

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

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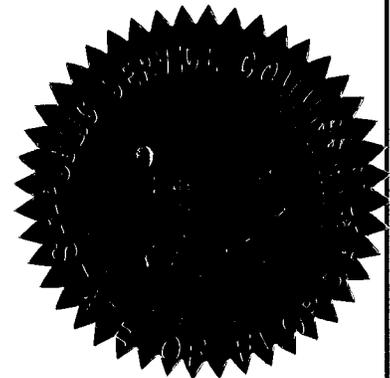
In the Matter of:

REVIEW OF 2007 ELECTRIC INFRASTRUCTURE DOCKET NO. 070297-EI
STORM HARDENING PLAN FILED PURSUANT TO
RULE 25-6.0342, F.A.C., SUBMITTED BY
TAMPA ELECTRIC COMPANY.

REVIEW OF 2007 ELECTRIC INFRASTRUCTURE DOCKET NO. 070298-EI
STORM HARDENING PLAN FILED PURSUANT TO
RULE 25-6.0342, F.A.C., SUBMITTED BY
PROGRESS ENERGY FLORIDA, INC.

REVIEW OF 2007 ELECTRIC INFRASTRUCTURE DOCKET NO. 070299-EI
STORM HARDENING PLAN FILED PURSUANT TO
RULE 25-6.0342, F.A.C., SUBMITTED BY
GULF POWER COMPANY.

REVIEW OF 2007 ELECTRIC INFRASTRUCTURE DOCKET NO. 070301-EI
STORM HARDENING PLAN FILED PURSUANT TO
RULE 25-6.0342, F.A.C., SUBMITTED BY
FLORIDA POWER & LIGHT COMPANY.



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VOLUME 1

Pages 1 through 124

PROCEEDINGS: HEARING

DOCUMENT NUMBER-DATE

FLORIDA PUBLIC SERVICE COMMISSION 09527 OCT 18 5

FPSC-COMMISSION CLERK

1 BEFORE: CHAIRMAN LISA POLAK EDGAR
2 COMMISSIONER MATTHEW M. CARTER, II
3 COMMISSIONER KATRINA J. McMURRIAN
4 COMMISSIONER NANCY ARGENZIANO
5 COMMISSIONER NATHAN A. SKOP
6
7 DATE: Tuesday, October 2, 2007
8
9 TIME: Commenced at 9:45 a.m.
10
11 PLACE: Betty Easley Conference Center
12 Room 148
13 4075 Esplanade Way
14 Tallahassee, Florida
15
16 REPORTED BY: LINDA BOLES, RPR, CRR
17 Official FPSC Reporter
18 (850) 413-6734
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9 Florida, Inc.

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21 Town of Palm Beach, and the Panama City Beach Community
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24

25

1 APPEARANCES (Continued):

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MICKEY GUNTER

Prefiled Direct Testimony Inserted

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EDWARD J. BATTAGLIA

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P R O C E E D I N G S

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2 CHAIRMAN EDGAR: Good morning. I call this hearing
3 to order. We'll begin by asking our staff to read the notice.

4 MR. YOUNG: Good morning. Good morning. By notice
5 issued September 11th, 2007, this time and --

6 CHAIRMAN EDGAR: Okay. Additional technical
7 difficulties. Bear with us. Okay. Everybody sit tight for a
8 minute and we'll see if we can get the sound turned up. And,
9 again, I'm having some technical difficulties here on the
10 bench, so just give us a moment.

11 (Pause.)

12 Okay. They said it would be about five minutes to
13 work on the sound system. So everybody at ease. We will be on
14 break for a few minutes, but if you would just kind of stay
15 close.

16 (Pause.)

17 Okay. We are going to go back on the record and we
18 are going to try to get started again. My apologies for the
19 technical difficulties. And thank you all for your patience.
20 And let's go back to -- I'd like to ask Mr. Young to please
21 read the notice.

22 MR. YOUNG: Thank you. By notice issued
23 September 11th, 2007, this time and place has been set for a
24 hearing in the following dockets: Docket Number 070297-EI,
25 Docket Number 070298-EI, Docket Number 070299-EI, and Docket

1 Number 070301-EI for the review of the 2007 Electric
2 Infrastructure Storm Hardening Plans filed pursuant to Rule
3 25-6.0342, Florida Administrative Code, submitted by Tampa
4 Electric Company, Progress Energy Florida, Incorporated, Gulf
5 Power Company and Florida Power & Light Company. The purpose
6 of the hearing is set out in the notice.

7 CHAIRMAN EDGAR: Thank you, Mr. Young. And now we'll
8 go ahead and take appearances. And recognizing that we do have
9 a number, thank you, a number of parties and a number of
10 dockets, when you are giving us your appearance, if you would
11 please state who you are representing and which dockets you are
12 participating in and we will try to keep it all straight. And
13 we'll begin to my left.

14 MR. BUTLER: Thank you, Madam Commissioner.

15 John Butler and Natalie Smith of Florida Power &
16 Light Company appearing in Docket 070301.

17 MR. BURNETT: Good morning, Commissioners. John
18 Burnett for Progress Energy Florida appearing in 070298.

19 MR. WILLIS: I'm Lee L. Willis appearing together
20 with James D. Beasley for Tampa Electric Company in Docket
21 Number 070297-EU (sic.)

22 CHAIRMAN EDGAR: Thank you.

23 MR. BADDERS: Good morning, Commissioners. Russell
24 Badders on behalf of Gulf Power Company in Docket 070299. Also
25 appearing with me is Jeffrey A. Stone, Steven R. Griffin and

1 Eric B. Langley. All of their addresses are as shown in the
2 Prehearing Order.

3 CHAIRMAN EDGAR: Thank you.

4 MR. O'ROARK: Good morning, Commissioners. I'm De
5 O'Roark appearing on behalf of Verizon Florida, LLC, in Docket
6 Numbers 070297, which is the Tampa Electric docket; 070298,
7 which is the Progress Energy docket; and 070301, which is the
8 FPL docket.

9 CHAIRMAN EDGAR: Thank you.

10 MR. HATCH: Tracy Hatch and Jennifer Kay appearing on
11 behalf of BellSouth Telecommunications, Inc., d/b/a AT&T
12 Florida, and also TCG South Florida. AT&T -- we're in all four
13 dockets.

14 MS. MASTERTON: Susan Masterton representing Embarq
15 Florida, Inc., in all four dockets.

16 MS. KEATING: Good morning, Commissioners. Beth
17 Keating appearing on behalf of the Florida Cable
18 Telecommunications Association in Dockets 070298 and 070299.
19 Also appearing today on behalf of the FCTA are Maria Browne and
20 John Seiver, and they're appearing in all four dockets.

21 CHAIRMAN EDGAR: Thank you.

22 Mr. Wright.

23 MR. WRIGHT: Thank you, Madam Chairman. Good
24 morning. My name is Robert Scheffel Wright and together with
25 my partner, John T. Lavia, III, we are appearing in Docket

1 070299, the Gulf Power docket, on behalf of the City of Panama
2 City Beach, the Panama City Beach Community Redevelopment
3 Agency and the Municipal Underground Utilities Consortium.
4 Additionally, in Docket 070301, the FPL Storm Hardening Plan
5 docket, we are appearing on behalf of the Municipal Underground
6 Utilities Consortium, the Town of Palm Beach and the Town of
7 Jupiter Island. Thank you.

8 CHAIRMAN EDGAR: Thank you.

9 And staff.

10 MR. YOUNG: Keino Young, Katherine Fleming, Lisa
11 Bennett, H. F. Mann and Adam Teitzman, Commission staff.

12 CHAIRMAN EDGAR: Thank you. Staff, preliminary
13 matters.

14 MR. YOUNG: There are several preliminary matters
15 which staff recommends be taken up after the public testimony
16 portion of the hearing when we begin with the technical
17 portion.

18 CHAIRMAN EDGAR: Okay. All right. Then we will move
19 to the public testimony portion of this proceeding. And I need
20 to ask if there are any members from the general public who
21 would like to address the Commission at this time on this
22 matter or in any of these dockets. Okay. Seeing none.

23 Mr. Young.

24 MR. YOUNG: Thank you, Madam Chairman.

25 Madam Chairman, first, all the parties in all the

1 dockets have stipulated to an approval by the Commission of the
2 process to engage third-party attachers, which is attached to
3 Exhibit KS-1 to the prefiled testimony of AT&T Florida witness
4 Kirk Smith, with the sentence of Paragraph 7 therefore revised
5 to read, "The electrical utilities will file with the Director
6 of the Division of Economic Regulations by March 1st." And
7 this is attached with that statement that was handed to the
8 Commissioners.

9 CHAIRMAN EDGAR: Thank you. Commissioners, are there
10 any questions regarding the proposed stipulation on the process
11 to engage third-party attachers? Seeing none, then is there a
12 motion to approve the stipulation as revised?

13 COMMISSIONER CARTER: So moved.

14 COMMISSIONER SKOP: Second.

15 CHAIRMAN EDGAR: There's a motion and a second. All
16 in favor, say aye.

17 (Unanimous affirmative vote.)

18 Show it adopted.

19 MR. YOUNG: Thank you, Madam Chairman. With that,
20 with the Commissioners agreeing on the proposed stipulation,
21 AT&T has asked that Witness Kirk Smith be excused if the
22 Commissioners have any -- no questions, if you don't have any
23 questions.

24 CHAIRMAN EDGAR: Commissioners, any questions for
25 Witness Smith when we get to that point in the proceeding? If

1 there are none, we will excuse him. I see none, and so Witness
2 Smith may be excused.

3 MS. FLEMING: Good morning, Chairman. I would like
4 to note that Verizon has filed a notice of withdrawal of the
5 testimony of Dr. Slavin and Mr. Walker in the FPL docket.

6 MR. O'ROARK: Just for clarification, it's only a
7 portion of the Walker testimony.

8 MS. FLEMING: That's correct. Just Walker's
9 testimony as it pertains to the FPL docket.

10 CHAIRMAN EDGAR: Okay. So there is a notice filed by
11 Verizon to withdraw, this is to make sure I have it straight,
12 to withdraw the testimony that had been filed by Dr. Slavin and
13 a portion of Witness Walker's testimony.

14 MR. O'ROARK: That is correct.

15 CHAIRMAN EDGAR: Correct. Okay. So noted for the
16 record.

17 MS. FLEMING: As far as for clarification, the
18 portion of Witness Walker's testimony that's been withdrawn
19 starts on Page 6, Line 1, and ends on Page 7, Line 18.

20 CHAIRMAN EDGAR: Are there any additional questions
21 or comments on that?

22 MR. SEIVER: May it please the Chair.

23 CHAIRMAN EDGAR: Yes, sir.

24 MR. SEIVER: On behalf of FCTA, we had originally
25 objected to the withdrawal of Dr. Slavin's testimony. We have

1 reached an agreement with Florida Power & Light and Verizon to
2 withdraw our objection to the withdrawal of the testimony and
3 instead stipulate to the admission of portions of Mr., of Dr.
4 Slavin's deposition transcript into the record in place of
5 that. And particularly the pages that have been agreed to are
6 Pages 1 through 4 of the deposition, as well as Pages
7 61 through 70, plus the Certificate of Oath and the Errata
8 Sheet.

9 CHAIRMAN EDGAR: Okay. So as has just been described
10 to us, FCTA is proposing to put forth -- can we do this as an
11 exhibit?

12 MS. FLEMING: Yes, Chairman.

13 CHAIRMAN EDGAR: Okay.

14 MS. FLEMING: We can identify this as hearing Exhibit
15 Number 44.

16 CHAIRMAN EDGAR: Okay. So we will put forth portions
17 of the deposition testimony of Mr. Walker; correct?

18 MR. SEIVER: No. Dr. Slavin.

19 CHAIRMAN EDGAR: Dr. Slavin. Thank you. Of Dr.
20 Slavin. And I believe you said Pages 1 through 4, 61 through
21 70, the Certificate and the Errata Sheet.

22 MR. SEIVER: That's correct.

23 CHAIRMAN EDGAR: Okay.

24 MS. FLEMING: And for clarity of the record, this
25 will only be, this hearing exhibit will be only identified in

1 the FPL docket, which is Docket Number 070301.

2 CHAIRMAN EDGAR: Okay. We will mark as Exhibit
3 Number 44 the portions of the deposition testimony that have
4 been described for Dr. Slavin offered by FCTA and for the FPL
5 docket.

6 (Exhibit Number 44 marked for identification.)

7 MS. FLEMING: And we'd also like to note for the
8 record that FCTA has filed a notice of withdrawal of Witness
9 Harrelson's prefiled testimony in the Gulf docket, which is
10 070299.

11 CHAIRMAN EDGAR: Any comments or questions? None.
12 Okay. So noted.

13 MS. FLEMING: At this point, we can address the
14 proposed stipulations. All the Commissioners, all the parties
15 and the court reporter have received a copy of the proposed
16 stipulations in this docket. Staff would suggest going docket
17 by docket and providing a brief summary of the stipulations.

18 CHAIRMAN EDGAR: Okay. Before we move to the
19 stipulations, let me just mention one, I'm going to call it a
20 personal preliminary matter to share with the parties and
21 Commissioners for planning purposes. We will be planning to
22 take a break at 12:00 to a little after 12:00 for lunch. After
23 that we'll come back depending -- what do you say, Commissioner
24 Carter, about 1:00 or 1:30? Okay. We'll announce that at the
25 time. Probably about 1:30. I need to attend to some other

1 matters this afternoon, so Commissioner Carter will be
2 presiding over the portion of the proceeding while I am out
3 this afternoon. And I will, of course, review the record for
4 the portion that I miss. And with that, I think we can move to
5 stipulations.

6 MS. FLEMING: In the TECO docket, Number 070297,
7 there are proposed stipulations on 1 through 6, 8 through 11.
8 Issues 1 through 6 are checklist type of requirements that TECO
9 has satisfied. The parties have agreed that TECO has satisfied
10 the requirements of the Rule 25-6.0342 for compliance with the
11 National Electric Safety Code extreme wind loading standards,
12 mitigation of flooding and storm surge and front lot
13 construction.

14 On the proposed stipulations for Issues 8 through 11,
15 they're predicated on the Commission's approval of the process
16 to engage third-party attachers, which the Commission just
17 approved. We would like to note for the record that AT&T and
18 TCG have not affirmatively stipulated to the issue, but take no
19 position on Issues 1, 8, 9 and 11, and AT&T, Embarq, TCG and
20 Verizon take no positions on 2, 3, 4, 5, 6 and 10.

21 CHAIRMAN EDGAR: Commissioners, are there any
22 questions about the proposed stipulations relating to the Tampa
23 Electric Company docket? Seeing none, is there a motion to
24 approve the stipulations for this docket?

25 COMMISSIONER CARTER: So move.

1 COMMISSIONER SKOP: Second.

2 CHAIRMAN EDGAR: I have a motion and a second. All
3 in favor, say aye.

4 (Unanimous affirmative vote.)

5 Opposed? Show it adopted. And we can move to the
6 next stipulation.

7 MS. FLEMING: The next stipulations are in the Gulf
8 docket, in 070299. We have stipulations on Issues 27, 31,
9 32 and 38. The proposed stipulations on this issue, they're
10 that Gulf has satisfied the requirements of the rule with
11 compliance with the National Electric Safety Code, mitigation
12 of flooding and storm surge and front lot construction.

13 On proposed stipulation Issue 38, it's a recognition
14 that Gulf's plan contains written procedures for the
15 third-party attachers.

16 Staff would note for the record that AT&T has taken
17 no position on Issues 27 and 38, and AT&T has taken no -- AT&T
18 and Embarq have taken no position on 31, on 31 and 32.

19 CHAIRMAN EDGAR: Commissioners, any questions about
20 the proposed stipulations for the Gulf Power Company docket?
21 Seeing none, is there a motion to adopt the stipulations?

22 COMMISSIONER ARGENZIANO: So move.

23 COMMISSIONER CARTER: Second.

24 CHAIRMAN EDGAR: All in favor, say aye.

25 (Unanimous affirmative vote.)

1 Opposed? Show it adopted.

2 MS. FLEMING: In addition to the issues just
3 mentioned for Gulf, I was just informed that there is also a
4 proposed stipulation on Issue 33 for the Gulf docket, and I
5 would defer to Gulf Power to address that.

6 MR. BADDERS: Yes. Good morning. Russell Badders on
7 behalf of Gulf Power. I believe Issue 33 is a stipulated
8 issue. It does not appear that any of the parties have taken
9 issue with Gulf's position. I believe some of them have either
10 taken no position or they agree with us.

11 CHAIRMAN EDGAR: Ms. Fleming.

12 MS. FLEMING: Staff has no objections. And if none
13 of the parties have any objections, staff would recommend that
14 the Commissioners approve the stipulation on Issue 33.

15 CHAIRMAN EDGAR: Commissioners, any questions?
16 Seeing none, is there a motion to approve the stipulation as
17 described?

18 COMMISSIONER ARGENZIANO: So moved.

19 COMMISSIONER CARTER: Second.

20 CHAIRMAN EDGAR: There's a motion and a second. All
21 in favor, say aye.

22 (Unanimous affirmative vote.)

23 Show it adopted

24 MS. FLEMING: The next docket is the FPL docket,
25 070301, and there are proposed stipulations on Issues 40 and

1 45. The stipulation states that FPL's plans meet the
2 requirements of the rule for compliance with the National
3 Electric Safety Code and front lot construction.

4 Staff would note for the record that AT&T takes no
5 position on Issues 40 and 45, and AT&T, Embarq and Verizon take
6 no position on 45.

7 CHAIRMAN EDGAR: Thank you.

8 Commissioners, any questions on the proposed
9 stipulations for Issue 40 and Issue 45 as described? Seeing
10 none, is there a motion?

11 COMMISSIONER ARGENZIANO: So move.

12 COMMISSIONER CARTER: Second.

13 CHAIRMAN EDGAR: All in favor of the motion to adopt
14 the proposed stipulations on Issue 40 and Issue 45 for the
15 Florida Power & Light docket, say aye.

16 (Unanimous affirmative vote.)

17 Show it adopted.

18 MR. BUTLER: Madam Chairman, I believe that we have
19 an additional --

20 CHAIRMAN EDGAR: Mr. Butler.

21 MR. BUTLER: -- I'm sorry, an additional issue that I
22 think is stipulated for FPL, and I'd like to address it at this
23 point if it's the appropriate time.

24 CHAIRMAN EDGAR: This is the appropriate time. What
25 issue number would that be?

1 MR. BUTLER: It would be Issue 51. And 51 is the
2 issue regarding FPL's plan including written attachment
3 standards and procedures. And we have agreed to this language
4 with the FCTA, and I don't believe that there's any other party
5 that would disagree with our taking this position.

6 Our position on, or the agreed position on
7 Issue 51 would say, "Yes. FPL is not seeking approval of the
8 standards and procedures, but instead is stating that it has
9 attachment standards and procedures for third-party attachments
10 that meet or exceed the NESC."

11 CHAIRMAN EDGAR: Any comments from any of the other
12 parties? No? Staff?

13 MS. FLEMING: Staff has no objection. Staff would
14 recommend that this stipulation be approved.

15 CHAIRMAN EDGAR: Commissioners, we have a
16 recommendation from our staff to adopt the proposed stipulation
17 for Issue 51 on the docket regarding Florida Power & Light.
18 Any questions? Is there a motion?

19 COMMISSIONER ARGENZIANO: So move.

20 COMMISSIONER CARTER: Second.

21 CHAIRMAN EDGAR: There's a motion and a second. Did
22 I hear -- no. Okay. All in favor of the motion, say aye.

23 (Unanimous affirmative vote.)

24 Show it adopted.

25 Mr. Butler.

1 MR. BUTLER: I'm sorry. If I may, Madam Chairman, in
2 connection with that issue, some of Mr. Harrelson's testimony
3 goes to this subject, and I will let Ms. Browne speak to it,
4 but I believe that there will be a companion motion for
5 withdrawal of a portion of his testimony that relates to that
6 subject.

7 CHAIRMAN EDGAR: And we can take that up at the time
8 that, when Mr. Harrelson comes forward, as he will be
9 testifying in other dockets. Does that work?

10 MR. BUTLER: That's fine. Or we can do it now. We
11 have been covering withdrawal of other witnesses' testimony,
12 and either way is fine with me.

13 CHAIRMAN EDGAR: I will look to our staff.

14 MS. FLEMING: Just for clarification, does this
15 correction of Mr. Harrelson's testimony consist of withdrawing
16 Harrelson's testimony in the FPL docket?

17 MS. BROWNE: We could withdraw a portion of the
18 testimony in the FPL docket.

19 MS. FLEMING: Then if Mr. Harrelson will still be
20 appearing in the FPL docket and providing testimony, I would
21 suggest we take it up at the time that Mr. Harrelson takes the
22 stand.

23 CHAIRMAN EDGAR: Okay. All right. Then we will hold
24 that matter for when we come to Witness Harrelson as we go
25 through the witness list.

1 MR. BURNETT: Madam Chairman.

2 CHAIRMAN EDGAR: Yes, sir.

3 MR. BURNETT: John Burnett on behalf of Progress
4 Energy.

5 Based on the Commission's approval just now of the
6 process within the process and FCTA's stipulation that we
7 reached yesterday with them changing their position from "No"
8 to "No objection" on Progress Issues 20, 24, 25 and 26, I
9 believe that Progress Energy is now in the position to where we
10 have either "Yes," "No objection" or "No position" to all of
11 our Progress issues. So we would -- we should be in the same
12 position as some of the other companies to have a stipulation
13 on all the Progress Issues 14 through 26 is either "No
14 objection", "No position" or "Agree."

15 CHAIRMAN EDGAR: Ms. Fleming.

16 MS. FLEMING: Just for clarification then, the
17 stipulation would be based on Progress's position in the
18 Prehearing Order?

19 MR. BURNETT: That is correct, Ms. Fleming, with the
20 notation of Issue 25, that there was a submitted change of
21 Progress's position in FCTA's yesterday to, to change that
22 position. But with that, we should be in a position to
23 stipulate all Progress issues.

24 MS. FLEMING: If there are no objections from any
25 other parties, then staff would recommend that those proposed

1 stipulations be approved by the Commission.

2 CHAIRMAN EDGAR: Yes, ma'am.

3 MS. KEATING: Madam Chair, thank you.

4 I was just going to suggest, I don't believe that we
5 have officially changed our position in the record, and I was
6 going to offer that today, that in light of good discussions
7 with Progress as well as with Gulf, FCTA is changing its
8 position on Issues 20, 24, 25 and 26 in Docket 070298 to "No
9 objection." And in 070299 we are changing our position on
10 Issues 33, 35, 37, 38 and 39 to "No objection."

11 CHAIRMAN EDGAR: Thank you, Ms. Keating.

12 And, Commissioners, I do believe that you have that
13 in writing in front of you as well. Thank you.

14 So, Ms. Fleming, we need to, a motion to adopt the
15 proposed stipulations as discussed and described?

16 MS. FLEMING: Yes. It is my understanding that on
17 Issues 14 through 26 the proposed stipulations will be
18 Progress's position as stated in the Prehearing Order, with the
19 exception of the position change at Issue 25 that was provided
20 to all Commissioners and the court reporter.

21 CHAIRMAN EDGAR: Thank you.

22 Commissioner Carter, did you have a question?

23 COMMISSIONER CARTER: I just wanted to be sure for
24 note purposes, for Progress it's Issues 14 through 26. And
25 what was the other number?

1 CHAIRMAN EDGAR: Issues 14 through 26 to be
2 reflected, and correct me if I get this wrong, 14 through 26 to
3 be reflected as described in the Prehearing Order; however,
4 Issue 25 to have a different position reflected for FCTA. Is
5 that correct?

6 MS. KEATING: That is correct.

7 CHAIRMAN EDGAR: Commissioner Carter, does that --

8 COMMISSIONER CARTER: Thank you, Madam Chair.

9 CHAIRMAN EDGAR: You're very welcome.

10 Okay. Then, Commissioners, if I could, a motion to
11 adopt the proposed stipulations as discussed and described by
12 Ms. Fleming.

13 COMMISSIONER CARTER: So move.

14 COMMISSIONER ARGENZIANO: Second.

15 CHAIRMAN EDGAR: All in favor, say aye.

16 (Unanimous affirmative vote.)

17 Show it adopted.

18 MR. BURNETT: Madam Chairman, if I may, John Burnett,
19 one more. Progress Witness Mickey Gunter, I'm informed by
20 staff that staff has no questions for Mr. Gunter. And based on
21 the stipulation just entered, no parties should have any
22 questions for Mr. Gunter. So if the Commission had no
23 questions, his direct testimony could be entered into the
24 record and he could be dismissed if it was the Commission's
25 pleasure.

1 CHAIRMAN EDGAR: Commissioners, as you've heard,
2 Progress is proposing that in light of the stipulations that
3 have been approved and related discussions, that Witness
4 Gunter, who is third on our list of witnesses, could be
5 stipulated and excused if there are no questions.
6 Commissioners, is there a desire to have Witness Gunter
7 available for questions or may he be stipulated and excused?

8 Okay. I'm seeing no questions, no objections. So we
9 will excuse Witness Gunter. And, Ms. Fleming, should we go
10 ahead and, and enter testimony, or for the sake of order of the
11 record should we wait? For sake of the order of the record --

12 MS. FLEMING: I would suggest we wait and move in any
13 stipulated exhibits and testimony as we get to that witness.

14 CHAIRMAN EDGAR: As we come to them. That works for
15 me. Does that work for you? Okay.

16 MR. BURNETT: Thank you.

17 CHAIRMAN EDGAR: Thank you.

18 Other matters.

19 MR. BADDERS: Yes, Commissioner. Russell Badders on
20 behalf of Gulf Power. I believe, given the stipulation that
21 we've reached with FCTA, that Witness Alan McDaniel's rebuttal
22 could go into the record without objection.

23 CHAIRMAN EDGAR: Ms. Fleming.

24 MS. FLEMING: Staff does not object. If any of the
25 parties do not object and the Commissioners don't have

1 questions of that witness, we can go ahead and take up his
2 rebuttal testimony in turn as we would with the other
3 witnesses.

4 CHAIRMAN EDGAR: And, again, we're going to try to
5 move through as far as entering the testimony, so will you
6 remind me when we come to that that we have discussed that
7 previously?

8 MR. BADDERS: I will indeed.

9 CHAIRMAN EDGAR: Okay. Thank you.

10 MR. O'ROARK: Madam Chairman.

11 CHAIRMAN EDGAR: Yes, sir.

12 MR. O'ROARK: Verizon has one additional matter. I'm
13 pleased to report that Verizon and TECO have been able to
14 resolve their differences, so we would request that for the
15 TECO issues, for issues that have not been stipulated, that the
16 Verizon position now be changed to simply "No position."

17 Further, we would like to withdraw an additional
18 portion of Mr. Walker's testimony, the portion beginning at
19 Page 4, Line 3, and going through Page 5, Line 24. That's the
20 portion that deals with the TECO plan.

21 Further, I've tried to canvass the parties, and it
22 appears that no one would have cross-examination for Mr. Walker
23 on the balance of his testimony. We would therefore request
24 that the remainder of his direct testimony be stipulated and
25 that Mr. Walker be excused.

1 CHAIRMAN EDGAR: Ms. Fleming.

2 MS. FLEMING: I don't believe staff has any
3 objections to that, if none of the other parties do.

4 CHAIRMAN EDGAR: Okay. So let me again make sure
5 that I understand what you're proposing: To withdraw a portion
6 of Witness Walker's testimony at Page 4 from Line 3 through
7 Page 5, Line 24; and then, in light of the agreements and
8 stipulations, to excuse him. And I need you to repeat that
9 last part for me again.

10 MR. O'ROARK: To stipulate his testimony that remains
11 and then to excuse him from the proceeding.

12 MS. FLEMING: Madam Chairman, if I may. The
13 testimony that he's referring to stipulating would be the
14 testimony relating to the Progress docket. So in essence
15 Mr. Walker is withdrawing the testimony as it relates to the
16 TECO docket and he's withdrawing the testimony as it relates to
17 the FPL docket. The only remaining testimony would be the
18 Progress docket, which would be stipulated.

19 CHAIRMAN EDGAR: Okay. Yes.

20 MR. BADDERS: One preliminary. Instead of moving
21 Mr. McDaniel's testimony into the record, we actually need to
22 withdraw that. The testimony of Mickey Harrelson against Gulf
23 Power was withdrawn earlier as a result of the approval of the
24 stipulation. This is rebuttal to that testimony, so it should
25 also be withdrawn.

1 CHAIRMAN EDGAR: The testimony of Witness McDaniel.

2 MR. BADDERS: Yes, just his rebuttal.

3 CHAIRMAN EDGAR: Ms. Fleming.

4 MS. FLEMING: Okay. Staff would like to note as well
5 that we have a Comprehensive Exhibit List, and the hearing
6 Exhibit Number 1 is the Comprehensive Exhibit List itself.
7 Staff also has Exhibits 2 through 7 that have been identified
8 that are stipulated exhibits, and at the appropriate time staff
9 would ask that Exhibits 1 through 7 be identified and moved
10 into the record.

11 CHAIRMAN EDGAR: Would this be the appropriate time?

12 MS. FLEMING: I believe so, Madam Chairman.

13 CHAIRMAN EDGAR: Okay. Any questions or comments
14 about the proposed stipulated list and Exhibits 1 through 7?
15 Okay. Seeing none, the list will be marked as Exhibit 1 and
16 the items as described marked 2 through 7, and Exhibits
17 1 through 7 will be entered into the record.

18 (Exhibits 1 through 7 marked for identification and
19 admitted into the record.)

20 MR. WILLIS: Madam Chairman, for Tampa Electric
21 Company, we have agreement of all the parties, I believe, to
22 move the order of witnesses so that Regan Haines would testify
23 after Manuel Miranda. This is in order to give us some
24 additional time to try to work out a, a settlement and
25 stipulation with FCTA. We're -- I think we can represent that

1 we're close to that, but we need just a little bit more time
2 and this will enable us to do that.

3 CHAIRMAN EDGAR: Okay. So the request is to take
4 Witness Haines out of order after Witness Miranda, which means
5 that we would, after oral -- opening statements, excuse me,
6 after opening statements we would begin with Progress Witness
7 Cutliffe. And that is amenable to Progress?

8 MR. BURNETT: Yes, ma'am.

9 CHAIRMAN EDGAR: Thank you. Any objections? Seeing
10 none, okay, we will proceed in that manner when we come to the
11 witnesses.

12 Are there other matters?

13 MR. HATCH: Madam Chairman, one housekeeping detail.
14 With the adoption by the Commission of the third-party attacher
15 process, there was an exhibit to Mr. Smith's testimony. It's
16 left hanging what to do with Mr. Smith's actual direct
17 testimony, which basically is just explanatory of the exhibit
18 that was attached. We can either withdraw it or you can -- the
19 parties had already previously agreed to stipulate it in. It's
20 your choice.

21 CHAIRMAN EDGAR: Ms. Fleming.

22 MS. FLEMING: I don't think staff has a preference.
23 If the parties don't object to stipulating, putting it into the
24 record, I would suggest that we just put in the stipulated
25 testimony as well as the prefiled exhibit when we take up

1 Witness Smith's name.

2 MR. HATCH: That works for us. Thank you.

3 CHAIRMAN EDGAR: And you'll remind me of that as
4 well?

5 MR. HATCH: Yes, ma'am.

6 CHAIRMAN EDGAR: Thank you. Okay. Any other matters
7 at this time?

8 Okay. Ms. Fleming, any other matters from staff?

9 MS. FLEMING: I'm not aware of any.

10 CHAIRMAN EDGAR: Okay. Is there any need at all to
11 take a few minutes to get papers in order in light of the
12 stipulations and other matters that we have addressed or are
13 you ready to move?

14 MS. FLEMING: We're ready to proceed.

15 CHAIRMAN EDGAR: You're ready? Okay. Then as
16 described in the Prehearing Order, we have opening statements
17 for each of the parties to be limited to five minutes. I
18 recognize that Mr. Wright is representing two parties. My
19 understanding, Mr. Wright, is that you will be making two
20 statements that roughly combine to approximately five minutes.
21 Is that --

22 MR. WRIGHT: Yes, ma'am.

23 CHAIRMAN EDGAR: And he says "Yes, ma'am," for the
24 record. Okay. Thank you very much.

25 Okay. Give me just a moment and then we will begin

1 with opening statements.

2 (Pause.)

3 Okay. Who would like to, who would like to kick us
4 off for the opening statements? Mr. Butler, is that you?

5 MR. BUTLER: I would be happy to. Although I
6 conferred with staff at that brief break, and I think they
7 intend to do it in docket number order. Is that right?

8 MR. YOUNG: Yes, Madam Chairman. For the clear
9 demarcation of the record, following the docket number order,
10 we believe, is more appropriate. So we'll begin with TECO's
11 docket.

12 CHAIRMAN EDGAR: Okay. Mr. Willis, are you ready?

13 MR. WILLIS: I am ready.

14 CHAIRMAN EDGAR: Okay. We are -- you are recognized.

15 MR. WILLIS: I'm Lee Willis representing Tampa
16 Electric Company in Docket Number 070297-EU. And we're here to
17 present Tampa Electric's storm hardening, which is a very
18 simple plan really.

19 Tampa Electric plans to continue as it has done since
20 the 1970s to build to construction Grade B, and that would be
21 for new distribution facilities, for expansions, rebuilds,
22 relocations of existing facilities. The company also plans to
23 engage in specifically targeted pilot projects and upgrades
24 which will harden its system. Most of Tampa Electric's plan
25 has been stipulated, and we are in the process, as we mentioned

1 earlier, of working on additional stipulations.

2 But with respect to construction Grade B, the purpose
3 of this docket is to require Tampa Electric's infrastructure to
4 be hardened to provide additional resilience to severe weather
5 and to reduce outages and restoration times. Construction
6 Grade B is particularly appropriate for Tampa Electric's
7 service area because it has an equivalent wind speed of
8 116 miles an hour, which fits the storm profiles that the
9 company has experienced in its service area over the past 150
10 years. Construction Grade C standards, on the other hand, has
11 an equivalent wind speed of only 86 miles an hour. There's no
12 doubt that stronger Class B poles provide a more hardened
13 system than Class C poles. Class B poles are required where
14 the crossing of the lines goes over an interstate highway, a
15 navigable waterway or a railroad, and this is because the
16 stronger B poles are less likely to cause an outage that would
17 obstruct a critical infrastructure that supports
18 transportation. The systematic change out of poles which do
19 not meet Grade B is a part of Tampa Electric's plan, and it
20 will enable the company to conform its system systemwide to
21 Class B in a shorter period of time.

22 With respect to attachment standards, your rule
23 requires that the company submit an attachment standard and
24 procedures as part of its Storm Hardening Plan. Tampa Electric
25 has done that. And this rule provides that each utility shall

1 maintain written safety, reliability, pole loading capacity and
2 engineering standards for attachment by others to the electric
3 utility transmission and distribution system. Each of the
4 standards which we propose are definitely related to the
5 provision of safe, adequate and reliable service.

6 It's really important, Commissioners, for utilities,
7 electric utilities in particular, to maintain control of what's
8 being added to their poles to assure that these poles are not
9 overloaded. Tampa Electric, as you will see in the testimony,
10 has experienced some 20 percent of its attachments that were
11 unnoticed and unauthorized. We believe that these standards
12 will help us reduce that, that number and to eliminate the
13 overloadings on the company's system.

14 In summary, Commissioners, Tampa Electric complies
15 with your rule by providing a reasonable and measured approach
16 to storm hardening, and we urge that it be approved.

17 CHAIRMAN EDGAR: Thank you, Mr. Willis.

18 And next will be Progress.

19 MR. BURNETT: Thank you, Madam Chair. John Burnett
20 on behalf of Progress Energy.

21 Commissioners, after the 2004 and 2005 unprecedented
22 hurricane season this Commission immediately took action. This
23 Commission looked, I think, at what we saw in 2004 and 2005 and
24 said on a, on a systemic basis, on a statewide basis what can
25 this Commission do to enhance hurricane hardening and

1 reliability? The Commission came out with the wood pole
2 inspection plan, the vegetation management plan, the ten-point
3 storm preparedness plan and a comprehensive March 1st
4 reliability report that all of the IOUs adhere to now. All
5 those plans again focused on statewide implementations of sound
6 practices and innovative practices that has helped Florida
7 become a more hardened and hurricane-ready state.

8 Also the Commission focused down at the next level
9 and said, and said, what can we do to focus in on particular
10 IOUs? And that's the genesis of this storm hardening rule.
11 And the storm hardening rule takes it to another layer and says
12 what within a particular service territory, a particular
13 experience with a particular IOU can the IOUs do to harden
14 within their particular service territories? And within that
15 we have focused on our particular activity and engaged in a
16 series of workshops. The, the Commission had a series of
17 workshops where we got together with all of the other IOUs, the
18 third-party attachers and with staff. And through these series
19 of workshops we learned a lot about what others were doing,
20 what was important, what were lessons learned, and we took that
21 and put that all together and it was a valuable process.

22 Also, we -- apart from learning, we also reached
23 important stipulations to that process with our third-party
24 attachers of how to communicate better, the process within the
25 process that the Commission just approved. It is, it is now a

1 uniform process that we communicate with our third-party
2 attachers. We came to important stipulations in Progress on
3 overlashing and pole identification that's going to help our
4 hurricane restoration efforts be that more fluid.

5 So in summary, what we're here for today is we're
6 focusing on the specific utility plans. What has Progress
7 Energy done on that next level down in addition to all the
8 other initiatives the Commission has enacted? And Progress's
9 Storm Hardening Plan absolutely helps enhance reliability and
10 will help to reduce restoration costs and outage times in a
11 prudent and cost-effective manner.

12 As you've seen here today with this myriad of
13 stipulations that went on, all the Intervenors in Progress's
14 docket have either taken no objection, have agreed to or have
15 not objected to Progress's plan. So we're here today to answer
16 any questions that the Commission or staff may have, and we
17 look forward to entertaining those questions at the appropriate
18 time. Thank you.

19 CHAIRMAN EDGAR: Thank you.

20 And that brings us to Gulf.

21 MR. BADDERS: Good morning.

22 CHAIRMAN EDGAR: Good morning.

23 MR. BADDERS: I'm Russell Badders and I'm appearing
24 on behalf of Gulf Power Company.

25 The Commission has before it Gulf Power's first Storm

1 Hardening Plan filed pursuant to the Commission's storm
2 hardening rules. Gulf received praise from its customers and
3 governmental entities alike for its storm restoration efforts
4 after Hurricanes Ivan and Dennis in 2004 and in 2005.
5 Notwithstanding, Gulf did not sit back and continue business as
6 usual. The company further refined its storm restoration plan
7 and actively participated here at the Commission in storm
8 hardening discussions.

9 Gulf Power recognized, as did this Commission, that a
10 further look at preventing storm damage was prudent. Gulf's
11 Storm Hardening Plan is the result of that closer look at storm
12 hardening. Hurricanes Ivan and Dennis both provided Gulf with
13 recent, first-hand experience with impacts of wind and storm
14 surge on an electric utility system. These experiences form
15 the basis of Gulf's Storm Hardening Plan.

16 Briefly, what is Gulf's plan? The foundation of
17 Gulf's plan is Gulf's ten-point plan already approved by the
18 Commission. In addition to that, Gulf is adopting Grade B
19 construction standards for all new distribution, construction
20 and major distribution rebuilds. Further, Gulf's plan is to
21 conduct pilot projects to determine the effectiveness of
22 extreme wind load standards. Gulf will also continue to look
23 at potential damage mitigation techniques related to
24 underground facilities.

25 After Hurricanes Ivan and Dennis caused severe damage

1 to Gulf's coastal underground utilities in 2004 and 2005, Gulf
2 implemented several design changes in underground construction
3 to test their effectiveness for mitigation of storm damage. It
4 is important to note that both the Commission and the parties
5 have acknowledged that this is an evolving process and that
6 this Storm Hardening Plan is just a first step. This plan will
7 also be refined over time as more and better information
8 becomes available.

9 Gulf is committed to pursuing cost-effective storm
10 hardening measures. The plan before you -- while the
11 activities in Gulf's Storm Hardening Plan can reasonably be
12 expected to enhance reliability and to reduce restoration costs
13 and outage times in a cost-effective manner, Gulf will continue
14 to look at the activities in its plan and at new activities as
15 they develop so Gulf can better understand and implement storm
16 hardening. Thank you.

17 CHAIRMAN EDGAR: Thank you.

18 And now Mr. Butler.

19 MR. BUTLER: Thank you, Madam Chairman. Good
20 morning, Commissioners.

21 Following the 2005 storm season two things became
22 very clear to FPL. First, our customers and public officials
23 representing them were unhappy with the number and especially
24 the length of the power outages following hurricanes. This
25 concern reached a peak, excuse me, following Hurricane Wilma in

1 October 2005 when FPL needed 18 days to fully return service to
2 all of our customers. These outages were not lengthy because
3 of any limitations on FPL's restoration efforts. Rather, they
4 were lengthy because the damage to FPL's electric distribution
5 system was substantial. One significant complicating factor in
6 FPL's restoration efforts was the number of broken poles.
7 Replacing broken poles is time-consuming and expensive, but
8 restoration work on the affected facilities cannot progress
9 until the broken poles are replaced.

10 Second, FPL's newly developed Storm Forensics Team
11 found that one factor unexpectedly caused over half of the
12 broken poles in Hurricane Wilma: Wind-only damage. These
13 poles failed not because anything fell on them or because they
14 were deteriorated, but simply because the wind forces on the
15 poles exceeded their design strength. This was true even
16 though the great majority of FPL's distribution poles were
17 designed for the NESC's highest normal standard of
18 construction, Grade B, and KEMA concluded that FPL's system
19 performed as designed.

20 Over the past year and a half the Commission and the
21 IOUs have collaborated effectively to develop several programs
22 to address the public concern over hurricane-related outages.
23 Consistent with the Commission's ten-point storm initiatives,
24 FPL now has a program in place to increase tree trimming, which
25 should help reduce the downed wires and broken poles caused by

1 vegetation. Pursuant to the Commission's pole inspection
2 order, we have an aggressive pole inspection program, and that
3 should help identify and repair or replace poles that are
4 deteriorated or have an accumulation of too many facilities
5 attached to them. And the Commission has approved FPL's GAF
6 tariff, which helps local governments pay for underground
7 conversion when they believe this is the best way to protect
8 their communities against hurricane-related outages.

9 However, none of those programs addresses the more
10 than 50 percent of all pole failures in Hurricane Wilma that
11 were wind only. FPL cannot consider its response to the
12 lessons of the 2004/2005 storm seasons to be complete without
13 addressing wind-only pole breakage.

14 FPL's Electric Infrastructure Storm Hardening Plan
15 that's before you today is our response to wind-only pole
16 breakage. Basically it starts with the premise that even
17 building to the NESC's highest normal construction standard has
18 proven inadequate to protect FPL's distribution system against
19 wind-only pole breakage.

20 Based on the 2005 forensics data, the KEMA report and
21 analysis of industry pole breakage experience by Davies
22 Consulting we propose to move FPL's distribution system toward
23 the NESC's extreme wind loading or EWL standard. The EWL
24 standard has served extremely well for years as the basis for
25 designing FPL's transmission system but previously it has not

1 been applied to FPL's distribution system. FPL plans to focus
2 our EWL hardening initially on the distribution circuits
3 serving facilities that are the most critical to have operating
4 during and after a hurricane such as 911 centers and acute care
5 hospitals. We have worked with the EOCs in each county to
6 identify and prioritize these critical infrastructure
7 facilities. Our plan also recognizes the importance of having
8 key commercial establishments available after a hurricane such
9 as grocery stores, gasoline stations and restaurants. We
10 intend to apply a highly targeted cost-effective technique
11 called incremental hardening to the circuits serving these
12 commercial establishments.

13 Finally, our plan calls for all new facilities and
14 major rework of existing facilities to be built to EWL
15 standards consistent with our ultimate goal of EWL hardening
16 all of the distribution system.

17 Because of the size and complexity of FPL's
18 distribution system, fully implementing FPL's hardening plan
19 will take many years. There will be many opportunities along
20 the way for FPL, the Commission and interested parties,
21 including third-party attachers, to revisit our approach. We
22 welcome this continued review and we are prepared to adjust
23 both the direction and the deployment of our plan where
24 appropriate.

25 We cannot agree, however, with the position that we

1 should not even begin to implement EWL hardening until more
2 data has been collected. We feel that the lessons of the
3 2004/2005 storm seasons are clear enough to compel action now.
4 Waiting for more data will simply mean lost opportunities to
5 start protecting customers against the disruptions that became
6 all too familiar in 2004 and 2005. Thank you.

7 CHAIRMAN EDGAR: Thank you. And we'll proceed down
8 the list as, as it is in the Prehearing Order, unless there is
9 a compelling reason to do it in a different order. And so that
10 would bring us next to recognizing FCTA.

11 MS. BROWNE: Thank you, Madam Chair, Commissioners.
12 My name is Maria Browne and I represent the Florida
13 Telecommunications Cable Television Association, FCTA.

14 The FCTA intervened in this proceeding because its
15 member operators have hundreds of thousands of attachments.

16 (Technical difficulty with audio system.)

17 CHAIRMAN EDGAR: Did we -- oh, are we back? Okay. I
18 apologize.

19 MS. BROWNE: That's okay.

20 CHAIRMAN EDGAR: Then we'll keep going.

21 MS. BROWNE: I'll start over. The FCTA has
22 intervened in this proceeding because its member operators have
23 hundreds of thousands of attachments on poles covered by the
24 four utility Storm Hardening Plans. FCTA's members rely on
25 these pole attachments for the delivery of their video, voice

1 and Internet services to over 5 million residents throughout
2 the State of Florida. It is therefore equally important to
3 FCTA's members, as it is to the electric utilities, to ensure
4 that the Florida utility pole infrastructure is safe, reliable
5 and able to withstand storms and extreme weather. Indeed, the
6 shared goal of pole owners and attachers is to prevent Florida
7 residents from losing power, cable, telephone and Internet
8 services in storms such as those experienced in the 2005
9 season, and when that does not happen, to ensure that service
10 is restored as quickly as possible.

11 The controlling rule mandates that utility poles be
12 storm hardened in a prudent, practical and cost-effective
13 manner, and requires consideration of not only the benefits
14 that may be produced by building to different grades of
15 construction, but also the potential costs to the utility
16 ratepayers and to third-party attachers. After months of
17 workshops, exchanging information and further development of
18 the plans we have a better, if not clearer, sense of what the
19 costs of building to extreme wind will be. Unfortunately,
20 given the untested nature of applying extreme wind to poles
21 less than 60 feet tall, it is not yet evident that building to
22 extreme wind will guarantee that significantly fewer poles will
23 come down in storms. That is why FCTA supports the limited
24 pilot project approach that has been advocated by three of the
25 four utilities in their plans.

1 FCTA also supports applying extreme wind to the
2 interstate highway crossings, which all four utilities have
3 also done. It is prudent, practical and cost-effective to test
4 extreme wind on critical infrastructure and to collect forensic
5 data about the effectiveness of these construction techniques.
6 It is not prudent, however, to decide based on the results of
7 one storm to deploy extreme wind throughout an entire utility
8 footprint, regardless of topography. And to clarify, FCTA is
9 not asking this Commission to delay applying extreme wind to
10 pilot projects or critical infrastructure or to the interstate
11 highway crossings.

12 The controlling rule also requires pole owners to
13 collaborate with, seek impact from and attempt in good faith to
14 address the concerns raised by third-party attachers. FCTA has
15 worked closely with Mickey Harrelson, a utility infrastructure
16 consultant, in evaluating the details of each Storm Hardening
17 Plan, including the different grades of construction being
18 proposed, each utility's deployment strategy and its standards
19 and procedures for third-party attachments. Mr. Harrelson has
20 evaluated the extent to which each plan meets or exceeds the
21 NESC and has attempted, with the information that has been
22 provided, to evaluate the costs and benefits of each planned
23 third-party attacher.

24 Among the concerns raised by Mr. Harrelson are the
25 significant potential cost increases to cable operators

1 associated with the new grades of construction in the form of
2 increased make-ready charges, transfer costs and increased
3 rental rates, as well as the substantial potential delays in
4 provisioning service in a highly competitive market resulting
5 from new attachment procedures.

6 We are, however, very excited about the improved
7 communication that will result from the approved process within
8 a process. It is clear that each of the utilities has
9 attachment standards and procedures that meet or exceed the
10 NESC, and it is FCTA's belief that such a finding is all that
11 is required by this Commission. The specific manner in which
12 each utility assures that its attachment standards and
13 procedures meet or exceed the NESC cannot be dictated
14 unilaterally by the utility. Instead, the specific standards
15 and procedures must be negotiated in good faith under the
16 auspices of the Federal Communications Commission. Indeed, the
17 rates, terms and conditions of pole attachment agreements have
18 been litigated before the FCC, the federal courts of appeal and
19 the United States Supreme Court. These issues need not be
20 revisited in the context of the Storm Hardening Plans. In
21 fact, they cannot be because the jurisdiction over the rates,
22 terms and conditions of access to utility poles in the State of
23 Florida is under the exclusive jurisdiction of the Federal
24 Communications Commission.

25 While the FCTA has raised issues in response to all

1 four plans as previously reported today, it is pleased that it
2 was able to reach an amicable resolution with Progress Energy
3 Florida, Gulf Power and on certain issues with FPL. It is
4 continuing to discuss issues with Tampa Electric Company and
5 it's hopeful that it will also be able to resolve matters
6 there. Thank you.

7 CHAIRMAN EDGAR: Thank you. Mr. Hatch.

8 MR. HATCH: AT&T waives its opening.

9 CHAIRMAN EDGAR: Thank you. Ms. Masterton.

10 MS. MASTERTON: Thank you, Commissioner. Embargo also
11 waives its opening statement.

12 CHAIRMAN EDGAR: Okay. Mr. O'Roark.

13 MR. O'ROARK: Verizon also waives its opening
14 statement.

15 CHAIRMAN EDGAR: Thank you. Mr. Wright.

16 MR. WRIGHT: Thank you, Madam Chairman. Because it's
17 presented in this order in the Prehearing Order, I will give
18 the MUUC's opening statement in the FPL docket first, followed
19 by the Panama City Beach opening statement in the Gulf Power
20 docket.

21 Commissioners, your rules, specifically Rule
22 25-6.0342(1), declare that the rules applicable to this
23 proceeding are intended to require the cost-effective
24 strengthening of critical electric infrastructure to increase
25 the ability of transmission and distribution facilities to

1 withstand extreme weather conditions and reduce restoration
2 costs and outage times to end use customers associated with
3 extreme weather conditions.

4 Your same rule, (2) goes on to require Storm
5 Hardening Plans to be filed by the investor-owned utilities and
6 to declare the Commission's standard of review of those plans
7 as follows. In a proceeding to approve a utility's plan, the
8 Commission shall consider whether the utility's plan meets the
9 desired objectives of enhancing reliability and reducing
10 restoration costs and outage times in a prudent, practical and
11 cost-effective manner to the affected parties.

12 FPL's plan addresses the requisite items listed in
13 the Commission's rules, and we would agree that FPL's plan is
14 practical as far as it goes. In particular, FPL's plan
15 deserves credit for moving to the extreme wind loading criteria
16 for new distribution and for major reconstruction, relocation
17 and refurbishment work. However, the MUUC believes that
18 additional efforts, especially with regard to encouraging and
19 implementing underground facilities, would be cost-effective
20 and therefore prudent because we believe FPL's plan does not
21 provide adequate analysis of the cost and benefits of
22 undergrounding as a hardening technology as compared to
23 alternate construction modes. We believe that FPL's plan
24 cannot be said to be demonstrably prudent and cost-effective
25 and accordingly should not be approved to that degree.

1 That concludes my opening statement with regard to
2 070301. I'd like to proceed to my opening statement, our
3 opening statement in the Gulf Power docket.

4 In Docket 070299, Commissioners, I represent the City
5 of Panama City Beach and the Panama City Beach Community
6 Redevelopment Agency. The Municipal Underground Utilities
7 Consortium has also joined in that docket to support the City
8 of Panama City Beach, which is a member of that consortium. I
9 previously read to you the declarations of policy and intent
10 and standard of review from your rules, and I don't intend to
11 repeat those now, but they're equally applicable to Gulf's
12 plan.

13 Panama City Beach and its Community Redevelopment
14 Agency are asking the Commission in this docket that you not
15 approve Gulf's Storm Hardening Plan because it is inadequate
16 with respect to its consideration of undergrounding as a storm
17 hardening measure. Despite Gulf's claims that it considered
18 undergrounding as a storm hardening measure and its further
19 claims that it considers cost-effectiveness and reliability in
20 evaluating potential storm hardening measures, Gulf did not
21 make an adequate evaluation of the costs and benefits of
22 undergrounding either with respect to the dollar cost and
23 benefits or with respect to the reliability benefits available
24 from undergrounding in developing its plan. Perhaps most
25 egregiously Gulf dismisses undergrounding in this docket with

1 its assertion that it lacks, quote, definitive proof, unquote,
2 of the benefits of undergrounding, and that it will in the
3 future after future storms hit its service area and impact its
4 customers collect data that can be used to evaluate
5 undergrounding, while at the same time ignoring data that has
6 been readily available to Gulf. Gulf's own data show, provided
7 in discovery show that Panama City Beach with a much higher
8 percentage, roughly double, of underground facilities than
9 Pensacola faired much, much better than Pensacola in comparable
10 storm conditions in Hurricane Dennis in 2005. At a bare
11 minimum, these data indicate that further and deeper evaluation
12 of undergrounding is warranted. I apologize that I forget the
13 name of the famous person who made this quote, but it reminds
14 me of the famous quote, "Those who do not learn from history
15 are doomed to repeat its mistakes." Gulf should be looking at
16 its own data and now.

17 Our witnesses, Peter Rant and R. L. Willoughby, have
18 specific field experience that indicates that there is at least
19 sufficient definitive proof, including the Federal Emergency
20 Management Agency providing grants to support undergrounding on
21 barrier islands served by a coastal utility in North Carolina,
22 to warrant deeper and more thorough investigation. And FPL's
23 specific real-world experience also indicates that there is
24 sufficient proof for this largest IOU in Florida to make
25 undergrounding one of the focal efforts of its Storm Secure

1 Plan. We are not saying that undergrounding is a panacea or
2 that all of Gulf's or any other utility's existing overhead
3 facilities should be converted to underground in a blanket
4 fashion starting immediately on a wholesale basis. What we are
5 saying is that any utility's Storm Hardening Plan should be
6 based on a solid, thorough evaluation of the costs and
7 benefits, both dollars and real reliability impacts of all
8 available alternatives. Utility Storm Hardening Plans should
9 be implemented to provide and informed by accurate value, cost
10 and price signals for all available storm hardening techniques,
11 including undergrounding.

12 The evidence shows that Gulf's plan must be found
13 lacking in this regard and, accordingly, the Commission should
14 disapprove Gulf's plan as it relates to undergrounding, and to
15 direct Gulf to return to the Commission soon, we would suggest
16 next June or July, with a more adequate plan. Thank you.

17 CHAIRMAN EDGAR: Thank you, Mr. Wright.

18 That concludes the opening statements. And we will
19 move here in a moment to administering the oath to the
20 witnesses. But before we do that, staff, are there any general
21 comments?

22 MR. YOUNG: Yes, Madam Chairman. Staff would note
23 for the record, as indicated in the Prehearing Order, that the
24 four dockets were previously consolidated for purposes of the
25 hearing, and some parties have only intervened in a specific

1 utility docket. To that end, staff and the parties have agreed
2 on the following process. Each witness's testimony summary
3 should make clear the storm hardening docket, the Storm
4 Hardening Plan to which his or her testimony pertains.
5 Intervenor witnesses who have prefiled testimony in multiple
6 dockets shall summarize their testimony separately for each
7 such docket and will then be cross-examined with respect to
8 that docket before proceeding to testify in other dockets, and
9 that process will follow for each docket they have intervened
10 in. Only those parties that have intervened in a specific
11 Storm Hardening Plan docket may cross-examine the witness
12 pertaining to the testimony in that docket. Cross-examining
13 parties shall clearly specify on the record which Storm
14 Hardening Plan the cross-examination is directed.

15 CHAIRMAN EDGAR: And as always, and to once again
16 state the obvious, we have numerous dockets, we have numerous
17 parties, we have numerous witnesses. I ask for your
18 cooperation as we move through it. And as I always do, would
19 ask that we make every effort to limit friendly cross. And
20 with that, I will ask the witnesses to stand with me as a group
21 and we'll go ahead and swear you in.

22 (Witnesses collectively sworn.)

23 Okay. We will move to witness testimony. But before
24 we do, let's just take about five minutes to switch out and
25 move to the next stage of the proceeding. My intention will be

1 to go for about an hour or so and then we will take a lunch
2 break. So we are on a short recess for approximately five
3 minutes, and then we will begin with the first witness.

4 (Recess taken.)

5 We will go back on the record. And when we had gone
6 on break we were just about to begin with the witness
7 testimony. We previously agreed to take up Witness Haines a
8 little later in the proceeding, and so that brings us to
9 Witness Cutliffe.

10 Mr. Burnett.

11 MR. BURNETT: Yes, ma'am. Thank you, Madam Chairman.
12 I didn't know if there was a potential to have Mr. Cutliffe
13 excused, Ms. Fleming.

14 MR. YOUNG: Staff has no questions.

15 CHAIRMAN EDGAR: I was actually waiting for you to
16 ask.

17 MR. BURNETT: Oh, I'm very sorry.

18 CHAIRMAN EDGAR: No. That's okay.

19 MR. BURNETT: But my understanding is staff has no
20 questions. So if it please the Commission, Mr. Cutliffe could
21 be excused.

22 CHAIRMAN EDGAR: Okay. Commissioners, are there any
23 questions for Witness Cutliffe? Seeing none. And staff has
24 concurred with the request, so let's go ahead and take up -- do
25 we need to take up the exhibits and prefiled testimony?

1 MS. FLEMING: That's correct, Madam Chairman.

2 MR. BURNETT: Yes, ma'am. And at this point we would
3 move in the direct prefiled testimony of Jason Cutliffe and his
4 exhibits JC-1T through JC-3T into evidence.

5 CHAIRMAN EDGAR: Okay. The prefiled testimony of
6 Witness Cutliffe will be entered into the record as though
7 read. And Exhibits 9, 10 and 11, seeing no objection, will be
8 entered into the record.

9 (Exhibits 9, 10 and 11 marked for identification and
10 admitted into the record.)

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**REVIEW OF 2007 ELECTRIC INFRASTRUCTURE STORM HARDENING
PLAN FILED PURSUANT TO RULE 25-6.034, F.A.C., SUBMITTED BY
PROGRESS ENERGY FLORIDA, INC.**

DOCKET NO. 070298-EI

**DIRECT TESTIMONY OF
JASON CUTLIFFE**

August 24, 2007

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

2 **A.** My name is Jason Cutliffe. My business address is 299 First Avenue North, St.
3 Petersburg, Florida 33701.

4

5 **Q. By whom are you employed and in what capacity?**

6 **A.** I am employed by Progress Energy Florida, Inc. as Manager of Distribution Asset
7 Performance in the Distribution Engineering and Operations Department.

8

9 **Q: What are your job responsibilities?**

10 **A.** My job responsibilities include overseeing capacity planning, reliability, and Public
11 Service Commission matters for the distribution delivery system. My previous
12 roles include Distribution Operations Manager and Region General Manager for
13 Progress Energy Florida.

14

15

16

1 **Q. Please describe your educational background and professional experience?**

2 **A.** I graduated in 1986 with a Bachelor of Science degree in electrical engineering
3 from the University of Maine and in 1992 I graduated with a MBA from the
4 University of Richmond. Before joining Progress Energy in 2000, I spent 14 years
5 with Dominion - Virginia Power, where I held various engineering and
6 management roles in their transmission and distribution organizations. I am a
7 licensed professional engineer.

8
9 **Q. What is the purpose of your testimony?**

10 **A.** The purpose of my testimony is to present for Commission approval PEF's Storm
11 Hardening Plan filed on May 7, 2007 along with PEF's Supplemental Plan
12 submitted on August 8, 2007.

13
14 **Q. Please summarize your testimony.**

15 **A.** FPSC Rule 25-6.0342, F.A.C., requires investor-owned electric utilities in Florida
16 to file a Storm Hardening Plan with the Florida Public Service Commission on or
17 before May 7, 2007 and every three years thereafter. PEF filed its Storm
18 Hardening Plan on May 7, 2007 along with a Supplemental update to its plan on
19 August 8, 2007. PEF's plan complies with all the requirements of Rule 25-6.0342
20 and should be approved by the Florida Public Service Commission.

21
22
23

1 **Q. Are you sponsoring any exhibits with your testimony?**

2 **A.** Yes. I am sponsoring the following exhibits that I prepared or that were prepared
3 under my supervision and control:

- 4 • Exhibit No. ___ (JC-1T), which is a copy of PEF's Storm Plan;
- 5 • Exhibit No. ___ (JC-2T), which is a copy of PEF's Plan Supplement; and
- 6 • Exhibit No. ___ (JC-3T), which is a copy of Position Statements from
7 Intervenor in this Docket.

8

9 **Q. Does PEF's Storm Hardening Plan and Supplemental Plan reasonably address**
10 **and comply with the 2007 edition of the NESC standards that are applicable**
11 **pursuant to Rule 25-6.0342(3)(a)?**

12 **A.** Yes.

13

14 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
15 **Storm Hardening Plan?**

16 **A.** Not directly. As can be seen from Exhibit JC-3T to my testimony, Verizon states
17 that it cannot complete its assessment of this aspect of PEF's Plan until sufficient
18 project level detail has been provided, but Verizon has not raised any specific issue
19 with this portion of PEF's Plan.

20

21 **Q. Does PEF's Plan reasonably address the extent to which the extreme wind**
22 **loading standards specified by Figure 250-2(d) of the 2007 edition of the**
23 **NESC are adopted for new distribution facility construction?**

1 A. Yes. PEF addresses extreme wind loading standards on Pages 4 – 7 of its Plan and
2 in Attachments C - E. PEF also address this issue in its Plan Supplement on pages
3 1-3, 6-8 and in Attachments A and B.

4
5 **Q. Does PEF's Plan reasonably address the extent to which the extreme wind**
6 **loading (EWL) standards of the 2007 edition of the NESC are adopted for**
7 **major planned work on the distribution system, including expansion, rebuild,**
8 **or relocation of existing facilities?**

9 A. Yes. PEF addresses extreme wind loading standards on Pages 4 – 7 of its Plan and
10 in Attachments C - E. PEF also address this issue in its Plan Supplement on pages
11 1-3, 6-8 and in Attachments A and B.

12
13 **Q. Does PEF's Plan reasonably address the extent to which EWL standards of the**
14 **2007 edition of the NESC are adopted for distribution facilities serving critical**
15 **infrastructure facilities and along major thoroughfares taking into account**
16 **political and geographical boundaries and other applicable operational**
17 **considerations?**

18 A. Yes. PEF addresses extreme wind loading standards on Pages 4 – 7 of its Plan and
19 in Attachments C - E. PEF also address this issue in its Plan Supplement on pages
20 1-3, 6-8 and in Attachments A and B.

21
22 **Q. Has any third party intervenor or Staff taken issue with the EWL portion of**
23 **PEF's Storm Hardening Plan?**

1 A. No third party has directly taken issue with this portion of PEF's Plan. As can be
2 seen from Exhibit JC-3T to my testimony, Verizon states that it cannot complete its
3 assessment of this aspect of PEF's Plan until sufficient project level detail has been
4 provided, but Verizon has not raised any specific issue with this portion of PEF's
5 Plan.

6
7 Staff has stated that it believes substantive support for "PEF's 60 mile per hour
8 wind speed loading criteria" has not been justified. Staff also states that PEF has
9 not addressed any specific efforts to verify or test the proposition that "a 60 mile
10 per hour wind speed loading criteria is appropriate for PEF's service area."

11

12 **Q. How does PEF respond to Staff's concerns related to EWL?**

13 A. PEF's storm hardening plan includes substantial support for the proposition that the
14 EWL standard should not be applied to PEF's distribution poles. The NESC, the
15 very entity that created the EWL standard, maintained in the 2007 version of the
16 NESC the exception which states that the EWL standard should not be applied to
17 distribution poles less than 60 feet in height. This information is included as
18 Exhibit C to PEF's plan filed on May 7, 2007. Thus, Staff cannot on the one hand
19 look to the NESC for the EWL wind loading curves for Florida and then ignore the
20 Code's explicit exception for applying those loading curves to distribution poles on
21 the other.

22

1 PEF's plan (Exhibits D and E) also includes expert testimony before the FPSC
2 showing that the EWL standard would have no appreciable benefit for PEF's
3 distribution poles with respect to preventing wind-caused damage. Additionally,
4 PEF's plan includes official comments to the NESC from utilities around the
5 country, including other coastal utilities and utilities that experience tornados,
6 supporting the fact that the EWL standard has no appreciable wind damage
7 prevention benefit for their distribution poles. Also, industry experts representing
8 other industries in this docket, such as those representing the Florida Cable
9 Telecommunications Association, have provided similar data to Commission Staff
10 in the workshops in this docket which further supports PEF's position in this
11 regard. PEF has additionally presented NESC expert Mickey Gunter's testimony
12 which further supports PEF's plan in this regard.

13
14 PEF's plan details PEF's experience with pole damage in the 2004 and 2005
15 hurricane seasons, which confirms, and even documents with pictures, that EWL
16 would not have provided any appreciable benefit for wind damage prevention on
17 distribution poles given the fact that transmission poles built to EWL failed when
18 hit with tornados or microburst winds. PEF has provided additional information
19 which shows that in 2004, approximately 96% of PEF's pole failures were
20 attributable to vegetation, flying debris and/or super extreme wind events such as
21 tornados and micro-bursts. PEF has also provided additional data showing that
22 rather than preventing storm outages and costs on PEF's system, the EWL standard

1 would cause longer restoration times and increased restoration costs when
2 compared to PEF's current practice.

3

4 In addition to providing detailed support for not using the EWL standard on a
5 system-wide basis within PEF's service territory, PEF's plan also specifically
6 identifies field projects where PEF will test Grade B and EWL construction in
7 contrast with Grade C construction to see if there is any benefit to Grade B and/or
8 EWL in real storm conditions in varying cross sections of PEF's service territory.

9 While wind simulators and other similar devices may provide some limited data,
10 real storms vary in length, time and intensity and have tornados, flying debris,
11 microburst wind, flooding, erosion, vegetation impacts, and other real world factors
12 that cannot be tested in simulation. PEF's plan acknowledges and incorporates
13 these realities.

14

15 **Q. Does PEF's Plan reasonably address the extent to which its distribution**
16 **facilities are designed to mitigate damage to underground and supporting**
17 **overhead transmission and distribution facilities due to flooding and storm**
18 **surges?**

19 **A.** Yes, on Pages 7-14 of PEF's Storm Hardening Plan and on pages 4-5 of PEF's
20 Plan Supplement and Attachments B and E to that supplement.

21

22 **Q. Has any third party intervenor or Staff taken issue with this particular**
23 **portion of PEF's Storm Hardening Plan?**

1 A. No third party has directly taken issue with this portion of PEF's Plan. As can be
2 seen from Exhibit JC-3T to my testimony, Verizon states that it cannot complete its
3 assessment of this aspect of PEF's Plan until sufficient project level detail has been
4 provided, but Verizon has not raised any specific issue with this portion of PEF's
5 Plan.

6
7 Staff states that PEF's Plan appears to discourage the use of underground in
8 locations at risk for storm surge and flooding and that underground construction is
9 promoted only in areas exposed to minor storm surge and/or short-term water
10 intrusion. Staff also states that PEF failed to state the specific scope and cost of its
11 underground storm hardening activities.

12
13 **Q. How does PEF respond to Staff's concerns related to the design of distribution**
14 **facilities to mitigate damage to underground and supporting overhead**
15 **transmission and distribution facilities due to flooding and storm surges?**

16 A. PEF makes clear in its plan that undergrounding is a site-specific consideration that
17 must be evaluated based on several sets of facts, and that "one size does not fit all"
18 when it comes to undergrounding. PEF specifically identifies 24 underground
19 hardening projects in its storm hardening plan. PEF also specifically describes
20 what measures PEF will use and test to mitigate flood and storm damage to UG
21 facilities on pages 7-8 and 11-14 of its Plan, and these measures include strategic
22 storm evaluation prior to placement of UG facilities and targeted use of (1)
23 submersible switchgear and stainless steel transformers; (2) submersible

1 terminations; (3) raised mounting boxes; (4) cold shrink sealing tubes; and (5)
2 submersible secondary blocks. PEF's plan discusses specific storm hardening
3 activities on pages 14-20. PEF also provided a cost analysis chart which outlines
4 its underground storm hardening activities (Attachment B to PEF's Supplement
5 Plan).

6
7 **Q. Does PEF's Plan reasonably address the extent to which the placement of new**
8 **and replacement distribution facilities facilitate safe and efficient access for**
9 **installation and maintenance pursuant to Rule 25-6.0341, F.A.C?**

10 **A.** Yes, on pages 8 and 9 of PEF's Plan.

11
12 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
13 **Storm Hardening Plan?**

14 **A.** Not directly. As can be seen from Exhibit JC-3T to my testimony, Verizon states
15 that it cannot complete its assessment of this aspect of PEF's Plan until sufficient
16 project level detail has been provided, but Verizon has not raised any specific issue
17 with this portion of PEF's Plan.

18
19 **Q. Does PEF's Plan provide a detailed description of its deployment strategy**
20 **including a description of the facilities affected; including technical design**
21 **specifications, construction standards, and construction methodologies**
22 **employed?**

1 A. Yes, on Pages 1-3 and 9-20 and Attachment A to PEF's Storm Hardening Plan and
2 pages 5-7 of PEF's Plan Supplement and Attachment E to that Supplement.

3

4 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
5 **Storm Hardening Plan?**

6 A. Not directly. As can be seen from Exhibit JC-3T to my testimony, Verizon states
7 that it cannot complete its assessment of this aspect of PEF's Plan until sufficient
8 project level detail has been provided, but Verizon has not raised any specific issue
9 with this portion of PEF's Plan. Staff contends that PEF has not effectively
10 explained its deployment strategy for specific hardening projects.

11

12 **Q. How does PEF respond to Staff's concerns related to its deployment strategy**
13 **for specific hardening projects?**

14 A. PEF has taken a methodical, scientific approach to potential hardening options and
15 projects through the use of its AIS system and its work with PURC and other
16 utilities. In its Plan, PEF is testing application projects in real storms and is
17 gathering real data so PEF can properly evaluate the efficacy of different hardening
18 options prior to implementing system-wide applications that may or may not
19 provide storm hardening benefits. For detailed information on PEF's AIS system
20 and how specific hardening projects are deployed, please see Attachment E to
21 PEF's Plan Supplement that is attached as Exhibit JC-2T to my testimony.

1 **Q. Does PEF's Plan provide a detailed description of the communities and areas**
2 **within the utility's service area where the electric infrastructure**
3 **improvements, including facilities identified by the utility as critical**
4 **infrastructure and along major thoroughfares are to be made?**

5 **A.** Yes. PEF provided a detailed list of distribution and transmission projects on
6 Pages 14-20 of its Storm Hardening Plan and in Attachment D to PEF's Plan
7 Supplement. PEF also has ongoing dialogue and interactions with third-party
8 attachers that are affected by projects in PEF's Plan.

9
10 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
11 **Storm Hardening Plan?**

12 **A.** Initially, both Staff and third party attachers requested additional information about
13 specific hardening projects, and cost information related to those projects. As
14 mentioned above, PEF provided supplemental information regarding these projects
15 in Attachments B and D to its Plan Supplement, and PEF has an ongoing dialogue
16 with third-party attachers and Staff regarding these issues. To date, PEF is not
17 aware of any further issue or problem regarding this portion on PEF's Plan. As can
18 be seen from Exhibit JC-3T to my testimony, Verizon states that it cannot complete
19 its assessment of this aspect of PEF's Plan until sufficient project level detail has
20 been provided, but Verizon has not raised any additional specific issue with this
21 portion of PEF's Plan.

22

1 **Q. Does PEF's Plan provide a detailed description of the extent to which the**
2 **electric infrastructure improvements involve joint use facilities on which**
3 **third-party attachments exist?**

4 A. Yes, on pages 20-21 of PEF's Plan and Attachment D to PEF's Plan Supplement.

5

6 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
7 **Storm Hardening Plan?**

8 A. Initially, both Staff and third party attachers requested additional information about
9 specific hardening projects, and cost information related to those projects. As
10 mentioned above, PEF provided supplemental information regarding these projects
11 in Attachments B and D to its Plan Supplement, and PEF has an ongoing dialogue
12 with third-party attachers and Staff regarding these issues. To date, PEF is not
13 aware of any further issue or problem regarding this portion on PEF's Plan. As can
14 be seen from Exhibit JC-3T to my testimony, however, Verizon states that it cannot
15 complete its assessment of this aspect of PEF's Plan until sufficient project level
16 detail has been provided, but Verizon has not raised any additional specific issue
17 with this portion of PEF's Plan.

18

19 **Q. Does PEF's Plan provide a reasonable estimate of the costs and benefits to the**
20 **utility of making the electric infrastructure improvements, including the effect**
21 **on reducing storm restoration costs and customer outages?**

22 A. Yes, at pages 21-23 of PEF's Plan and pages 5-8 of PEF's Plan Supplement and
23 Attachments A and B to that Supplement.

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Q. Has any third party intervenor or Staff taken issue with this portion of PEF's Storm Hardening Plan?

A. Initially, both Staff and third party attachers requested additional information about specific hardening projects, and cost information related to those projects. As mentioned above, PEF provided supplemental information regarding these projects in Attachments B and D to its Plan Supplement, and PEF has an ongoing dialogue with third-party attachers and Staff regarding these issues. To date, PEF is not aware of any further issue or problem regarding this portion on PEF's Plan. As can be seen from Exhibit JC-3T to my testimony, Verizon states that it cannot complete its assessment of this aspect of PEF's Plan until sufficient project level detail has been provided, but Verizon has not raised any additional specific issue with this portion of PEF's Plan.

Q. Does PEF's Plan provide a reasonable estimate of the costs and benefits, obtained pursuant to third-party attachers affected by the electric infrastructure improvements, including the effect on reducing storm restoration costs and customer outages realized by the third-party attachers?

A. Yes, at pages 21-23 of PEF's Plan and Attachments B and D to PEF's Plan Supplement.

Q. Has any third party intervenor or Staff taken issue with this portion of PEF's Storm Hardening Plan?

1 A. Initially, both Staff and third party attachers requested additional information about
2 specific hardening projects, and cost information related to those projects. As
3 mentioned above, PEF provided supplemental information regarding these projects
4 in Attachments B and D to its Plan Supplement, and PEF has an ongoing dialogue
5 with third-party attachers and Staff regarding these issues. To date, the third-party
6 attachers that have intervened in this docket all state that they cannot provide cost
7 benefit estimates based on the information that PEF has provided to them. Each of
8 their respective positions are included in Exhibit JC-3T to my testimony.

9

10 **Q. How does PEF respond to the Third-Party Attachers' statements that they**
11 **cannot provide cost benefit estimates based on the information that PEF has**
12 **provided to them?**

13 A. In its Plan Supplement, PEF has provided detailed cost benefit data in Attachments
14 A and B to that Supplement. PEF has also provided specific project cost
15 information in Attachment D to its Plan Supplement. Based on the information that
16 PEF has provided, PEF does not know why the third-party attachers cannot provide
17 cost benefit estimates, nor have any third-party attachers told PEF what further
18 specific information they would need to complete such estimates.

19

20 **Q. Does the Company's Plan include reasonable written Attachment Standards**
21 **and Procedures addressing safety, reliability, pole loading capacity, and**
22 **engineering standards and procedures for attachments by others to the**
23 **utility's electric transmission and distribution poles that meet or exceed the**

1 **edition of the National Electrical Safety Code (ANSI C-2) that is applicable**
2 **pursuant to Rule 25-6.034, F.A.C.?**

3 **A.** Yes, at pages 22-23 and Attachments A and J of PEF's Plan.

4
5 **Q.** **Has any third party intervenor or Staff taken issue with this portion of PEF's**
6 **Storm Hardening Plan?**

7 **A.** Yes. Each of the third-party attachers' respective positions are included in Exhibit
8 JC-3T to my testimony.

9
10 **Q.** **How does PEF respond to the concerns set forth by the Third-Party**
11 **Attachers?**

12 **A.** As an initial matter, it is worthy to note that PEF's attachment standards have not
13 changed as a result of this docket or any of the other storm hardening activity
14 initiated by the Commission. In other words, the attachment standards that are
15 included with PEF's plan are the same ones that were in existence prior to 2004, the
16 date after which the Commission began its recent storm hardening initiatives.
17 Thus, any issues that a Third-Party Attacher has with PEF's attachment standards is
18 one that existed prior to this docket, and such issues were not caused and did not
19 come into existence because of this docket. This fact is clearly illustrated in the
20 Third-Party position statements included with Exhibit 3 to my testimony. None of
21 the issues that the Third-Party Attachers raise in their position statements for this
22 subject appear to be "storm hardening plan" issues. Rather, they are issues that

1 touch on subjects that are beyond the scope of this proceeding and are proper for
2 resolution in other forums.

3

4 **Q. Based on the resolution of the preceding issues, should the Commission find**
5 **that the Company's Plan meets the desired objectives of enhancing reliability**
6 **and reducing restoration costs and outage times in a prudent, practical, and**
7 **cost-effective manner to the affected parties?**

8 **A.** Yes.

9

10 **Q. Has any third party intervenor or Staff taken issue with this portion of PEF's**
11 **Storm Hardening Plan?**

12 **A.** As discussed above, the Third-Party Attachers in this docket have, in summary,
13 stated that they cannot provide cost benefit estimates based on the information that
14 PEF has provided and they have also raised pole attachment issues that are outside
15 the proper scope of this proceeding. Staff, however, is the only party that has raised
16 specific concerns with this portion of PEF's plan. Staff has three criticisms of
17 PEF's plan in this regard.

18

19 **Q. What are Staff's criticisms and how does PEF respond to each of them?**

20 **A.** *"PEF is not proposing any changes to its EWL criteria and has not identified*
21 *substantive increases promoting underground facilities. Nevertheless, PEF's cost*
22 *estimates, on a per customer basis, of \$56 exceed that of FPL (\$36-\$46) and TECO*
23 *(\$37). Both FPL and TECO are promoting a more robust wind standard than*

1 *PEF. Therefore, it appears that PEF may be proposing higher cost programs to*
2 *achieve a less robust electric infrastructure system compared to other utilities.”*

3 **PEF RESPONSE:**

4 This statement does not fairly characterize PEF's plan. This statement does not
5 account for the fact that PEF: (1) is hardening all its transmission poles to concrete
6 and steel; (2) is using front-lot construction for new, rebuilt, and relocated
7 distribution assets; (3) has developed and implemented the AIS system to identify,
8 evaluate, and deploy storm hardening techniques; and (4) has identified 36 specific
9 distribution hardening projects in its Plan to include OH to UG conversions,
10 submersible UG devices, reconductoring, and alternative NESC applications.

11
12 Additionally, this statement assumes, despite all evidence to the contrary, that the
13 EWL provides a hardening benefit when applied to distribution poles in PEF's
14 service territory. As discussed above, all evidence and information that PEF has
15 shows that it does not. The comment above additionally does not account for the
16 fact that PEF is upgrading all of its transmission poles to concrete and steel. This
17 cost constitutes a significant portion of PEF's hardening costs which leads to the
18 \$56/per customer figure.

19
20 Further, the dollar-per-customer comparison above also does not acknowledge
21 PEF's wood pole inspection plan, vegetation management plan, and 10-point
22 Ongoing Storm Preparedness Plan. The comparison also does not properly

1 acknowledge other initiatives that PEF has included in its hardening plan such as
2 the AIS system and the 36 distribution hardening projects slated for 2007-2009.

3
4 Q. *“In general, certain aspects of verifying customer benefits depend on future storm
5 experiences. Nevertheless, it is also possible to test elements of PEF’s planned
6 activities through simulated extreme weather events and thereby avoiding complete
7 reliance on a “trial-by-experience” approach. Thus, our staff believes PEF’s Plan
8 does not adequately discuss a feed-back mechanism that ensures that the
9 overarching goals of lower storm restoration costs and fewer storm outages are
10 achieved economically.”*

11 **PEF RESPONSE:**

12 PEF’s plan specifically identifies field projects where PEF will test Grade B and
13 EWL construction in contrast with Grade C construction to see if there is any
14 benefit to Grade B and/or EWL in real storm conditions in varying cross sections of
15 PEF’s service territory. While wind simulators and other similar devices may
16 provide some limited data, real storms vary in time and intensity and have
17 tornados, flying debris, microburst wind, flooding, erosion, vegetation impacts, and
18 other real world factors that cannot be tested in simulation. PEF’s plan also makes
19 clear that PEF is continuing to take part in collaborative research projects which
20 impact on this issue. Finally, as Commissioner Argenziano recognized at the June
21 19, 2007 FPSC agenda in this docket, real utility experience in real storms cannot

1 be ignored.¹ PEF knows of no better support for the proposition that its system is
2 and has been properly designed, constructed, and maintained than the real life
3 experience that PEF has had with storms that have taken place within PEF's actual
4 service territory. For example, the 2004 hurricane season shows that 96% of PEF's
5 pole failures were due to flying debris and/or super extreme wind events that would
6 have caused EWL constructed assets to fail. PEF cannot reasonably ignore this sort
7 of data and advocate charging its customers more money for more expensive
8 construction designs such as EWL that would have also failed and would have been
9 more costly and time consuming to replace in the hurricane restoration phase.
10 Finally, PEF's 10-Point Storm Preparedness Plan and its subsequent Storm
11 Hardening Plan both discuss how PEF will use its integrated systems and data
12 collection efforts to ensure that the overarching goals of lower storm restoration
13 costs and fewer storm outages are achieved economically. This includes PEF's
14 AIS System, its intergrated GIS systems, its forensic storm analysis process, and
15 other related activity as outlined in those plans.

16
17 Q. *"Additionally, we note that PEF sustained higher damage costs on a per customer*
18 *basis than either FPL or TECO.*

19 2004 Self-Insured Storm Damage Impact
20 FPL, PEF, TECO, and Gulf

¹ **Agenda Transcript, Page 13, Lines 3-5:** *"When we talk about trial by experience, I mean, if you are a company that has been in business for a while, you already have experience."*

Agenda Transcript, Page 13, Lines 19-24 & Page 14, Lines 1-2: *"And Madam Chair, what I mean is they have that experience, I'm pretty sure. When you are in business, I would hope that one would want to harden on their own, as much as they could, and then what we are asking them to do in addition to that. But anything that they have come back and said, look, this is what we have done in the past, this works the best, and history shows that maybe what you're asking here may be not as cost-effective as doing it a different way."*

Agenda Transcript, Page 14, Lines 11-14: *"And Madam Chair, I guess that makes a lot of sense. Because if one company has been hit a certain way, and another has been hit a different way, we may be able to use that history from both of them."*

1

	Charley (Millions)	Frances (Millions)	Ivan (Millions)	Jeanne (Millions)	Total (Millions)	Millions of Customers	Cost per Customer
FPL	\$ 209	\$267	\$ 0	\$234	\$ 710	4.4	\$161
PEF	\$ 146	\$129	\$ 6	\$ 86	\$ 367	1.6	\$229
TECO	\$ 14	\$ 23	\$ 0	\$ 28	\$ 65	0.7	\$93
GULF	\$ 0	\$ 0	\$ 134	\$ 0	\$ 134	0.4	\$335

2

Sources: Docket No. 041291-EI for FPL; Docket No. 041272-EI for PEF; and answers to staff data requests for TECO and Gulf.

3

4

While there are many factors contributing to the level of storm damage experienced by each of these utilities, PEF's filings do not provide conclusive support for a lower EWL criteria than neighboring utilities which serve in areas that experience equivalent extreme wind speeds."

8

9

PEF RESPONSE:

10

This comparison is not appropriate. First, the comparison does not take into

11

consideration the intensity of the storms, the length of the storms and paths, as well

12

as other storm-specific considerations. Each storm event affects each utility

13

differently and therefore, it is difficult, if not impossible, to accurately evaluate and

14

compare this sort of data as being indicative of a utility's ability to withstand a

15

storm event.

16

Using the methodology employed in the comparison above, Gulf Power would

17

have had a \$0 cost per customer in 2004 instead of a \$335 cost per customer if

18

Hurricane Ivan did not happen. This simple example shows that information such

19

as that presented in the chart above has no relevance as to a utility's ability to

20

withstand storm events because the conclusions drawn from that data will vary and

1 show disparate and inaccurate conclusions depending on a utility's particular storm
2 experience in a given year.

3 To further illustrate this point, in the recent FPSC Report to the Legislature on
4 Enhancing the Reliability of Florida's Distribution and Transmission Grids During
5 Extreme Weather, the FPSC reported that during the 2005 hurricane season, PEF
6 experienced \$7 million in total hurricane damage costs which results in a cost per
7 customer of roughly \$4. Thus, by simply using 2005 instead of 2004, PEF's per
8 customer hurricane damage cost goes from \$229 to \$4.

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

11 **A.** Yes it does.
12
13
14

1 MR. BURNETT: Thank you, Madam Chairman. And also
2 the direct prefiled testimony of Mickey Gunter and his prefiled
3 exhibits as well, we would move those into the record as though
4 read.

5 CHAIRMAN EDGAR: Okay. And staff concurs?

6 MS. FLEMING: Yes. Madam Chairman, we would like to
7 note for the record that Exhibits 9 through 17 are being moved
8 into only Docket 070298.

9 CHAIRMAN EDGAR: Okay. Exhibits 9 through 17, so
10 noted, are being entered into the record for the docket
11 regarding the Progress plan. And we will go ahead and enter
12 12, 13, 14, 15, 16 and 17 into the record.

13 (Exhibits 12 through 17 marked for identification and
14 admitted into the record.)

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**REVIEW OF 2007 ELECTRIC INFRASTRUCTURE STORM HARDENING
PLAN FILED PURSUANT TO RULE 25-6.034, F.A.C., SUBMITTED BY
PROGRESS ENERGY FLORIDA, INC.**

DOCKET NO. 070298-EI

**DIRECT TESTIMONY OF
MICKEY GUNTER**

August 24, 2007

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

2 **A.** My name is Mickey B. Gunter. My address is 415 Bells Ferry Road NE, Rome,
3 Georgia 30161.

4

5 **Q. By whom are you employed and in what capacity?**

6 **A.** I am currently a consulting engineer and a retired engineer from Georgia Power
7 Company.

8

9 **Q: Please describe your responsibilities during your employment with Georgia**
10 **Power Company?**

11 **A:** I started work at Georgia Power Company in 1966 as a Junior Engineer and was
12 promoted to District Engineer in 1971 for the Austell District where I was
13 responsible for the distribution engineering, operations and maintenance activities.
14 From 1973 through 1990, I held several positions in the company and my
15 responsibilities included, at various times, the supervision of all distribution
16 engineering, line construction, supervising mapping, metering, reviewing and

1 approving of all large distribution engineering projects, support planning, and
2 training activities all of which were in the Rome Division of Georgia Power
3 Company. From 1990 to 2004, I held several positions and was responsible for
4 developing and maintaining Georgia Power Company's Distribution Specifications.
5 I was also involved in conducting Construction Standards update forums for line
6 personnel and engineers along with assisting in developing and teaching
7 distribution engineering personnel which included line design, NESC and other
8 engineering related topics. I held this position until I retired in 2004. I am
9 currently involved in teaching NESC schools for the Southern Company and
10 various other electric utilities. Some of the electric utilities and/or organizations
11 that I have taught NESC classes and/or conducted NESC update seminars other
12 than Georgia Power Company include: Gulf Power Company, Savannah Power
13 Company, Mississippi Power Company, Tampa Electric Company, Colorado
14 Springs Utility, AEGIS Insurance Company (various electric utilities), Central
15 Louisiana Electric Company, Entergy, South Carolina Gas & Electric, Jackson
16 EMC, Blue Ridge EMC, Patterson & Dewar Engineering, Tri-County EMC,
17 Entergy Council of the NE, the Southeastern Electric Exchange, and Utility Support
18 Systems.

19

20 **Q. Please describe your educational background and professional experience.**

21 **A.** I graduated in 1966 with a Bachelor of Science degree in Industrial Engineering
22 from Georgia Institute of Technology in Atlanta, GA. After serving in the Army
23 for two years, I began my career with Georgia Power Company. I have over 38

1 years of experience in Distribution Engineering Design, Standards and Training. I
2 presently serve on three ANSI C-2 National Electrical Safety Code (NESC) Sub-
3 committees, the Edison Electric Institute (EEI) NESC, and am Chairman of the
4 Southeastern Electric Exchange NESC Committee. I have been active in the NESC
5 since December 1993 and have had active participation in the 1997, 2002 and 2007
6 NESC revisions.

7
8 **Q. What is the purpose of your testimony?**

9 **A.** The purpose of my testimony is to discuss the Extreme Wind Loading Standard
10 (“EWL”) found in Rule 250C of the National Electrical Safety Code (“NESC”) and
11 the applicability of EWL to different types of electric power poles.

12
13 **Q. Are you sponsoring any exhibits with your testimony?**

14 **A.** Yes. I am sponsoring the following exhibits that I prepared or that were prepared
15 under my supervision and control:

- 16 • Exhibit No. ____ (MG-1T), a copy of my resume;
- 17 • Exhibit No. ____ (MG-2T), a copy of the 2007 NESC Rule 250C;
- 18 • Exhibit No. ____ (MG-3T), a copy of the 1977 NESC Rule 250C;
- 19 • Exhibit No. ____ (MG-4T), a copy of the 1987 NESC Rule 250C;
- 20 • Exhibit No. ____ (MG-5T), a copy of the 2005 comments from Sub-committee
21 5 (Strength and Loading) rejecting the originally approved/modified NESC
22 2007 change proposals 2766, 2673, and 2798 in 2003; and

- 1 • Exhibit No. ____ (MG-6T), copies of the original 2007 NESC change
2 proposals 2766, 2673, and 2798 which were originally approved/modified
3 in 2003 to eliminate the 60' exemption.

4
5 **Q. What is the EWL standard in the NESC?**

- 6 **A.** The EWL (extreme wind loading) standard is in Rule 250C of the 2007 NESC and
7 describes the application of the extreme wind loading (one of three weather related
8 loads) required in Rule 250A1 on structures and their supported facilities such as
9 wires, etc. The rule states how the wind pressures on structures and its supported
10 facilities are to be calculated and applied to structures in order to determine the
11 strength of a structure. The rule also states that *“If no portion of a structure or its*
12 *supported facilities exceeds 60 ft above ground or water level, the provisions of this*
13 *rule are not required, except as specified in Rule 261A1c, 261A2e, or 261A3d.”*
14 Thus, except in limited circumstances, the EWL standard does not apply to poles
15 and facilities that are 60 feet or less in height above ground or water level.

16
17 **Q. What is the history of the EWL standard in the NESC?**

- 18 **A.** The extreme wind loading first appeared in the 1977 NESC edition with language
19 referencing “tall structures.” It further stated that “If any portion of a structure or
20 its supported facilities is located in excess of 60 feet above ground or water level,
21 these wind pressures shall be applied to the entire structure and supported facilities
22 without ice covering.” The current language found in the 2007 NESC that states,
23 *“If no portion of a structure or its supported facilities exceeds 60 ft above ground*

1 *or water level, the provisions of this rule are not required, ...*”, was first placed in
2 the 1984 NESC edition. I am not aware of any resource that explains the exact
3 reasons the EWL was added in 1977, but as an engineer, I would think that since
4 taller structures were probably being installed at that time and with better weather
5 data being available, additional forces were actually being imposed on tall
6 structures and this needed to be reflected in the way calculations were made to
7 determine the strength of a structure other than the traditional method of using the
8 “heavy, medium, and light” weather loadings used exclusively before 1977.

9
10 **Q. Under the current edition of the NESC, does the EWL standard apply to**
11 **distribution poles that are 60 feet or less in height?**

12 **A.** No. The current edition of the 2007 NESC, as did all prior versions since 1977,
13 exempts any structure or its supported facilities that are 60 feet or less above
14 ground from the EWL.

15
16 **Q. Why does that exemption exist?**

17 **A.** Most distribution poles and their supported facilities are less than 60 feet in height
18 above ground. Additionally, most distribution pole lines are somewhat shielded
19 from extreme winds due to their lower height, trees, and the structures they are
20 serving. Also, based on my and many utility personnel’s experience, most
21 distribution pole failures during abnormally high wind conditions, such as those
22 found in hurricanes, are due to falling trees, tree limbs, flying debris, etc. This is
23 reflected in the 2005 comments from the NESC Sub-committee 5 (strength and

1 loading) when they rejected the change proposals to eliminate the 60 foot
2 exemption to EWL.

3 Conversely, most transmission poles, due to their height and lack of shielding by
4 trees, buildings, etc. have much more exposure to high winds. Transmission poles
5 also typically have wider easements, more stringent vegetation clearing rights and
6 requirements, danger tree removals, and far fewer miles of line to maintain. That is
7 why the EWL standard is used for those poles and not distribution poles.

8
9 **Q. Please describe the history of this exemption that has led to the to the current**
10 **NESC standards?**

11 **A.** The efforts to eliminate the 60 foot exemption was originally approved in the 2003
12 NESC discussions and placed in the 2007 NESC pre-print that was published for
13 public comment. Much of the effort to remove the exemption was based on factors
14 that were not rooted in the many years of actual experience of distribution utility
15 engineering personnel that distribution poles (less than 60 feet above ground) fail in
16 high winds due to trees, flying debris, and the like. NESC Sub-committee 5
17 (strength and loading) received many comments in 2005 regarding this subject.
18 Among the comments received, 14 supported the decision to delete the 60 foot
19 exemption, while 217 supported the rejection of eliminating the 60 foot exemption
20 and retaining it in the 2007 NESC edition. The bottom line reason given for
21 keeping the exemption was that by eliminating the 60 foot exemption, additional
22 unnecessary costs would be added to utilities, without significantly improving or
23 increasing safety.

1 **Q. Do you agree with this exemption as it exists in the current 2007 edition of the**
2 **NESC?**

3 **A. Yes.**
4

5 **Q. Why do you agree?**

6 **A.** I have over 38 years of distribution engineering experience and have worked many
7 storms related to high winds such as tornadoes, hurricanes, etc. Based on my
8 experience, I don't recall ever having seen any hard data or evidence to suggest that
9 distribution poles fail due to high winds only, which is the purpose of the EWL
10 standard. Instead, my experience, as well as those of utilities from around the
11 country, shows that distribution poles and facilities generally fail in high wind
12 conditions due to trees, tree limbs, and flying debris. I agree with the 217 others
13 who supported the rejection of eliminating the 60 foot exemption and retaining it in
14 the 2007 NESC edition because eliminating the 60 foot exemption would yield
15 additional unnecessary costs without significantly improving or increasing safety.
16

17 **Q. Does this conclude your testimony?**

18 **A. Yes it does.**
19

1 MR. BURNETT: And, Madam Chair, if I may, based on
2 the stipulations today, Progress has no cross-examination for
3 any of the rebuttal witnesses, I mean, for any of the
4 intervenor witnesses, nor do we have any rebuttal. So if it
5 please the Commission, we would ask to be excused from the
6 proceeding.

7 CHAIRMAN EDGAR: You don't want to stay for the
8 party?

9 MR. BURNETT: I would love to, Madam Chair, but --
10 (Laughter.)

11 CHAIRMAN EDGAR: Recognizing that Progress's case in
12 chief has basically been made with the stipulations and the
13 testimony and exhibits that have been entered, you may be
14 excused from the rest of the proceeding.

15 MR. BURNETT: Thank you.

16 CHAIRMAN EDGAR: Thank you. Okay. So that takes
17 care of Witness Cutcliffe, Witness Gunter, and brings us to
18 Witness Battaglia.

19 MR. BADDERS: I believe we're ready to proceed,
20 Commissioner.

21 CHAIRMAN EDGAR: We're ready.

22 MR. BADDERS: Thank you.

23 EDWARD J. BATTAGLIA
24 was called as a witness on behalf of Gulf Power Company and,
25 having been duly sworn, testified as follows:

DIRECT EXAMINATION

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BY MR. BADDERS:

Q Mr. Battaglia, were you present earlier this morning when the witnesses were sworn?

A Yes, I was.

Q And you took the oath?

A Yes.

Q Please state your name and your business address for the record.

A My name is Edward J. Battaglia. My business address is 1 Energy Place, Pensacola, Florida 32520.

Q By whom are you employed and in what capacity?

A Gulf Power Company as Technical Services Manager.

Q Have you prefiled direct testimony consisting of 20 pages?

A Yes.

Q Do you have any changes to that testimony?

A No.

Q If I were to ask you the same questions today, would your answers be the same?

A Yes.

Q Do you also have one exhibit attached to your testimony?

A Yes.

Q And it has ten schedules?

1 A No.

2 Q How many schedules is attached --

3 A Oh, excuse me. Ten schedules.

4 Q Ten schedules. I would like to -- do you have any
5 changes to that exhibit?

6 A No.

7 MR. BADDERS: I would like to identify Exhibit EJB-1.

8 CHAIRMAN EDGAR: Which is marked as Exhibit 18 in the
9 comprehensive exhibit list.

10 MR. BADDERS: Thank you.

11 (Exhibit 18 marked for identification.)

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1 GULF POWER COMPANY

2 Before the Florida Public Service Commission

3 Prepared Direct Testimony of

4 Edward J. Battaglia

5 Docket No. 070299-EI

6 In Support of Gulf Power Company's Storm Hardening Plan

7 Date of Filing: August 24, 2007

8

9 Q. Please state your name, business address and occupation.

10 A. My name is Edward J. Battaglia, and my business address is One Energy

11 Place, Pensacola, Florida 32520. I am the Technical Services Manager

12 for Gulf Power Company. My organization is responsible for providing

13 technical support for the distribution engineering and construction

14 personnel at Gulf. This technical support function includes the Company's

15 Reliability, Design and Construction Specifications, Power Quality,

16 Distribution Geographic Information System (DistGIS), Technical

17 Applications, such as the Company's Job Estimating and Tracking

18 System, and large project engineering.

19

20 Q. Please summarize your educational and professional background.

21 A. I graduated from the State University of New York at Buffalo with a

22 Bachelor of Science Degree in Electrical Engineering in 1972 and the

23 University of South Florida with a Master of Science Degree in

24 Engineering Management in 1989. I joined Gulf Power Company in 1973

25 as a Field Engineer in Panama City. I have since held a number of

positions with increasing responsibility: Construction Services Supervisor,

Manager of Division Engineering, Power Delivery Manager, Principal

Engineer, and Supervisor of Distribution Reliability and Power Quality. My

1 experience is predominately in the areas of distribution operation,
2 maintenance, and construction. During my career, I have participated in
3 and led multiple storm restoration teams after major storms. My first
4 hurricane experience was as a damage evaluator and crew leader after
5 Hurricane Eloise in 1975. My most recent experience was as an area
6 restoration coordinator after Hurricanes Ivan, Dennis and Katrina in 2004
7 and 2005. In total, I have assisted with restoration work in the field for
8 over 17 named storms ranging in strength from tropical storm to
9 category 3 hurricanes. I am registered as a Professional Engineer in the
10 State of Florida.

11

12 Q. Have you prepared an exhibit that contains information to which you will
13 refer in your testimony?

14 A. Yes. I have one exhibit consisting of 10 schedules to which I will refer.
15 These schedules were prepared under my supervision and direction.

16 Counsel: We ask that Mr. Battaglia's Exhibit EJB-1, consisting of
17 10 schedules, be marked for identification as Exhibit No. ____.

18 Please refer to Schedule 1 of Exhibit EJB-1 for an Index of
19 Schedules.

20

21 Q. What is the purpose of your testimony in this proceeding?

22 A. I will address Gulf Power Company's Storm Hardening Plan (the "Plan")
23 for the period 2007 through 2009 as amended on August 14, 2007.

24 Specifically, I will give an overview of how Gulf developed its Plan and
25 how each part of the Plan addresses and supports the requirements set

1 forth in Florida Public Service Commission (FPSC) Rules 25-6.0341 and
2 25-6.0342, Florida Administrative Code. Further, I will discuss how Gulf
3 will assess the ongoing effectiveness of the Plan.

4
5 Q. Please give an overview of Gulf's service area, including the number of
6 customers, what counties are served, and a summary of Gulf's facilities.

7 A. Please refer to Schedule 2 for a map of Gulf Power's service area. Gulf
8 Power's service area spans the area from the Alabama border on the west
9 to the Apalachicola River on the east; and from the Alabama border on the
10 north to the Gulf of Mexico on the south. Gulf Power serves
11 approximately 427,000 retail customers in 71 towns and communities in its
12 eight-county service area: Escambia, Santa Rosa, Okaloosa, Walton,
13 Holmes, Bay, Washington, and Jackson. Gulf is a mixture of rural and
14 urban customer populations with weighting towards being more rural.
15 Please refer to Schedule 3 for a map which illustrates population
16 densities.

17 Gulf Power owns approximately 2,700 MW of generation capacity.
18 To deliver electricity to its customers, Gulf maintains 126 substations,
19 approximately 1,600 miles of transmission line and 7,200 miles of
20 distribution line. Approximately 1,400 miles (20 percent) of the distribution
21 system is underground.

22
23 Q. Please describe and discuss Gulf's Storm Hardening Plan.

24 A. Gulf Power's Storm Hardening Plan, which consists of 12 sections and 7
25 appendices, addresses the requirements as set forth in FPSC Rules 25-

1 6.0341 and 25-6.0342. Gulf Power views this Plan as a starting point of
2 an ongoing process to identify ways to minimize future storm damage and
3 customer outages. Gulf plans to build on what works well and to improve
4 in areas that do not work as well as intended. Gulf is committed to
5 continuous improvement by building on its experiences and is supportive
6 of research to address the potential benefits of initiatives, which could lead
7 to less-frequent customer outages and improved continuity of service
8 during major storm-related events. The Plan incorporates the Ten-Part
9 Storm Preparedness Plan initiatives (Ten-Part Initiatives) in Section 2.0
10 that were approved in FPSC Order Nos. PSC-06-0781-PAA-EI and PSC-
11 06-0947-PAA-EI. These initiatives have been updated to reflect FPSC
12 approved changes and the latest company information. The Ten-Part
13 Initiatives include the following:

14 1. Gulf's Vegetation Management Plan which provides for a
15 three year trim cycle on all main line feeders and a six-year cycle on
16 laterals, an annual inspection and corrective action program for main line
17 feeders, and a hazard tree program.

18 2. Joint-use pole attachment audits which provide for a field
19 audit every five years and a Pole Strength/Load Assessment annually
20 through 2009.

21 3. Inspection cycle of transmission structures on a six-year
22 inspection cycle.

23 4. Storm hardening activities for transmission structures,
24 providing for storm guy installations and replacement of wood cross-arms
25 with steel.

1 5. Geographic Information System (GIS) development, which is
2 an electronic database for Gulf's distribution, transmission and land
3 records data.

4 6. Post storm data collection and forensic analysis utilizing the
5 GIS mentioned above.

6 7. Collection of outage data differentiating between overhead
7 and underground systems.

8 8. Close coordination with local governments on storm
9 preparedness and restoration efforts.

10 9. Participation in collaborative storm hardening research with
11 other utilities through the Public Utility Research Center at the University
12 of Florida.

13 10. Annual updates to Gulf's Disaster Preparedness and
14 Recovery Plan.

15 Section 3.0 of the Plan describes the Wood Pole Inspection Plan
16 approved in FPSC Order No. PSC-07-0078-PAA-EU that requires Gulf to
17 implement an 8-year wood pole inspection cycle. Gulf had previously
18 utilized a 10-year inspection cycle for all wood poles. Actual performance
19 data for the initiatives in Sections 2.0 and 3.0 is included in the Distribution
20 Reliability Report filed annually on March 1. These initiatives comprise the
21 foundation of Gulf's Plan.

22 Sections 4.0 through 9.0 of Gulf's Plan address each of the new
23 requirements contained in Rules 25-6.0341 and 25-6.0342.

24 In Section 4.0, concerning compliance with the National Electric
25 Safety Code (NESC), the Plan states that Gulf will exceed NESC by

1 initiating a transition to Grade B construction for all new construction,
2 major projects and maintenance work.

3 Section 5.0 addresses the adoption of extreme wind loading (EWL)
4 for distribution facilities, including a specific discussion on storm hardening
5 critical infrastructure and major thoroughfares. In this section of the Plan,
6 Gulf proposes to adopt Grade B construction standards for new
7 construction, major expansions, rebuilds, and relocations of distribution
8 facilities. In addition, Gulf is continuing its storm hardening efforts
9 regarding EWL through pilot programs targeting critical infrastructure
10 facilities and major thoroughfares.

11 Section 6.0 relates to mitigation of damage to underground facilities
12 and supporting overhead transmission and distribution facilities due to
13 flooding and storm surges. Gulf has developed overhead and
14 underground distribution storm hardening specifications to address this
15 requirement of the Commission's rules.

16 Section 7.0 addresses placement of new and replacement of
17 distribution facilities so as to facilitate safe and efficient access for
18 installation and maintenance. Gulf has always recognized that easy
19 access to its facilities is critical to efficient operation, maintenance and
20 restoration of its facilities. Gulf has 99.998% of its overhead facilities
21 located on road right-of-ways or easements with only 0.002% of its
22 facilities are back lot line construction. Gulf will continue to build its
23 facilities with this design aspect in mind and has modified company
24 specifications to reinforce this design concept.

25 Section 8.0 contains other key elements such as feeder patrols and

1 infrared patrols. These two activities help further prepare the distribution
2 system for storm season. The installation of Gulf's wind monitors is
3 another key element that will provide the granular weather data needed to
4 support the forensic data analysis and the evaluation of the effectiveness
5 of Gulf's storm hardening projects.

6 Section 9.0 describes Gulf's Storm Plan deployment strategy.

7 Section 10.0 contains Gulf's estimate of incremental costs and
8 benefits, which are summarized on page 2 of Appendix 7 of the Plan.

9 Sections 11.0 and 12.0 address storm hardening, as it relates to
10 joint-use and third-party attachers.

11

12 Q. What sections of Gulf's Plan are you addressing in your testimony?

13 A. I will be addressing Section 2.0 of Gulf's Plan, Gulf's Ten-Part Storm
14 Preparedness Plan; Section 3.0, Gulf's Wood Pole Inspection Plan;
15 Section 4.0 concerning compliance with the National Electric Safety Code
16 (NESC); Section 5.0 which addresses the adoption of EWL for distribution
17 facilities; Section 6.0 concerning mitigation of damage to underground
18 facilities and supporting overhead transmission and distribution facilities
19 due to flooding and storm surges; Section 7.0 related to placement of new
20 and replacement distribution facilities so as to facilitate safe and efficient
21 access for installation and maintenance; Section 8.0 which contains other
22 key elements such as feeder patrols, infrared patrols and installation of
23 Gulf's own wind monitors; Section 9.0 which is Gulf's Storm Plan
24 deployment strategy; and Section 10.0, Gulf's estimate of incremental
25 costs and benefits.

1 Mr. Alan McDaniel, Gulf's Project Services Manager, will address
2 Section 11.0, Impact to Collocation Facilities, concerning pole strength
3 and load assessments and the new process concerning pre-notification by
4 third-party attachers when performing overlashing of cables, along with
5 Section 12.0, which covers third-party attachers' estimate of costs and
6 benefits.

7
8 Q. Please summarize the process used to develop Gulf's Storm Hardening
9 Plan.

10 A. The foundation of Gulf's Plan is the Ten-Part Initiatives and Wood Pole
11 Inspection Plan already approved by this Commission. Gulf's operational,
12 maintenance and storm restoration experience strongly support that these
13 initiatives hold the most potential for accomplishing the objectives of
14 reduced customer outages and reduced restoration time. The initiatives
15 that will do the most to accomplish our goals of reducing customer
16 outages and restoration times are: Vegetation Management, Joint-Use
17 Pole Attachment Audits, Transmission Inspection and Storm Hardening
18 Activities, Post Storm Data Collection and Forensic Analysis, which are
19 part of the Ten-Part Initiatives, and the Wood Pole Inspection Program.
20 These five "key elements" of the Ten-Part Initiatives, along with the Wood
21 Pole Inspection Program, will help meet the desired objectives during both
22 storm situations and on a day-to-day reliability basis. Based on their
23 benefits and costs, these initiatives will provide the most value to our
24 customers in regard to storm hardening.

25 Building on the Ten-Part Initiatives and Wood Pole Inspection

1 program, Gulf relied on its many years of storm restoration experience and
2 the lessons learned from Hurricanes Ivan and Dennis to formulate a plan
3 to meet the requirements of Rule 25-6.0341 and 25-6.0342, F.A.C. which
4 addresses EWL. Appendix 5 and 6 of the Plan and Gulf's updated storm
5 preparations and restoration practices contain these lessons learned.
6 While there is no empirical forensic data showing the exact storm impacts
7 from Hurricanes Ivan and Dennis, field observations by Gulf personnel
8 involved in the restoration effort after these hurricanes were used as an
9 input for determining how to storm harden Gulf's system. Along with this
10 base of knowledge, Gulf also incorporated its experience with day-to-day
11 operation and maintenance of its electric system.

12 Gulf considered transitioning to underground as a storm hardening
13 option in the development of its Plan. In adopting a storm hardening
14 activity, Gulf considers both cost- effectiveness and whether the activity
15 meets the goal of reduced customer outages and restoration times. In
16 reviewing an activity for implementation, the Company looks at how the
17 activity would further the goal of reduced customer outages and
18 restoration times both in the aftermath of a storm occurrence and also on
19 a day-to-day operations basis. At this time, Gulf's experience with
20 underground distribution does not support its use as a storm hardening
21 activity. Although underground distribution appears to be an attractive
22 method of avoiding wind damage during a storm event, underground
23 construction has limitations that cause additional issues on a day-to-day
24 operational basis and during storm restoration. For example, underground
25 construction has increased costs both with initial installation, normal

1 operation and maintenance and during storm restoration situations.
2 Finding and repairing damage to underground facilities after a storm event
3 and on a day-to-day basis takes longer resulting in longer outages.
4 Finally, underground is susceptible to storm surges and to damage during
5 clean-up after storms. Based on Gulf's experience with underground
6 construction on both a day-to-day operational basis and during storm
7 restoration, underground construction was not adopted as a storm
8 hardening activity. However, Gulf is conducting several distribution pilot
9 projects in potential storm surge areas to test the effectiveness of
10 mitigation techniques. For further description of these projects, see
11 Section 6.0 of the Plan.

12 In respect to Gulf's Plan, as data continues to be gathered and
13 research progresses, Gulf will continue to evaluate and refine its approach
14 to storm hardening in a way that balances storm hardening with the need
15 to maintain reasonable costs and still achieve the expected results of
16 reduced outages and restoration times.

17
18 Q. How did Gulf address extreme wind loading standards in its Storm
19 Hardening Plan?

20 A. For new construction, major expansions, rebuilds, and relocations of
21 distribution facilities, Gulf is adopting the NESC standard Grade B
22 construction. Beginning in 2007, Gulf will begin transitioning to Grade B
23 construction. Moving to Grade B involves more than just substituting a
24 stronger pole. While a stronger class of pole can certainly be a part of
25 going to Grade B construction, other considerations are also involved,

1 including stronger anchoring and guying, and in some cases shorter span
2 lengths with a greater number of poles. In addition, all of the attachments
3 on a pole must be modeled and analyzed to determine what impact they
4 have on the pole strength and whether it meets Grade B construction
5 standards. Modeling of pole structures is an extensive process that looks
6 at, among other items, the size of all conductors attached, the heights of
7 all conductors, the configuration, the span lengths of every conductor, the
8 lead length of all anchors and soil class. Pole strength analysis will be
9 performed by both Gulf and a third-party contractor. Gulf will use an
10 application named PoleForeman, while the third-party contractor will use a
11 similar proprietary application. PoleForeman is an industry-recognized
12 application for calculating the loading on a pole. PoleForeman calculates
13 the stresses on the pole and determines which components will fail, if any.
14 For extreme wind loading, the wind is applied 360 degrees around the
15 pole and the worst-case scenario is modeled. Please refer to Schedules
16 5, 6, and 7 of Exhibit EJB-1 for an example of a pole analysis. Schedule 5
17 shows a photo of a main line feeder pole with power and communication
18 attachments. Schedule 6 shows the PoleForeman analysis of the pole
19 which under EWL analysis shows that the pole does not meet strength
20 requirements for 140 mph wind loading. Schedule 7 shows the analysis
21 after the needed modifications are added and that the pole now meets
22 EWL criteria for a 140 mph wind. Gulf will continue to work with third-party
23 attachers to ensure that necessary inputs are included in the pole strength
24 analysis to account for all impacts from attachments to poles.

25 Over the next three years, Gulf will be undertaking targeted pilot

1 projects to upgrade certain of its critical infrastructure and interstate
2 crossings to extreme wind loading standards specified by Figure 250-2(d)
3 of the 2007 edition of the NESC. Gulf analyzed National Oceanic and
4 Atmospheric Administration (NOAA) data for Northwest Florida's hurricane
5 history as an input into the Plan. Schedule 8 of Exhibit EJB-1 shows a
6 map of all of the storm paths for 155 years, which shows that there are
7 few spots that have not been impacted to some degree over this time
8 period. As a result of these storms, Gulf has gained valuable experience
9 that has shaped Gulf's construction practices, storm preparations and
10 restoration practices over the years. Appendices 5 and 6 of the Plan are
11 examples of design specification changes that Gulf has adopted as a
12 result of past storms. Some additional changes made include: improving
13 internal communications to the field on how the restoration process is
14 proceeding; acquiring additional evaluators, support, and staging site
15 management teams earlier in the restoration effort; determining alternative
16 housing options by assuming that all motels are damaged and not
17 available; combining the distribution line and tree trimming contractor
18 coordination to ensure administrative consistency; and decentralizing the
19 logistics function into major field areas during storms.

20 The chart in Schedule 9, again from NOAA, shows the distribution
21 by hurricane category for Northwest Florida. As you can see, category 1
22 storms account for approximately 50% of the storms experienced, with no
23 category 4 or 5 storms.

24 The use of Grade C construction, which is equal to a 60 MPH wind
25 design, results in an "equivalent wind" load of 83 MPH. This is Gulf's

1 current standard. In addition, three phase feeders and laterals can have
2 an effective wind load up to 95 MPH. When you take into consideration
3 that Gulf's service area storm history is nearly 50% category 1, it shows
4 that our current system design is well-matched with the most likely storms.
5 As discussed previously, Gulf's Plan adopts Grade B construction for all
6 new and planned expansions, rebuilds and relocations. This design
7 results in an "equivalent wind" load of 118 MPH. Adopting Grade B
8 construction will now strengthen the distribution system to address
9 approximately 80% of the storms likely to be experienced by Gulf based
10 on past historical hurricane data. Gulf's field experience strongly indicates
11 that pole failures on its distribution system are not the result of the wind
12 itself during a hurricane, but rather the wind-carried debris and off right-of-
13 way trees. Despite this, it is reasonable to adopt Grade B construction at
14 this time given its cost-effectiveness and the potential for positive storm
15 hardening benefits. Gulf will continue to evaluate the adoption of Grade B
16 construction to determine its actual costs and benefits. Further, Gulf plans
17 to compare Grade C and Grade B construction in the field post-storm to
18 determine what benefits, if any, actually have been derived by
19 transitioning to Grade B construction standards.

20
21 Q. Please discuss Gulf's pilot projects that upgrade certain critical
22 infrastructure and interstate crossings to EWL standards.

23 A. Gulf defines critical infrastructure as feeders which serve critical loads,
24 such as hospitals, major sewage treatment plants, and fuel depots. Gulf
25 defines major thoroughfares as Interstates 10 and 110. As a part of the

1 process of developing the Plan, Gulf solicited input from a representative
2 sample of county emergency operating centers to help determine the
3 critical infrastructure categories on which to begin focusing its storm
4 hardening efforts. This input was used as the basis of Gulf's definition of
5 critical infrastructure. These contacts also served to reinforce Gulf's
6 ongoing input from local governmental agencies as described in
7 Section 2.8 of the Plan.

8 Gulf Power will adopt Grade B construction standards for all new
9 construction and major rebuilds of existing distribution facilities that serve
10 critical infrastructure facilities and cross major thoroughfares. In addition,
11 as a pilot program, Gulf proposes to adopt EWL standards specified by
12 Figure 250-2(d) of the 2007 edition of the NESC for main feeder
13 distribution systems that serve critical facilities such as hospitals, sewer
14 treatment plants, fuel depots, and feeders that cross major thoroughfares.
15 Please refer to Schedule 10 for a summary by year of EWL projects. The
16 proposed EWL pilot projects for the years 2007 through 2009 are also
17 identified in Section 9.1 of the Plan. As a part of these pilot projects, Gulf
18 will also install wind monitoring devices at substations nearest to the
19 planned pilot projects. These devices will enable Gulf to collect granular
20 wind data close to the actual projects. This granular wind data coupled
21 with forensic data gathered after a major storm will assist in the
22 determination of the effectiveness of the EWL pilot projects in Gulf's
23 service area. Gulf believes this is a prudent approach to EWL given that
24 the actual impacts of wind on Gulf's system are not clearly defined and
25 evidence shows that pure wind impacts alone without wind blown debris

1 are minimal in Gulf's service area.

2

3 Q. Why did Gulf not adopt EWL standards for all of its existing overhead
4 distribution facilities?

5 A. It is not cost-effective to do so. If Gulf applied EWL standards to all of its
6 existing distribution overhead lines, the estimated cost would be
7 approximately \$437.2 million plus a yearly cost of approximately \$2 million
8 associated with new overhead construction.

9 Using Gulf's methodology for determining benefits associated with
10 storm hardening initiatives, the possible avoided storm restoration cost is
11 approximately \$1.1 million. The benefits were calculated using data from
12 Gulf's March 1, 2006, filing for "Reliability and Storm Hardening Initiatives
13 Report". Pole losses are based on Gulf's worst hurricane to date, which
14 was Hurricane Ivan, a Category 3 storm in 2004, where the percentage of
15 pole loss was approximately 1.6% or 3,976 poles out of 233,897 poles.
16 Based on NOAA weather data, Gulf has experienced approximately 80%
17 category 1 and 2 hurricanes and approximately 20% category 3
18 hurricanes during this 155-year time period. The total cost/benefit
19 analysis was derived by modeling two scenarios, one for feeder pole
20 losses and one for lateral pole losses. While Gulf cannot predict what
21 frequency and category of storms it may experience in the future, this
22 analysis does show a range of potential benefits. In addition, Gulf's
23 experience is that wind-blown debris is the predominant cause of damage
24 versus pure wind.

25

1 Q. In the Plan, does Gulf reasonably address the extent to which its
2 distribution facilities are designed to mitigate damage to underground and
3 supporting overhead transmission and distribution facilities due to flooding
4 and storm surges?

5 A. Yes. Gulf has developed overhead and underground distribution storm
6 hardening specifications to mitigate damage due to flooding and storm
7 surges. These specifications are shown in Appendices 5 and 6 of Gulf's
8 Plan. In addition, Gulf is currently working on several distribution pilot
9 projects in potential storm surge areas to test the effectiveness of
10 mitigation techniques. Current pilot projects include the installation of
11 below-grade gear, along with heavy lids and anchoring systems on flush-
12 mounted switch enclosures. Gulf will continue to utilize stainless steel
13 equipment in all coastal areas as it has done for many years.

14
15 Q. In the Plan, does Gulf reasonably address the extent to which the
16 placement of new and replacement distribution facilities facilitate safe and
17 efficient access for installation and maintenance pursuant to Rule 25-
18 6.0341, F.A.C?

19 A. Yes. Gulf Power has always recognized that accessibility to distribution
20 facilities is essential to safe and efficient maintenance and storm
21 restoration. Gulf continues to promote placement of facilities adjacent to
22 public roads; to utilize easements, public streets, roads and highways; to
23 obtain easements for underground facilities; and to use right-of-ways for
24 conversions of overhead to underground. Gulf has 99.998% of its facilities
25 on road right-of ways or easements.

1 Q. In the Plan, does Gulf provide a detailed description of its deployment
2 strategy including a description of the facilities affected, technical
3 design specifications, construction standards, and construction
4 methodologies employed?

5 A. Yes. Section 9.1 of the Plan describes the 3-year deployment strategy for
6 the proposed EWL critical infrastructure pilot projects. Appendices 5 and
7 6 of the Plan contain the design and construction specifications for the
8 overhead and underground distribution facilities.

9

10 Q. In the Plan, does Gulf provide a detailed description of the communities
11 and areas within the utility's service area where the electric infrastructure
12 improvements, including facilities identified by the utility as critical
13 infrastructure and along major thoroughfares, are to be made?

14 A. Yes. Section 9.1 of the Plan identifies the proposed critical infrastructure
15 project locations. In addition, Appendix 1 of the Plan is a map that shows
16 the location of the proposed critical infrastructure projects in relation to the
17 communities in Northwest Florida.

18

19 Q. In the Plan, does Gulf provide a reasonable estimate of the costs and
20 benefits to the utility of making the electric infrastructure
21 improvements, including the effect on reducing storm restoration costs
22 and customer outages?

23 A. Yes. Total storm hardening costs for the 2007 to 2009 time period are
24 estimated at approximately \$20 million per year. Schedule 4 is a
25 summary sheet of the total costs and benefits, which indicates a 2007 cost

1 per customer of \$46.00.

2 The incremental costs of Gulf's storm hardening activities are
3 shown on page 2 of Appendix 7 of the Plan, as amended. The estimated
4 revenue requirement for incremental storm hardening costs over the 2007
5 to 2009 time period is approximately \$8.3 million or \$0.28 for the cost of
6 1,000 kWh on Gulf's residential rate RS. Gulf continues to evaluate the
7 possible benefits associated with its storm hardening activities. The items
8 contained in this Plan are likely to result in some mitigation of storm
9 damage, though it will take years to determine their true effect and
10 resulting benefits.

11

12 Q. How will Gulf assess the ongoing effectiveness of its Plan?

13 A. Gulf will assess the effectiveness of its storm hardening efforts with a two-
14 part approach. First, Gulf will address the effectiveness of the Plan on a
15 "non-storm" basis or how the initiatives affect normal daily operations.
16 The second part addresses the effectiveness of initiatives during named
17 storm events, which involves forensic data collection post-storm. In both
18 parts, Gulf will use new and existing internal work processes, which
19 include reporting tools and procedures. This will involve using existing
20 accounting systems with some modifications and existing applications,
21 such as Gulf's Job Estimating and Tracking System (JETS) and Trouble
22 Call Management Systems (TCMS), to collect data. The data obtained
23 through these systems, along with the internal work processes, will
24 provide cost information and reliability data for the ongoing evaluation of
25 the effectiveness of initiatives and projects contained in the Plan.

1 Q. How does Gulf plan to address communications with interested parties
2 related to storm hardening activities?

3 A. As described in Section 2.8 of the Plan, Coordination with Local
4 Governments, Gulf Power has several employees whose responsibility
5 during storm restoration is to serve as liaison with local governments and
6 customers in Northwest Florida. In addition, district managers located in
7 Pensacola, Ft. Walton, and Panama City, along with local managers
8 located in Milton, Crestview, Niceville, and Chipley, interact with city and
9 county personnel and customers on a daily/weekly basis as needed
10 regarding numerous issues, including emergency preparedness. These
11 Gulf Power employees are also actively involved in joint government and
12 business committees that focus on local development and emergency
13 preparedness needs in Northwest Florida.

14
15 Q. Does Gulf's Plan comply with all applicable sections of the National
16 Electric Safety Code (ANSI C-2) [NESC] 2007 Edition?

17 A. Yes. Gulf's Plan fully complies with the National Electric Safety Code.
18

19 Q. Does Gulf's Plan meet the desired objectives of enhancing reliability and
20 reducing restoration costs and outage times in a prudent, practical, and
21 cost-effective manner to the affected parties?

22 A. Yes. Gulf's Plan can reasonably be expected to enhance the reliability
23 and reduce restoration cost and customer outage times in a cost-effective
24 manner. By adopting Grade B construction standards on all new and
25 major distribution rebuilds, along with utilizing an EWL pilot project

1 approach on critical infrastructure facilities and performing underground
2 storm hardening projects where appropriate, Gulf's Plan is prudent,
3 practical, and cost-effective.

4

5 Q. Does this conclude your direct testimony?

6 A. Yes.

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1 BY MR. BADDERS:

2 Q Mr. Battaglia, please provide the summary of your
3 testimony.

4 A Gulf based the development of its Storm Hardening
5 Plan on its many years of storm restoration experience, the
6 lessons learned from Hurricanes Ivan and Dennis, along with
7 feedback from state and county emergency operation personnel.
8 The foundation of Gulf's plan is the ten-part initiatives and
9 wood pole inspection plan already approved by this Commission.

10 Gulf's operational, maintenance and storm restoration
11 experience strongly support that these initiatives hold the
12 most potential for accomplishing the objectives of reduced
13 customer outages and reduced restoration time during both storm
14 situations and on a day-to-day reliability basis.

15 Based on the potential benefits and costs these
16 initiatives will provide the most value to our customers in
17 regard to storm hardening and being cost-effective in meeting
18 the real requirements.

19 Building on the ten-part initiatives and the wood
20 pole inspection program, Gulf formulated a plan to meet the
21 requirements of the new rules which address extreme wind
22 loading. While there is no empirical forensic data showing the
23 exact storm impacts of Hurricanes Ivan and Dennis, field
24 observations by Gulf personnel involved in the restoration
25 effort after these hurricanes and past storms were used as an

1 input for determining how to storm harden Gulf's system, along
2 with its experience with day-to-day operation and maintenance
3 of its electric system.

4 ~~Gulf's storm field experience strongly indicates that~~
5 pole failures on its distribution system are not the result of
6 the wind itself during a hurricane, but rather the wind-carried
7 debris and off right-of-way trees. Based on this information,
8 Gulf improved its existing design specifications, developed new
9 specifications and updated storm preparations and restoration
10 practices which reflect these lessons learned from past
11 hurricanes. And over the next three years Gulf will be
12 undertaking targeted pilot projects to upgrade its critical
13 infrastructure and interstate crossings to extreme wind loading
14 standards.

15 In addition, Gulf listened and learned from the
16 Florida Public Service Commission workshops and reviewed
17 National Oceanic and Atmospheric Administration data for
18 Northwest Florida's hurricane history. Based on this, Gulf
19 amended its plan. For new construction, major expansions,
20 rebuilds and relocations of distribution facilities Gulf is
21 adopting the NESC standard for Grade B construction.

22 In the development of Gulf's Storm Hardening Plan,
23 transitioning to underground was considered as a storm
24 hardening option. Although underground distribution appears to
25 be an attractive method of avoiding wind damage during a storm

1 event, underground construction has limitations that cause
2 additional issues on a day-to-day operational basis and during
3 storm restoration. Finding and repairing damage to underground
4 ~~facilities after a storm event and on a day to day basis takes~~
5 longer, resulting in longer outages.

6 Finally, underground is susceptible to storm surges
7 and to damage during cleanup after storms. Gulf has recent
8 first-hand experience with the damage storm surge does to
9 underground facilities on barrier and coastal areas. Based on
10 Gulf's experience with underground construction on both a
11 day-to-day operational basis and during storm restoration,
12 underground construction was not adopted as a storm hardening
13 activity in the plan. However, Gulf has not ruled out
14 underground as a storm hardening option in the future. Gulf is
15 conducting several distribution pilot projects in potential
16 storm surge areas to test the effectiveness of mitigation
17 techniques and has joined the other IOUs through PURC in
18 further studying underground as a possible storm hardening
19 option.

20 In conclusion, this is Gulf's first Storm Hardening
21 Plan pursuant to Florida Public Service Commission rule. As
22 data continues to be gathered and research progresses, Gulf
23 will continue to evaluate and refine its approach to storm
24 hardening in a way that balances storm hardening with the need
25 to maintain reasonable cost to all of its customers and still

1 achieve the expected results of reduced outages and restoration
2 times. This concludes my summary.

3 MR. BADDERS: For clarity of the record,
4 ~~Mr. Battaglia's testimony is offered in Docket 070299, the Gulf~~
5 Power docket.

6 CHAIRMAN EDGAR: Thank you.

7 MR. BADDERS: And we tender Mr. Battaglia for cross.

8 CHAIRMAN EDGAR: Are there questions from AT&T? No
9 questions. Embarq? No questions. FCTA.

10 MR. SEIVER: No questions.

11 CHAIRMAN EDGAR: No questions.

12 Mr. Wright.

13 MR. WRIGHT: Thank you, Madam Chairman. Good
14 morning.

15 CROSS EXAMINATION

16 BY MR. WRIGHT:

17 Q Good morning, Mr. Battaglia. As I understand it, you
18 are sponsoring and testifying with regard to most of Gulf's
19 Storm Hardening Plan; is that correct?

20 A That is correct.

21 Q Mr. McDaniel is sponsoring those parts that relate to
22 the third-party attacher issues; is that correct?

23 A That is correct.

24 Q Thank you. And I believe you claim at Pages 19 and
25 20 and perhaps elsewhere in your testimony that Gulf's plan is

1 cost-effective. Is that also correct?

2 A That is correct.

3 MR. WRIGHT: Thank you. I'm going to distribute an

4 ~~exhibit which consists of Gulf's responses to Panama City~~

5 Beach's interrogatories 41 through 47, Madam Chairman.

6 CHAIRMAN EDGAR: So we will mark this as Exhibit

7 Number 45.

8 (Exhibit 45 marked for identification.)

9 MR. WRIGHT: Madam Chairman, thank you for marking
10 this as Exhibit 45 for identification.

11 BY MR. WRIGHT:

12 Q Mr. Battaglia, I'd like to ask you first to turn sort
13 of towards the back of this and look at Gulf's responses to
14 Interrogatories 46 and 47. I believe that the attachments to
15 each of Gulf's responses 46 and 47 is exactly the same
16 document, but could, as a preliminary matter could you confirm
17 that they're the same document?

18 A They are the same.

19 Q Thank you. I would like to understand what this
20 document shows us. From your testimony it, it seems to show
21 the benefits, potential benefits of going to extreme wind
22 loading standards, but I'm not 100 percent clear that that's
23 what it is. Is that accurate?

24 A The calculation methodology that you're looking at,
25 that methodology is basically to try to give an estimated

1 benefits associated with, can be used for, in conjunction with
2 Grade B and with extreme wind loading as far as trying to
3 identify possible benefits.

4 ~~Q So I think the bottom line number is based on total~~
5 benefits for a major storm the expected value is about
6 \$1.1 million; is that accurate?

7 A Based on these calculation sheets, it can range up to
8 that. And, again, in looking at this particular methodology,
9 it needs to be understood that this is based on extreme, as far
10 as extreme conditions, data that we basically use from
11 Hurricane Ivan since at this point that was Gulf's worst storm
12 that it experienced. So, again, it was trying to tag off of
13 that as far as using it to, to try to get some sense of
14 possible benefits which can range up to that maximum shown.
15 But also with the understanding that it's dependent upon
16 obviously the frequencies of storms as far as, and intensity of
17 storms as far as how often you may actually see these possible
18 benefits.

19 Q Just so the record is clear, is the \$1.1 million the
20 maximum benefit as a comparison of extreme wind loading to
21 Grade C or Grade B to Grade C or what's the -- what is it that
22 would provide the \$1.1 million a year in benefits is the
23 question I'm trying to ask?

24 A In conjunction with question number 6, it is with
25 extreme wind loading criteria.

1 Q Thank you. I believe you testified in your direct
2 testimony, I think at Page 13 and also in your summary you
3 mentioned that it is Gulf's experience that the vast majority
4 ~~of damage sustained by your distribution system is due to~~
5 flying debris; is that correct?

6 A That is correct.

7 Q Thank you. Will you agree that undergrounding,
8 undergrounded facilities are, with very rare exceptions, not
9 subject to damage from wind-blown debris?

10 A Up to a point. And, again, underground facilities,
11 part of what goes on with underground facilities is typically
12 having pad-mounted switch gears, perhaps aboveground,
13 transformers aboveground, all of which could possibly be
14 damaged by wind-blown debris, which includes trees coming down
15 perhaps on an underground. So there is some possible damage
16 due to wind-blown debris even with underground.

17 Q Yes. And I understand that. That's why I qualified
18 my question by saying "with rare exceptions."

19 Will you agree that the type of damage that you just
20 described from wind-blown debris impacting underground
21 appurtenances is relatively rare?

22 A Again, based on my experience as far as saying
23 relatively rare, you have to qualify that in the sense that,
24 relatively rare in the sense that in some areas your percentage
25 of underground versus overhead may be very small. So, again,

1 the odds of wind-blown debris affecting a very small piece of
2 it wherever it may be located may be rare. But if you have an
3 area that is a high percentage underground, that may not be the
4 case.

5 Q Have you ever seen a road sign removed from its
6 foundation by the wind take a transformer or a switch cabinet
7 out of service?

8 A I have not seen a road sign, no.

9 Q Have you, have you seen a tree, where a tree has
10 fallen on a transformer cabinet?

11 A Yes, I have.

12 Q How many times?

13 A In my experience as far as from hurricane, excuse me,
14 as far as the area that I worked on, there were several small
15 areas in which it was impacted.

16 Q Can you say how many cabinets you've actually seen
17 had a tree fall on them?

18 A Personally I would say, you know, less than a half a
19 dozen.

20 Q Thank you. Will you agree that with regard to
21 potential damage from wind-blown debris, undergrounding will
22 sustain less damage and, therefore, will incur less storm
23 restoration costs as a result of being impacted by wind-blown
24 debris?

25 MR. BADDERS: I'm going to object to the form of the

1 question.

2 CHAIRMAN EDGAR: For what reason?

3 MR. BADDERS: I think there were two questions there
4 with two assumptions.

5 CHAIRMAN EDGAR: Can you rephrase?

6 MR. WRIGHT: Surely.

7 BY MR. WRIGHT:

8 Q Will you agree that the storm restoration costs
9 associated with underground facilities being impacted by
10 wind-blown debris are generally less than the storm restoration
11 costs associated with overhead facilities being impacted by
12 wind-blown debris?

13 A Gulf has not done any kind of studies that, that
14 basically based on those assumptions that I'm hearing that,
15 that show that that's the case.

16 Q Well, I understand that, and I intend to inquire
17 about studies that Gulf has and has not done. But let me ask
18 you based, the same question based on your personal experience
19 with restoration work in the field for more than 17 named
20 storms.

21 A Repeat the question, please.

22 Q Will you, based on your experience with more than 17
23 named storms, will you agree that the storm restoration costs
24 associated with underground facilities being impacted by
25 wind-blown debris are less than the storm restoration costs

1 associated with overhead facilities being impacted by
2 wind-blown debris?

3 A And, again, based on what I am understanding from the
4 ~~question, Gulf has not had the data or have I been able to try~~
5 to determine those differences between the two as far as the
6 costs impacting one or the other to a greater degree.

7 Q Mr. Battaglia, I asked you the question very
8 specifically on the basis of your personal experience. If you
9 are not able to answer it, you can say I don't know. But
10 you've answered in terms of --

11 CHAIRMAN EDGAR: Mr. Wright.

12 MR. BADDERS: I'm going to have to object.

13 MR. WRIGHT: Oh, Madam Chairman, I'm trying to get
14 the witness to answer the question on the basis of his
15 experience. He continues to revert to the basic answer that
16 Gulf has not done any studies and has not given me an answer to
17 the question I asked him based on his personal experience. I
18 would like him to answer that question. If he doesn't know, he
19 can say he doesn't know.

20 CHAIRMAN EDGAR: Mr. Badders.

21 MR. BADDERS: I believe the witness answered the
22 question. I think he answered the same question twice. And I
23 believe what he said was what he had reviewed did not indicate
24 one way or the other.

25 CHAIRMAN EDGAR: All right. Let's try it this way.

1 To the witness, please try to answer the question, if you can,
2 as the question is posed to you. And, Mr. Wright, let's try it
3 one more time and then let's move on.

4 ~~MR. WRIGHT: Yes, ma'am.~~

5 BY MR. WRIGHT:

6 Q Mr. Battaglia, I'm asking you based on your
7 experience in the field with more than 17 named storms is it
8 your experience that storm restoration costs associated with
9 underground facilities, that would be their aboveground
10 appurtenances, being impacted by wind-blown debris are less
11 than the corresponding storm restoration costs associated with
12 overhead facilities being impacted by wind-blown debris?

13 A I do not know.

14 Q Thank you. And just to clarify the record, I think,
15 I think your previous answer indicated that Gulf has not done
16 any analyses of the relative costs and benefits of underground
17 facilities versus overhead with regard to wind-blown debris
18 impacts; is that correct?

19 MR. BADDERS: I'm going to object.

20 CHAIRMAN EDGAR: Mr. Badders.

21 MR. BADDERS: I believe the record stands for itself.
22 I mean, what the witness answered in response to that is in the
23 record. And we've now heard the question three times.

24 CHAIRMAN EDGAR: We have heard the question three
25 times. I agree with that.

1 Mr. Wright, just, if you would, try to stick to
2 asking the questions and not rephrasing the answers. Let's try
3 that.

4 ~~MR. WRIGHT: I was really just trying to get clear as~~
5 to what Gulf has and has not done, Madam Chairman.

6 CHAIRMAN EDGAR: Do you have further questions for
7 this witness?

8 MR. WRIGHT: Oh, yes, ma'am.

9 CHAIRMAN EDGAR: Okay.

10 BY MR. WRIGHT:

11 Q All right. Mr. Battaglia, I'd like to ask you now to
12 look at Gulf's responses to interrogatories numbers 42, 43, 44,
13 and 45.

14 MR. WRIGHT: Madam Chairman, I would note that the
15 last page of what has been marked as Exhibit 45 is the
16 certificate from Ms. Susan Ritenour, the secretary and
17 treasurer and regulatory manager of Gulf Power who avers that
18 the answers to these interrogatories are true and correct. May
19 I simply ask the witness?

20 BY MR. WRIGHT:

21 Q Mr. Battaglia, were you involved in preparing the
22 answers to these interrogatories?

23 A Yes.

24 Q And to your knowledge the answers to each of these
25 interrogatories is true and correct; is that accurate?

1 A Yes.

2 Q Thank you. Other than the material that's presented
3 in response, I think, to interrogatories 44, 46 and 47, are you
4 ~~aware of any other benefit cost or cost-effectiveness analyses~~
5 performed by or for Gulf relative to the costs and benefits of
6 undergrounding as a storm hardening measure?

7 A No.

8 Q Thank you. Mr. Battaglia, you've been in the utility
9 business in Florida for a pretty long time; is that true?

10 A Yes, sir.

11 Q Are you familiar with Florida Power & Light Company's
12 Storm Secure Plan?

13 A To a certain degree.

14 Q Thank you.

15 MR. WRIGHT: Madam Chairman, I would like to
16 distribute as an exhibit, which I would ask be marked as 46, a
17 copy of FPL's Storm Secure Plan or initiative filed with the
18 Commission on January 30th, 2006.

19 CHAIRMAN EDGAR: Yes, sir.

20 MR. WRIGHT: Thank you.

21 CHAIRMAN EDGAR: Okay. And as Mr. Wright has
22 requested, we will mark this as Exhibit 46, FPL's Storm Secure
23 Plan, January 30, 2006.

24 (Exhibit 46 marked for identification.)

25 MR. WRIGHT: Thank you, Madam Chairman.

1 BY MR. WRIGHT:

2 Q Mr. Battaglia, have you in your experience with this
3 issue reviewed this document?

4 A Yes, to a certain degree.

5 Q Thank you. I want to simply read the witness one
6 sentence from the first page of the text of the document and
7 ask him whether he agrees with it or not. And that sentence is
8 the first sentence following the heading "Background," which
9 reads, "Two extraordinary hurricane seasons have made it clear
10 that significant changes are required in the way that Florida
11 utilities design, construct and operate their electrical
12 systems."

13 Mr. Battaglia, do you agree with that statement or
14 disagree or unable to answer?

15 A I agree.

16 Q And are you familiar that FPL's Storm Secure Plan
17 includes as a significant component of that plan certain
18 undergrounding initiatives?

19 A Yes.

20 Q And would I understand correctly that your testimony
21 addressing Gulf's consideration of undergrounding as a storm
22 hardening option is given largely at Page 9 and I think
23 continuing over on to Page 10 of your direct testimony?

24 A Correct.

25 Q Thank you. At Page 6 of Gulf's Amended Storm

1 Hardening Plan Gulf makes the statement effectively that Gulf's
2 position does not favor one over the other, meaning overhead or
3 underground, as long as Gulf is able to recover associated
4 costs. Is that an accurate characterization of Gulf's plan?

5 A And, again, repeat for me which page you were on.

6 Q My notes indicate that it was on Page 6.

7 I'm sorry. Perhaps that's your testimony, Page 6.

8 A No. You are correct. It's on Page 6. I saw it, and
9 that's correct.

10 MR. WRIGHT: All right. Thank you. I apologize for
11 the confusion, Madam Chairman.

12 BY MR. WRIGHT:

13 Q With regard to Gulf's recovery of associated costs,
14 would it also be Gulf's position that Gulf's Storm Hardening
15 Plan and all of Gulf's policies should send accurate value or
16 price signals to Gulf's customers?

17 A Please repeat that question again. I'm not sure I
18 understand it.

19 Q Would it be Gulf's position that Gulf's Storm
20 Hardening Plan and all of Gulf's policies should, to the
21 maximum extent feasible, send accurate value or price signals
22 to Gulf's customers?

23 A As far as providing value and what Gulf tries to do
24 in its Storm Hardening Plan, yes. As far as cost signals, I'm
25 not sure I understand what you're referring to there.

1 Q Okay. I'll try to explain. Will you agree that to
2 the extent that undergrounding provides benefits, measurable
3 dollar benefits to Gulf and its general body of customers,
4 ~~those benefits should be recognized in calculating who pays how~~
5 much of the cost of any underground projects?

6 A And, again, it sounds like you're making the
7 assumption that there are benefits associated with underground
8 in conjunction with storm hardening, and, again, you know, Gulf
9 has nothing to indicate that at this time. But based on your
10 question as worded in conjunction with the other part, I would
11 have to agree.

12 Q Thank you. Are you familiar with Commission Rule
13 25-6.115 which relates to contributions in aid of construction
14 for undergrounding?

15 A To a certain degree, yes.

16 Q Are you familiar with the provision of that rule that
17 requires each utility to include in its CIAC calculations the
18 estimated differences between the storm restoration costs
19 including other operational costs, or I think it's the other
20 way around, operational costs including storm restoration costs
21 associated with overhead and underground facilities?

22 A And, again, please repeat the question.

23 Q Are you familiar with the provision of Rule
24 25-6.115 that requires utilities to include in their CIAC
25 computations the estimated difference in operational costs,

1 including storm restoration costs, associated with overhead and
2 underground facilities?

3 A To a certain degree, yes.

4 Q My question -- that was a predicate question, Madam
5 Chairman.

6 And the question is has Gulf done the analysis, any
7 specific cost-benefit analyses or cost-effectiveness analyses
8 to value those factors articulated in the Commission's rule?

9 A Gulf has currently underway processes to capture
10 those costs. But up to this point Gulf does not have the
11 needed information associated with storm restoration to
12 basically make those quantitative analyses as far as the
13 differences in the operational costs between the underground
14 and the overhead system.

15 Q So just so the record is clear, is the specific
16 answer to my specific question, no, but you're in the process
17 of conducting studies?

18 A Gulf is in the process of collecting the needed data
19 associated with those. As far as conducting a study at this
20 time, the answer is no.

21 Q Thank you. Excuse me. At Page 10 of your direct
22 testimony you testify that Gulf is conducting several
23 distribution pilot projects in potential storm surge areas. Do
24 you recall that testimony?

25 A And, again, please repeat. It's in Page 10 of the

1 direct?

2 Q Page 10, beginning at Line 8.

3 A Yes, I see that.

4 Q Thank you. Now your testimony states that for a

5 further description of those pilot projects one should look at
6 Section 6.0 of the plan, which I think is on Page 24. Is that
7 accurate?

8 A Are you going to Page 24 of my direct testimony
9 versus Appendix 6 in the plan?

10 Q I'm sorry. Section 6 of the plan, which I think is
11 on Page 24 of your amended Storm Hardening Plan.

12 A And your question is?

13 Q I just want to make sure we're in the same place.

14 A Yes, we are.

15 Q Okay. Thank you.

16 My first question is where were these pilot projects
17 implemented?

18 A And again I apologize, but clarify as far as pilot
19 projects. Again, on Page 24 what I'm looking at is the table
20 that shows the extreme wind loading projects.

21 Q Oh, excuse me. If you would look at Section 6.1,
22 which is the final paragraph on Page 24 at least of the plan
23 that I have, that is what I understood Page 10 of your direct
24 testimony to be referring to. If my understanding is
25 incorrect, please set me straight.

1 CHAIRMAN EDGAR: Well, and on that, if I may
2 interject, it is 12:00. I had commented at the beginning of
3 the proceeding that we would be breaking for lunch around
4 12:00, and this seems like perhaps as good a time as any within
5 this couple of minute time period. So if there is no
6 objection, I would like to propose that we stop at this point.
7 We will take a lunch break; come back at 1:30. And when we
8 come back, we will continue questioning with this witness.
9 And, Mr. Wright, you will have the opportunity to continue, and
10 then, of course, see if there are any questions from staff and
11 then move to redirect. And as I mentioned earlier, I do have
12 another matter I need to attend to. So Commissioner Carter
13 will be presiding when you come back at 1:30, and I will see
14 you all later. And with that, we are on break.

15 (Lunch recess taken.)

16 (Transcript continues in sequence with Volume 2.)

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