			A Yes.
÷ ·		-	Q When you finished your Master's, you
			then obtained a Ph.D. from the University of
him read his resume, but I want to use it	i		Cincinnati?
nini Icad his Icauine, but I want to use m	1.2		
	MR. GUTMAN: Who's the first witness? don't know if Mr. Adams is here. There cross. MR. BARTOLONE: They decided not to cross Mr. Adams. MR. GUTMAN: Okay. So Mr. Adams i going to be here? MR. BARTOLONE: NO. THE COURT: Mr. Adams has already testified. MR. GUTMAN: Okay. Right. MR. GUTMAN: Okay. Right. MR. LITTLE: My first witness is Dr. Jerry Wong. THE COURT: Would you raise your right hand to be sworn. (Whereupon, the witness was duly swo THE WITNESS: I do. DIRECT EXAMINATION BY MR. LITTLE: Q Good morning. Will you please tell us your name. A My name is Jerry Wong. The last nam spelled W-O-N-G. Q And who are you employed by? A Florida Power & Light. Q What is your job title? A I'm a Staff Engineer for the Power Delivery Business Units. Q In the hiearchy of engineering classifications at Florida Power & Light Cor where is Staff Engineer in that hiearchy? A Staff Engineer can hold. Q Would you generally describe for us y duties and responsibilities as Staff Engineer. A I'm in charge of the so called Transmission Line Design Section. We do to all of the line design analysis, engineering and including R&D's and co-compliance a hose things. Q Let me hand you, if I could is this your resume? A Yes. MR. LITTLE: Judge, what I'd like to do, and just so you'll know, my intention in a	PROCEEDINGS MR. GUTMAN: Who's the first witness? I don't know if Mr. Adams is here. There was a cross. MR. BARTOLONE: They decided not to cross Mr. Adams. MR. GUTMAN: Okay. So Mr. Adams is not going to be here? MR. BARTOLONE: NO. THE COURT: Mr. Adams has already testified. MR. GUTMAN: Okay. Right. MR. GUTMAN: Okay. Right. MR. LITTLE: My first witness is Dr. Jerry Wong. THE COURT: Would you raise your right hand to be sworn. (Whereupon, the witness was duly sworn.) THE WITNESS: I do. DIRECT EXAMINATION BY MR. LITTLE: Q Good morning. Will you please tell us your name. A My name is Jerry Wong. The last name is spelled W-O-N-G. Page 999 Q And who are you employed by? A Florida Power & Light. Q What is your job title? A I'm a Staff Engineer for the Power Delivery Business Units. Q In the hiearchy of engineering classifications at Florida Power & Light Company, where is Staff Engineer in that hiearchy? A Staff Engineer as Notal. Q Would you generally describe for us your futies and responsibilities as Staff Engineer. A I'm in charge of the so called Transmission Line Design Section. We do basically II of the line design analysis, engineering and including R&D's and co-compliance and all hose things. Q Let me hand you, if I could is this our resume? A Yes. MR. LITTLE: Judge, what I'd like to do, and just so you'll know, my intention in sort	PROCEEDINGS  MR. GUTMAN: Who's the first witness? I  MR. GUTMAN: Who's the first witness? I  don't know if Mr. Adams is here. There was a cross.  MR. BARTOLONE: They decided not to cross Mr. Adams.  MR. GUTMAN: Okay. So Mr. Adams is not going to be here?  MR. BARTOLONE: No.  THE COURT: Mr. Adams has already II  testified.  MR. GUTMAN: Okay. Right. III  MR. GUTMAN: Okay. Right. III  MR. GUTMAN: Okay. Right. IIII  MR. GUTMAN: Okay. Right. IIII  MR. GUTMAN: Okay. Right. IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

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ı	in effect somewhere in the end of February	Page 1010	Page 1
1 7	beginning of March of next year.	orune	asked you, what do you mean by that as far as
2	• •		FPL's standards?
3	Q Of 2002?		
	A 2002.	1	higher wind load than the building code requires.
5	Q Your resume also lists a number of	[ !	
6	affiliations with ASCE, that's the American		I'm going to ask you to speak up. Sometimes it's
7	Society of Civil Engineers; is that right?		bard to hear, and the Judge is at the far end of
8	A Ycs.	1	the table.
9	Q The ASCE, is that a Florida organization	on s	Are you aware of any transmission line
0	or is it broader?	10	design standards that are higher than Florida Power &
1	A It's a national organization. It's	11	Light Company's standards with respect to wind load?
2	also - a lot of the ASCE standards published	d is 🛛 🛛 🗠	A Not in the United States.
3	being used worldwide.	13	Q Not in the United States.
4	Q Have you chaired any committees?	14	Looking over the last page of your resume,
5	A Yes, I chair some committees. And o	n <b>e</b> 15	
6	of them is the so called "Committee for Ele		
7	Transmission Structure." That's the highest		•
8	the committee in the American Society of C		
9	Engineers to address electrical transmission		· · ·
0	systems. Underneath that, they have several		•
1	forces and technical committees. I'm the ch		•
-	that particular committee.	22	•
3	I'm also chair of the ASCE Committee		•
4	which is a load for electrical transmission -	-	•
5	line for - I have it here. I'm sorry.	- guide 25	
_	me for There is inder The Sorry.	·	
1	MR. GUTMAN: The third bullet.	Page 1011	Page 1 Power excuse me.
2	MR. LITTLE: Guidelines for Electrical		
3	Transmission Line Structural Loads?		÷
J A	THE WITNESS: Yes.	3	
5			A I'm responsible for the damage assessment for our electrical grid, transmission
Ξ.	BY MR. LITTLE:	0	
6	Q And you're chairman of that committe	ec? 6	· · · · · · · · · · · · · · · · · · ·
7	A I'm chairman of that particular	7	responsible for the restoration work. And I
8	committee. And that committee addresses a	ୟାପରେ   ୫	prepare all of the reports to the Department of
9	the load requirements for the electrical	9	Energy, FEMA and some other organizations like
0	transmission system.	10	Dade County Emergency for basically the damage
1	Q Has the Florida Public Service	11	assessment on hurricanes.
2	Commission adopted these guidelines under	74? 12	Q Did you personally observe the effects
3	A No. The Menu 74 is an industry stan	dard 13	of Hurricane Andrew on the FPAL transmission line
4	for standard practice. It's not a code.	14	system?
5	Q How are these guidelines considered,	if 15	
6	at all, by Florida Power & Light?	16	
7	A That's the brainchild of the industry	117	
8	expert. We have to respect their opinion. V	Ve use 18	A I was there the next morning. I didn't
,	them as a reference to develop our own guid		
	or our own FP&L standards.	20	
1	Q Are FPL's own standards more stringe		area, did you familiarize yourself with the
2	than the National Electric Safety Code and the		
	ASCE guidelines?		
	A Yes.	23	
		1.19	
4	Q When you say more stringent, as I've		

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TERWILLIGER vs. SFWMD

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	Co	ndens	elt ADMIN HRG - VOL. VI
	Page 1	042	Page 1044
1	guardrail have to hit it at over 100 miles to	1	the ground for you to do your model?
2	bring that pole down.	2	A Yes.
3	Remember, this pole is different than the	3	Q And then you put it in the computer and
4	pole in Hurricane Andrew. This pole has much mon	- 4	you come up with some parameters based on things
5	capacity than what we had in Hurricane Andrew.	5	like your basic wind speed design for the entire
6	Q Well, what is the capacity of this pole?	6	structure?
7	A The capacity of this pole - this pole	7	A Yes.
8	is designed to withstand 24,000 pounds two feet		Q And this is the same model that you
9	from top of the pole.	9	
10	Q And what is the basic wind speed that	10	•
In	the design of this transmission line structure -	in	Q Do they verify your -
12	A That's an invalid question. Because the	112	
13	capacity the wind speed depends on the span,	13	Q And what is the typical depth that you
14	the size of wire. You have many, many variables.		
15	Q I'm not referring to the pole. I'm	14	specify for these poles, and in what terrain do
16	referring to the pole in the project, this	15	you specify this depth?
17	project.	16	A Please explain your questions.
18		17	Q What is the depth that you specify in
	A This particular project is designed for	18	your design of these poles to meet this criteria?
19	110 mile per hour basic wind speed. And we made	19	What is the depth that you specify for the poles
20	adjustments from every factor that's applicable.	20	to be installed?
21	Q And is that a Category II hurricane?	21	A The standard setting depth for those -
22	A That is basically a category the	22	poles are 19 feet 6 inches. That's including
	upper end of the Category II hurricane, yes.	23	construction tolerance.
- 1	Remember, we made adjustments. All of the factors	24	THE COURT: I'm sorry, including
25	the code asks us to apply, we made that	25	construction what?
	Page 10	43	Page 1045
1	Page 10 adjustment. Such as the adjustment with height,	43	Page 1045 THE WITNESS: Tolerance.
1 2	adjustment. Such as the adjustment with height,	43 1 2	
2	•	43 1 2 3	THE WITNESS: Tolerance.
2	adjustment. Such as the adjustment with height, adjustment with terrain, adjustment with everything that you can think of.	1 2	THE WIINESS: Tolerance. BY MR. GUTMAN: Q What is that tolerance?
2 3 4	adjustment. Such as the adjustment with height, adjustment with terrain, adjustment with everything that you can think of. Q When you made the calculation for this	1 2 3 4	THE WITNESS: Tolerance. BY MR. GUTMAN: Q What is that tolerance? A Plus minus six.
2 3 4	adjustment. Such as the adjustment with height, adjustment with terrain, adjustment with everything that you can think of. Q When you made the calculation for this 80,000 pound truck going in you just gave me a	1 2	THE WITNESS: Tolerance. BY MR. GUTMAN: Q What is that tolerance? A Plus minus six. Q Feet?
2 3 4 5 6	adjustment. Such as the adjustment with height, adjustment with terrain, adjustment with everything that you can think of. Q When you made the calculation for this 80,000 pound truck going in you just gave me a 24,000 pound design at two feet above ground.	1 2 3 4 5 6	THE WITNESS: Tolerance. BY MR. GUTMAN: Q What is that tolerance? A Plus minus six. Q Feet? A Inches. But that's also assuming a
2 3 4 5 6 7	adjustment. Such as the adjustment with height, adjustment with terrain, adjustment with everything that you can think of. Q When you made the calculation for this 80,000 pound truck going in you just gave me a 24,000 pound design at two feet above ground. A No, two feet from top of the pole.	1 2 3 4 5 6	THE WITNESS: Tolerance. BY MR. GUTMAN: Q What is that tolerance? A Plus minus six. Q Feet? A Inches. But that's also assuming a certain type of soil. We assume - to be on the
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Page 1046 of the soil, that is how well packed it is, how sturdy the foundation is? A That's why it's on poor soil. Q So that's the criteria? A We assume it's very loose. Again, this particular location is much firmer than what we typically do. Q When you say firmer, it's a direct impact straight down? A Both ways, yes. Sideways. On single pole structures and on guide structures, the criteria we design is more lateral support. Q Can you explain what you mean by more lateral support. A We need the lateral strength in addition to downwards. Q When you say a construction tolerance of six inches plus or minus - I'm sorry - is that	1 2 3 4 5 6 7 8 9 10 11	Page 10 couldn't compact to the degree you really want it to be. So they will have some kind of a settlement. They will have some kind of a so called gapping. That's all taken into consideration. Q You take that into consideration. You said you need a firmly packed soil in your calculation. But if there was gapping around the pole, which then would be considered to be loosely packed soil, you take that into consideration? A Yeah, that's why we mentioned - I mentioned in the beginning that what we assume is a very poor soil condition. And then we require to set a pole as precisely as we want it to be.
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to downwards. Q When you say a construction tolerance of	1	And there's definitely adjustments. Soil is not
Q When you say a construction tolerance of	16	like a man-made material like steel. They're not
	17	uniform.
the manufacture of the pole can vary by six	18	Q is the soil out there considered gravel
inches?	19	and sand or is it a different type of soil? What-
	20	type of soil is out there on that bank?
	1	A Well, currently, from my observation, it
		is gravel and it's really well graded gravel. But
	23	I was told that there's actually coral rock -
	24	underneath that I couldn't see.
lesign specification for that installer would not	25	Q Have you been out there to inspect?
Page 1047		Page 10
ave been met?	1	A I've been there once.
A Not necessarily. Because for one thing,	2	Q When was that?
f you're an engineer, you know, you only go	3	A I don't remember.
hrough certain increments. For example, like	4	Q Was it this year?
his particular pole, they require setting them on	5	A Yes.
very poor soil is 18.9. And then you have	6	Q Did you walk the whole line, the four
· · ·	17	lines?
	1	A No.
	I.	Q Did you pick out portions or did you
	1 <sup>-</sup>	just go to one pole?
· · · · · · · · · · · · · · · · · · ·		A I went to several poles, but I didn't
	[	• •
		walk the whole distance. I walked maybe less than
		five.
	1	Q Were you toward the eastern side, the
	15	western side, the middle?
	16	A I don't even know where I was. Somebody
•	17	else drove me there. We have many, many projects
A Yes.	18	that I'm in charge of the whole transmission line
Q Gapping between the pole and the ground?	19	design group. I don't have time to go to any
A That's typical construction practice.	20	specific project unless there's a reason for me to
t was considered into our calculation. In the	21	go.
eginning, after the pole is set, you can do as	22	Q Are you aware that this project turns
	23	south?
		A Yes.
	1	Q Were you around that point? Do you
	A Not necessarily. Because for one thing, f you're an engineer, you know, you only go brough certain increments. For example, like his particular pole, they require setting them on very poor soil is 18.9. And then you have tou only specify numbers by half a foot. You're alking about soil. So you're talking about half foot. Now, if we go back and take some more etailed engineering information, this pole might only ced to be set 17 feet if we have assuming that we ave a very firm soil, for example, like 20 blow inground and reasonably compacted. I only need to set hat pole 17 feet to develop the same capacity. Q Is there any reason for gapping around hese poles? A Yes. Q Gapping between the pole and the ground? A That's typical construction practice. was considered into our calculation. In the eginning, after the pole is set, you can do as such tempering as you can. Just like your riveway or your house pad. Why are they racking? Because no matter how you do it, you	Chat's the installation.       22         Q So if the installer installed the poles       23         more than six inches away from that, then your       24         lesign specification for that installer would not       25         Page 1047         awe been met?         A Not necessarily. Because for one thing,       2         f you're an engineer, you know, you only go       3         hrough certain increments. For example, like       4         his particular pole, they require setting them on       5         wery poor soil is 18.9. And then you have       6         you only specify numbers by half a foot. You're       7         alking about soil. So you're talking about half       8         foot.       9         Now, if we go back and take some more       10         letailed engineering information, this pole might only       11         eed to be set 17 feet if we have assuming that we       12         ave a very firm soil, for example, like 20 blow       13         inground and reasonably compacted. I only need to set       14         hat pole 17 feet to develop the same capacity.       16         Q Gapping between the pole and the ground?       19         A That's typical construction practice.       20         <

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Current -

## Exhibit E

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12596 Little Palm Lane Boca Raton, FL 33428 561-883-0837 June 14, 2002

Dear Ms. Wang:

I would like to request a copy of all correspondence, documents, emails, etc. made in reference to any safety standards or associated engineering practices in reference to FPL's project along the Hillsboro Canal, the Parkland Transmission Line. I realize that this project did not fall under the Transmission Siting Act but I wasn't sure if the PSC still requires some safety documentation on this line. Please include all documentation submitted to the PSC prior to construction, submitted during construction and submitted after completion of construction of the line.

Please do not include all public documents that are available externally on the web filed under docket No. 010908 EI or any documents that were submitted under my previous request. Correspondence should include all emails, requests, statements, notes taken at meetings, etc. made by the Public Service Commission staff or board members, any other entity that interacts with the commission relating to this docket and FPL. Correspondence should also include any internal documents relating to the above.

If this request overlaps my previous request, I apologize but I was unable to confirm this with Mr. Keating.

Please call with a price before sending the information.

Thank you, Donna Tennant

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12596 Little Palm Lane Boca Raton, FL 33428 561-883-0837 May 29, 2002

Dear Ms. Wang:

I would like to request a copy of all correspondence, documents, emails, etc. made in reference to PSC Docket No. 010908 EI. Please do not include all public documents that are available externally on the web filed under this docket. Correspondence should include all emails, requests, statements, notes taken at meetings, etc. made by the Public Service Commission staff or board members, any other entity that interacts with the commission relating to this docket and FPL. Correspondence should also include any internal documents relating to the above.

Please call with a price before sending the information.

Thank you, Donna Tennant

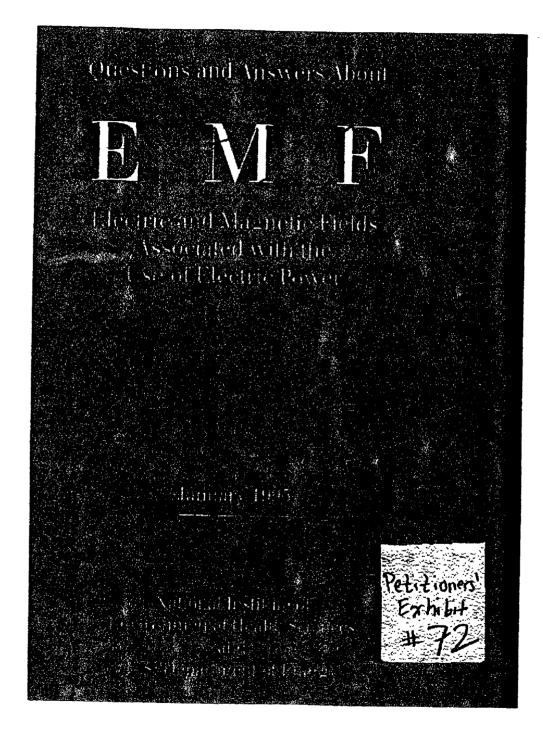
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## Exhibit F

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### Introduction

The tions have come to take for granted the simple flip of a switch that turns night into day. With electric power, however, come certain precautions that are also well known. Electric power lines, household wiring, and appliances can cause serious injury from electric shock if handled improperly. Recently, a new question has emerged about the electric power we all depend on: Does it have anything to do with cancer?

Some epidemiological studies have suggested that a link may exist between exposure to power-frequency electric and magnetic fields (EMFs) and certain types of cancer, primarily leukemia and brain cancer. Other studies have found no such link. Laboratory researchers are studying how such an association is biologically possible. At this <sup>\*</sup> point, there is no scientific consensus about the EMF issue—except a general agreement that better information is needed. A national EMF research effort is under way, and major study results are expected in the next few years.

This booklet provides some answers to common questions about the possible health effects of EMFs. First, we define some basic electrical terms, describe EMFs, and discuss recent scientific studies. We then describe what the government is doing to address public concerns about EMFs. Next, we address questions people have about their own exposure to EMFs. Lastly, we tell you how to obtain more detailed information about these issues.

This booklet was prepared by Oak Ridge National Laboratory, under the direction of the National Institute of Environmental Health Sciences and the U.S. Department of Energy, for the EMF Research and Public Information Dissemination (RAPID) Program. It was reviewed by staff from nine federal government agencies and by the National EMF Advisory Committee, which represents public advocacy groups, organized labor, state governments, academia, and industry. Much of this material was originally developed by the Bonneville Power Administration, one of the

Amount of lischnical detail



Note to readers: This publication contains a moderate level of technical detail.

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Page 39

**Q** What happens when I am exposed to EMFs?

A C fields create weak electric currents in the bodies of people and animals. This is one reason why there is a potential for EMFs to cause biological effects. As shown on the right, currents from electric and magnetic fields are distributed differently within the body. The amount of this current, even if you are directly beneath a large transmission line, is extremely small (millionths of an ampere). The current is too weak to penetrate cell membranes; it is present mostly between the cells.

Currents from 60-Hz EMPs are weaker than natural currents in the body, such as those from the electrical activity of the brain and heart. Some scientists argue that it is therefore impossible for EMPs to have any important effects. Other scientists argue that, just as a trained ear can pick up a familiar voice or cry in a crowd, so a cell may respond to induced current as a signal, lower in intensity yet detectable even through the background "noise" of the body's natural currents. Numerous laboratory studies have shown that biological effects can be caused by exposure to EMPs (see p. 23). In most cases, however, it is not clear how EMPs actually produce these demonstrated effects.

Strong electric fields, such as those found beneath large transmission lines, can cause hair on your exposed head or arms to vibrate slightly at 60 Hz. This is felt by some people as a tingling sensation. EMFs from transmission lines can also in some circumstances cause nuisance shocks from voltages created by EMFs on objects like ungrounded metal fences.

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B

A person standing in an electric field (blue lines) showing induced current (while dashed lines).



A person standing in a magnetic field (blue lines) 'showing induced current (white dashed lines).



Most of the 60-Hz current accurs between the cells, not through them.

## Exhibit G

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---- JAN-30-2001 TUE U4:01 PM

P. 02

## West Boca Community Council, Inc.

11364 Chisolm Way Boca Raton, FL 33428

January 30, 2001

Frank Finch, Exocutive Director South Florida Water Management District 3301 Cum Club Road West Palm Beach, Florida 33406

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47

Dear Mr. Finch:

I am writing on behalf of West Boca Community Connell, a coalition of approximately 110 homeowners and condominium associations west of the city of Boca Raton comprising approximately 130,000 people. Recently, we have been apprised that the South Florida Water Management District granted permits to Florida Power and Light to build a high-voltage transmission line on the south side of the Hillsboro Canal. As you may know, that permitting was accompliabed without the knowledge or consent of the community or the homeowners affected. This is especially troublesome since many of the homeowners had been working with South Florida at the time permits were granted. These homeowners have requested that South Florida Water Management District revoke the permits obtained by Florida Power and Light and the West Boca Community Council strongly supports that request. Florida power and Light can either bury the wires or move them south of Louahatchee Road where they more property belong. We urge the South Florida Water Management District to take the necessary steps to accomplish this on behalf of the community. We thank you in advance for your courtery in this regard.

Very truly yours, JEFFRE

Petitioners' Exhibit

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Paul Kaulaan Vide Pyseldeni

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	May 3, 2001	19th Define	01-1504 x

Judge J. Lawrence Johnston Division of Adusinistrative Hearings The DeSoto Building 1230 Apelachee Parkway Tailahanee, Florida 32399-3060

#### Dear Judge Johnston:

I was recently contacted by a group of constituents that live in the communities of Loggars Ran, Ashiey Park, and Bocs Winds. These community members have been participating is an affort to request a formal administrative hearing with regards to the permits issued to Florida Power and Light (FPL) for the installation of a 230kv transmission line along the backyards of residential house, located along the Hillsboro Canal. In a grass roots affort these community members have joined together to ask the SPWMD to encourage the FPL to relocate their transmission lines away from their house.

Per a conversation with residents from the West Bocs Raton communities, I have immed that they are particularly concerned about potential health problems for their fimily members and the dramatic decrease in their property value. Unfortunately, the homeowners were not informed of any powerline installation prior to the purchase of their new home.

I would appreciate your consideration in reviewing an alternative route for these powerlines that would assure the safety of my constituents. Thenk you in advance for your attention to my request. If you should have any questions regarding this matter, please fiel free to contact me at (561) 988-6302.

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Petitioners

Date: 54/01 Pages: 21 Remote CSID: 20092291794 9229276

Time: Sender: 6:03 PM 9229276

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### Florida House of Representatives

Representative Irving Slosberg Diaria 89

Reply to: 9045 Lal'ontana Bivé., B-17 Boce Raton, FL 33434 (561) 637-7097

402 South Moneuc Street Tallehauser, Piorida 32399-1300 (850) 488-1302

01-150

The Honorable Judge J. Lawrence Johnston Division of Administrative Hearings The DeSoto Building 1230 Apalechee Parkway Tallahasees, FL 32399-3060

May 4, 2001

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Dear Judge Johnston:

I have been contacted by several of my constituents who reside on the South side of Lox Road, Waters Edge Estates, Waters Edge Enclaves, Regency, Carlyle Estates, Ashley Park and Ponderosa. It has been brought to my effection that they have requested a formal administrative hearing in regards to permits issued to Florida Power & Light (FPL) for the installation and use of high voltage transmission lines on the ROW of the Hillsborough Canal. I respectfully request that you give them a fair opportunity to voice they're concerns.

This community has been having an ongoing negotiations with the South Florida Water Management District (SFWMD) and Florida Power & Light with regards to 230,000 volt high power transmission lines which were placed on the SFWMD Right of Way merely 60 to 100 feet from there homes! The community had never been given notice that this project was to take place and therefore never given a chance to voice there objection. These lines may not only become a health hazard, but they will ineviably decrease the property value of the homes within this area. They are a risk to life and property: these electric lines are not even built to withstand hurricane winds anywhere between 111 to 130 mph.

I thank you for giving my constituents the opportunity to go before your court and voice there concerns to a higher power. I args you hear there thoughts carefully and allow your judgment to be fair and unencombered by the opposing argument. If you should have any questions regarding this or any other matter, please feel free to contact me.

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Since

Trying Slosburg State Representative District \$9

tioners

### Exhibit H

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#### Page 1 of 2

#### **Jim Ruehl**

From: Francisco Paez

Sent: Tuesday, August 14, 2001 6:52 PM

To: Bob Elias

Cc: Jim Ruehl; Edward Mills

Subject: FW: should I send this to PSC

Bob, I will try to answer them to the best of my knowledge.

1a)FPL engineering design is mainly "cook book".

FPI has engineering design manuals and computer programs that would provide the engineer with the required minimum setting depth for a paticular pole.

The pole setting depth is usualy a function of the height of the pole.

There might be cases where a pole will be set deeper, but poles are never set less than the required depth in order to aquire height to compensate a clearance problem.

Most of FPI's design specs have safety factors built in to provide a safe design in case of a minor miscalculation. 1b)In distribution pole setting these measurement are close, they are not survey exact.

I have seen several setting of distribution poles.

They dig the hole and a crew member measures the hole with a tape measure to make sure the pole hole is the required depth before they set the pole.

I would assume that in transmission they follow the same procedure.

1c)The setting depth are calculated for stability purposes.

Poles would break before they topple. I have never heard of a pole that has topple.

1

2)Normaly these plates are installed where a person can read them without the use of a ladder. I do not think that all these plates are in the same location from the bottom of pole.

If one was installed 13' above ground, then there might be a concern that the pole was not set properly.

3a)If they have to face a certain way is not due to structural weakness or structural strength of the pole, but to the fact that these poles are pre-drilled at the manufacturer, they have to be installed a certain way in order to have the insulators at the correct positions.

3b)DO THEY HAVE A WEAK SPOT?

A structural engineer or the manufacturer would have to answer this question.

4)FPL would have to answer this question.

5)FPL would have to answer this question.

6)FPL uses contractor to do a majority of their large jobs. The only way to know for sure is to ask FPL who installed the poles.

7) FPL has a contract supervisor that is responsible for overseeing the job. The contractor is responsible to build the job according to the job instructions. If the contractor deviates from the job instructions, they must have FPL's approval.

8a)See number 2. FPL would have to answer this question.

9)FPL would have to send a survey crew to measure the height of the pole above ground and subtract this from the total lenght of the pole. The difference would be the setting depth.

10)The FPL survey crew could probably measure the angle of tilt and see if it is within the allowable range. FPL can monitor these poles in the future to make sure that these poles do not continue to tilt or exceed the allowable angle that a pole can tilt.

In previous meeting ,the point was brought out that this was the first time that FPL has installed these particular

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poles parallel and in close proximity to a canal. Due to this fact, it might be a good idea for FPL to monitor these poles.

----Original Message-----From: Bob Elias Sent: Tuesday, August 14, 2001 9:07 AM To: Francisco Paez Subject: FW: should I send this to PSC

Frank, would you answer, to the extent you can, the questions posed by Mrs. Terwilliger.

-----Original Message-----From: SCTerwil@aol.com [mailto:SCTerwil@aol.com] Sent: Tuesday, August 14, 2001 8:55 AM To: relias@psc.state.fl.us; fpiaz@psc.state.fl.us; fpias@psc.state.fl.us Subject: Fwd: should I send this to PSC

Hi Bob- I'm sending this to you and (I HOPE) Frank... I wasn't sure of his email address, so if it's incorrect please forward it to him immediately ... this could be helpful in both of our cases, so I need answers... (by yesterday!!!)

As always, I appreciate any help you can offer. We have our prehearing conference on Thurs. and Friday this week. (That's why we need the info !)

If you get a chance please update me on the status of our case ...

Many Thanks! Suzanne Terwilliger

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