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September 14, 2007

-VIA HAND DELIVERY -

Ms. Ann Cole
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

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Re: Docket No. 070301-EI

Dear Ms. Cole:

I am enclosing for filing in the above docket the original and fifteen (15) copies of the prefiled rebuttal testimony and exhibits of Florida Power & Light Company witnesses Manuel B. Miranda and John J. McEvoy. Exhibits MBM-4, MBM-5 and MBM-6 to Mr. Miranda's rebuttal testimony consist of voluminous, large-format engineering maps and drawings, which are cumbersome to reproduce and distribute as hard copies. Accordingly, only the original of Mr. Miranda's rebuttal testimony is accompanied by hard copies of those exhibits. The other copies of his rebuttal testimony being filed with the Commission, as well as the service copies, are accompanied by CDs of those exhibits.

Please contact me if you have any questions about this transmittal.

Sincerely,

John T. Butler

Enclosure
cc: Counsel for Parties of Record (w/encl.)

- CMP 2
- COM 5
- CTR 1
- ECR _____
- GCL 2 (3 CDs)
- OPC _____
- RCA 1
- SCR _____
- SGA _____
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McEvoy
DOCUMENT NUMBER-DATE
08393 SEP 14 05
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[CDs to GCL]
8389-07 MBM-4
8390-07 MBM-5
08391-07 MBM-6 P12
08392-07 MBM-6 P12

Miranda
DOCUMENT NUMBER-DATE
08388 SEP 14 05
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CERTIFICATE OF SERVICE
Docket No. 070301-EI

I HEREBY CERTIFY that a true and correct copy of the pre-filed rebuttal testimony and exhibits of Florida Power & Light Company witnesses Manuel B. Miranda and John J. McEvoy has been furnished by hand delivery (*) or overnight delivery on the 14th day of September, 2007, to the following:

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By: _____
John T. Butler
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**BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION**

**DOCKET NO. 070301-EI
FLORIDA POWER & LIGHT COMPANY**

**IN RE: FLORIDA POWER & LIGHT COMPANY'S
2007 ELECTRIC INFRASTRUCTURE STORM
HARDENING PLAN FILED PURSUANT TO
RULE 25-6.0342 F.A.C.**

SEPTEMBER 14, 2007

REBUTTAL TESTIMONY OF:

MANUEL B. MIRANDA

DOCUMENT NUMBER-DATE

08388 SEP 14 8

FPSC-COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **REBUTTAL TESTIMONY OF MANUEL B. MIRANDA**

4 **DOCKET NO. 070301-EI**

5 **SEPTEMBER 14, 2007**

6

7 **Q. Please state your name and business address.**

8 A. My name is Manuel B. Miranda. My business address is 9250 W. Flagler St.,
9 Miami, Florida 33174.

10 **Q. Did you previously submit direct testimony in this proceeding?**

11 A. Yes.

12 **Q. Are you sponsoring any exhibits as part of your rebuttal testimony?**

13 A. Yes. I am sponsoring the following three exhibits:

- 14 • MBM-4, 2007 Aerial Maps & Engineering Drawings for 2007 CIF and
15 Community Projects;
- 16 • MBM-5, Balance of 2007 Engineering Drawings for 2007 CIF and
17 Community Projects;
- 18 • MBM-6, Primary Map Drawings for 2008 and 2009 CIF Projects.

19 **Q. What is the purpose of your rebuttal testimony?**

20 A. I will respond to the portions of the testimony submitted on behalf of Verizon
21 Florida LLC by Lawrence M. Slavin and Sanford C. Walker as well as
22 Michael T. Harrelson on behalf of Florida Cable Telecommunications
23 Association, Inc. (FCTA) that relate to their objections to FPL's plan to apply

1 extreme wind loading criteria (EWL) to its distribution facilities. Additionally,
2 I will respond to the portions of the testimony of Mr. Harrelson regarding his
3 contentions that FPL has not submitted all information required by Rule 25-
4 6.0342(4), F.A.C., that FPL's attachment standards are not reasonably
5 practicable as required by Rule 2506.0342(5), F.A.C., and that FPL has not
6 fully satisfied its obligation to seek and attempt in good faith to accommodate
7 concerns of third party attachers.

8 **Background on FPL's Storm Hardening Plan**

9 **Q. The testimonies of the Verizon and FCTA witnesses express concern**
10 **regarding the need for and cost of FPL's plan to apply EWL within its**
11 **service territory. Please describe the background that led FPL to propose**
12 **the application of EWL within its 3 prong storm hardening approach.**

13 A. The 2004 and 2005 hurricane seasons were the most extraordinary and
14 challenging on record for FPL and its customers. Seven storms, including five
15 direct landfalls within FPL's service territory, resulted in a very large number
16 of customer outages, with those outages extending for many days and even
17 weeks in some cases. Customers made it clear that the scope and duration of
18 these storm outages, and the disruption to the recovery and normal functioning
19 of their communities that the outages entailed, were unacceptable. At the
20 same time, FPL and this Commission recognized that, without significant
21 changes in the way we construct and operate our infrastructure to prevent
22 outages, the level of disruptions to our system as well as to our customers in
23 future storms would be much like that experienced in 2004 and 2005.

1 Accordingly, FPL and this Commission concluded that significant changes
2 were needed. FPL announced its Storm Secure initiative in January 2006, and
3 the Commission also began to roll out its own initiatives (e.g., mandating pole
4 inspections programs, requiring development of storm preparedness initiatives
5 and initiating hardening rulemaking dockets). In early 2007, the Commission
6 finalized its hardening rules, and specifically Rule 25-6.0342, requiring all
7 IOUs to file hardening plans by May 7, 2007.

8
9 To comply with this rule, FPL filed its Electric Infrastructure Storm
10 Hardening Plan (Plan), which contained a 3 prong approach to harden its
11 distribution system: (1) EWL; (2) Incremental Hardening; and (3) Design
12 Guidelines. EWL would be applied to existing and new feeders serving CIF
13 and certain poles critical to operations and efficient restoration. Incremental
14 Hardening, hardening existing feeders, up to and including EWL, would focus
15 on community projects (facilities serving essential community needs such as
16 grocery stores and gas stations). FPL's Design Guidelines contained criteria to
17 apply EWL to the design/construction of all new overhead facilities, major
18 planned work, relocation projects, as well as daily work activities.

19
20 The 2004 and 2005 storm experiences, the performance of FPL's transmission
21 structures (which were already built to EWL standards and performed well
22 during the 2004 and 2005 storm seasons), and most importantly, the forensic
23 data from Hurricane Wilma, serve as the basis for FPL's Plan. FPL found that,

1 in Hurricane Wilma, “wind only” was the predominant root cause of
2 distribution pole breakage. This was a fact that FPL could not ignore. Other
3 initiatives, e.g., pole inspections and increasing vegetation trimming, were
4 addressing all other major causes of pole breakage, but none of them
5 addressed the “wind only” failures that had been so prevalent in Hurricane
6 Wilma. FPL’s Plan addresses that last major cause of pole failure.

7
8 FPL’s Plan includes the associated estimated costs for 2007-2009 as well as
9 estimated benefits that can be expected. FPL recognizes that implementing the
10 Plan will be expensive, as one would expect when the goal is to harden an
11 electric infrastructure as expansive as ours. But these expenditures are
12 important, because only by implementing the Plan will FPL directly address
13 the problem of “wind only” pole failures. FPL believes that this is what our
14 customers expect. As discussed in my direct testimony, implementation of the
15 Plan should provide substantial benefits to our customers, including fewer
16 outages, reduced restoration time, quicker return of essential community
17 services, as well as day-to-day reliability and is, therefore, in the best interest
18 of our customers. Most of those benefits will work to the advantage of the
19 third parties that attach their facilities to FPL’s poles as well.

1 **Responses to Specific Points Made By Intervenor Witnesses**

2 **Q. Do you agree with Mr. Harrelson’s claim that FPL’s plan is not prudent,**
3 **practical or cost effective because it will dramatically increase costs**
4 **without adequate assurance of a commensurate improvement in storm**
5 **performance or storm restoration?**

6 **A.** No. First, Mr. Harrelson uses only the top of the range for each of the years
7 2007-2009 which exaggerates FPL’s 3 year hardening cost estimates. Using
8 the low end of the range for these years would result in a 34% reduction from
9 the figures Mr. Harrelson cites.

10
11 Interestingly, Mr. Harrelson compares FPL’s projected storm hardening
12 expenditures to TECO’s, making the point that FPL’s projected costs are
13 approximately five times larger on an overall basis. However, given the
14 differences in size between FPL and TECO, this is clearly not a valid
15 comparison. FPL’s service territory covers almost 28,000 square miles
16 compared to approximately 2,000 square miles for TECO – 14 times larger.
17 And FPL has over 4.3 million customers compared to approximately 650,000
18 for TECO – over six and one half times as many. Given these differences in
19 size, FPL’s overall projected hardening expenditures under the Plan are quite
20 reasonable – in fact, relatively modest -- in comparison to TECO’s.

21
22 Regarding the benefits of FPL’s Plan, Mr. Harrelson’s position is again based
23 on skewing the data in favor of his position. Whereas his evaluation of the

1 Plan's cost focused on the *high* end of the range, when he talks about the
2 benefits, he focuses on the *low* end of FPL's restoration cost savings per mile
3 of hardened feeder. Mr. Harrelson is right that FPL cannot guarantee that the
4 benefits associated with storm restoration performance or costs will be
5 achieved. As I discussed in my direct testimony, there are several factors that
6 affect the amount of actual restoration cost savings, including the frequency of
7 storms impacting FPL's service territory, the intensity of these storms, and
8 reductions in storm hardening costs associated with improvements in
9 construction processes or technological advancements. At this time, it is
10 impossible for FPL or anyone else to predict the outcome on any of those
11 factors. However, as I noted previously, the experience of the 2004-2005
12 hurricane seasons as well as some recent meteorological analyses suggest that
13 more frequent storm activity may be more representative than the assumption
14 used in FPL's restoration cost savings analysis of a storm every three years.
15 Also, a Hurricane Wilma event occurring once every 3 years will result in
16 restoration cost savings becoming approximately equal to hardening costs.

17
18 It is important for this Commission to keep the benefit-cost evaluation in
19 perspective. FPL's Plan, and the Commission's rule requiring such plans,
20 were not motivated strictly by a benefit-cost calculus; as I discussed earlier,
21 they are responding to a strong public outcry after the 2004 and 2005 storm
22 seasons concerning the disruptions caused by widespread and lengthy outages.
23 FPL is well aware that only limited information is available at this time to

1 evaluate the benefits of storm hardening, but does not believe that the public's
2 strong interest in reducing those disruptions would be well served by doing
3 nothing (or doing only minimal, pilot projects) until complete information is
4 ultimately available at some point in the indefinite future.

5 **Q. Mr. Harrelson and Dr. Slavin assert that FPL should not adopt EWL for**
6 **distribution facilities because the NESC Committee has rejected it and**
7 **because none of the other Florida IOUs “embrace the EWL standard as**
8 **FPL has done”. How do you respond to these assertions?**

9 A. FPL is not unsympathetic to the position taken by the NESC Committee as
10 well as the other Florida IOUs. It is the same position taken by FPL until
11 Hurricane Wilma, the seventh storm to impact us over a 15-month period.
12 Again, however, FPL cannot ignore the results of its Hurricane Wilma
13 forensic data, which showed “wind only” being the predominant cause for
14 pole breakage. Nor can FPL ignore the expectations of its customers and
15 others to improve the storm performance of FPL’s electrical infrastructure.

16 **Q. Mr. Harrelson believes that FPL’s deployment plans, do not comply with**
17 **Rule 25-6.0342(a)-(e), F.A.C. Do you agree with this conclusion?**

18 A. No. As I stated in my direct testimony, FPL’s hardening and deployment plans
19 are in compliance with the requirements of Rule 25-6.0342.

1 **Q. Mr. Harrelson faults FPL for not limiting its application of EWL to**
2 **coastal areas. Is this a valid criticism of the approach to EWL hardening**
3 **in FPL's Plan?**

4 A. No. While FPL's Plan will apply EWL system-wide, it differentiates the
5 application based on three EWL wind zone areas. These wind zone areas
6 generally result in the highest wind-speed designs being used in the
7 southeastern portions of FPL's service territory, where history has shown that
8 the risk of severe storms is the greatest. In contrast, the more northerly and
9 inland portions of FPL's system generally will have lower wind-speed designs
10 for EWL hardening, reflecting the somewhat lower risk of severe storms in
11 those areas.

12
13 Furthermore, it is important to recognize that FPL's Hurricane Wilma forensic
14 data does not support the theory that non-coastal areas and sheltered areas will
15 not be exposed to strong storm winds. Hurricane Wilma struck FPL's territory
16 on the west coast of Florida; however, most of the damage, and certainly the
17 most severe damage, occurred on the southeast portion of FPL's territory,
18 after the hurricane had traveled inland across the southern portion of FPL's
19 territory. Additionally, with large storms like Hurricanes Frances and Jeanne
20 in 2004 and more intense storms like Hurricane Charley, my experience is that
21 there is no defining line to suggest limiting the application of EWL to just
22 coastal areas.

1 Q. Both Messrs. Harrelson and Walker suggest that FPL has not provided
2 adequate descriptions of the communities and areas where improvements
3 are to be made, description of the extent to which joint use facilities are
4 involved, and estimates of costs and benefits to the utility. Has FPL
5 provided this information?

6 A. Yes. This is especially true for 2007. FPL provided a listing of all CIF and
7 incremental hardening projects, including the county in which they are
8 located. Additionally, FPL provided to all interested parties detailed
9 engineering drawings for each of these CIF and incremental hardening
10 projects. These detailed engineering drawings provide information that
11 includes the location of the route, poles requiring replacement, and where new
12 intermediate poles will be set. At the various workshops, as well as
13 discussions with individual companies, FPL has requested and all parties have
14 confirmed that for 2007, all information related to the 2007 projects has been
15 provided.

16
17 Since the time that Rule 25-6.0342 was proposed by the Commission in its
18 current form, FPL has repeatedly made it clear that it was not going to be able
19 to provide the same level of detail for the two “out years,” in this case, 2008
20 and 2009, because its internal budget process would not be completed for
21 those years at the time that each three-year hardening plan is initially filed.
22 FPL has always expected that it would have to provide updated information
23 on an annual basis, and, in fact, the rule provides for that option.

1 In spite of the limitations, however, FPL has worked hard to provide as much
2 information on 2008 and 2009 projects as quickly as possible. I provided a
3 listing of the 2008 and 2009 CIF projects in Exhibit MBM-2 to my direct
4 testimony. Additionally, in August 2007 FPL provided to all of the
5 intervenors, including Verizon and FCTA, a CD showing the route for each of
6 these projects. This information should be more than sufficient for all of the
7 intervenors, including Verizon and FCTA, to form an opinion on the
8 appropriateness of the 2008-2009 CIF projects.

9
10 Furthermore, while it is true that the precise details of how these projects will
11 be designed and constructed has yet to be provided, FPL, Verizon, FCTA and
12 all other parties to this docket have agreed upon a process to provide updated
13 information for 2008 and 2009. This process is spelled out in Exhibit KS-1 to
14 the testimony of AT&T Florida witness Kirk Smith. With one revision that
15 has been requested by the Commission Staff, FPL supports this process and
16 asks that the Commission approve it as part of the final order in this docket.
17 The Staff revision is to provide for the annual status report on hardening plans
18 to be filed “with the Director of Division of Economic Regulation” rather than
19 with “the Commission.” FPL understands that all of the parties to this docket
20 support Staff’s revision.

1 Q. Both Dr. Slavin and Mr. Harrelson suggest that the Davies Consulting
2 Storm Pole Replacement analysis provides inconclusive support for
3 substantiating that systems designed to withstand stronger winds have
4 greater overall resiliency in storms. Do you agree?

5 A. No. On its face, the relationship between the two curves represented on
6 Exhibit MBM-3 to my direct testimony clearly indicates that FPL's Grade B
7 poles consistently performed better than Grade C poles in storm conditions.
8 The only identified variable that differs between the electric systems whose
9 storm experience is reflected in these curves is the grade of construction.
10 Neither of the intervenor witnesses offers any speculation and a
11 recommendation for further investigation in response. Therefore, I see no
12 reason to adjust my earlier conclusion about the Davies Consulting analysis -
13 it shows that a higher grade of construction will provide greater overall storm
14 resiliency.

15 Q. Has FPL provided as part of its Plan any estimates of the costs and
16 benefits to third party attachers?

17 A. Yes, to the extent the attachers have provided estimates of their costs and
18 benefits, FPL has included that information in its filing. However, where
19 attachers have provided no input, FPL has not been able to include cost and
20 benefit information for those attachers in the Plan. FPL is not in a position to
21 estimate the costs and benefits of the Plan to attachers, as that information is
22 much more in their control than ours.

23

1 In regard to FCTA, I would like to point out that FPL has provided: (1)
2 detailed engineering drawings for the 2007 CIF and community projects
3 indicating the work to be completed on each feeder; (2) the total number of
4 poles to be replaced (2,100) and number of intermediate poles to be installed
5 (700) in 2007; (3) when it expects FCTA will be required to reimburse FPL
6 for make-ready work; and (4) an estimate of the pole rental rate computed
7 using 2007 estimated hardening cost estimates (which indicated a 2%
8 increase). FCTA has enough information to provide 2007 cost estimates and
9 benefits; however, they have yet to do so.

10 **Q. Do you agree with Mr. Harrelson that FPL's hardening plans will cause**
11 **cable operators to incur significant additional costs?**

12 A. No. FPL is only replacing approximately 2,100 poles and installing 700 new
13 intermediate poles system-wide in 2007, compared to a total distribution pole
14 population of 1.1 million. While all the details for 2008 and 2009 have not
15 been finalized, costs associated with pole replacements and new intermediate
16 poles are expected to increase. However, again, FPL does not expect the
17 impact on cable operators to be significant. Also, to the extent possible, it is in
18 FPL's best interests, as well as attachers, for FPL to set new replacement and
19 intermediate poles "in line," thereby minimizing splicing and new cable costs.
20 Taking these factors into consideration, as well as the estimated minimal
21 impact of FPL's hardening projects on the annual pole rental rate for 2007, it
22 is not clear to me how Mr. Harrelson has determined that the cost impacts to
23 cable operators are significant.

1 Q. Mr. Harrelson and Dr. Slavin suggest that FPL's hardening plan may
2 actually adversely impact the distribution system's ability to withstand
3 extreme weather and hinder storm restoration, e.g., adding more poles
4 and more poles under or near tall tree canopies, the lack of availability of
5 larger poles in a restoration event, foreign crews' inability to set concrete
6 poles, and more and stronger poles possibly failing due to trees and
7 tornados creating more hazards for motorists. Do you agree that their
8 suggestions of adverse effects are plausible?

9 A. No. Their suggestions are speculative, and they have provided no evidence in
10 support of their statements. First, FPL expects that its increased vegetation
11 trimming will significantly reduce the number of instances in which poles will
12 be damaged by falling trees or limbs. Additionally, FPL expects that the
13 stronger poles will better withstand falling tree limbs when they do occur, as
14 well as damage from flying debris. As to the claim that stronger poles will
15 pose hazards for motorists, all FPL poles are properly permitted with the
16 appropriate agencies and meet or exceed all safety requirements. Finally, there
17 is no reason to expect that FPL's restoration activities will be negatively
18 impacted by the use of more and stronger poles. FPL is recognized as leader
19 and expert in storm restoration activities. Specialized equipment, e.g.,
20 airboats, barges, large cranes, and "moon walkers," is readily available to FPL
21 as well as foreign crews to address any extraordinary needs, including
22 installing concrete poles. Nor would restoration efforts be delayed as a result

1 of any larger pole or concrete pole shortages as FPL has and will continue to
2 use all available pole inventory to restore service as quickly as possible.

3 **Q. Mr. Harrelson suggests other alternatives to strengthen FPL's system**
4 **that he says should be pursued in lieu of building to EWL. These include**
5 **replacing poles that do not meet current construction standards,**
6 **replacing small wire, providing better access to inaccessible facilities,**
7 **using specialized equipment for storm restoration efforts, strengthening**
8 **or replacing guys, adding equipment to improve line segment**
9 **sectionalizing, and converting system voltages to 25kV. Is FPL pursuing**
10 **any of these alternatives?**

11 A. Yes. In fact, FPL has in place most of Mr. Harrelson's suggestions, including:
12 FPL's 8-year pole inspection program; FPL's model feeder program;
13 installation of automated feeder switches to improve line sectionalizing
14 capabilities; and utilizing special equipment as I previously discussed in storm
15 restoration activities. These activities are properly being pursued in addition
16 to, not in lieu of, FPL's Plan. Continuation of the same processes and
17 programs that have already been in place will not provide the step change in
18 storm hardening that our customers are seeking.

19 **Q. What do FPL's third party attachment standards and procedures require**
20 **in terms of pole loading analysis prior to new attachments?**

21 A: The standards require that each pole be evaluated.

1 Q. In the middle of p. 38, Mr. Harrelson paraphrases FPL's loading analysis
2 requirements for new attachments as follows: "In other words, FPL is
3 saying that the analysis can be performed on the worst case pole in a
4 given string of poles having similar characteristics." Is this an accurate
5 characterization?

6 A. No. The Permit Application Process Manual (Manual) referenced by Mr.
7 Harrelson, when read in its entirety, requires a load assessment for each pole.
8 For example, in the section of the Manual addressing non-make ready permit
9 applications for new attachments and overlashing, part of the package
10 required for submittal includes "Wind load sheets for each pole applied for."
11 Moreover, the very page of the Manual referenced in Mr. Harrelson's
12 testimony states: "The goal of the wind load calculations is to know that all
13 the parties have sufficient strength for the proposed attachments".

14 Q. Are any of the third party attachment standards and procedures to which
15 Mr. Harrelson objects new to the FPL Plan?

16 A. No. These are the same standards and procedures we have been using for a
17 number of years prior to this docket.

18 Q. Do you understand why Mr. Harrelson has chosen this time to object to
19 FPL's overlashing requirements?

20 A. No. These are the same requirements that have been in place since the mid-
21 1990's and FPL cannot recall any negative feedback regarding these
22 requirements.

1 **Q. Do you agree with Mr. Harrelson's testimony at pp. 39-40 that power**
2 **lines and electric facilities have a greater impact on pole loading than**
3 **third party attachments or overlashing?**

4 A. His statement is literally true, but the difference is that the pole lines were
5 engineered in the first instance to support the power lines and electric
6 facilities. FPL does not systematically engineer its system on the front end to
7 accommodate untold numbers of third party attachments and overlashings.

8 **Q. Is FPL amenable to Mr. Harrelson's "alternative" overlashing proposal**
9 **(at p. 41) which would require a load assessment within 30 days after the**
10 **overlashing is made?**

11 A. No. There are at least two reasons. First, there is no convincing reason to
12 change the way FPL has been requiring load assessments (without objection)
13 for 10+ years. Second, Mr. Harrelson's "violate now and fix later" approach
14 would practically be condoning, if not inviting, NESC violations. This is
15 unacceptable from FPL's perspective.

16 **Q. Do you agree with Mr. Harrelson's testimony at p. 43 that third party**
17 **attachments can have a "beneficial effect on the stability of the pole or**
18 **ability to withstand wind and other forces"?**

19 A. There are some limited circumstances where this can happen, but those
20 circumstances are the exception to the general rule.

1 Q. On page 8 of his testimony, Mr. Harrelson provides a “yes and no”
2 answer to a question that asks if FPL sought input from third party
3 attachers and attempted in good faith to accommodate concerns raised by
4 third party attachers. Has FPL sought input from attachers and
5 attempted in good faith to accommodate their concerns?

6 A. Yes. I believe FPL has gone out of its way on the both of these issues. I
7 personally have conducted meetings with all attachers, first in a joint meeting
8 held at FPL’s offices in April 2007 (which FCTA attended) as well as
9 individually meeting with all interested parties (including FCTA).
10 Additionally, I personally attended all but one of the FPSC workshops held in
11 conjunction with this proceeding, where various issues were repeatedly
12 discussed, both formally during the workshop as well as well as informally
13 during breaks and before/after each workshop. To the extent that FPL has had
14 details available on its EWL CIF and community projects, those details have
15 been made available to all interested parties as promptly as possible. This
16 includes providing CDs of data over the April – August 2007 period that
17 contained the available engineering information. Those CDs are Exhibits
18 MBM-4 through MBM-6 to my rebuttal testimony.

19
20 Specifically, Exhibit MBM-4 contains the aerial maps and available detailed
21 engineering drawings for all 2007 EWL CIF and community hardening
22 projects. This information was provided to all interested parties in April 2007.
23 Exhibit MBM-5, which was provided in a CD to all interested parties in

1 August 2007, contains the detailed engineering drawings for all 2007 EWL
2 CIF and community projects that were not available in April 2007. Finally,
3 Exhibit MBM-6 contains the primary map drawings for all EWL CIF projects
4 to be completed in 2008 and 2009.

5
6 FPL has also worked very hard to respond to concerns about the Plan raised
7 by the attachers. Frankly, I am surprised that Mr. Harrelson would suggest
8 otherwise, after the numerous discussions that I and others at FPL have had
9 with him. For example, Mr. Harrelson's testimony complains that FPL has
10 not modified the "hardening tools" that we use to implement the Plan so that
11 the guying effect of cables and other facilities would be taken into account.
12 FPL has asked Mr. Harrelson on multiple occasions, beginning about 6
13 months ago, to point us to any information of which he is aware that would
14 provide a quantitative basis for FPL to evaluate and consider these guying
15 effects. Unfortunately, he provided no such information until FCTA served
16 responses to FPL discovery this week, just three days before rebuttal
17 testimony was due. None the less, Mr. McEvoy includes some initial thoughts
18 on this information in his testimony.

19 **Q. Mr. Harrelson suggests that if the Commission is going to approve the**
20 **application of EWL to distribution facilities it should be done on a limited**
21 **"trial" or pilot project basis. What is your reaction?**

22 A. I believe FPL's Plan, as well as the other storm hardening and preparedness
23 initiatives in place, provide the foundation for improving the storm resiliency

1 of FPL's system. This is not just a trial or pilot program -- FPL believes its
2 customers want results, not just research.

3
4 At the same time, the Commission should keep in mind that implementing the
5 Plan system-wide will be a long-term endeavor. FPL's system is very diverse
6 and geographically large. Its overhead system consists of over 41,000 miles,
7 includes approximately 3,000 feeders and it contains over 1.1 million poles. In
8 2007, FPL's Plan results in: approximately 145 miles either EWL or
9 incrementally hardened (CIF and community projects); 38 feeders EWL
10 hardened (CIF) and 34 feeders incrementally hardened (community projects),
11 and approximately 2,100 poles replaced and 700 new intermediate poles
12 installed. While the 2008 and 2009 projects are not finalized at this time, it
13 appears that the number of CIF projects completed will be increasing in these
14 2 years, in order to complete all CIF projects within the next 6-8 years. As can
15 be seen by the 2007 results, fully hardening the infrastructure will take time,
16 effort and commitment from all involved. Approving this Plan is not a final
17 and one time action. As additional storm experience, more and better data,
18 new improved processes, and better products and materials, e.g., composite
19 poles, become available, more cost-effective hardening solutions will be able
20 to be implemented. The requirements in Rule 25-6.0342 for on-going
21 submittal and review of hardening plans, as well as the process for updating
22 and reviewing annual plans that has been agreed to by all parties, provides the
23 process for these plans to be appropriately monitored.

1 Approval of FPL's Plan for the 2007-2009 time period is a first step, in which
2 FPL and its customers, the Commission and third-party attachers can begin to
3 see the benefits of hardening. At the end of that time period, there will be an
4 opportunity for everyone involved to evaluate those benefits. FPL fully
5 expects that the techniques and approach to implementing hardening will
6 change over time. Thus, this first three-year Plan will create a base of
7 hardened facilities and give FPL's customers a solid start toward achieving
8 the added storm resilience that they have clearly indicated they want.

9 **Q. Does this conclude your rebuttal testimony?**

10 A. Yes.