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February 20, 2006

VIA HAND DELIVERY

Ms. Blanca S. Bayó, Director
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
Betty Easley Conference Center, Room 110
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

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through
060151-EI

Dear Ms. Bayó:

On January 30, 2006, Florida Power & Light Company (FPL) filed the plan titled STORM SECURE: FPL'S FIVE-POINT PLAN TO BUILD A STRONGER GRID FOR THE FUTURE (the "Plan"). The Plan (attached Exhibit "A") outlines a number of initiatives designed to address not only the resiliency of our system to future weather events, but also to provide for an increased level of day-to-day reliability for our customers.

As the next step in the implementation of the Plan, certain changes to both FPL's Electric Tariff (Tariff) and to the Florida Administrative Code (FAC) are needed. These changes, which are summarized below, will enable FPL to move forward in a timely manner, with the initiatives described in the Plan. While separate filings are being submitted to the Commission for each of the needed changes, this cover letter is provided as an overview and summary of all of the proposed changes.

FPL STORM SECURE INITIATIVES

Initiatives I and III

Initiative I pertains to the strengthening of FPL's system as it relates to post-hurricane repairs and targeted facility upgrades to prepare FPL's system for the 2006 hurricane season. Initiative III addresses hardening of the electric infrastructure related to new construction, system upgrades and long-term hardening of targeted facilities. In

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order to move forward with these initiatives, revisions are needed to FAC 25-6.034, Standard of Construction, and FAC 25-6.0345, Safety Standards for Construction of New Transmission and Distribution Facilities. These FAC sections reference minimum standards, and the proposed revisions will authorize the construction of facilities based on higher standards (e.g. National Electrical Safety Code Extreme Wind Velocities) where applicable. Subsequent to approval of these revisions, FPL also plans to file with the Commission for administrative approval detailed boundary maps and other information necessary to demonstrate the application of extreme wind standards throughout FPL's service territory, taking into account political and geographic boundaries and other operational considerations.

Initiative II

This initiative proposed guidelines for pole inspections, treatment and replacement, and as originally proposed included a ten-year inspection cycle for all distribution wood poles. However, this area has already been addressed by the Commission in Docket 060078-EI, wherein an eight-year inspection schedule has been established. FPL is not proposing as part of this package any changes to the FAC or its tariff.

Initiative IV

Initiative IV addresses various undergrounding matters related to FPL's distribution system. As part of this initiative FPL would invest 25% of the cost of local government-sponsored conversion projects. This would be done as a means of promoting and encouraging additional conversion efforts. Therefore, both the FAC and related Tariff sections should be revised to allow for this investment by FPL. As a result, revisions to both FAC 25-6.115, Facility Charges for Providing Underground Facilities, and Tariff Sheet 6.300, Conversion of Overhead Electric Distribution Facilities to Underground, are being submitted.

Initiative V

This initiative identifies a number of proposals which are being implemented to enhance our overall vegetation management effort. The proposed revisions to Tariff Sheet 6.020 (Rules and Regulations Section 2.8), Access to Premises, will improve our ability to carry out the desired initiatives.

Subject to Commission approval, FPL will work aggressively to implement all of the components of the Company's Five-Point Plan. The above described FAC and Tariff

revisions are critical to our success in these areas. As a result, we respectfully request an expedited review and approval of these changes.

Sincerely,

Patrick M. Bryan
Attorney
Florida Power & Light Company

PMB
Enclosure
cc: Harold A. McLean, Esquire (via U.S. Mail)
Office of Public Counsel

STORM SECURE: FPL'S FIVE-POINT PLAN TO BUILD A STRONGER GRID FOR THE FUTURE

January 30, 2006

The purpose of this paper is two-fold: to explain the steps that FPL proposes to take to substantially increase the resistance of its distribution, transmission and substation network to severe weather impacts; and to identify areas where assistance will be required, either from the Florida Public Service Commission (FPSC) or from state and local government bodies and communities.

BACKGROUND

Two extraordinary hurricane seasons have made it clear that significant changes are required in the way that Florida utilities design, construct and operate their electrical systems. This is particularly true for FPL, whose service area has experienced the direct hit of five hurricanes as well as the impact of two others in 2004 and 2005. Standards that have worked well and provided customers with reliable service in the past will need to be enhanced going forward. Florida generally, and South Florida in particular, are much more heavily and densely populated than they were at the time of Hurricane Andrew; customers' expectations have changed; and there is good evidence that we are in a more active part of a multi-decade hurricane cycle and can expect more frequent events. Even if 2004 and 2005 were aberrations, as long-term statistics suggest, we must be prepared for further, significant storm activity in the years ahead.

The issue is not whether changes should be made, but what those changes should be. Although no electrical system can be rendered fully resistant to hurricane impacts under the current state of technology and economics, this paper outlines changes that FPL proposes to make to benefit our customers and the communities we serve. Our approach to new construction, system upgrades and maintenance will provide significant improvements in our system's resiliency to storms and our restoration time after a storm passes. In addition, it will ensure that a critical mass of providers of basic services that are essential to the health and safety of our communities will have a reliable supply of electricity as promptly as possible after a hurricane strike. In developing these proposals, some of which will require FPSC approval, we have kept in mind the following essential points:

1. FPL's distribution, transmission and substation systems, as validated by KEMA's independent analysis, meet or exceed all required safety standards set forth by the National Electrical Safety Code (NESC) and performed as designed and expected during recent hurricanes. However, given the severe nature of the 2004 and 2005 hurricane seasons and, as the FPSC has recognized, the fact that meteorological experts have determined that this is likely part of a long term cycle of increased hurricane activity, we are proposing many changes to the current standards for our distribution system.

2. Significant changes to the resiliency of our system will take many years of sustained effort to achieve. Unfortunately, our system is so large and geographically diverse that it cannot be changed overnight, and all parts of our extensive service territory are susceptible to hurricane impacts. Therefore, we must be intelligent in the development of our programs and focus early efforts on those parts of the system where we can have the greatest impact for a given level of effort, whether this be by geography or by element of the network.

3. Substantial improvements to our system's resiliency will have cost implications (for example, converting the entire grid to underground could double our customers' rates). We know that would be unacceptable to most customers. That is why we must focus on spending resources efficiently and wisely.

4. We must avoid focusing excessively on any one aspect of the problem. Electrical systems are exposed to a variety of different failure modes under the stress of hurricane conditions and typically each specific failure mode only accounts for a relatively small proportion of the total problem. For example, FPL and every other utility experiences pole failures during hurricane conditions. However, even if FPL had experienced zero pole failures during the 2004 and 2005 storm seasons, we would still have experienced millions of customer outages.

We have used these points as guidelines in assisting us to formulate the initiatives that follow and in their refinement in the coming months.

BASIS OF OUR PROPOSALS

We have developed our proposals based in part on the extensive analyses that we have conducted either directly ourselves, or with the aid of external resources such as KEMA, on the evidence of seven hurricane events that our system has experienced in the last two seasons: Charley, Frances, Jeanne, Dennis, Katrina, Rita and Wilma, [1] and also taking into consideration customer and governmental expectations that have been expressed in the wake of this past storm

[1] FPL Hurricane Assessment prepared by Davies Consulting, Inc. (February 18, 2005); FPL Transmission and Substation – 2004 Storm Season Report (2005); FPL Hurricane Assessment (January 25, 2005); FPL Infrastructure Resilience Team Report on 2004 Hurricanes (2005); FPL Vegetation Management Study (2005); FPL Wilma Engineering Analysis prepared by KEMA (January 12, 2006).

season. We are happy to provide further background to the Commission and its Staff. However, we note that we have not by any means completed our analysis and we expect to learn more as we continue to probe the evidence. In addition, while our proposals have been subjected to a preliminary and general economic assessment, we are not yet at the point where we can specify exactly what each element of the program will cost. Accordingly, we expect to refine our proposed program over time, both by adding elements as we develop new ideas and by adjusting the timing, level or focus of current elements. FPL is committed to the approach and initiatives set forth in this paper, subject to FPSC review and approval where needed.

ELEMENTS OF THE PLAN

1. Complete **post-hurricane repairs and targeted facility upgrades** to rehabilitate and strengthen the electrical infrastructure in order to prepare for the 2006 hurricane season.

2. Modify our existing **pole inspection, treatment and replacement** program to include a systematic ten-year inspection and treatment cycle for all distribution wood poles, including those poles owned by other utilities, in order to proactively address any identified pole deficiencies (consistent with recent FPSC staff recommendations) and work with other utilities to address joint use issues pertaining to loading.

3. **Harden the electrical infrastructure** by (a) adopting NESC extreme wind velocity zone criteria as the standard for all new distribution construction and system upgrades (up to 150 mph in certain areas) using construction methods such as undergrounding, stronger poles (including concrete poles where appropriate), shorter spans, guying, etc., (b) upgrading existing overhead main lines (feeders) initially targeting those serving top critical infrastructure facilities and major thoroughfares within the first five years, with the objective of applying NESC extreme wind-loading criteria where feasible and practical, and (c) replacing targeted components of remaining transmission and substation facilities constructed under legacy standards -- all as part of a comprehensive, detailed ten-year hardening plan for distribution, transmission and substation infrastructure.

4. Promote **undergrounding** by (a) investing 25% of the cost of local-government sponsored overhead-to-underground conversion projects otherwise borne by the requesting locality, (b) aggressively encouraging local ordinances and legislation requiring developers to provide underground electrical service for all new subdivisions, developments and projects, and (c) facilitating local undergrounding projects by allowing underground conduit and cable, and associated above-ground transformers and switch cabinets to be placed in road rights-of-way under specific standards and agreements.

5. Enhance **vegetation management initiatives** by (a) accelerating main line (feeder) clearing to complete 75% of each year's planned line clearing work before the peak

hurricane season, (b) completing line clearing for circuits serving top critical infrastructure facilities (CIFs) prior to hurricane season 2006 and prior to every hurricane season thereafter, (c) ensuring a 3-year line clearing cycle for all main lines (feeders), (d) aggressively promoting our "Right Tree – Right Place" program to educate communities and improve shared responsibility with customers regarding the placement, removal, species and type of trees in proximity to power lines, and (e) supporting legislation that would regulate and enforce the species, type, placement and removal of trees and vegetation in proximity to electric facilities, and enhance utility rights of access to property to clear lines through local code enforcement assistance.

We are confident that these initiatives will ultimately result in fewer outages during severe weather events. When outages do occur, service will be restored faster, particularly to critical infrastructure facilities and to main thoroughfares where businesses that provide basic necessities such as gas stations and grocery stores are located. Our plan clearly demonstrates that just as Florida's weather is changing, so are we.

INITIATIVES

I. Post-Hurricane Repairs and Targeted Facility Upgrades to Prepare FPL's System for the 2006 Hurricane Season

Our restoration process has two components – the initial restoration phase, when all customers affected by storm-related outages are restored; and the recovery phase, when facilities affected by hurricane are restored to pre-storm condition. As a result of the 2005 hurricane season, a comprehensive field assessment of all distribution, transmission and substation facilities was initiated. Follow-up work to our system is ongoing to repair and restore distribution, transmission and substation facilities that were damaged and left weakened during the 2005 hurricane season, and to replace facilities where necessary. Additionally, certain near-term work is being performed to strengthen targeted facilities prior to the onset of the 2006 hurricane season. Our action plan includes the following:

- Distribution Follow-Up Work on Poles
  - Replace damaged poles, including those braced during restoration
  - Straighten leaning poles
  - Remove pole stubs
- Other Distribution Follow-Up Work
  - Replace damaged lightning arrestors
  - Replace or repair capacitor banks
  - Replace or repair switches
  - Address various other components of electrical infrastructure damaged during last year's hurricane season
- Distribution Facility Strengthening

    - Replace conductor along targeted main lines (feeders) serving critical infrastructure facilities (*e.g.*, Port Everglades)
    - Complete Thermovision inspections and follow-up repairs to identified 500 main lines (feeders) to proactively address potential causes of interruptions
- Transmission Line Follow-Up Work and Targeted Facility Strengthening
    - Rebuild seven miles of the Conservation-Corbett 500kV transmission line that experienced structural damage
    - Inspect all 500kV lines within the impacted area of Hurricane Wilma and make hurricane-related repairs as identified
    - Relocate the wood pole line off the berm of Lake Okeechobee and rebuild with concrete poles
    - Replace existing ceramic post insulators with better performing polymer post insulators on facilities with the highest customer impacts
- Substation Facility Strengthening
    - Accelerate replacement of silicon carbide arrestors to better performing arrestors on transformers with the highest customer impact
    - Harden selected equipment assemblies at 500 kV substations and bus connections at 15 substations

As we complete our follow-up work on facilities during this recovery phase, it should be noted that we are also often replacing identified facilities with ones that meet current, higher standards than those in place at the time of initial installation, which will improve the overall robustness of FPL's system.

The above initiatives help to address the immediate operating viability and reliability of our infrastructure prior to the onset of the 2006 hurricane season. The initiatives that follow are more comprehensive in nature and address the longer-term strength and resiliency of our electrical system.

II. Pole Inspection, Treatment and Replacement

FPL's distribution poles are currently designed to meet NESC standards, and most poles are designed 50% stronger than NESC minimum requirements. FPL's distribution poles are inspected as part of a three-pronged approach: (1) a Thermovision program that visually inspects all main line (feeder) poles; (2) a targeted wood-pole inspect and treat program; and (3) pole inspections that are done as part of daily work activities. FPL's transmission poles have been designed to meet extreme wind-loading criteria at the time of construction, and are currently inspected, treated and replaced as necessary on a 3, 4 or 8-year cycle, depending on material and customer count.

The failure rate of FPL's distribution poles during the 2004 and 2005 hurricanes was low. With respect to Hurricane Wilma, KEMA determined that of the distribution poles that experienced hurricane force winds, the distribution pole failure rate (1.46% of the total population of distribution poles that were exposed to hurricane-force winds) was consistent with

the failure rate that would have otherwise been expected for a hurricane of that storm's size and strength. KEMA concluded that wind was the predominant root cause of pole breakage. Notwithstanding the low distribution pole failure rate, given the expectation that Florida is experiencing a heightened cycle of increased hurricane activity, FPL is taking the following action:

- Modify the existing pole inspection and treatment program to establish a systematic inspection and treatment cycle of ten (10) years for all distribution wood poles, including those poles carrying FPL facilities that are owned by other utilities (consistent with recent FPSC staff recommendations)
- Prioritize inspection of creosote-treated wood poles (the oldest type of pole within distribution system) by the onset of the 2006 hurricane season
- Replace as necessary those poles identified as having deficiencies
- Report findings to the FPSC of such inspections, treatment and replacement on an annual basis
- Work with other utilities (*e.g.*, telephone, cable) to address joint use issues pertaining to loading and their own inspection programs

III. Hardening the Electrical Infrastructure

New Construction

All of FPL's distribution facilities meet or exceed NESC standards. However, given the severe nature of the 2004 and 2005 hurricane seasons and, as the FPSC has recognized, the fact that meteorological experts have determined that Florida is in a long-term cycle of increased hurricane activity. FPL proposes to take the following action:

- Adopt the NESC extreme wind-loading criteria as the standard for all new distribution construction (up to 150 mph in certain areas). This standard will be applied as specified by established NESC extreme wind velocity zones (*see* Exhibit A), and may be achieved using construction methods such as undergrounding, stronger poles (including concrete poles where appropriate), shorter spans, guying, etc.

Changes in new construction standards for transmission and substation facilities are not indicated or recommended.[2] That said, we are taking proactive action as follows:

[2] FPL's transmission and substation facilities are designed in accordance with NESC extreme wind loading criteria applicable at the time of design. During the 2004 and 2005 hurricanes, the transmission lines built to the current standard of concrete poles and polymer insulators performed well. During Hurricane Wilma, a total of 345 transmission line sections were interrupted; of these 65% had no damage. (Note that countermeasures to address the 35% of transmission line sections that were damaged are included in the "Hardening the Electrical Infrastructure" section of this paper). The most probable cause of the interruption of those undamaged transmission lines was wind-blown debris including trees, branches and vegetative material from outside FPL's easements and rights-of-way, which likely self-cleared the impacted facilities. In total, these 345 line sections disrupted service to 241 substations, of which only 8 had damage requiring repairs prior to restoring service.

- Enhance our current standards for substation fences and control house roofs where appropriate (Note: Although this damage did not cause any outages, substation roof and fence damage was found at 26 locations after Hurricane Wilma.)

System Upgrades

System upgrades are generally described as projects aimed at substantially changing the current state of existing facilities, through programs such as system expansion, relocations and major maintenance/rebuild projects. FPL intends to take the following action with respect to system upgrades:

- Apply NESC extreme wind velocity zone criteria in those instances when main lines (feeders) have to be relocated along road rights-of-way or are being substantially upgraded due to increased electrical demand

Long-Term Hardening of Targeted Facilities

In addition to new construction and system upgrades, a targeted, long-term approach to systematically increasing the strength and resiliency of existing electrical infrastructure that serves critical infrastructure facilities (CIFs) and major thoroughfares is necessary. To accomplish this, long-term retrofit projects will be undertaken with the sole purpose of hardening identified facilities. The following proactive hardening plans are being initiated:

- Develop a comprehensive, detailed ten-year hardening plan for distribution infrastructure based on additional independent and internal analyses, including recommendations for infrastructure hardening developed with assistance from KEMA
- Upgrade existing overhead main lines (feeders), initially targeting those serving top critical infrastructure facilities and major thoroughfares (with gas stations, grocery stores, etc.) within the first five years, with the objective of applying NESC extreme wind-loading criteria where feasible and practical
- Initiate a long-term plan to replace remaining transmission line ceramic post insulators, single-pole unguyed wood transmission structures, and substation transformer surge arresters constructed under legacy standards

This will be the first time that any electric utility operating in the United States has adopted the NESC extreme wind-loading criteria for distribution facilities. This will, undoubtedly, have profound long-term benefits to all our customers and the communities we serve.

IV. Undergrounding

Currently 37% of FPL's distribution infrastructure is underground. FPL's current policy is to install underground facilities in high density areas where multiple power lines are required to serve customers, or where local ordinances require underground construction for new residential subdivisions. Pursuant to FPSC rule, FPL's customers pay the differential cost between overhead and underground pursuant to existing tariff. There are specific applications under which underground service is less desirable than overhead service for reasons of site engineering or due to extended outages after storm surge or flooding. However, analysis from the 2004 hurricanes and Hurricane Katrina which impacted FPL's service area indicated that underground facilities incurred fewer main line (feeder) interruptions during each hurricane. In addition, we recognize that many communities have expressed an interest in pursuing conversion from overhead to underground. Therefore, FPL intends to take the following actions:

- Promote the conversion of electric distribution facilities from overhead to underground by offering to invest 25% of the cost of local government-sponsored conversion projects otherwise borne by the requesting locality, with the FPSC recognizing such investment as new plant in service
    - All property located within any area designated by the locality for conversion would be required to convert from overhead to underground service in order to ensure that the potential benefits to the new underground area's robustness are not compromised by interceding overhead facilities that are exposed to causes of overhead outages
- Aggressively enhance existing efforts with local governments to strongly encourage ordinances requiring developers to provide underground electrical service for all new subdivisions, developments and projects
- Support legislation that would require developers throughout the state to provide underground electrical service for all new subdivisions, developments and projects
- Support and assist efforts of communities to obtain funding assistance from federal and state agencies to defray costs of underground conversion projects
- Facilitate local undergrounding projects by allowing underground conduit and cable, and associated above-ground transformers and switch cabinets to be placed in road rights-of-way under specific standards and agreements

V. Vegetation Management

Evidence and analysis from the 2004 and 2005 hurricane seasons shows that trees and vegetation interfering, damaging or breaking poles, lines and other facilities were the greatest cause of hurricane-related outages. FPL's current line clearing practice is to clear distribution lines on a 3-year average cycle (an average of 4,600 feeder miles annually). Our line clearing practices, which include directional pruning methods, meet ANSI A-300 and NESC tree trimming standards and follow the guidelines recommended by both the International Society of Arboriculture and the National Arborist Association.

That said, vegetation management is an area that FPL cannot unilaterally control. Our forensic team's analysis of tree-related distribution feeder and lateral outages from Hurricanes Katrina and Wilma in 2005 concluded that 81% of tree-related outages were not preventable by FPL; that is, no trimming standard or work performed by FPL would have prevented these outages from occurring. These outages were caused by damage to FPL facilities from trees located off rights-of-way or outside of FPL's property or its easements which toppled into FPL's poles, lines and other facilities, or by limbs breaking off from trees and vegetative material located outside of FPL's trim zone. In addition, FPL's transmission system had 22 trees located outside of FPL's transmission rights-of-way that impacted facilities. As previously indicated, no damage was observed on the vast majority of transmission line sections interrupted by Hurricane Wilma, indicating that these facilities were impacted by flying debris, including tree branches and other vegetative material from outside FPL's easements and rights-of-way, that likely self-cleared from the impacted lines. For its part, to mitigate the prospect of outages caused by trees and vegetation interfering with, damaging or breaking electrical facilities, FPL is taking the following action:

- Accelerate main line (feeder) clearing to complete 75% of each year's planned line clearing work before the peak hurricane season
- Complete line clearing for circuits serving top critical infrastructure facilities (CIFs) prior to hurricane season 2006 and prior to every hurricane season thereafter
- Ensure a 3-year line clearing cycle for all main lines (feeders)
- Aggressively promote "Right Tree – Right Place" program to heighten community education and shared responsibility between FPL, communities and customers for tree species, type, location and proximity to power lines
- Support legislation that would regulate and enforce the species, type, placement and removal of trees and vegetation in proximity to electric facilities, and also enhance utility rights of access to property to clear lines through local code enforcement assistance

CONCLUSION

We have all experienced firsthand the significant impact of recent hurricanes in our state. No utility has had to respond to as many direct hits by hurricanes in recent years as FPL. We recognize that if the recent cycle of increased hurricanes activity is the new storm paradigm for our state, FPL's service area and its customers will undoubtedly be impacted. Without fundamental and significant changes in the way we prepare for storms and harden our infrastructure to prevent outages, we believe that the level of disruptions to our electrical system may well continue into the future. That is unacceptable to FPL, as it is unacceptable to our customers.

However, it is a reality that, regardless of the initiatives that we set forth above, when hurricanes and severe weather events impact our state, outages will occur. It is our intention, however, to take the steps necessary to mitigate such impact. The tactical and strategic initiatives

we have outlined not only address the resiliency of our system to future severe weather events, but also provide for an increased level of day-to-day reliability for our customers. In addition to the initiatives outlined above, FPL intends to make further refinements to this action plan based on additional input and analyses, and will include such refinements as part of our 10-year hardening plan. We expect this plan to provide a clear roadmap to improving the long-term resiliency of our electric infrastructure, and will submit it to you later this year. Furthermore, we will include localized hardening plans that we will share with respective community leaders and local emergency managers.

Exhibit A

National Electrical Safety Code (NESC) Extreme Wind Velocities

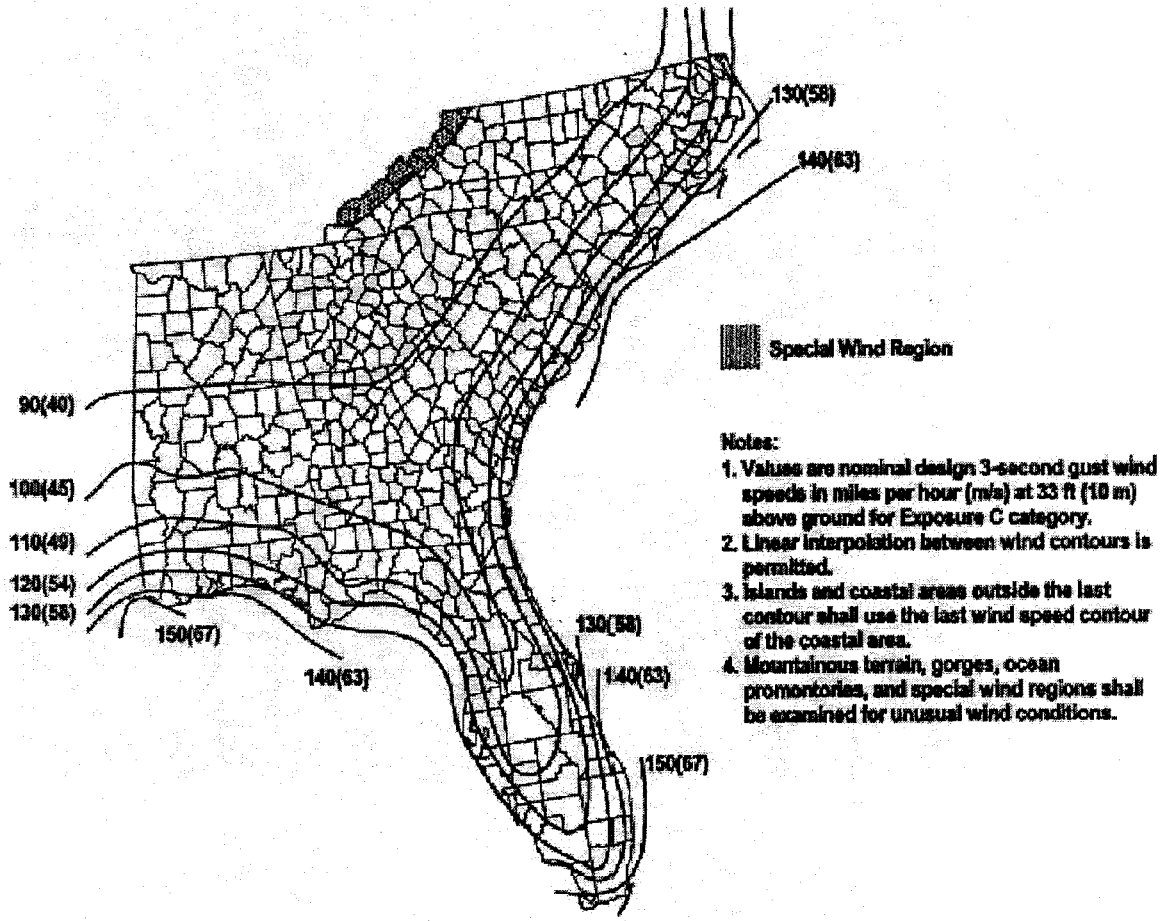

Fig 250-2(d)
Eastern Gulf of Mexico and Southeastern US Hurricane Coastline*

Source: National Electrical Safety Code (NESC) [2002 Edition]

FPL