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May 21, 2018

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Petition for recovery of costs associated with named tropical systems during the 2015, 2016 and 2017 hurricane seasons and replenishment of storm reserve subject to final true-up, by Tampa Electric Company
FPSC Docket No. 20170271-EI

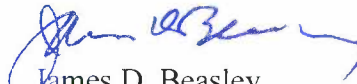
Dear Ms. Stauffer:

Attached for filing in the above docket on behalf of Tampa Electric Company are the following:

1. Direct Testimony and Exhibit (GRC-1) of Gerard R. Chasse
2. Direct Testimony and Exhibit (JSC-1) of Jeffrey S. Chronister
3. Direct Testimony and Exhibit (SEY-1) of S. Beth Young

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

JDB/pp
Attachment

cc: All Parties of Record (w/attachment)



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20170271-EI

IN RE: PETITION FOR RECOVERY OF COSTS
ASSOCIATED WITH NAMED TROPICAL SYSTEMS
DURING THE 2015, 2016, AND 2017 HURRICANE
SEASONS AND REPLENISHMENT OF STORM RESERVE
SUBJECT TO FINAL TRUE-UP, TAMPA ELECTRIC
COMPANY.

DIRECT TESTIMONY AND EXHIBIT
OF
GERARD R. CHASSE

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **GERARD R. CHASSE**

5
6 **I. INTRODUCTION**

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

8
9 **A.** My name is Gerard R. Chasse. My business address is 702
10 N. Franklin Street, Tampa, Florida 33602. I am employed
11 by Tampa Electric Company ("Tampa Electric" or "the
12 company") as Vice President, Electric Delivery
13 Department.

14
15 **Q.** Please describe your duties and responsibilities in that
16 position?

17
18 **A.** My duties and responsibilities include the oversight of
19 all functions within Tampa Electric's Electric Delivery
20 Department including the planning, engineering,
21 operation, maintenance and restoration of the
22 transmission, distribution and substation systems,
23 operation of the distribution, and energy control
24 centers, administration of tariffs and compliance,
25 execution of the company's Transmission and Distribution

1 ("T&D") strategic solutions including advanced metering
2 infrastructure, outdoor and streetlight LED conversion
3 project, and advanced distribution management system,
4 line clearance activities, warehouse and stores, and
5 fleet and equipment. As it relates to this filing, I am
6 responsible for the safe, timely, and efficient
7 implementation of Tampa Electric's storm restoration
8 plan.

9
10 **Q.** Please describe your educational background and
11 professional experience?

12
13 **A.** I received a Bachelor of Science degree in electrical
14 engineering from the University of Maine in 1990 and
15 became a licensed professional engineer in 1996. I have
16 held numerous positions of increasing responsibility in
17 Bangor Hydro Electric and its successor, Emera Maine,
18 including Substation Engineer, Planning Engineer,
19 Substation Operations Supervisor, Manager of Engineering,
20 Manager of Assets, Project Manager for an international
21 transmission line, Vice-President of Operations,
22 Executive Vice-President, and President of Emera Maine
23 from 2010 through 2015. In 2015 and 2016, I was Vice-
24 Chair of the Emera Maine Board. My position was also
25 focused on renewable strategy, grid modernization

1 strategy, and customer strategy for Emera companies from
2 2015 to 2016 before my current role.

3
4 **Q.** What is the purpose of your direct testimony?

5
6 **A.** The purpose of my direct testimony is to describe Tampa
7 Electric's Disaster Preparedness and Recovery Plan and to
8 provide details of the work and costs incurred by Tampa
9 Electric's T&D organization during the 2015, 2016 and 2017
10 storm seasons in connection with the five named tropical
11 storms: Tropical Storm ("TS") Erika, TS Colin, Hurricane
12 Hermine, Hurricane Matthew and Hurricane Irma. These five
13 named tropical storms required storm preparation and
14 restoration activities. My direct testimony supports the
15 reasonableness and prudence of the T&D storm restoration
16 costs for which Tampa Electric is seeking recovery.

17
18 **Q.** Are you sponsoring any exhibits in this proceeding?

19
20 **A.** Yes, I am. Exhibit No. GRC-1, consisting of one document
21 entitled "Tampa Electric's Recoverable Restoration Costs
22 by Storm, Function and Cost Element" was prepared under
23 my direction and supervision. This Exhibit details the
24 company's recoverable storm costs by function and
25 detailed category which supports the necessary and

1 prudent restoration costs Tampa Electric incurred in
2 restoring the electrical systems in the five named
3 tropical storms in this proceeding.
4

5 **II. TAMPA ELECTRIC'S DISASTER PREPAREDNESS AND RECOVERY PLAN**

6 **Q.** What is the objective of Tampa Electric's Disaster
7 Preparedness and Recovery Plan?
8

9 **A.** The objective of Tampa Electric's Disaster Preparedness
10 and Recovery Plan is to safely, efficiently and
11 effectively restore power to customers as quickly as
12 practical during and following a severe weather event.
13 This is accomplished in accordance with all regulatory,
14 legislative and industry rules, including the
15 Occupational Safety and Health Administration ("OSHA").
16 It is accomplished in close coordination with all
17 applicable local, regional, state and federal
18 governmental agencies. It is also accomplished according
19 to a well-established and always improving plan.
20 Facilities, equipment and critical customers are restored
21 using both a predetermined prioritization process and a
22 methodology to restore the largest number of customers as
23 quickly as possible. The plan is readily scalable to the
24 size and impacts of the event and employees are regularly
25 trained in their roles within the plan.

1 The scale of the implementation of the plan may extend on
2 a small scale to only internal resources and possibly
3 local contractor resources all the way to opening multiple
4 incident bases, acquiring resources from regional mutual
5 aid groups ("RMAG") across the country, as well as
6 affiliates and non-RMAG contractor resources.
7

8 **Q.** Please describe the key components of Tampa Electric's
9 Disaster Preparedness and Recovery Plan?
10

11 **A.** Tampa Electric's Disaster Preparedness and Recovery Plan
12 consists of a standard management hierarchy and set of
13 procedures for managing temporary events of any size called
14 an incident command structure ("ICS"). ICS includes
15 procedures to select and form temporary management
16 hierarchies to manage and control funds, personnel,
17 facilities, resources and communications. It is designed
18 to be used or applied from the time an event is anticipated
19 until the requirement for additional management and
20 operations no longer exist. It provides logistical and
21 administrative support to operational staff allowing them
22 to focus on addressing the event. It is cost effective by
23 avoiding duplication of efforts and maximizing utilization
24 of available resources.
25

1 As a nationally recognized standardized approach to the
2 command, control and coordination of emergency response,
3 ICS provides for a common terminology and clear
4 communications within which responders from multiple
5 agencies public and/or private can be effective. One of
6 its strengths is the ability to expand or contract in scope
7 to meet the needs of the event to which it is applied. As
8 ICS is standardized nationally and utilized by virtually
9 all first responders in the company's service territory, it
10 allows for effective and efficient coordination of response
11 to events between Tampa Electric and the first responders
12 of the communities the company serves.

13
14 **Q.** Please explain the function of ICS as it relates to Tampa
15 Electric's Disaster Preparedness and Recovery Plan?

16
17 **A.** ICS consists of five major functional areas: Command,
18 Operations, Planning, Logistics and Finance.

19
20 **Command (or Command Staff):** Where the event objectives,
21 strategies and priorities are set and overall
22 responsibility for the event resides. For small events,
23 the Incident Commander may be the only position staffed.
24 Other command level positions include Public Information
25 Officer (normally Corporate Communications), Safety and

1 representatives from other major groups (Environmental,
2 Energy Supply, Emergency Management - Business Continuity,
3 Customer Experience, Human Resources, etc.). The Incident
4 Commander has overall responsibility for managing the
5 incident.

6
7 **Operations:** Responsible for developing and implementing
8 tactics to accomplish the event objectives (restore
9 service) lies within this area. Operations is led and
10 staffed by individuals with the greatest tactical expertise
11 in dealing with the problem at hand. Tactical response
12 resources (crews, equipment, material, etc.) are organized,
13 assigned and supervised by the Operations section.

14
15 **Planning:** Responsible for collecting, evaluating and
16 displaying event intelligence and information. Also
17 required to prepare and document Incident Action Plans,
18 tracking resources assigned to the event, maintaining event
19 documentation and developing plans for demobilization.

20
21 **Logistics:** Responsible for insuring that there are adequate
22 resources (personnel, supplies and equipment) for meeting
23 the event objectives. Logistics is responsible for all
24 services and support needs, including:

- 25 • Ordering, obtaining, maintaining and accounting for

- 1 essential personnel, equipment and material
- 2 • Providing communication planning and resources
- 3 • Setting up food services for responders
- 4 • Setting up and maintaining event facilities (Incident
- 5 Bases, housing, etc.)
- 6 • Providing support transportation
- 7 • Providing medical services to event personnel

8

9 **Finance:** All event specific financial management is handled

10 within this area. Responsible for:

- 11 • Contract negotiation and monitoring
- 12 • Timekeeping
- 13 • Cost analysis
- 14 • Compensation for injury or damage to property
- 15 • Documentation for reimbursement (under mutual aid
- 16 agreements and assistance agreements)

17

18 **Q.** Does Tampa Electric periodically update its Disaster

19 Preparedness and Recovery Plan?

20

21 **A.** Yes, the company updates the plan on an annual basis.

22 Each year Tampa Electric's Corporate Emergency Management

23 revises the plan based on new improvements identified,

24 organizational changes or changes to personnel. In

25 particular, subsequent to Hurricane Irma and due to its

1 size and scale of required response, a detailed lessons
2 learned exercise was conducted throughout the company and
3 suggestions for improvements were gathered and many have
4 subsequently been implemented.

5
6 **Q.** What other steps does Tampa Electric take to prepare for
7 each storm season?

8
9 **A.** Tampa Electric regularly takes a number of steps each
10 year to prepare the company and team members for each
11 storm season including implementing the company's storm
12 hardening plan, mock storm exercises, communication with
13 local, county, and state emergency response centers,
14 implementation of the company's vegetation management
15 plan, increasing of inventory levels for T&D equipment
16 that has the potential to be damaged, and implementation
17 of new technologies to make storm management and execution
18 more efficient.

19
20 **Q.** Would you provide some examples of things that the company
21 has done recently to improve its Disaster Preparedness
22 and Recovery Plan?

23
24 **A.** The company has several examples that have been done
25 recently to improve Tampa Electric's Disaster

1 Preparedness and Recovery Plan. The company has initiated
2 additional Fold Out Rigid Temporary Shelters ("FORTS") to
3 provide command center facilities at incident bases. Out
4 of the suggested improvements following Hurricane Irma,
5 most of these suggestions are within the Electric Delivery
6 Department with over 140 of these suggestions having been
7 already implemented into the company's Disaster
8 Preparedness and Recovery Plan. The remaining
9 improvements are still undergoing evaluation for
10 implementation and are being actively tracked. Tampa
11 Electric's Customer Experience Department has also
12 implemented lessons learned identified from Hurricane
13 Irma and is on schedule to complete many more prior to
14 the peak of the 2018 hurricane season. Tampa Electric's
15 Support Services Department also identified suggested
16 improvements and have initiated approximately 32 of them
17 and similar to the Electric Delivery and Customer
18 Experience Departments, continue to evaluate and
19 implement these suggestions where practical.

20
21 **Q.** How does Tampa Electric respond when a storm threatens
22 its service territory?

23
24 **A.** Initiation of storm response for Tampa Electric begins
25 with very close monitoring of weather forecasts. Tampa

1 Electric's Electric Delivery Emergency Manager provides
2 daily updates on weather forecasts throughout the year.
3 During the hurricane season, potential storms are
4 identified as early as ten or more days ahead of potential
5 impacts to the peninsular Florida and the company's
6 service area. Tampa Electric subscribes to a paid weather
7 forecasting service and also monitors the National
8 Weather Service. If the storm has the potential to
9 threaten Florida and the company's service area, the
10 Electric Delivery Incident Commander will initiate calls
11 with the Electric Delivery Operations team. Depending on
12 the storm's intensity and forecasted track and impacts,
13 at approximately the five to seven-day range, the Electric
14 Delivery Incident Commander will initiate full or partial
15 Electric Delivery Incident Command Structure along with
16 daily to twice daily calls using the established pre-
17 storm agenda. The primary focus is to engage the key
18 responsible process owners in the areas of Emergency
19 Management and Mutual Assistance, Safety, Environmental,
20 Customer Experience, Human Resources, Corporate
21 Communications, Energy Supply, Electric Delivery
22 Logistics Support, Transmission and Substation
23 Operations, Transmission and Distribution Control Center,
24 Planning and Finance. Initial activities are focused on
25 weather forecasts and planning which includes storm

1 modeling and assessing the need for restoration
2 resources. If forecasts for impacts continue to hold,
3 all other areas of the company are quickly activated to
4 execute their responsibilities within the plan.
5 Depending on the size and potential impacts of the storm,
6 the Electric Delivery Incident Commander will recommend
7 to the Corporate Incident Commander, Tampa Electric's
8 Chief Executive Officer ("CEO"), whether Corporate ICS
9 should be initiated.

10
11 **Q.** Has Tampa Electric had previous opportunities to exercise
12 its Disaster Preparedness and Recovery Plan?

13
14 **A.** Yes. Tampa Electric has had several opportunities to
15 exercise the company's Disaster Preparedness and Recovery
16 Plan. The company exercised the plan at various levels
17 for all the storms that are the subject of this
18 proceeding. In addition, Tampa Electric exercises the
19 plan each year prior to the upcoming hurricane season by
20 conducting training, preparation and mock storm
21 exercises.

22
23 **Q.** Has Tampa Electric implemented improvements in its
24 Disaster Preparedness and Recovery Plan over time?

1 **A.** Yes. Just in the past year, Tampa Electric has
2 implemented numerous improvements in its Disaster
3 Preparedness and Recovery Plan as a result of the lessons
4 learned exercise that was conducted subsequent to
5 Hurricane Irma. Some examples of these include:
6 Identification of a list of vehicle/equipment needs to
7 run tasks such as laundry, pillow, sheets, cots, etc. for
8 restoration crews, improvements to the residential and
9 small customer handling, escalation and priority,
10 implementation of a two-man troubleman role, improvements
11 to the wire-down processes, improvements to the Estimated
12 Time for Restoration process, an improved outage map, etc.

13
14 **Q.** How does Tampa Electric ensure that its Disaster
15 Preparedness and Recovery Plan is consistently followed?
16

17 **A.** Tampa Electric ensures that the company's Disaster
18 Preparedness and Recovery Plan is consistently followed
19 through annual training and preparation and mock storm
20 exercises, as well as, having a well-defined Emergency
21 Management and Incident Response Plan where internal
22 resources understand and have been trained on their roles
23 and responsibilities. The plan is reviewed and updated
24 annually. Everyone that fills a role in the plan is
25 notified and trained. In most cases there are primary

1 personnel and backup personnel for each role within the
2 plan. All documentation on the plan is readily accessible
3 by all employees through the company's intranet.
4

5 **Q.** How does Tampa Electric assess its restoration work load
6 requirements?
7

8 **A.** Tampa Electric assesses its restoration work load
9 requirements for storm events through two primary
10 methods. The first is through storm modeling where the
11 specific attributes of the forecasted weather are
12 modelled based on a history of storm impacts from other
13 events. The modeling is specific to each one of the
14 company's service areas. Based on the projected number
15 of customer outages and the damage expected, the manhours
16 necessary to repair the damage and restore power are
17 estimated and restoration targets are established.
18 Smaller storm events may have targets that range between
19 24 and 48 hours with sub-goals that no customers will be
20 out more than 24 hours. Restoration targets for larger
21 events may be driven by availability of external resources
22 and other practical limitations within logistics or
23 operations. Once restoration targets are established,
24 internal resource availability of both field employees
25 and native contractors primarily in the areas of damage

1 assessment, line clearance and T&D line workers are
2 assessed against the needed manhours to complete the work.
3 If the resource requirement is greater than the internal
4 availability, then external resources will be acquired.
5 The direct testimony of Tampa Electric's Witness S. Beth
6 Young provides additional information on the procurement
7 of external resources.

8
9 The second method for determining work load requirements
10 is through damage assessment. After the storm, damage
11 assessors are sent out to patrol feeders, gather damage
12 information and return that information to Tampa
13 Electric's Planning section. With that information and
14 information on actual outage counts from the company's
15 outage management system, adjustments can be made to the
16 resource requirement predictions from the modeling and a
17 more accurate Estimated Time of Restoration ("ETR") can
18 be made. For large storms the damage assessment process
19 may require 24 to 48 hours before enough information is
20 gathered and assessed to make reasonable estimations on
21 ETR's.

22
23 **III. Tropical Storm Erika**

24 **Q.** Please provide an overview of Tropical Storm Erika, Tampa
25 Electric's actions and response to the storm and how it

1 impacted Tampa Electric's service territory?
2

3 **A.** TS Erika formed on Monday, August 24, 2015 in the Atlantic
4 and was immediately classified as a TS. TS Erika moved
5 westward while being steered by the flow south of the
6 subtropical ridge. During this move westward, TS Erika
7 was in an environment that was conducive for some
8 strengthening. On Tuesday, August 25, 2015 wind shear
9 began affecting TS Erika along with dry mid-level air
10 which inhibited intensification. On Thursday, August 27,
11 2015 TS Erika passed near the northern tip of Guadeloupe
12 while slightly intensifying. On Friday, August 28, 2015
13 TS Erika passed south of the U.S. Virgin Islands and
14 Puerto Rico while experiencing wind shear which prevented
15 additional intensification. By mid-day the storm no
16 longer had a well-defined circulation and dissipated. The
17 remnants of TS Erika remained an area of low pressure
18 that reached Florida on Wednesday, September 2, 2015 and
19 moved into Southeastern Georgia before finally losing its
20 identity on Thursday, September 3, 2015.

21
22 On Friday, August 28, 2015 Governor Rick Scott declared
23 a state of emergency for the entire state of Florida ahead
24 of TS Erika. Also, on this day, Tampa Electric commenced
25 emergency operations preparation as the company's service

1 area was in the cone of TS Erika's potential landfall.
2 After shifting to emergency operations, Tampa Electric
3 requested Southeastern Electric Exchange ("SEE") and non-
4 SEE distribution and tree trim resources to travel and
5 arrive on Sunday, August 30, 2015 in preparation for the
6 restoration. In addition, Tampa Electric began making
7 preparation for the storm by securing the service area
8 yards, materials, two incident bases and coordinating
9 restoration preparation and response work schedules. On
10 Monday, August 31, 2015 the weather service was still
11 forecasting three to five inches of rain and over 30 miles
12 per hour ("mph") winds, so additional distribution
13 resources were brought in early in preparation for the
14 inclement weather.

15
16 The National Hurricane Center ("NHC") declared that TS
17 Erika dissipated near the north coast of eastern Cuba at
18 9:30 a.m. Eastern Daylight Time ("EDT") on Saturday,
19 August 29, 2015. It was at this time that hurricane
20 hunter data concluded that the form of this TS had
21 degenerated to a trough of low-pressure.

22 23 **IV. TROPICAL STORM COLIN**

24 **Q.** Please provide an overview of Tropical Storm Colin, Tampa
25 Electric's actions and response to the storm and how it

1 impacted Tampa Electric's service territory

2

3 **A.** TS Colin formed from a low-pressure area on Sunday, June
4 5, 2016 off the Gulf of Mexico near the northern coast of
5 the Yucatan Peninsula. TS Colin was forecasted to make
6 landfall on Monday, June 6, 2016 along Florida's Gulf
7 coast as a weak tropical storm. Even though TS Colin was
8 a minimal tropical storm, tropical storm warnings were
9 added late on June 5, 2016 that covered Altamaha Sound in
10 Georgia down to Sebastian Inlet on Florida's Atlantic
11 Coast. The NHC provided guidance late on June 5, 2016
12 that focused less on TS Colin's forecast track, which was
13 to the North, but rather on the potential strong winds,
14 heavy rain and coastal flooding, which were being
15 forecasted well to the east of the center of circulation.
16 The NHC posted flash flood watches, forecasted a storm
17 surge in Tampa Bay between one and two feet and the
18 possibility of isolated tornadoes in Florida. On Tuesday,
19 June 7, 2016 at 3:00 a.m., TS Colin made landfall near
20 Dekle Beach with the storm's maximum sustained winds of
21 50 mph. TS Colin continued a northeastward track, crossed
22 north Florida and southern Georgia and exited over the
23 Atlantic Ocean.

24

25 On Monday, June 6, 2016 Governor Rick Scott declared a

1 state of emergency for thirty-four counties in the state,
2 including most of Tampa Electric's service area
3 (Hillsborough and Pinellas Counties). Preliminary
4 weather service predictions of TS Colin's path indicated
5 it would cross the Florida Peninsula close to Tampa Bay
6 with tropical storm force winds of 40 to 50 mph with heavy
7 rain squalls. Tampa Electric's Energy Delivery
8 Department went into a soft activation on Friday, June 3,
9 2016 as the company monitored the storm. After shifting
10 to emergency operations, Tampa Electric requested non-SEE
11 distribution resources to travel and arrive on Sunday,
12 June 5, 2016 in preparation for the restoration
13 activities. In addition, Tampa Electric prepared for the
14 storm by securing the service area yards, materials and
15 a vehicle staging area and coordinating restoration
16 preparation and response work schedules. By Sunday, June
17 5, 2016 TS Colin's projected landfall was moved north to
18 Cedar Key with the worst weather south and east of the
19 center, which included Tampa Bay. On Sunday, June 5,
20 2016 Tampa Electric went to partial activation and then
21 the company made the decision to implement full activation
22 on Monday, June 6, 2016 to make the final storm
23 preparations. On Tuesday, June 7, 2016 the severe weather
24 was past Tampa Bay and the company's service area. On
25 Wednesday morning, June 8, 2016 non-SEE distribution

1 resources were released and the company discontinued
2 storm operations.

3
4 **V. HURRICANE HERMINE**

5 **Q.** Please provide an overview of Tropical Storm Hermine,
6 Tampa Electric's actions and response to the storm and
7 how it impacted Tampa Electric's service territory?

8
9 **A.** On Sunday, August 28, 2016 tropical depression nine was
10 moving westward as a tropical wave north of Cuba into the
11 Gulf of Mexico. On Wednesday, August 31, 2016 tropical
12 depression nine intensified into TS Hermine. TS Hermine
13 shifted from a westward track to a northeastward track in
14 the south-central Gulf of Mexico and intensified further
15 to become Hurricane Hermine just prior to making landfall
16 on Thursday, September 1, 2016. On Friday, September 2,
17 2016 at 3:00 a.m., Hurricane Hermine made landfall as a
18 Category 1 hurricane just east of St. Mark's Florida.
19 Hurricane Hermine quickly dissipated in strength becoming
20 TS Hermine by mid-morning. TS Hermine continued a
21 northeastward track, crossed North Florida, Georgia and
22 South Carolina and exited over the Atlantic Ocean.

23
24 On Wednesday, August 31, 2016 Governor Rick Scott declared
25 a state of emergency for forty-two counties in the state

1 covering Tampa Electric's entire service area
2 (Hillsborough, Pasco, Pinellas and Polk Counties) ahead
3 of what would become Hurricane Hermine. Preliminary
4 weather service predictions of TS Hermine's path were
5 projected to impact Tampa with a 60 percent chance of
6 development into a tropical cyclone. Preparation storm
7 calls for Tampa Electric' Energy Delivery department
8 began on Monday, August 22, 2016 with formal activation
9 for Tampa Electric on Thursday, August 25, 2016. After
10 shifting to emergency operations, Tampa Electric
11 requested SEE and non-SEE distribution, tree trim and
12 damage assessment to travel and arrive Sunday, August 28,
13 2016 in preparation for the restoration activities. In
14 addition, Tampa Electric resources were making
15 preparation for the storm by securing the service area
16 yards, materials, three incident bases and coordinating
17 restoration preparation and response work schedules. On
18 Friday, August 26, 2016 the weather service indicated the
19 system would slow down and not intensify as much as
20 previously predicted. The path was also revised
21 indicating land fall would be in the Panama City area.
22 However, heavy rain squalls were possible along the
23 western Florida Peninsula with projected rainfall amounts
24 of three to six inches with isolated total of seven to
25 ten inches possible based upon this new projected storm

1 track. Tampa Electric made the decision to release the
2 SEE resources, delay the arrival of the non-SEE resources
3 until the evening of Wednesday, August 31, 2016 and scale
4 back the number of incident bases to one. On Wednesday,
5 August 31, 2016 with the forecast changing to more of a
6 rain event for Tampa Electric and showing slightly
7 improved conditions for the Tampa Bay area, the company
8 began unwinding preparations while still preparing for a
9 storm with up to a possible 100,000 customers impacted.
10 Tampa Electric made the decision to retain non-SEE
11 resources for the night to ensure that adequate resources
12 were available for restoration pending a decision to
13 potentially release them in the morning. On Friday,
14 September 2, 2016 the Tampa Bay area was impacted by two
15 separate and significant rain bands from Hurricane
16 Hermine that produced strong winds and heavy rain.
17 Because of the outages caused by these two rain bands,
18 Tampa Electric secured additional crews to arrive
19 Saturday morning, September 3, 2016 to assist in
20 restoration efforts. With significant progress made
21 overnight Friday, Tampa Electric made the decision to
22 release these additional crews to enable these crews to
23 provide mutual assistance to the North Coastal Region of
24 Duke Energy Florida beginning Sunday, September 4, 2016.

25

1 **VI. HURRICANE MATTHEW**

2 **Q.** Please provide an overview of Tropical Storm Matthew,
3 Tampa Electric's actions and response to the storm and
4 how it impacted Tampa Electric's service territory?

5
6 **A.** Matthew developed into a tropical storm southeast of St.
7 Lucia on Wednesday, September 28, 2016. On Thursday,
8 September 29, 2016 TS Matthew grew in intensity into a
9 Category 1 hurricane northeast of Curacao and reached
10 Category 5 status on the following day. Hurricane Matthew
11 weakened slightly to a Category 4 hurricane as it made
12 its northward turn and made its first landfall over Haiti
13 on Tuesday, October 4, 2016. Hurricane Matthew then made
14 its second landfall over Cuba where it weakened to a
15 Category 3. Hurricane Matthew intensified again as it
16 moved offshore from Cuba and re-attained Category 4
17 status. Hurricane Matthew then headed to the Bahamas and
18 on Thursday, October 6, 2016 it made its third landfall
19 over Grand Bahama. Hurricane Matthew then moved northward
20 paralleling the coast of Florida on Thursday, October 6,
21 2016 and Friday, October 7, 2016.

22
23 On Monday, October 3, 2016 Governor Rick Scott declared
24 a state of emergency for the entire state ahead of
25 Hurricane Matthew. Although preliminary discussions had

1 been occurring in Tampa Electric's Energy Delivery
2 Department since Thursday, September 29, 2016 on
3 Wednesday, October 5, 2016 Tampa Electric commenced
4 emergency operations preparation as parts of the
5 company's service area were projected in the cone of
6 Hurricane Matthew's potential path. After shifting to
7 emergency operations, Tampa Electric evaluated the
8 potential storm impacts and resultant customer outages
9 and determined that neither SEE or non-SEE resources would
10 be required. However, the option was left open for Tampa
11 Electric to request outside resources in the event the
12 storm's path moved westward towards Tampa Electric's
13 service area. Tampa Electric began making preparation
14 for the storm by securing the service area yards,
15 materials and coordinating restoration preparation and
16 response work schedules. As the path of Hurricane Matthew
17 kept it just offshore of the east coast of Florida, the
18 customer outages in Tampa Electric's service area were
19 quickly restored during the day Friday, October 7, 2016.
20 With all customers restored, Tampa Electric provided
21 mutual assistance resources to other utilities impacted
22 by the storm.

23
24 **VII. HURRICANE IRMA**

25 **Q.** Please provide an overview of Hurricane Irma, Tampa

1 Electric's actions and response to the storm and how it
2 impacted Tampa Electric's service territory?
3

4 **A.** On Wednesday, August 30, 2017, the NHC upgraded Tropical
5 Disturbance 36 to TS Irma and predicted that it would
6 strengthen into a hurricane over the next two to three
7 days with a track that would take it near, if not into
8 Florida. The next day, Thursday, August 31, 2017, TS
9 Irma was upgraded to a hurricane and predicted to pass
10 close to the Northeast Caribbean islands as a major
11 Category 4 hurricane. In subsequent advisories, the
12 uncertainty of Hurricane Irma's track put the entire
13 Caribbean and east coast of the United States on alert.
14 The entire peninsula of Florida was included in the cone
15 of uncertainty. Hurricane Irma traveled as far west as
16 Cuba before turning north and making its first landfall
17 east of Key West as a Category 4 hurricane, then a second
18 landfall near Marco Island as a Category 3 hurricane on
19 Sunday, September 10, 2017. Hurricane Irma then traveled
20 inland up the west coast of Florida, crossing Tampa
21 Electric's service area at an angle along the Hillsborough
22 and Polk County lines early Monday morning, September 11,
23 2017. While significantly weakened at this point,
24 Hurricane Irma still had significant strength that
25 impacted Tampa Electric's service area. Hurricane Irma

1 continued to travel in a northerly direction up the state,
2 continuing to weaken to a tropical storm and then a
3 remnant low by Monday evening.
4

5 On Monday, September 4, 2017, Governor Rick Scott declared
6 a state of emergency for the entire state. Over the Labor
7 Day Weekend, Tampa Electric had already begun holding
8 calls to discuss the storm and start initiating
9 preparatory actions. On Tuesday, September 5, 2017, Tampa
10 Electric began securing additional crews to support
11 possible restoration efforts and started internal
12 preparations for the storm. On Wednesday, September 6,
13 2017, Tampa Electric's Energy Delivery department and the
14 entire corporation went into full emergency operations.
15 Planning efforts centered around a Category 3 hurricane
16 impacting Tampa Electric's service area. For the rest of
17 the week, as the forecasted track for Irma became less
18 and less favorable, Tampa Electric worked to prepare for
19 the effects of the storm by securing additional materials,
20 resources and services in anticipation of a major
21 restoration effort. Preparations included the possible
22 opening of all seven Distribution and one Transmission
23 Incident Bases. While some outside resources were
24 requested to arrive over the weekend, with the projected
25 path of the storm taking it up the entire peninsula, the

1 majority of the crews were requested to report on Tuesday,
2 September 12, 2017. Preparations were complicated as the
3 area was dealing with fuel and bottled water shortages
4 resulting from Hurricane Harvey. Residents, anticipating
5 similar impacts to those of Hurricane Harvey in Texas,
6 heeded the warnings of Governor Scott and stocked up on
7 supplies and evacuated. Transportation of materials and
8 resources, along with the securing of housing for outside
9 resources, was slowed by evacuation traffic.

10
11 After Hurricane Irma cleared Tampa Electric's service
12 area, restoration mode began the morning of Monday,
13 September 11, 2017. By Tuesday, September 12, 2017, the
14 first Incident Base was opened, with three more set to
15 open the next day. Ultimately, a total of six Incident
16 Bases were opened. With the entire company working in
17 restoration mode (activated into storm roles and working
18 extended days) and the assistance of over 3,400 outside
19 resources, restoration proceeded quickly and efficiently.
20 Numerous unforeseen issues such as the possible closure
21 of Interstate 75 and shortages of fuel in the state were
22 dealt with and solutions/workarounds were put into place.
23 As an ETR of Sunday, September 17, 2017, became likely
24 the process began on Thursday, September 14, 2017 to start
25 preparing the organization to return to normal

1 operations. On Friday, September 15, 2017, Tampa Electric
2 released almost 400 outside resources to travel south to
3 assist Florida Power and Light ("FPL") with their
4 restoration efforts. On Saturday, September 16, 2017, 96
5 percent of impacted customers had been restored and an
6 additional 200 outside resources were released to FPL to
7 assist with their restoration efforts. By Sunday,
8 September 17, 2017, 99 percent of impacted customers had
9 been restored and the process to shift to normal operation
10 continued. Over 2,300 outside resources were released to
11 both FPL and Duke Energy Florida ("DEF") to assist their
12 restoration efforts, leaving several hundred onsite to
13 assist in final restoration efforts at Tampa Electric.
14 On Monday, September 18, 2017, all remaining outside crews
15 at Tampa Electric were released, Incident Bases shut down
16 and Tampa Electric resumed normal business except for
17 wrapping up any remaining emergency operations.

18
19 **VIII. TAMPA ELECTRIC'S RESTORATION COSTS**

20 **Q.** What were the final recoverable restoration costs
21 incurred by Tampa Electric in connection with each of the
22 named storms you have described?

23
24 **A.** Tampa Electric incurred prudent recoverable restoration
25 costs by the aforementioned five named tropical storms in

1 the amount of \$99,675,710 which excludes any interest
2 provision on the storm balance that exceeded the company's
3 Storm Reserve or regulatory assessment fees. These final
4 recoverable restoration costs are reflected in my Exhibit
5 No. GRC-1, Document No. 1 titled "Tampa Electric's Final
6 Recoverable Restoration Costs", which provides a
7 breakdown of the restoration costs incurred by storm,
8 function and detailed category.

9
10 **Q.** Did Tampa Electric incur any restoration costs which were
11 not included in the recoverable restoration costs, and if
12 so, what was that amount that was not recoverable in
13 connection with the five named tropical storms you have
14 described?

15
16 **A.** Yes, Tampa Electric did incur restoration costs which it
17 is not seeking to recover from customers. These costs
18 associated with the five named tropical storms were
19 \$12,016,878. These restoration costs are reflected in
20 Tampa Electric Witness Chronister's Exhibit No. JSC-1,
21 Document No. 1 titled "Tampa Electric's Storm Restoration
22 Cost Summary", which provides a breakdown of the
23 recoverable and non-reserve restoration costs incurred by
24 function.

25

1 Q. Please explain why the total recoverable restoration
2 costs that Tampa Electric is seeking for recovery in this
3 proceeding has increased from what was submitted in its
4 original petition?

5
6 A. The final recoverable restoration costs increased from
7 the original petition due to Tampa Electric still
8 receiving invoices from companies that performed mutual
9 assistance. Tampa Electric estimates the restoration
10 costs that will be billed and tracks invoices the company
11 receives. The estimates initially used were understated
12 when compared to the final verified invoices. The last
13 remaining invoice for assisting the company with
14 Hurricane Irma restoration efforts was received on May
15 14, 2018.

16
17 **IX. EVALUATING TAMPA ELECTRIC'S RESTORATION RESPONSE**

18 Q. Would you consider Tampa Electric's restoration plan and
19 its execution for these five named tropical storms in
20 this proceeding to be effective?

21
22 A. Yes, I am confident that the execution of Tampa Electric's
23 Disaster Preparedness and Recovery Plan resulted in a
24 response that was very effective in performing
25 restoration in each of the five named tropical storms.

1 **Q.** What key factors contributed to the effectiveness of Tampa
2 Electric's restoration plan and execution for the five
3 named tropical storms in this proceeding?
4

5 **A.** There were a number of key factors that contributed to
6 the effectiveness of Tampa Electric's restoration plan
7 and execution for the five named tropical storms in this
8 proceeding. Each storm is a learning experience and after
9 each storm, in addition to the annual plan review process,
10 learnings from the storm are incorporated into the plan.
11 Employees are trained in their storm roles and many
12 employees are experienced leaders with critical storm
13 roles that were in their current or other storm roles
14 during the hurricanes of 2004 and 2005. Annual mock storm
15 exercises are critical to preparation for storm season.
16 Expanded access to external resources for large events
17 through mutual aid groups, contractor networks, and
18 affiliate companies also are important to accomplishing
19 restoration activities as efficiently, and timely as
20 practical. Additionally, clear and frequent
21 communication with the various external stakeholders
22 through multiple channels has become nearly, if not as
23 important as the restoration work itself. Intensive
24 efforts for communications with customers and other key
25 external groups was an important key to the company's

1 success. Finally, the establishment of an ETR was
2 critical.

3

4 **Q.** Please provide a few examples of key restoration
5 plans/process enhancements that Tampa Electric has
6 implemented recently?

7

8 **A.** As I mentioned above in my direct testimony, Tampa
9 Electric has a process to gain lessons learned from
10 performing restoration, conducting mock storm exercises
11 or through the sharing of best practices with other
12 utilities during mutual assistance. Some of the recent
13 lessons learned examples identified following Tampa
14 Electric's debrief of Hurricane Irma that the company has
15 implemented that will benefit the restoration process
16 from the impacts of future storms include: Expand the
17 number of incident base locations in the event of a larger
18 category storm with a larger number of outside resources
19 required, use diesel forklifts instead of propane to keep
20 uniformity of fuel at incident bases, obtain rental
21 vehicles five to ten days in advance of storm to ensure
22 sufficient transportation available, implementation of a
23 new outage map with more granularity and align hours of
24 operation for Logistics Support Unit with crew's work
25 schedule.

1 Q. What are your conclusions regarding Tampa Electric's
2 restoration efforts with respect to the five named
3 tropical storms the company encountered in 2015, 2016 and
4 2017?

5
6 A. My conclusion is that the company's Disaster Preparedness
7 and Recovery Plan and response was effective and efficient
8 in the restoring power in these five named tropical
9 storms. Hurricane Irma, being the largest of the five
10 and the largest to hit Tampa Electric, was a particularly
11 good test of implementation of the plan. From that event,
12 Tampa Electric will be able to make further improvements
13 to make future events even more efficient.

14
15 Q. Does this conclude your direct testimony?

16
17 A. Yes.
18
19
20
21
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23
24
25

EXHIBIT

OF

GERARD R. CHASSE

Table of Contents

DOCUMENT NO.	TITLE	PAGE
1	Tampa Electric's Recoverable Costs by Storm, Function and Cost Element	36

Tampa Electric's Recoverable Costs by Storm, Function and Cost Element
(In \$ Thousands)

	Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
<u>Erika</u>					
Labor	63	63	0	0	0
Outside Services - Line Clearance	78	78	0	0	0
Outside Services - Services Expense	545	545	0	0	0
Employee Expense	24	24	0	0	0
Total	710	710	0	0	0

	Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
<u>Colin</u>					
Labor	641	621	19	2	0
Outside Services - Line Clearance	128	128	0	0	0
Outside Services - Services Expense	1,637	1,634	4	0	0
Materials & Supplies Expense	8	8	0	0	0
Employee Expense	133	132	1	0	0
Total	2,548	2,522	23	2	0

	Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
<u>Hermine</u>					
Labor	855	814	24	17	0
Outside Services - Line Clearance	333	333	0	0	0
Outside Services - Services Expense	3,885	3,833	0	53	0
Materials & Supplies Expense	42	11	0	31	0
M&S Inventory Issue	4	4	0	0	0
Other Operating Expense	33	33	0	0	0
Employee Expense	192	169	0	23	0
Rent Expense	16	16	0	0	0
Total	5,361	5,213	24	123	0

Matthew

Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
Labor	191	3	10	0
Outside Services - Line Clearance	180	0	0	0
Outside Services - Services Expense	607	29	1	0
Materials & Supplies Expense	2	0	0	0
M&S Inventory Issue	3	0	0	0
Employee Expense	12	0	0	0
Total	996	32	11	0

Irma

Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
Labor	7,306	228	776	404
Outside Services - Line Clearance	6,406	0	0	0
Outside Services - Services Expense	68,377	1	519	940
Materials & Supplies Expense	815	0	0	165
M&S Inventory Issue	1,094	0	0	2
Other Operating Expense	72	0	0	4
Employee Expense	4,530	0	79	0
Rent Expense	11	0	0	0
Total	86,898	230	1,374	1,516

TOTAL

Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
Labor	8,996	274	804	404
Outside Services - Line Clearance	7,124	0	0	0
Outside Services - Services Expense	75,081	34	573	940
Materials & Supplies Expense	866	0	31	165
M&S Inventory Issue	1,102	0	0	2
Other Operating Expense	105	0	0	4
Employee Expense	4,892	1	102	0
Rent Expense	27	0	0	0
Total	96,340	310	1,510	1,516

Note: Detail may not add to totals due to rounding.



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20170271-EI

IN RE: PETITION FOR RECOVERY OF COSTS
ASSOCIATED WITH NAMED TROPICAL SYSTEMS
DURING THE 2015, 2016, AND 2017 HURRICANE
SEASONS AND REPLENISHMENT OF STORM RESERVE
SUBJECT TO FINAL TRUE-UP, TAMPA ELECTRIC
COMPANY.

DIRECT TESTIMONY AND EXHIBIT
OF
JEFFREY S. CHRONISTER

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **JEFFREY S. CHRONISTER**

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

7
8 **A.** My name is Jeffrey S Chronister. My business address is
9 702 North Franklin Street, Tampa, Florida 33602. I am
10 employed by Tampa Electric Company ("Tampa Electric" or
11 "the company") as Controller, Tampa Electric.

12
13 **Q.** Please describe your duties and responsibilities in that
14 position?

15
16 **A.** I am responsible for maintaining the financial books and
17 records of the company and for the determination and
18 implementation of accounting policies and practices for
19 Tampa Electric. I am also responsible for budgeting
20 activities within the company.

21
22 **Q.** Please provide a brief outline of your educational
23 background and business experience.

24
25 **A.** I graduated from Stetson University in 1982 with a

1 Bachelor of Business Administration degree in Accounting.
2 Upon graduation I joined Coopers & Lybrand, an independent
3 public accounting firm, where I worked for four years
4 before joining the company in 1986. I started in Tampa
5 Electric's Accounting department, moved to TECO Energy's
6 Internal Audit department in 1987, and returned to the
7 Accounting department in 1991. I am a Certified Public
8 Accountant in the State of Florida and I am a member of
9 both the American Institute of Certified Public
10 Accountants ("AICPA") and the Florida Institute of
11 Certified Public Accountants ("FICPA"). I have served in
12 my current position as Controller of Tampa Electric since
13 July 2009.

14
15 **Q.** Have you previously testified before the Florida Public
16 Service Commission ("Commission")?

17
18 **A.** Yes, I have testified or filed testimony before this
19 Commission in several dockets. Most recently, I testified
20 for Tampa Electric in Docket No. 20130040-EI, which was
21 Tampa Electric's last base rate proceeding. The testimony
22 in that case included the same topics I testify to in this
23 case. I also filed testimony in Docket No. 20080317-EI,
24 Tampa Electric Company's Petition for An Increase In Base
25 Rates And Miscellaneous Service Charges, Docket No.

1 19960007-EI, Tampa Electric's Environmental Cost Recovery
2 Clause, and Docket No. 19960688-EI, Tampa Electric's
3 environmental compliance activities for purposes of cost
4 recovery.

5
6 **Q.** What is the purpose of your direct testimony in this
7 proceeding?

8
9 **A.** The purpose of my direct testimony is to support the
10 company's calculation of the costs incurred by Tampa
11 Electric during the 2015, 2016 and 2017 storm seasons in
12 connection with the five named tropical storms: Tropical
13 Storm ("TS") Erika, TS Colin, Hurricane Hermine, Hurricane
14 Matthew and Hurricane Irma. My direct testimony supports
15 the cost recovery in this proceeding and demonstrates that
16 Tampa Electric's storm restoration and recovery accounting
17 processes and controls are well established, documented,
18 and implemented by personnel that are suitably trained, to
19 ensure proper storm accounting and ratemaking.
20 Specifically, my direct testimony will show that Tampa
21 Electric has effective and appropriate controls and
22 accounting procedures for storm events, and that accounting
23 for the five named tropical storms in this proceeding was
24 performed in accordance with the Incremental Cost and
25 Capitalization Approach ("ICCA") methodology required under

1 Rule 25-6.0143, Florida Administrative Code ("F.A.C.").

2
3 **Q.** Would you please provide a summary of your direct testimony?

4
5 **A.** Tampa Electric's long-standing accounting control processes
6 and procedures were employed for the five named tropical
7 storms, and those control processes continue to ensure
8 proper storm accounting and ratemaking. The ICCA
9 methodology found in Rule 25-6.0143, F.A.C. was applied to
10 each storm cost type to determine the amount recoverable
11 from Tampa Electric's customers. My Exhibit No. JSC-1,
12 Document No. 3 titled "Tampa Electric's Recoverable
13 Restoration Costs by Cost Type" includes a detail of the
14 five named tropical storm's recoverable costs by cost type
15 in accordance with the ICCA methodology required under Rule
16 25-6.0143, F.A.C. The total recoverable restoration costs
17 Tampa Electric is seeking to recover in this proceeding is
18 \$99,675,710, which excludes any interest provision on the
19 storm costs that exceeded the company's storm reserve or
20 regulatory assessment fees. This amount will fully deplete
21 and exceed the \$55,860,642 October 31, 2013 pre-storm
22 balance in the company's reserve account.

23
24 **Q.** Did you prepare any other exhibits that support your direct
25 testimony?

1 **A.** Yes. I have eight documents within Exhibit No. JSC-1 that
2 support my direct testimony that were prepared under my
3 direction and supervision. These eight Documents provide
4 detail for the total recoverable and non-recoverable costs
5 that were incurred by Tampa Electric in performing
6 restoration for the five named tropical storms.

- 7
- 8 Document No. 1: Tampa Electric Company's Storm
9 Restoration Cost Summary
- 10 Document No. 2: Tampa Electric Company's Recoverable
11 Restoration Costs by Cost Element
- 12 Document No. 3: Tampa Electric Company's Recoverable
13 Restoration Costs by Cost Type
- 14 Document No. 4: Tampa Electric Company's Recoverable
15 Restoration Costs by Function
- 16 Document No. 5: Tampa Electric Company's Storm
17 Restoration Costs by Function
- 18 Document No. 6: Tampa Electric Company's Storm Reserve
19 Balance History
- 20 Document No. 7: Tampa Electric Company's Associated
21 Interest Expense for Restoration Costs
22 Exceeding the Company's Reserve
- 23 Document No. 8: Tampa Electric Company's Actual
24 Incremental Storm Costs 2015 through
25 2017

1 Q. What is the total storm restoration cost incurred by Tampa
2 Electric for the five named tropical storms?

3

4 A. Tampa Electric incurred a total of \$111,692,589 of storm
5 restoration costs, as reflected on my Exhibit No. JSC-1,
6 Document No. 1. This includes \$9,113,445 of capital and
7 \$2,903,433 of operations and maintenance expense ("O&M")
8 costs the company is not seeking to recover.

9

10 Q. What are the storm costs Tampa Electric is seeking to
11 recover from each of the five named tropical storms?

12

13 A. Tampa Electric is seeking to recover a total of \$100,369,592
14 for prudently incurred storm restoration costs. This total
15 recoverable cost is developed from the five named tropical
16 storms as follows: \$710,037 from TS Erika; \$2,547,505 from
17 TS Colin; \$5,361,042 from Hurricane Hermine; \$1,039,216
18 from Hurricane Matthew; \$90,017,921 from Hurricane Irma;
19 \$621,694 for the interest expenses through May 31, 2018
20 associated with the restoration costs that exceeded the
21 company's storm reserve; and \$72,214 for Regulatory
22 Assessment Fees which are detailed in my Exhibit No. JSC-
23 1, Document Nos. 1 through 5 and Document No. 8. These
24 costs were updated from Tampa Electric's 2017 Amended
25 Petition, Exhibit D, page 2 of 2, filed on January 30, 2018.

1 **Q.** Were any of these numbers above adjusted from what was filed
2 in Tampa Electric's initial or amended petition in this
3 proceeding?
4

5 **A.** Yes. In Tampa Electric's Petition filed on December 28,
6 2017 in this proceeding, the costs related to Hurricane
7 Irma were estimated to be \$77,656,721 and the total costs
8 for all five named tropical storms were estimated to be
9 \$87,377,388. In Tampa Electric's Amended Petition in this
10 proceeding, filed on January 30, 2018, the costs related to
11 Hurricane Irma were updated to \$92,818,327 and the total
12 costs for all five named tropical storms were updated to
13 \$99,675,710. At the time Tampa Electric filed these
14 petitions, the costs for Hurricane Irma were not final
15 because of the ongoing receipt of invoices for storm
16 activities. These amounts have also been updated in my
17 Exhibit No. JSC-1, based on the receipt of final invoices.
18

19 **Q.** Is Tampa Electric aware of any other adjustments that need
20 to be made?
21

22 **A.** No.
23

24 **Q.** Did Tampa Electric notify the Commission in any of the five
25 named tropical storms that the restoration costs were

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expected to exceed \$10 million?

A. Yes. In accordance to Rule 25-6.0143, F.A.C., the company notified the Commission on September 13, 2017 that the storm-related damages for Hurricane Irma were expected to exceed \$10 million. The four other named tropical systems were never estimated to exceed \$10 million.

Q. What operational internal controls and procedures are in place during storm restoration to ensure storm accounting policies are followed?

A. Finance/Accounting employees are key to storm restoration accounting and controls. As reflected in the Direct Testimony of Tampa Electric's Witness Gerald C. Chasse, the Tampa Electric Unified Command Center organization recognizes the critical role and responsibilities of these employees. Finance/Accounting representatives are assigned to each staging and processing site (referred to as "Finance Section Chiefs") to ensure active, real-time financial controls are in effect and adhered to during the storm restoration event. Responsibilities of the Finance Section Chiefs include: (1) ensuring procedural compliance with internal cost controls; (2) providing guidance and oversight to ensure prudent spending; (3) collecting and

1 analyzing data real-time such as timesheets; and (4)
2 assisting with the proper accounting of mutual aid
3 resources. Employees from Tampa Electric's Human Resources
4 department are also embedded at many sites and perform
5 internal control support tasks such as providing guidance
6 on the proper information to include on timesheets. In
7 addition, each business unit has a finance representative
8 (referred to as a "Business Unit Coordinator") performing
9 a storm controllership function for their respective
10 business units, which includes communicating the storm
11 plant maintenance order ("PMO") charging instructions to
12 the personnel directly supporting storm restoration,
13 ensuring that appropriate costs are charged to the storm
14 PMOs, as well as preparing cost estimates before, during,
15 and after the restoration is complete.

16
17 **Q.** How does Tampa Electric track storm restoration costs?
18

19 **A.** Tampa Electric establishes unique functional (i.e.,
20 distribution, transmission, generation and other) PMOs for
21 each storm to aggregate the total amount of storm
22 restoration costs incurred for financial reporting and
23 regulatory recovery purposes. The company uses these PMOs
24 to account for all costs directly associated with storm
25 restoration, including costs that will not be recoverable

1 from Tampa Electric's storm reserve based on the
2 Commission's requirements under the ICCA methodology. All
3 incremental storm restoration costs charged to storm PMOs
4 are captured in Federal Energy Regulatory Commission
5 ("FERC") Account 186, Miscellaneous Deferred Debits. All
6 incremental costs charged to FERC Account 186 are
7 subsequently cleared and charged to the storm reserve, O&M
8 or capital. Non-incremental charges are charged to O&M or
9 capital, accordingly.

10
11 **Q.** How does Tampa Electric determine when to start charging
12 storms costs?

13
14 **A.** As detailed in the direct testimony of witness Chasse, if
15 a storm has the potential to threaten Florida and the
16 company's service area, the Electric Delivery Incident
17 Commander will initiate calls with the Electric Delivery
18 Operations team. Dependent on the storm's intensity and
19 forecasted track and impacts, at approximately the five to
20 seven-day range, the Electric Delivery Incident Commander
21 will initiate full or partial Electric Delivery Incident
22 Command Structure. If forecasts for impacts continue to
23 hold, all other areas of the company are quickly activated
24 to execute their responsibilities within the plan. This
25 includes the Finance Cost Estimation team, which

1 establishes and activates storm PMOs to begin tracking
2 costs for each named tropical system. An email
3 communication is sent to all business units to inform them
4 that storm PMO's have been activated for purposes of
5 collecting storm restoration charges. Attached to the
6 email, Tampa Electric also provides: (1) a listing of PMOs
7 by function and location; (2) guidance on recording time
8 for payroll; and (3) guidance on the types of costs eligible
9 to be charged to storm PMOs. The pre-landfall costs charged
10 to the storm PMOs include the acquisition of external
11 resources (e.g., line and vegetation crews), mobilization
12 and pre-staging of internal and external resources, opening
13 of staging and processing sites, reserving lodging, and
14 securing Tampa Electric's existing operational facilities
15 in preparation for the impacts of the storm.

16
17 **Q.** When did Tampa Electric start charging costs to each of the
18 five named tropical storms?

19
20 **A.** Tampa Electric began charging costs for TS Erika in August
21 2015, TS Colin in June 2016, Hurricane Hermine in August
22 2016, Hurricane Matthew in October 2016, and Hurricane Irma
23 in September 2017.

24
25 **Q.** Did Tampa Electric follow and apply the ICCA, as described

1 in Rule 25-6.0143, F.A.C., for the costs that the company
2 is seeking recovery for in this proceeding?

3
4 **A.** Yes.

5
6 **Q.** What types of costs are included in the amounts for which
7 Tampa Electric is seeking recovery?

8
9 **A.** In accordance with Rule 25-6.0143, F.A.C., the categories
10 of costs that were properly accounted for in the calculation
11 of Tampa Electric's total recoverable restoration costs
12 include: (1) contract labor hired for storm restoration
13 activities; (2) logistics costs of providing meals,
14 lodging, and linens for tents and other staging areas; (3)
15 transportation of crews for storm restoration; (4) vehicle
16 costs for vehicles specifically rented for storm
17 restoration activities; (5) waste management costs
18 specifically related to storm restoration activities; (6)
19 rental equipment specifically related to storm restoration
20 activities; (7) materials and supplies used to repair and
21 restore service and facilities to pre-storm condition; (8)
22 overtime payroll and incremental payroll-related costs for
23 utility personnel included in storm restoration activities;
24 and (9) fuel cost for company and contractor vehicles used
25 in storm restoration activities.

1 **Q.** Please explain how Tampa Electric determines the non-
2 incremental O&M costs incurred from the five named tropical
3 storms?

4
5 **A.** Once all incremental costs were incurred and recorded to
6 FERC Account 186, the accounting department completed a
7 detailed review to determine amounts which were not
8 incremental under the ICCA methodology prescribed in Rule
9 25-6.0143, F.A.C. Per the ICCA methodology, non-
10 incremental costs are those that are included in normal
11 base rate operations. As reflected in the Direct Testimony
12 of Tampa Electric's Witness S. Beth Young, the company
13 excluded the following restoration costs that were
14 incurred: (1) payroll costs that are already recovered in
15 base rates; (2) bonuses for utility personnel not eligible
16 for overtime pay; (3) utility call center and customer
17 service budgeted overtime; and (4) non-incremental costs
18 associated with the storm events. Additionally, tree
19 trimming expenses that totaled less than the actual monthly
20 average of tree trimming costs charged to O&M expense for
21 the same month in the three previous calendar years were
22 excluded.

23
24 **Q.** Would you explain how Tampa Electric determines the capital
25 costs incurred from the five named tropical storms?

1 **A.** All incremental storm restoration costs (including follow-
2 up work) are charged to FERC Account 186, Miscellaneous
3 Deferred Debits. Non-incremental charges are charged to
4 O&M or capital, accordingly. Once storm restoration is
5 complete, Tampa Electric totals the amount of capital costs
6 in accordance with capitalization guidance provided within
7 the Code of Federal Regulations ("CFR") - Title 18
8 Conservation of Power and Water Resources, Florida
9 Administrative Code and Generally Accepted Accounting
10 Principles ("GAAP"), which includes both materials and
11 labor. The capital costs for functional areas are
12 determined based on actual work performed and are then
13 likewise recorded to the balance sheet in accordance with
14 Tampa Electric's capitalization guidance as listed above.
15 Once the capital jobs are completed, the capital work in
16 progress ("CWIP") account is credited and the appropriate
17 functional plant account in FERC Account 101, Plant in
18 Service, is debited based on the actual cost of installed
19 units of property. Retirements of fixed assets removed
20 during storm restoration are recorded when the new incurred
21 capital costs are placed in service.

22
23 **Q.** Please describe the process that is followed by Tampa
24 Electric after each storm to ensure the charges that are
25 being charged to that specific storm are appropriate to be

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billed?

A. Throughout storm restoration, the operating and business units estimate, validate, record and pay storm costs. Extensive documentation is collected throughout the storm and restoration and after each storm invoices are validated against the operational documentation and any discrepancies are researched, disputed and resolved, resulting in the payment of appropriate charges. Also, as reflected in the direct testimony of witness Young, Tampa Electric's Foreign Crew Coordination Unit reviews all invoices prior to paying. If a discrepancy is found, the Foreign Crew Coordination Unit will follow up with the specific company and work out the discrepancy. No invoice is released for payment if there are outstanding discrepancies.

Q. Please provide background on Tampa Electric's storm reserve.

A. Tampa Electric maintains a property insurance reserve account (Account No. 228.1), in accordance with Rule 25-6.0143, F.A.C., which is designated to cover the costs of storm-related damages to the utility's own property or property leased by others that is not covered by insurance. In Order No. PSC-93-1570-FOF-E1, issued on October 27,

1 1993, the Commission approved Tampa Electric's proposal to
2 accrue \$4 million annually to its property insurance
3 reserve account ("storm reserve"). Subsequently, Order No.
4 PSC-95-0255-FOF-EI, issued on February 23, 1995,
5 established a target storm reserve balance of \$55 million.
6 Tampa Electric accrued \$4 million each year to the storm
7 reserve and in 2003, the balance had reached \$40 million.
8 Then in 2004, Tampa Electric incurred \$73.4 million of storm
9 restoration costs due to Hurricanes Charley, Frances and
10 Jeanne. In Order No. PSC-05-0675-PAA-EI, Approving
11 Stipulation and Settlement, Tampa Electric capitalized
12 \$38.9 million of the total storm restoration costs of \$73.4
13 million, leaving \$34.5 million of storm restoration costs
14 to be charged against the storm reserve. As a result of
15 capitalizing the \$38.9 million, the storm reserve had an
16 \$7.8 million positive balance as of August 1, 2004, rather
17 than a \$31.1 million deficit.

18
19 In Tampa Electric's 2008 Petition for Rate Increase, Docket
20 No. 20080317-EI, the company sought approval to modify the
21 storm reserve accrual and target balance. Commission Order
22 No. PSC-09-0283-FOF-EI approved an increase of the storm
23 accrual to \$8 million per year and established a storm
24 reserve target balance of \$64 million. Then, in the
25 company's 2013 Stipulation and Settlement Agreement, Docket

1 No. 20130040-EI, Tampa Electric agreed to stop accruing \$8
2 million per year to the storm reserve and instead would
3 seek recovery of storm restoration costs when the storm
4 reserve balance was depleted. In accordance with Order No.
5 PSC-13-0443-FOF-EI, issued on September 30, 2013, approving
6 the 2013 Stipulation and Settlement Agreement, the storm
7 reserve balance was set at \$55,860,642, which was the amount
8 of the reserve balance on October 31, 2013. During the
9 2015, 2016 and 2017 in connection with the five named
10 tropical storms, Tampa Electric incurred \$99,675,710 of
11 recoverable storm restoration costs due to the five named
12 tropical storms. The storm reserve balance was fully
13 depleted and exceeded the \$55,860,642 October 31, 2013 pre-
14 storm reserve balance in the company's storm reserve
15 account by \$43,815,069, which is detailed in my Exhibit No.
16 JSC-1, Document No. 6.

17
18 **Q.** Is Tampa Electric's storm reserve funded or unfunded?

19
20 **A.** The company's reserve is unfunded; therefore, the company
21 has been able to utilize the storm reserve to fund its
22 general operation activities over several years. However,
23 with the amount of storm costs incurred during the five
24 named tropical storms identified in this proceeding, the
25 company's storm reserve balance has been exceeded and

1 requires the company to raise additional capital to pay for
2 those costs. As such, Tampa Electric is seeking recovery
3 for only the short-term debt costs associated with the
4 portion of storm costs incurred above the company's
5 reserve. This associated interest expense for the storm
6 costs exceeding the reserve is detailed in my Exhibit No.
7 JSC-1, Document No. 7.

8
9 **Q.** Does or will Tampa Electric expect to receive any insurance
10 reimbursement from any of the five named tropical storms?

11
12 **A.** No.

13
14 **Q.** Does or will Tampa Electric expect to receive any third-
15 party reimbursement from any of the five named tropical
16 storms?

17
18 **A.** No.

19
20 **Q.** Do all the costs that Tampa Electric is seeking to recover
21 for the five named tropical storms and the cost calculation
22 methodologies used to develop these costs in this petition
23 comply with Tampa Electric's 2017 Settlement Agreement?

24
25 **A.** Yes.

1 **Q.** How will the netting of storm damage costs against estimated
2 annual tax savings be trued up and finally resolved, once
3 the final amount of storm costs authorized to be recovered
4 and the final determination of the impact of tax reform on
5 Tampa Electric's base rates and charges are determined?
6

7 **A.** As stated in Order No. PSC-2018-0125-PCO-EI, issued on
8 March 7, 2018, in this proceeding, Approving Interim Storm
9 Recovery Charge, which includes the Implementation
10 Settlement Agreement, a final determination of storm costs
11 and the impact of tax reform shall be made in separate
12 dockets and any difference will be trued-up and
13 recovered/refunded to customers through the 2019 Energy
14 Conservation Cost Recovery Clause with the full impact of
15 tax reform reflected in a change in base rates in January
16 2019. The approval of interim Storm Cost Recovery Charge
17 factors is preliminary in nature and is subject to true-up
18 pending further review once the total actual storm
19 restoration costs are reviewed and approved. After the
20 actual costs are reviewed for prudence and reasonableness
21 and are compared to the actual amount recovered through the
22 interim Storm Cost Recovery Charge, a determination will be
23 made whether any over/under recovery has occurred and the
24 appropriate steps to be taken for a refund or additional
25 charge would be considered by the Commission at a later

1 date.

2

3 **Q.** Would you explain how adjustments will be made at the end
4 of the recovery period to ensure the company only recovers
5 the amount that is being sought?

6

7 **A.** In accordance with the 2017 Amended and Restated
8 Stipulation and Settlement Agreement ("2017 Agreement"),
9 the 2018 net effect on net income from the related tax
10 reform, storm reserve and deferred entries will be zero.
11 In 2019, the difference between the 2018 tax reform benefits
12 and storm reserve amount will flow through the Energy
13 Conservation Cost Recovery Clause, as needed. Further
14 refinement of the 2018 tax reform benefits will be
15 determined through a separate proceeding.

16

17 **Q.** Is the proposed storm cost recovery method consistent with
18 the 2017 Agreement, approved by the Commission in Order No.
19 PSC-2017-0456-S-EI, issued on November 27, 2017 in Docket
20 Nos. 20170210-EI and 20160160-EI?

21

22 **A.** Yes. The methodology is consistent with provisions of the
23 2017 Agreement addressing Storm Damage and Federal Income
24 Tax Reform, respectively. The Amended Implementation
25 Stipulation was approved by the Commission at the March 1,

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2018 Agenda Conference, as reflected in Order No. PSC-2018-0125-PCO-EI, issued on March 7, 2017.

Q. Does this conclude your direct testimony?

A. Yes, it does.

EXHIBIT

OF

JEFFREY S. CHRONISTER

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Tampa Electric's Storm Restoration Cost Summary

(In \$ Thousands)

Year	Storm	Total Storm Restoration Costs	Capital	O&M	Recoverable Costs
2015	Erika	710	0	0	710
2016	Colin	2,548	0	0	2,548
2016	Hermine	5,731	370	0	5,361
2016	Matthew	1,046	6	0	1,039
2017	Irma	101,659	8,737	2,903	90,018
	Total	111,693	9,113	2,903	99,676

Notes: Detail may not add to totals due to rounding
 Prior to Hurricane Irma in 2017, Tampa Electric did not track non-recoverable O&M.

Tampa Electric's Recoverable Storm Restoration Costs by Cost Element
(In \$ Thousands)

Total Storm Restoration Recoverable Costs	Erika	Colin	Hermine	Matthew	Irma
Labor	63	641	855	205	8,713
Employee Expense	24	133	192	12	4,530
Outside Services - Line Clearance	78	128	333	180	6,406
Outside Services - Other Services	545	1,637	3,885	637	68,377
Materials & Supplies	0	8	46	6	1,909
Rent Expense	0	0	16	0	11
Other Operating Expense	0	0	33	0	72
Total	710	2,548	5,361	1,039	90,018

Note: Detail may not add to totals due to rounding

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Tampa Electric's Recoverable Storm Restoration Costs by Cost Type
(in \$ Thousands)

Total Storm Restoration Recoverable Costs	Erika	Colin	Hermine	Matthew	Irma
Contractors	81,609	1,765	4,218	816	74,187
Logistics	4,987	127	225	12	4,599
Transportation of Crews	223	6	0	0	216
Vehicle Rentals	16	0	16	0	0
Waste Management	39	1	0	0	39
Rental Equipment	11	0	0	0	11
Materials & Supplies	1,362	2	38	6	1,317
Labor	10,478	641	855	205	8,713
Fuel	951	6	8	0	936
Total	99,676	2,548	5,361	1,039	90,018

Note: Detail may not add to totals due to rounding

Tampa Electric's Recoverable Storm Restoration Costs by Function
(In \$ Thousands)

Total Storm Restoration Recoverable Costs	Erika	Colin	Hermine	Matthew	Irma
Generation	0	0	0	0	1,516
Transmission	0	23	24	32	230
Distribution	710	2,522	5,213	996	86,633
Other	0	2	123	11	1,639
Total	710	2,548	5,361	1,039	90,018

Note: Detail may not add to totals due to rounding.

Tampa Electric's Storm Restoration Costs by Function

(In \$ Thousands)

	Total Storm Restoration Costs	Capital	O&M	Reserve
Generation	6,518	5,002	0	1,516
Transmission	462	0	153	310
Distribution	100,920	2,396	2,184	96,340
Other	3,792	1,715	567	1,510
Total	111,693	9,113	2,903	99,676

Note: Detail may not add to totals due to rounding

Tampa Electric's Storm Reserve Balance History

1994-2017

(In \$ Thousands)

Year	Beginning Balance	Storm Expense		Restoration Cost		Transfer to Capital	Ending Balance
		Accrual	Incurred	Incurred			
1994	0	(4,000)	0	0	0	0	(4,000)
1995	(4,000)	(4,000)	0	0	0	0	(8,000)
1996	(8,000)	(4,000)	0	0	0	0	(12,000)
1997	(12,000)	(4,000)	0	0	0	0	(16,000)
1998	(16,000)	(4,000)	0	0	0	0	(20,000)
1999	(20,000)	(4,000)	0	0	0	0	(24,000)
2000	(24,000)	(4,000)	0	0	0	0	(28,000)
2001	(28,000)	(4,000)	0	0	0	0	(32,000)
2002	(32,000)	(4,000)	0	0	0	0	(36,000)
2003	(36,000)	(4,000)	0	0	0	0	(40,000)
2004	(40,000)	(4,000)	71,965	0	0	0	27,965
2005	27,965	(4,000)	2,394	2,394	(38,877)	0	(12,518)
2006	(12,518)	(4,000)	220	0	0	0	(16,298)
2007	(16,298)	(4,000)	(12)	0	0	0	(20,310)
2008	(20,310)	(4,000)	1,658	0	0	0	(22,652)
2009	(22,652)	(6,667)	0	0	0	0	(29,319)
2010	(29,319)	(8,000)	0	0	0	0	(37,319)
2011	(37,319)	(8,000)	1,925	0	0	0	(43,394)
2012	(43,394)	(8,000)	1,185	0	0	0	(50,209)
2013	(50,209)	(6,667)	1,015	0	0	0	(55,861)
2014	(55,861)	0	0	0	0	0	(55,861)
2015	(55,861)	0	0	0	0	0	(55,861)
2016	(55,861)	0	0	0	0	0	(55,861)
2017	(55,861)	0	102,555	0	0	0	46,694
2018	46,694	0	(2,879)	0	0	0	43,815 *
			Amount needed to Replenish Reserve				99,676
			Resulting Reserve				55,861

*The \$43,815K is the expected reserve balance as of May 31, 2018

**Tampa Electric's Associated Interest Expense for Restoration
Costs Exceeding the Company's Reserve**

<u>Reserve Balance</u>	<u>G/L Balance</u>	<u>S/T Debt Rate</u>	<u>Interest</u>	
Nov-13	\$ (55,860,642)			
8/1/2017 ¹	\$ (46,205,643)			
Sep-17	\$ 13,794,357	2.25%	\$	16,381
Oct-17	\$ 19,294,357	2.25%	\$	36,177
Nov-17	\$ 29,794,357	2.25%	\$	55,864
Dec-17	\$ 46,694,357	2.25%	\$	87,552
Jan-18	\$ 46,694,357	2.25%	\$	87,552
Feb-18	\$ 46,694,357	2.25%	\$	87,552
Mar-18	\$ 45,794,357	2.25%	\$	85,864
Apr-18	\$ 44,052,660	2.25%	\$	82,599
May-18	\$ 43,815,069	2.25%	\$	82,153
			\$	621,694

¹ Change in reserve due to charges from TS Erika, TS Colin, Hurricane Matthew and Hurricane Hermine.

Tampa Electric Company
 Storm Restoration Costs Related to Named Tropical Storms Colin, Erika, Hermine, Matthew, & Irma
 (\$5000's)

Line No.	Storm Restoration Costs by Storm							Total (6)	Storm Loss Recovery (7)
	Colin (1)	Erika (2)	Hermine (3)	Matthew (4)	Irma (5)				
1	Storm Reserve Balance (Pre-Storm)								(55,861)
2	Labor	641	63	855	205	8,713		10,478	
3	Outside Services - Line Clearance	128	78	333	180	6,406		7,124	
4	Outside Services - Services Expense	1,637	545	3,885	637	68,377		75,081	
5	Materials & Supplies Expense	8	0	42	2	815		866	
6	M&S Inventory Issue	0	0	4	3	1,094		1,102	
7	Other Operating Expense	0	0	33	0	72		105	
8	Employee Expense	133	24	192	12	4,530		4,892	
9	Rent Expense	0	0	16	0	11		27	
10	Total Recoverable Storm-Related Restoration Costs/Losses	2,548	710	5,361	1,039	90,018		99,676	99,676
11	Amount of Reserves used to Fund Storm Costs								99,676
12	Balance of Storm Reserve after Funding Storm Costs								43,815
13	Amount Needed to Replenish Reserve to Oct 2013 Level as per Settlement Agreement (Exhibit A of Order No. PSC-2017-0456-S-EI)								99,676
14	Interest on Storm Balance Exceeding Reserve								622
15	Subtotal - System Storm Losses to be Recovered from Customers								100,297
16	Regulatory Assessment Fee Multiplier								1.00072
17	Total System Storm Losses to be Recovered from Customers ("Recoverable Storm Amount")								100,370

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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20170271-EI

IN RE: PETITION FOR RECOVERY OF COSTS
ASSOCIATED WITH NAMED TROPICAL SYSTEMS
DURING THE 2015, 2016, AND 2017 HURRICANE
SEASONS AND REPLENISHMENT OF STORM RESERVE
SUBJECT TO FINAL TRUE-UP, TAMPA ELECTRIC
COMPANY

DIRECT TESTIMONY AND EXHIBIT
OF
S. BETH YOUNG

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

S. BETH YOUNG

I. INTRODUCTION

Q. Please state your name, address, occupation and employer.

A. My name is S. Beth Young. My business address is 820 S. 78th St, Tampa, Florida 33619. I am employed by Tampa Electric Company ("Tampa Electric" or "the company") in the Electric Delivery Department as the Director, Asset Management, Planning, & Support.

Q. Please describe your duties and responsibilities in that position.

A. My duties and responsibilities include the governance and oversight of Tampa Electric's transmission and distribution assets, including capital allocation, system planning, reliability planning and system maintenance, in addition to responsibilities for studies in support of transmission service. My duties and responsibilities also include support for the Electric Delivery Department's operations in the areas of warehousing, fleet, line clearance,

1 geographic information system ("GIS") and mapping services,
2 and the Electric Delivery Department's emergency response
3 and planning.
4

5 **Q.** Please describe your educational background and
6 professional experience.
7

8 **A.** I received my Bachelor of Science degree in Electrical
9 Engineering from the University of South Florida in 1983.
10 I am a registered professional engineer in the state of
11 Florida. I joined Tampa Electric as a co-operative
12 education student in 1980 and became a full-time team member
13 as an associate engineer in 1983. From 1983 through
14 present, I have held various positions as an engineer,
15 manager, and director in Tampa Electric's Electric Delivery
16 Department working in Transmission, Substation,
17 Distribution, System Operations, Project Management,
18 Lighting, and Support Services.
19

20 **Q.** Have you previously testified before the Florida Public
21 Service Commission ("Commission")?
22

23 **A.** Yes, I testified before the Commission in Docket No.
24 20120234-EI, Tampa Electric's Petition to Determine Need
25 for Polk 2-5 Combined Cycle Conversion and in Docket No.

1 20130040-EI, Tampa Electric's 2013 petition for an increase
2 in base rates and miscellaneous charges.
3

4 **Q.** What is the purpose of your direct testimony in this
5 proceeding?
6

7 **A.** The purpose of my direct testimony is to describe how Tampa
8 Electric acquires, stages and manages foreign crew
9 resources in assisting with large scale restoration efforts
10 as well as explain why the costs incurred for those
11 activities were prudent in order to achieve timely
12 restoration of the company's electric system. My direct
13 testimony will also include an overview of Tampa Electric's
14 indirect transmission and distribution ("T&D") restoration
15 efforts and cost details related to restoration activities
16 of the company during the five named tropical storms in
17 2015, 2016 and 2017. These named tropical systems include:
18 Tropical Storm ("TS") Erika, TS Colin, Hurricane Hermine,
19 Hurricane Matthew and Hurricane Irma. My direct testimony
20 also supports the reasonableness and prudence of those
21 restoration activities and the associated costs for which
22 Tampa Electric is seeking recovery.
23

24 **Q.** Are you sponsoring any exhibits in this proceeding?
25

1 **A.** Yes, I am sponsoring Exhibits No. SEY-1, Documents No. 1
2 and No. 2 that were prepared under my direction and
3 supervision. Exhibit No. SEY-1, Document No. 1 titled
4 "Tampa Electric's Recoverable Restoration Costs of
5 Foreign Crews". This Document details the company's
6 recoverable foreign crew restoration storm costs by
7 function and by storm that assisted Tampa Electric in
8 restoring the company's electrical systems in the five
9 named tropical storms in this proceeding. Exhibit No.
10 SEY-1, Document No. 2 titled "Tampa Electric's Indirect
11 Recoverable Restoration Costs by Storm and Function".
12 This Document details the company's costs incurred by
13 Tampa Electric Non-Transmission and Non-Distribution
14 personnel that supported the restoration of the company's
15 electrical systems in the five named tropical storms in
16 this proceeding.

17
18 **II. Acquiring, Staging and Managing Foreign Crew Resources**

19 **Q.** Would you explain what a "foreign crew resource" is and
20 provide an overview of how Tampa Electric acquires foreign
21 crew resources?

22
23 **A.** A foreign crew resource is a work crew supplied by a third
24 party (not native utility nor native contractor employees)
25 that is contracted to work on emergency or storm restoration

1 activities for the native utility. Tampa Electric monitors
2 all storms that could potentially impact the company's
3 service area. Tampa Electric's Electric Delivery
4 Department conducts numerous phone calls in advance of a
5 storm to discuss the readiness of the company to prepare
6 for the impending storm. During these calls, projected
7 outages and required resources are discussed. Depending on
8 the projected number of outages, the number of foreign crew
9 resources necessary to restore service in a timely manner
10 is identified. If necessary, the company communicates with
11 the Southeastern Electric Exchange ("SEE") and non-SEE
12 companies to obtain additional resources.

13
14 **Q.** What types of foreign crew resources does Tampa Electric
15 utilize?

16
17 **A.** Depending on the projected and actual needs for additional
18 assistance, Tampa Electric acquires and utilize foreign
19 crew resources that perform line work, tree trimming,
20 mutual assistance routing systems ("MARS") (call center
21 assistance) and damage assessment.

22
23 **Q.** Which of the named tropical systems that the company is
24 seeking cost recovery for in this proceeding did Tampa
25 Electric acquire foreign crew resources?

1 **A.** Tampa Electric acquired foreign crew resources to assist
2 with restoration efforts in all of the named tropical
3 systems that the company is seeking cost recovery for in
4 this proceeding.

5
6 **Q.** Please identify what type of foreign crew resources Tampa
7 Electric acquired for each named tropical system that the
8 company is seeking cost recovery for in this proceeding.

9
10 **A.** Tampa Electric acquired the following foreign crew
11 resources in the following named tropical systems:

12 TS Erika: line crew and tree trimming

13 TS Colin: line crew

14 Hurricane Hermine: line crew, tree trimming and damage
15 assessment

16 Hurricane Matthew: line crew

17 Hurricane Irma: line crew, tree trimming, MARS and
18 damage assessment

19
20 **Q.** Could Tampa Electric have restored service to its customers
21 in a timely manner without the aid of foreign crew
22 resources?

23
24 **A.** Not in a timely manner. For Tampa Electric to restore
25 service without the aid of foreign crew resources depends

1 on the actual magnitude of outages, the necessary work to
2 restore and how many days would be allowed to perform the
3 restoration. Tampa Electric currently employs 230 line
4 personnel. Tampa Electric also has 120 contract line
5 personnel on the system. Tampa Electric's 80 damage
6 assessors are internal team members who are familiar with
7 the transmission and distribution systems and the company
8 subcontracts 230 line clearing personnel. In order to
9 restore service during Hurricane Irma in a timely manner
10 Tampa Electric utilized the following foreign crew
11 resources: 2,523 line personnel, 194 damage assessors, 622
12 line clearing personnel and 137 MARS support personnel.

13
14 **Q.** Please explain how the company determines how many foreign
15 crew resources to acquire.

16
17 **A.** Tampa Electric determines the number of foreign crew
18 resources to acquire by utilizing a model that takes as an
19 input the track, size and intensity of the storm. The
20 company estimates the number of customer outages, the
21 amount of damage and the overall number of man-hours
22 required to restore the system. Utilizing this
23 information, the company determines how many foreign crew
24 resources to request based on the targeted number of days
25 to restore. Tampa Electric also evaluates this information

1 against prior storm restoration events to validate the
2 results.

3

4 **Q.** Does Tampa Electric take cost into consideration when
5 acquiring resources for storm restoration?

6

7 **A.** Yes, Tampa Electric considers the cost of acquiring foreign
8 crew resources for storm restoration assistance. Tampa
9 Electric's restoration process works to minimize costs for
10 foreign crew resources by releasing more expensive
11 resources first, releasing foreign crew resources to other
12 utilities as early as practical to minimize travel costs
13 even before the electrical system is fully restored, and
14 keeping the most efficient resources until the system is
15 fully restored.

16

17 **Q.** Does Tampa Electric have business controls in place for the
18 acquisition of foreign crew resources?

19

20 **A.** Yes, the company has a documented process to control the
21 acquisition of foreign crew resources. Tampa Electric's
22 Energy Delivery Command will determine the required number
23 of resources based on the projected damage estimates and
24 the targeted estimated time to restore ("ETR"). Resources
25 are obtained from the SEE member companies in a documented

1 process and/or from non-SEE companies directly. All
2 foreign resources obtained are communicated with and are
3 tracked by the company's Foreign Crew Coordination ("FCC")
4 unit, who communicates with other groups such as Logistics
5 and Planning as to their availability and for providing
6 necessary logistical services. Once the foreign resources
7 are no longer required, Electric Delivery's Planning
8 section notifies the FCC unit and the appropriate
9 notifications of the crew members and their home companies
10 are made. As invoices are received, the FCC reconciles
11 them against company documentation for accuracy and proper
12 documentation.

13
14 **Q.** How and when do these foreign crew resources get to Tampa
15 Electric's service area?

16
17 **A.** Tampa Electric pre-positions the foreign crew resources in
18 safe locations or directs the foreign crew resources to
19 arrive at the company after the storm has passed, so as not
20 to put either the crews or their equipment/bucket trucks in
21 the path of the impending storm. After the storm has passed
22 and it is safe for these foreign crews to travel, the crews
23 will travel to Tampa Electric's service area. Once the
24 crews arrive, they are provided a safety briefing and then
25 assigned a Tampa Electric lineman who directs the crew to

1 the restoration work area assigned and supervises their
2 work.

3

4 **Q.** Does staging the resources away from the company's service
5 area cause a delay in restoration?

6

7 **A.** This method of staging does not typically cause a delay.
8 If there is a delay from staging the resources remotely, it
9 is caused by storm impacts occurring between the staging
10 area and Tampa Electric's service area. For example, during
11 Hurricane Irma, with the size and path projection, the
12 foreign crews were mostly staged in Georgia to keep them
13 out of harm's way. Once Hurricane Irma passed Florida and
14 it was safe to travel, the road congestion issues on
15 Interstate 75 caused a delay in getting these resources to
16 the company's service area. Even though there was this
17 delay due to traffic, when the crews arrived all their
18 equipment was in working order and they immediately began
19 assisting Tampa Electric with service restoration.

20

21 **Q.** Please explain how these foreign crews are assigned to
22 Incident Bases to perform restoration work.

23

24 **A.** Prior to the storm impacting Tampa Electric, the Planning
25 section utilizes the planning model to forecast the

1 estimated damage by Incident Base area and makes a
2 preliminary assignment of the foreign crews. The goal is
3 to complete each of the preliminary Incident Base areas
4 assignments prior to the storm. After the storm has passed,
5 an initial damage assessment is performed and damage by
6 Incident Base area is projected. Adjustments to Incident
7 Base assignments are made as needed and the foreign crews
8 are sent to the appropriate Incident Base as they arrive.
9

10 **Q.** How does Tampa Electric ensure these foreign crews are
11 working efficiently and the work is of high quality?
12

13 **A.** To ensure quality and efficient work of the company's
14 foreign line crews, each foreign line crew is assigned a
15 Tampa Electric lineman. The efficiency of their work is
16 ensured more from effective planning that occurs prior to
17 assigning these crews work. The company was very pleased
18 with the overall efficiency and quality of the foreign line
19 crews that performed work during Hurricane Irma. Their
20 average work time in a 16-hour work day was approximately
21 12 hours. Tampa Electric's effective planning on the front
22 end minimized idle and drive time between jobs during the
23 restoration and ensured that sufficient materials were on
24 hand to minimize non-productive time.
25

1 Each foreign tree trimming crew is assigned a Tampa Electric
2 supervisor to monitor and ensure the efficiency and quality
3 of the crew's work. Prior to each day's work during
4 restoration it is the responsibility of the Tampa Electric
5 supervisor to lay out the expectations for the work being
6 assigned. Any quality control issues with tree trimming
7 are corrected on the spot.

8

9 **Q.** How does Tampa Electric determine that these foreign crews
10 are no longer needed?

11

12 **A.** Tampa Electric's Electric Delivery's Planning section
13 reviews the number of customers remaining out of service,
14 the ETR's forecasted and, in collaboration with the
15 Operations section, evaluates the current needs for foreign
16 crew resources. Foreign crew resources are released,
17 either home or to other utilities, as the need for
18 assistance diminishes as restoration nears completion.

19

20 **Q.** Is the overall cost of crews taken into consideration in
21 making the decision as to when and what foreign crews are
22 released during restoration?

23

24 **A.** Yes, Tampa Electric does include the overall cost of the
25 foreign crew in this decision. Tampa Electric's

1 restoration process works to minimize costs for foreign
2 crew resources by releasing more expensive resources first,
3 releasing foreign crew resources to other utilities as
4 early as practical to minimize travel costs even before the
5 electrical system is fully restored, and keeping the most
6 efficient resources until the system is fully restored.
7

8 **Q.** Does Tampa Electric only pay for foreign crew resources
9 labor and equipment costs or are there other costs that
10 Tampa Electric also pays to support these crews?
11

12 **A.** There are other costs. In addition to paying the contracted
13 labor and equipment price to the company supplying the
14 foreign crew resources, Tampa Electric also pays for the
15 costs to fuel their vehicles and to house and feed these
16 crew members. Examples of these other costs include hotels,
17 mattresses and bedding if hotels are unavailable, food,
18 water, ice and laundry services. It is also important to
19 note that utility crews employed by and responding from
20 other utilities to assist in restoration are reimbursed at
21 cost in accordance with pre-existing mutual aid agreements.
22

23 **Q.** How do these foreign crew resources bill Tampa Electric?
24

25 **A.** All of the foreign crew resources will send Tampa Electric

1 a formal invoice for their costs to provide the restoration
2 assistance.

3

4 **Q.** Does Tampa Electric review these invoices prior to paying?

5

6 **A.** Yes, Tampa Electric's FCC unit reviews all invoices prior
7 to paying.

8

9 **Q.** What does Tampa Electric do if there is a discrepancy in
10 the invoice submitted by the foreign crew?

11

12 **A.** If there is a discrepancy with the invoice submitted by the
13 foreign crew, Tampa Electric's FCC unit follows up with the
14 specific company and work out the discrepancy. No invoice
15 is released for payment if there are outstanding
16 discrepancies.

17

18 **Q.** What are the total costs Tampa Electric is seeking to
19 recover in this proceeding, by each storm, for foreign crew
20 resources?

21

22 **A.** Tampa Electric is seeking to recover a total cost for
23 foreign resources of \$70,069,939. This total cost includes
24 costs from the five named tropical storms as follows:
25 \$614,471 from TS Erika; \$141,355 from TS Colin; \$772,736

1 from Hurricane Hermine; \$197,748 from Hurricane Matthew;
2 and \$68,343,628 from Hurricane Irma. The foreign crew
3 amounts Tampa Electric is seeking to recover in this
4 proceeding, by each storm, is also detailed in my Exhibit
5 No. SEY-1, Document No. 1.
6

7 **III. TAMPA ELECTRIC'S INDIRECT T&D STORM RESTORATION**
8 **ACTIVITIES**

9 **Q.** Would you describe restoration efforts performed by Tampa
10 Electric team members that indirectly support T&D
11 restoration?
12

13 **A.** During large storm events such as Hurricane Irma, it's an
14 all-hands-on-deck approach and every team member of Tampa
15 Electric has a pre-established Emergency Assignment (Storm
16 Role). During named tropical system restoration
17 activities, Tampa Electric utilizes the company's Electric
18 Delivery Department team members as well as many other team
19 members who work from various departments other than the
20 Electric Delivery Department to support the necessary
21 restoration activities. Depending on the projected size
22 and path of the storm, Tampa Electric may choose to activate
23 only portions of the company's emergency preparedness plan.
24 These various departments include: Business Development,
25 Business Strategy and Renewables, Community Relations,

1 Customer Experience, Energy Supply, Financial Accounting
2 and Business Planning, Regulatory, Safety and TECO
3 Services.

4
5 **Q.** Would you provide some examples of how each of the
6 departments you have referred to supports restoration?
7

8 **A.** Yes, I will combine some of the departments as their
9 activities supporting storm restoration will be similar.
10

11 **Business Development, Business Strategy and Renewables,**
12 **Community Relations, Financial Accounting and Business**
13 **Planning, and Regulatory:** Tampa Electric team members from
14 these departments support a variety of storm restoration
15 activities depending on the storm assignment of the
16 individual team member. Some examples of these storm
17 restoration functions include the following: leading and
18 operating incident bases; lodging coordination; family
19 assistance; meals coordination; laundry coordination;
20 State, County and City Emergency Operating Center support;
21 transportation; wire down coordination; debris clearance
22 support; search and rescue support.
23

24 **Customer Experience:** Tampa Electric's Customer Experience
25 Department handles communication with customers reporting

1 outages and hazardous conditions. The Customer Experience
2 Department also performs outbound calls to verify services
3 and to provide assurance to customers that they have not
4 been forgotten and provide updates on restoration progress.
5 The Customer Experience Department also coordinates
6 outbound communication such as outbound dialer or emails to
7 update customers on restoration progress and estimates for
8 completion. For Hurricane Irma, due to the high call volume
9 that was projected and ultimately experienced, Tampa
10 Electric utilized its MARS offsite support services to
11 assist.

12
13 **Energy Supply:** Tampa Electric's Energy Supply Department
14 prepares the company's generation facilities ("power
15 plants") to minimize any potential damage to the power
16 plants from the impending storm as well as safely and
17 efficiently returning the power plants to normal operations
18 following the storm. The Energy Supply Department performs
19 a full review of the power plants' status including:
20 communication, environmental concerns, fuel, water storage,
21 waste handling, byproducts handling, consumables (ammonia,
22 hydrogen, sulfuric acid, carbon dioxide), outage
23 requirements, reliability issues and transportation issues.
24 For Hurricane Irma, the Energy Supply Department installed
25 the storm doors at Big Bend and Bayside Power Stations due

1 to potential flooding and shut down Big Bend Units 1 and 2
2 due to the projected impacts of high winds.

3
4 **Safety:** Tampa Electric's Safety Department provides the
5 safety onboarding briefing for all foreign crew resources.
6 During the restoration efforts, the Safety Department
7 provides daily storm safety messages and performs field
8 safety observations to ensure all personnel maintain a
9 heightened focus on being safe during this very challenging
10 time of high workload, pressure to restore quickly and in
11 the hot Florida climate. The Safety Department also
12 performs accident investigations when needed and collect
13 all first aid and recordable injury cases.

14
15 **TECO Services:** TECO Services includes the business
16 functions of Corporate Communication, Facilities, Finance
17 and Treasury, and Human Resources and Information
18 Technology and Telecom ("IT"). Corporate Communications
19 provides messaging on the company's website to provide
20 updates on the restoration progress and estimates for
21 completion. Corporate Communications also develops social
22 media messaging, press releases and interface with media
23 (television and radio) to ensure restoration information is
24 reaching customers. Facilities prepares Tampa Electric's
25 buildings to minimize any potential damage from the storm

1 such as installing storm screens and shutters, preparing
2 the buildings to ride out the storm in case of certain
3 failures such as ensuring all emergency generator fuel
4 tanks are topped off, providing technical engineering
5 support for the company incident bases such as installing
6 portable generators and outdoor/indoor lighting, and
7 responding to facility repair requests during the storm
8 such as roof and water damage repairs. In addition,
9 Facilities team members are stationed on standby at key
10 facilities during the storm to handle any emergencies. IT
11 provides technical support before, during and after the
12 storm to ensure all Tampa Electric electronic systems and
13 communication systems and connections operate as intended
14 to fully support restoration efforts.

15
16 **Q.** Please identify which of the departments have restoration
17 costs included in the costs that Tampa Electric is seeking
18 for recovery in this proceeding (Business Development,
19 Business Strategy and Renewables, Community Relations,
20 Customer Experience, Energy Supply, Financial Accounting
21 and Business Planning, Regulatory, Safety and TECO
22 Services).

23
24 **A.** All the departments listed indirectly supported restoration
25 activities during at least one of the named tropical systems

1 identified in the company's Amended Petition, filed on
2 January 30, 2018 and the associated costs that are
3 appropriate for recovery in this proceeding are included.
4

5 **Q.** Please provide examples of restoration costs that would
6 have been incurred by the following departments that are
7 not included in the costs that Tampa Electric is seeking
8 for recovery in this proceeding (Business Development,
9 Business Strategy and Renewables, Community Relations,
10 Customer Experience, Energy Supply, Financial Accounting
11 and Business Planning, Regulatory, Safety and TECO
12 Services).

13
14 **A.** Tampa Electric followed the Incremental Cost and
15 Capitalization Approach ("ICCA") which is addressed in
16 Tampa Electric's Witness Jeffrey S. Chronister's Direct
17 Testimony. Under this ICCA approach, Tampa Electric
18 excluded the following restoration costs that were
19 incurred: any payroll costs from any of these departments
20 that is already recovered in base rates and utility call
21 center and customer service non-incremental costs
22 associated with the storm events. In addition, for
23 Hurricane Irma, Energy Supply had repairs at two power
24 plants that were charged to capital and not to the storm
25 reserve. These included replacements of a circulating

1 water pump, a GSU fire protection system, several low
2 voltage breakers due to water intrusion, and a 13kV/480V
3 transformer. Also, all of these departments annually
4 review, train and perform mock exercises. The costs
5 associated with this annual training are not included in
6 the costs for which Tampa Electric is seeking recovery.
7

8 **Q.** Did Tampa Electric need to bring in any additional personnel
9 to support these indirect restoration activities for any of
10 the five named tropical storms?
11

12 **A.** Yes, Tampa Electric utilized its MARS to provide call center
13 assistance during and following Hurricane Irma. MARS
14 provided an additional 112 call center resources during the
15 storm and had a peak level of 137 additional resources
16 following the storm to support restoration activities.
17

18 **Q.** Please provide the costs from these non-T&D departments
19 that are included in the costs that Tampa Electric is
20 seeking for recovery in this proceeding for each of the
21 five named tropical storms.
22

23 **A.** Tampa Electric is seeking to recover a total of \$4,223,741
24 prudently incurred storm costs. This total cost includes
25 costs from non-T&D storm support activities for the five

1 named tropical storms as follows: \$3,538 from TS Erika;
2 \$8,301 from TS Colin; \$97,067 from Hurricane Hermine;
3 \$11,093 from Hurricane Matthew; and \$4,103,741 from
4 Hurricane Irma. These amounts are also detailed in my
5 Exhibit No. SEY-1, Document No. 2.
6

7 **Q.** Were these costs incurred for indirect restoration related
8 duties prudent and necessary for Tampa Electric's
9 restoration?
10

11 **A.** Yes, they were prudent and necessary. Tampa Electric's
12 Energy Supply Department took steps prior to the storm to
13 protect the plants and those efforts minimized the repair
14 needed to return the plants to normal operation. Customer
15 Experience and Corporate Communications provided crucial
16 messages to customers experiencing outages as well as for
17 public safety. Facilities took steps to protect Tampa
18 Electric facilities from the high winds, so they could be
19 fully utilized following the storm to support the
20 restoration and return to normal business.
21

22 **Q.** Does this conclude your direct testimony?
23

24 **A.** Yes, it does.
25

EXHIBIT

OF

S. BETH YOUNG

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1	Tampa Electric's Recoverable Restoration Costs of Foreign Crews	25
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Tampa Electric's Recoverable Restoration Costs of Foreign Crews
(In \$ Thousands)

	Total Storm Restoration Recoverable Costs					
	Line	Vegetation Management	Damage Assessors	Customer Service	Other	
Erika	537	78	0	0	0	
Colin	126	0	14	0	1	
Hermine	702	39	27	0	5	
Matthew	198	0	0	0	0	
Irma	59,936	5,733	1,331	735	609	
Total	61,499	5,850	1,372	735	615	

Note: Detail may not add to totals due to rounding

Tampa Electric's Indirect Recoverable Restoration Costs by Storm and Function
(In \$ Thousands)

	Total Storm Restoration Recoverable Costs	Distribution	Transmission	Other	Generation
Erika	4	4	0	0	0
Colin	8	8	0	0	0
Hermine	97	0	0	97	0
Matthew	11	0	0	11	0
Irma	4,104	1,045	0	1,543	1,516
Total	4,224	1,057	0	1,651	1,516

Note: Detail may not add to totals due to rounding