

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET NO. 130040-EI**

IN RE: TAMPA ELECTRIC COMPANY'S  
PETITION FOR AN INCREASE IN BASE RATES  
AND MISCELLANEOUS SERVICE CHARGES



**DIRECT TESTIMONY AND EXHIBIT  
OF  
EASEL L. CARLSON JR.**

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AFD	<u>1</u>
APA	<u>1</u>
ECO	<u>10</u>
ENG	<u>1</u>
GCL	<u>1</u>
IDM	<u>   </u>
TEL	<u>   </u>
CLK	<u>1</u>

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OF  
EDEL L. CARLSON, JR.

1                                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **PREPARED DIRECT TESTIMONY**

3                                   **OF**

4                                   **EDSEL L. CARLSON, JR.**

5  
6   **Q.** Please state your name, business address, occupation and  
7       employer.

8  
9   **A.** My name is Edsel L. Carlson, Jr. My business address is  
10       702 North Franklin Street, Tampa, Florida 33602. I am  
11       the Risk Manager for Tampa Electric Company ("Tampa  
12       Electric" or "company").

13  
14   **Q.** Please provide a brief outline of your educational  
15       background and business experience.

16  
17   **A.** I graduated from the University of South Florida with a  
18       Bachelor of Arts degree in Criminology and from Saint Leo  
19       University with a Masters of Business Administration  
20       degree. I hold the Associate in Risk Management  
21       designation from Insurance Institute of America and a  
22       Fellow in Risk Management designation from Global Risk  
23       Management Institute, Inc. I have approximately 20 years  
24       of experience working in the Risk Management Department,  
25       where I have held the positions of Claims Adjuster and

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Risk Analyst. I have held my present position as Risk Manager since 2000.

**Q.** Have you previously testified before the Florida Public Service Commission ("Commission" or "FPSC")?

**A.** Yes. I testified before the Commission in Docket No. 080317-EI, Petition for Rate Increase by Tampa Electric Company.

**Q.** What is the purpose of your direct testimony?

**A.** My direct testimony supports the need for Tampa Electric's annual storm damage accrual and an increase in the target amount for its storm damage reserve.

**Q.** Have you prepared an exhibit to support your direct testimony?

**A.** Yes, Exhibit No. \_\_\_\_ (ELC-1) entitled "Exhibit of Edsel L. Carlson, Jr." was prepared under my direction and supervision. It consists of one document, "List Of Minimum Filing Requirement Schedules Sponsored Or Co-Sponsored By Edsel L. Carlson, Jr.".

1   **Q.**   Please summarize Tampa Electric's proposed annual accrual  
2           and target amount for its storm damage reserve.

3  
4   **A.**   Based upon Tampa Electric's history and experience,  
5           increases in its asset values and the results of a  
6           detailed storm study conducted by Tampa Electric's  
7           witness Steven P. Harris of EQECAT, an affiliated company  
8           of ABS Consulting, both of which are subsidiaries of the  
9           ABS Group of Companies, Inc. ("EQECAT"), Tampa Electric  
10          requests that it be allowed to maintain the current \$8  
11          million annual accrual and increase the target reserve  
12          amount from \$64 million to \$100 million. The proposed  
13          accrual is designed to manage the cost of damage to Tampa  
14          Electric's uninsured transmission and distribution  
15          ("T&D") assets and property deductibles associated with  
16          damage to insured assets such as substations and  
17          generating facilities. This conclusion was based on  
18          three fundamental objectives that were considered  
19          essential by Tampa Electric as it evaluated its needs for  
20          a storm damage reserve: 1) achieve an effective balance  
21          of rate stability and long-term cost for customers; 2)  
22          build a reserve sufficient to cover the majority of loss  
23          events in order to mitigate the need for a surcharge to  
24          customers immediately after such an event; and 3) design  
25          a reserve to cover the higher probability events and not

1 the low probability high severity events.

2

3 **Q.** Please describe the history of Tampa Electric's existing  
4 storm reserve.

5

6 **A.** Prior to Hurricane Andrew in 1992, Tampa Electric was  
7 able to purchase commercial insurance coverage for its  
8 T&D facilities. Shortly after Hurricane Andrew, this  
9 insurance became unavailable, leaving utilities in  
10 Florida with crucial assets that were uninsurable.  
11 Florida's investor-owned utilities ("IOUs") approached  
12 the Commission with a proposal to establish a  
13 self-insurance program by creating a reserve for each  
14 utility to provide for uninsured property losses.

15

16 A limited proceeding was held in early 1994. In  
17 Commission Order No. PSC-94-0337-FOF-EI, the FPSC  
18 authorized Tampa Electric a \$4 million annual storm  
19 damage accrual and required the submittal of a storm  
20 damage study. In Tampa Electric's 2008 base rate  
21 proceeding, Docket No. 080317-EI, the Commission  
22 increased the annual storm damage accrual to \$8 million  
23 and adjusted the target amount of the reserve to \$64  
24 million and provided that the accrual could be  
25 readdressed if the target amount was achieved, which has

1 not occurred as I later describe in my testimony.

2

3 **Q.** What is Tampa Electric's history of expense charges  
4 against its reserve?

5

6 **A.** Prior to 2004, only named storms and annual expenses  
7 exceeding \$3.5 million (the amount of the insurance  
8 deductible available at the time) could be charged to the  
9 reserve. As a result, the reserve that was established  
10 in 1994 accrued \$4 million annually without any charges  
11 against the reserve until 2004. Between August 13, 2004  
12 and September 26, 2004, Hurricanes Charley, Frances and  
13 Jeanne hit Tampa Electric's service territory causing  
14 damage to its system. The cost to repair the system was  
15 approximately \$73.4 million. At that time, the company's  
16 storm damage reserve balance was only \$42.3 million, an  
17 amount insufficient to cover the entire damage. The  
18 Commission, in 2005, approved incremental storm  
19 restoration costs, which would be recovered from the  
20 storm reserve. In 2008, Tampa Electric charged  
21 approximately \$1.6 million against the reserve for losses  
22 associated with Tropical Storm Fay, in 2011 approximately  
23 \$1.9 million was charged for restoration costs arising  
24 from the April No Name Storm and in 2012 approximately  
25 \$1.2 million was charged for Tropical Storm Debby.

1   **Q.**   Did Tampa Electric seek a surcharge to recover the  
2           damages in excess of the reserve in 2004, as did other  
3           Florida IOUs?

4  
5   **A.**   No.           In   Order   No.   PSC-05-0675-PAA-EI   issued  
6           June 20, 2005, the Commission approved a Stipulation and  
7           Settlement ("the Stipulation") between Tampa Electric,  
8           the Office of Public Counsel and Florida Industrial Power  
9           Users Group which avoided imposing a customer storm  
10          surcharge as the result of the 2004 hurricanes.   The  
11          Stipulation allowed the company to charge \$34.5 million  
12          of the storm damage costs to the reserve and capitalize  
13          the remaining storm restoration costs.   After this  
14          charge, the reserve had a balance of \$7.8 million.

15  
16   **Q.**   What is Tampa Electric's current status regarding  
17          insurance and its storm reserve?

18  
19   **A.**   Traditional commercial property insurance for T&D assets  
20          is still not available in the market today at deductible  
21          levels and prices that would make it cost effective.   I  
22          recently obtained a price indication from the company's  
23          property insurance broker who indicated that for a policy  
24          with \$50 million in limits and a \$100 million deductible,  
25          the cost would be between \$6 million and \$7.5 million



1           annually. Clearly, this is not cost effective. Since  
2           the last base rate proceeding the company has continued  
3           to accrue \$8 million annually. As of December 31, 2012,  
4           the storm damage reserve balance is approximately  
5           \$50,209,000.

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**Q.** What is the overall regulatory framework considered when  
evaluating the storm-related accrual amount?

10 **A.** Electric utilities in Florida will incur costs to restore  
11 service after tropical storms and hurricanes. These  
12 costs are an integral part of the cost of providing  
13 electric service in Florida, a region susceptible to  
14 tropical storms and hurricanes. It is essential that  
15 utilities realistically plan for these events and reserve  
16 sufficient funds so that surcharges are less likely to be  
17 required when storm damage occurs. Adequate accruals  
18 minimize the need for surcharges in the future.

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The Commission has recognized the need for storm  
restoration cost recovery and previous actions  
acknowledge this and established a regulatory framework  
for such cost recovery consisting of three major  
components: 1) an annual storm accrual, adjusted over  
time as circumstances change; 2) a storm reserve adequate

1 to accommodate most, but not all storm years; and 3) a  
2 provision for utilities to seek recovery of costs that go  
3 beyond the storm reserve. These three components act  
4 together to allow Florida utilities, over time, to  
5 recover the full costs of storm restoration, while at the  
6 same time balancing the impact on customers. The storm  
7 damage reserve is especially essential to utilities such  
8 as Tampa Electric with a relatively small service  
9 territory. Unlike Florida Power & Light and Progress  
10 Energy Florida, who have a substantially larger service  
11 territory with assets and customers spread throughout the  
12 state, Tampa Electric has a higher probability that if a  
13 storm hits the service territory, a higher percentage of  
14 customers will be affected. The storm damage reserve  
15 methodology has functioned as designed and the  
16 Commission's basic approach has proven to be a  
17 cost-effective way to finance storm damage risk while  
18 keeping customer impacts stabilized.

19  
20 **Q.** Why does Tampa Electric believe it is important to  
21 mitigate the need for storm damage surcharges?

22  
23 **A.** It is important to mitigate, if not avoid altogether,  
24 imposing a storm surcharge subsequent to storms because a  
25 surcharge compounds the effects of the storm on customers

1 at a time when they are likely to have experienced  
2 property damage from the same event. This is especially  
3 true in Tampa Electric's condensed service territory,  
4 since there is a higher probability that a higher  
5 percentage of customers will be affected by the same  
6 storm event.

7

8 **Q.** After three hurricanes hit Tampa Electric's service  
9 territory in 2004, was the storm damage reserve adequate  
10 to cover the actual costs for system restoration and  
11 repairs?

12

13 **A.** No. As I indicated above, the reserve balance at that  
14 time was \$42.3 million and the costs associated with  
15 damages were \$73.4 million. The Stipulation allowed the  
16 company to avoid a negative reserve balance and customer  
17 surcharge. It is important to note that the damage  
18 experienced in 2004 was small relative to what it could  
19 have been if any of these three storms had hit Tampa  
20 directly.

21

22 **Q.** Does this indicate a failure in the Commission's current  
23 regulatory framework?

24

25 **A.** No, quite the opposite. In general, I think it supports

1 the conclusion that the current regulatory framework is  
2 sound. For the most part, the damages Tampa Electric  
3 incurred in 2004 were of a nature that the reserve is  
4 designed to cover and the Commission has shown  
5 flexibility in permitting customer surcharges when  
6 companies' reserves are inadequate. The annual accruals  
7 would be adequate to cover the restoration costs  
8 associated with events other than the low probability  
9 high severity storms. However, the increase in asset  
10 balances that I later describe, as well as the expected  
11 impacts from a Category 1 or 2 storm, support the  
12 company's recommendation that the target reserve level  
13 should be adjusted.

14  
15 The Commission recognized the need to periodically  
16 reexamine accrual and reserve levels in Order No.  
17 PSC-07-0444-FOF-EI issued in May 2007, and the Commission  
18 required IOUs to conduct a new storm damage study every  
19 five years. Tampa Electric, in this proceeding, is  
20 supplying the FPSC with its most recent study completed  
21 in 2013. Witness Harris, who conducted the study for  
22 EQECAT, details the results of this study in his direct  
23 testimony.

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25 **Q.** Why was EQECAT selected to conduct the storm damage

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study?

**A.** Tampa Electric selected EQECAT because of their experience and qualifications. They have been conducting storm loss analyses in Florida since 1993, not only for Tampa Electric but also for Florida Power & Light, Progress Energy Florida and Gulf Power Company. EQECAT uses an advanced computer model simulation program, USWIND™, which is one of only four models evaluated and determined acceptable by the Commission on Hurricane Loss Projection Methodology for projecting hurricane loss costs. Witness Harris has over 30 years of experience in conducting various risk assessments for utilities throughout the United States, the Caribbean and Europe.

**Q.** What direction was provided by Tampa Electric to EQECAT in the preparation of the study?

**A.** Consistent with Order No. PSC-07-0444-FOF-EI, issued on May 23, 2007, the company directed EQECAT to perform analyses of Tampa Electric's T&D assets for both hurricane and tropical storm loss exposures. Tampa Electric asked EQECAT to conduct the analysis on a near-term view of hurricane risk because there is a consensus among experts that the Atlantic Basin, which

1 includes Florida, is in a period of increased storm  
2 activity and the near-term analysis is an appropriate  
3 indicator of Tampa Electric's exposure. The company also  
4 requested that EQECAT include insured Tampa Electric  
5 property such as generating plants and substations to  
6 determine the amount of un-recovered property  
7 deductibles. Finally, Tampa Electric asked EQECAT to  
8 model and analyze the performance of the storm reserve to  
9 assist in estimating the expected annual reserve balance  
10 over a multi-year period.

11  
12 **Q.** What conclusions did EQECAT reach regarding the expected  
13 annual long-term cost for service restoration and repair  
14 of storm damage to Tampa Electric's assets?

15  
16 **A.** As described in the direct testimony of witness Harris,  
17 the analysis concludes that the expected average annual  
18 cost for windstorm losses in the current environment of  
19 increased storms is approximately \$21.9 million. This  
20 represents average losses per year over time. Of course,  
21 there will be years where there are no losses like 2006,  
22 2007, 2009 and 2010, but there will also be years where  
23 losses will be higher like 2004. Over time, losses will  
24 average about \$21.9 million per year; the loss could be  
25 in excess of \$600 million as demonstrated by witness

1 Harris. However, the company recognizes the need to  
2 balance an adequate reserve amount with the rate impact  
3 associated with raising the storm accrual to cover high  
4 severity low probability events and is proposing that the  
5 company maintain its current reserve accrual amount of \$8  
6 million annually.

7  
8 **Q.** Does the study's conclusions support a specific target  
9 reserve level?

10  
11 **A.** No. There is no single correct target reserve balance.  
12 The study does supply a table that shows the probability  
13 of loss exceeding a particular dollar amount in any given  
14 year. The target reserve level depends largely on  
15 tolerance for risk. The company believes the target  
16 reserve level should be set to cover most storm events  
17 (higher probability and lower severity events) but not  
18 all storms (low probability and high severity). The  
19 higher the storm damage reserve balance level, the lower  
20 the probability that a storm will exceed the reserve and  
21 thus less likely the company would need to request a  
22 surcharge from customers at a time that they are likely  
23 suffering from the hardships associated with storm  
24 damages.

25

1 **Q.** How were the proposed target reserve level and annual  
2 accrual determined?

3  
4 **A.** The total targeted amount of the reserve and the annual  
5 accrual to reach the target is a function of the total  
6 loss that could occur to the company's system as a result  
7 of storm activity and the probability of occurrences of  
8 various levels of storm activity in Tampa Electric's  
9 service area. Once EQECAT assessed these values and  
10 probabilities, professional judgment was applied to  
11 determine an appropriate level for the annual accrual and  
12 target level for the reserve. In applying this judgment,  
13 the company considered the Commission's rationale and  
14 basis for its decision to increase the target reserve  
15 level and annual accrual in the last base rate  
16 proceeding. The company also considered the current  
17 reserve balance and the need to balance rate stability  
18 and long-term costs to customers. In addition, the  
19 company considered the increase in T&D asset value from  
20 the previous base rate proceeding. It is fair to say no  
21 one knows when storm damage will occur and the exact  
22 extent of damage, but it is reasonably certain that  
23 storms will cause damage to Tampa Electric's system in  
24 the future and the company should make reasonable plans  
25 to provide for the costs of this damage with a minimal



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impact to customers after a storm occurs.

**Q.** How were the results of the EQECAT study used to determine the requested annual accrual and targeted total reserve amounts?

**A.** The EQECAT study was an important tool that helped assess storm damage risk. As previously explained, the study results were one of several factors that the company considered in developing the requested annual accrual and targeted total reserve amounts. The company carefully considered the overall O&M expense profile.

The study shows the expected annual loss to be higher than the requested annual accrual and thus could support a request for a higher accrual. The study's reserve analysis shows that at the requested reserve level the expected balance at five years would be negative, but within a manageable amount.

When developing the annual accrual, the company took into account the Commission's rationale in the previous base rate proceeding, where the company's annual accrual and target amount were increased to the current levels. The previous study showed an expected annual loss amount to

1 be \$17.8 million and the company requested a \$20 million  
2 annual accrual. The Commission approved an increase in  
3 the accrual from \$4 million to \$8 million and increased  
4 the target from \$55 million to \$64 million. Since that  
5 decision, the reserve balance has increased from \$21.6  
6 million to \$50.2 million. However, as previously stated  
7 this reserve balance would be insufficient to cover the  
8 costs if the company were to experience a year like 2004  
9 again.

10  
11 Based on the proposal in this case, the result will  
12 likely be that the reserve will not grow as large as the  
13 proposed new target but should be adequate to maintain  
14 the reserve at a manageable level as long as the company  
15 continues to have favorable loss experience. Given Tampa  
16 Electric's desire to manage its cost profile and its  
17 ability to seek recovery of storm damage costs that may  
18 exceed the reserve, the current \$8 million annual accrual  
19 is appropriate.

20  
21 In establishing the target reserve amount the company  
22 took into account the increase in asset value from the  
23 previous study of \$3.4 billion to \$4.1 billion. The  
24 company also considered the Hurricane Landfall Analyses  
25 in the EQECAT Study, which shows that a \$100 million

1 reserve will cover the majority of the Category 1 and  
2 Category 2 storms. Tampa Electric's target amount should  
3 be increased to \$100 million to cover the higher  
4 frequency lower severity storms events such as Category 1  
5 and Category 2 storms. This target reserve level should  
6 adequately protect customers from the chance of rate  
7 increases after a storm event.

8  
9 **Q.** How can the company ensure that the requested annual  
10 accrual continues to be appropriate over time?

11  
12 **A.** Based on the current study and associated probabilities,  
13 there is a 32 percent probability that a reserve based on  
14 an \$8 million annual accrual will be depleted by the end  
15 of five years. To ensure the reserve accrual and target  
16 are still reasonable, the company will submit an updated  
17 study for Commission review within five years as  
18 required.

19  
20 **Q.** How does the proposed reserve compare to insurance  
21 premiums?

22  
23 **A.** The study conducted by EQECAT that was used to establish  
24 a proposed reserve is similar to studies insurers use as  
25 a foundation to develop premium charges. The expected

1 annual loss amount is the starting point an insurer uses  
2 to calculate an annual premium. Thus, in determining an  
3 annual accrual amount, Tampa Electric's approach is  
4 similar to that used by an insurance company to determine  
5 a premium. This is appropriate, considering that the  
6 reason the storm damage reserve and accrual exist is that  
7 insurance is not available at cost effective pricing for  
8 T&D assets. The advantage of the reserve is that the  
9 annual accrual, in a year where no losses occur, will  
10 remain in the reserve, in contrast to insurance where,  
11 even if there are no losses, the insurer retains the  
12 premiums paid. The obvious advantage of insurance is  
13 that if you have a large loss event, the insurance policy  
14 will pay the loss up to the limits of the policy with  
15 usually no other obligation on the insured's part. In  
16 contrast, a reserve may be insufficient to absorb the  
17 loss, particularly if it occurs before the reserve has a  
18 chance to accumulate. The practical reality, however, is  
19 that insurance is not available at cost-effective pricing  
20 for T&D assets in wind-exposed locations like Florida.

21  
22 **Q.** What is the status of Tampa Electric's efforts to obtain  
23 commercial T&D Insurance?

24  
25 **A.** The property insurance markets for T&D insurance coverage

1 remain very restrictive, especially for Gulf and Atlantic  
2 coast locations. In the last several years, Tampa  
3 Electric has requested a price indication from its  
4 property insurance broker for commercial property  
5 insurance to cover its T&D facilities from storm related  
6 damage. Based on discussions with the broker, property  
7 insurance for the company's T&D facilities at reasonable  
8 costs and deductible levels continues to be unavailable.

9  
10 **Q.** Does the company have property insurance on other  
11 portions of its property?

12  
13 **A.** Yes, Tampa Electric has property insurance on all of its  
14 assets with the exception of its T&D assets. The company  
15 has included its non-recovered windstorm deductible  
16 losses for substation and generating assets as a part of  
17 its proposed \$8 million annual accrual.

18  
19 **Q.** Please summarize your direct testimony.

20  
21 **A.** Following Hurricane Andrew, property insurance coverage  
22 for T&D assets became unavailable in Florida. To provide  
23 for uninsured storm losses, Tampa Electric accrued  
24 annually to a reserve \$4 million from 1994 to 2008 and \$8  
25 million from 2008 to present. Tampa Electric's annual

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storm damage accrual should remain at \$8 million in order to build its storm damage reserve to a level sufficient to provide for most, but not all, storms and the target reserve balance should be increased to \$100 million. While the EQECAT study supports a larger accrual, the company acknowledges the need to balance rate stability and long-term costs to customers and therefor a larger accrual has not been requested.

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

**A.** Yes, it does.

TAMPA ELECTRIC COMPANY  
DOCKET NO. 130040-EI  
WITNESS: CARLSON

EXHIBIT

OF

EDSEL L. CARLSON, JR.

Table of Contents

DOCUMENT NO.	TITLE	PAGE
1	List Of Minimum Filing Requirement Schedules Sponsored Or Co-Sponsored By Edsel L. Carlson, Jr.	23



TAMPA ELECTRIC COMPANY  
DOCKET NO. 130040-EI  
EXHIBIT NO. \_\_\_\_ (ELC-1)  
WITNESS: CARLSON  
DOCUMENT NO. 1  
PAGE 1 OF 1  
FILED: 04/5/2013

LIST OF MINIMUM FILING REQUIREMENT SCHEDULES  
SPONSORED OR CO-SPONSORED BY EDESEL L. CARLSON, JR.

MFR Schedule	Title
B-21	Accumulated Provision Accounts - 228.1, 228.2 and 228.4