2015

STORM IMPLEMENTATION PLAN
&
ANNUAL RELIABILITY PERFORMANCE REPORTS

FILED: March 1, 2016

REVISED: August 24, 2016

TECO
TAMPA ELECTRIC

2015 Storm Implementation Plan & Annual Reliability Performance Reports

TAMPA ELECTRIC COMPANY

SUMMARY OF 2015

STORM HARDENING PLAN, ANNUAL RELIABILITY PERFORMANCE REPORTS and ANNUAL WOOD POLE INSPECTIONS

Tampa Electric received approval of its 2013-2015 Storm Hardening Plan in Docket No. 130138-EI, Order No. PSC-13-0640-PAA-EI, issued December 3, 2013.

In 2015, Tampa Electric continued to perform the required system hardening activities such as equipment upgrades, system and equipment maintenance, upgrading of distribution wood structures, replacement of transmission non-wood structures and the company's distribution and transmission inspection processes. These continued storm hardening activities will ensure Tampa Electric's electrical system will perform at an acceptable level if a major storm impacts the company's service area.

Tampa Electric's 2015 distribution reliability indices showed improvement in System Average Interruption Duration Index ("SAIDI"), Customer Average Interruption Duration Index ("CAIDI") and most notably the Momentary Average Interruption Event Frequency Index ("MAIFIe") which is the lowest it has ever been. In 2015, Tampa Electric's customers experienced fewer momentary breaker operations and also shorter outages overall. Tampa Electric expected this reduction in momentary breaker operations to cause an increase in the System Average Interruption Frequency Index ("SAIFI"), Customers Experiencing More Than Five Interruptions ("CEMI-5") and Average Duration of Outage Events ("L-Bar") measurements.

For 2016, Tampa Electric remains committed to continued electric system storm hardening and will submit the company's 2016-2018 Storm Hardening Plan demonstrating continued compliance to Rule 25-6.0342 FAC on May 2, 2016.

The following pages include the following reports:

1. Tampa Electric's 2015 activities and costs and 2016 projected activity and costs for each of the Ten Storm Hardening Initiatives.
2. Tampa Electric's 2015 Annual Distribution Service Reliability Report as required by Rule 25-6.0342 Florida Administrative Code ("FAC").
3. Tampa Electric's 2015 Annual Wood Pole Inspection Report as required by Docket Nos. 07-0634-EI and 07-0635-TL, Order No. PSC-07-0918-PAA-PU issued November 14, 2007.

A) Initiative 1: Four-year Vegetation Management

Tampa Electric's Vegetation Management Program ("VMP") incorporates a balanced approach to electrical safety and reliability while adhering to the American National Standards Institute ("ANSI") A300 pruning standards. The company manages approximately 6,300 miles of overhead distribution and 1,300 miles of overhead transmission lines over five counties within Florida. Tampa Electric's current VMP calls for trimming the company's distribution system on a four-year cycle approved by the Commission in Docket No. 120038-EI, Order No. PSC-12-0303-PAA-EI, issued June 12, 2012. The plan incorporates the flexibility to change circuit prioritization utilizing the company's reliability based methodology.

B) Initiative 2: Joint Use Pole Attachments Audit

In 2015, Tampa Electric conducted comprehensive loading analyses and continued to streamline processes to better manage attachment requests from attaching entities. The comprehensive loading analysis was performed

on 1,548 poles and all poles determined to be overloaded will be corrected.

For 2016, Tampa Electric will continue conducting comprehensive loading analyses where necessary.

C) Initiative 3: Transmission Structure Inspection Program

Tampa Electric's Transmission Structure Inspection Program is a multi-pronged approach that identifies potential transmission system issues.

In 2015, all scheduled inspections were completed. These scheduled inspections included the annual aerial infrared, ground patrol and ground line inspections. The above ground inspections for 2015 had been completed in November 2014.

In May 2015, Tampa Electric identified a scheduling opportunity that enabled the company to perform the above ground inspections scheduled for 2016 in 2015. Additionally in December 2015, the company was able to perform the aerial infrared and ground line inspections scheduled for 2016 in addition to the 2015 inspections that were completed earlier in the year. As a result, the 2016 above ground, ground line and infrared inspections were completed before the end of 2015.

In November of 2014, the Florida Public Service Commission ("FPSC") approved Tampa Electric's petition to alter the Above Ground Inspection cycle from six to eight years, reducing the annual inspection amount from 17 percent to 12.5 percent. The reduction in the inspection schedule was supported by the results of the company's substantial transmission pole replacement and maintenance program.

The ruling was also supported by the company's plan to reallocate the cost

savings from the reduced above ground inspections to refine and enhance the accuracy of the State Estimator Model. The upgrade of this application will improve the company's ability to identify potential outages before they occur, thus improving reliability without any additional cost to the customer. In 2015, the State Estimator Model accuracy was improved and the solution rate improved by 28 percent, bringing the solution rate to 99.5 percent in December 2015.

For 2016, the annual ground patrol inspections are scheduled to meet program requirements.

D) Initiative 4: Hardening of Existing Transmission Structures

Tampa Electric continues hardening the existing transmission system in a prudent and cost-effective manner utilizing the company's inspection and maintenance program to systematically replace wood structures with non-wood structures.

In 2015, Tampa Electric hardened 726 structures that included 649 pole replacements utilizing steel or concrete poles and 77 sets of insulators replaced with polymer insulators.

For 2016, Tampa Electric is projecting to harden 500 transmission structures as part of the pole inspection and maintenance program.

E) Initiative 5: Geographic Information System

Tampa Electric's Geographic Information System ("GIS") continues to serve as the foundational database for all transmission, substation and distribution facilities. As communicated in the July 2015, Audit review of Data Accuracy in Electric Reliability Reporting by Florida Electric IOUs conducted by the FPSC Office of Auditing and Performance Analysis development and

improvement of the company's GIS system continues.

In 2015, Tampa Electric implemented over 30 changes and enhancements to the company's GIS system. These changes included service pack upgrades, data updates, metadata and functionality changes to closer align with business processes and improve user performance.

F) Initiative 6: Post-Storm Data Collection

Tampa Electric's process for post storm data collection and forensic analysis has been in place for approximately eight years. The company has continued the relationship with outside contractors to perform the following critical components of the plan:

- The establishment of a field asset database
- Implement forensic measurement protocol
- Perform the integration of forensics activity with overall system restoration efforts
- Perform forensic data sampling
- Provide reporting in a standardized format

Should a storm impact Tampa Electric's service area, the overall process will facilitate post-storm data collection and forensic analysis that will be used to determine the root cause of damage occurring to the company's distribution system.

G) Initiative 7: Outage Data - Overhead and Underground Systems

Tampa Electric was not impacted by any major storms in 2015. Should a major weather event occur in 2016, the company believes it has an established process in place for collecting post-storm data and performing forensic analyses. The company also has appropriate measures in place to manage outage performance data for both overhead and underground

systems.

H) Initiative 8: Increase Coordination with Local Governments

In 2015, Tampa Electric's communication efforts focused on maintaining existing vital governmental contacts and continued participation on standing disaster recovery planning committees. Tampa Electric continues to be involved in improving emergency response to vulnerable populations. In addition, Tampa Electric also participated in joint storm exercises with the Florida Division of Emergency Management ("FDEM"), the FPSC, the City of Tampa ("COT"), and Hillsborough and Pasco Counties.

I) Initiative 9: Collaborative Research

Tampa Electric is participating in a collaborative research effort with the state's other investor-owned electric utilities, several municipals and cooperatives to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This research is being facilitated by the Public Utility Research Center ("PURC") at the University of Florida. A steering committee comprised of one member from each of the participating utilities is providing the direction for research initiatives. An extension of the Memorandum of Understanding ("MOU") was signed with PURC in December 2015 which expires on December 31, 2018 allowing this collaborative research to continue during the next three-year storm hardening plan.

J) Initiative 10: Disaster Preparedness and Recovery Plan

Tampa Electric Emergency Management plans address all hazards, including extreme weather events. Tampa Electric follows the policy set by TECO Energy for Emergency Management and Business Continuity which delineates the responsibility at employee, company and community levels.

In 2015, Tampa Electric participated in the following disaster preparedness and recovery plan activities which included in-depth coordination with local, state and federal emergency management in the following areas:

- Hillsborough County Threat, Hazard, Identification Risk Assessment
- Continued to contribute to the Hillsborough County Post Disaster Redevelopment Plan ("PDRP") update, helping to align PDRP recovery support functions and emergency support functions
- Chair of the Florida Emergency Preparedness Association ("FEPA") Public-Private Partnership Committee.
- Principal member of the National Fire Protection Association ("NFPA") 1600 - Committee on Business Continuity, Emergency Management and Disaster Recovery
- Leadership roles in Local Mitigation Strategy ("LMS") and Vulnerable Population Committees
- Member of Electric Subsector Coordinating Council ("ESCC") Leadership Working Group. Organized first federal level ESCC exercise for principal industry members supporting chief executive officers and supported the socialization of the ESCC Playbook
- Supported Hillsborough County's application for Emergency Management Accreditation Program ("EMAP")
- Member of the GridEx Working Group ("GEWG") which developed the GridEx III exercise scenario.

Also In 2015, Tampa Electric launched the Emergency Management ("EM") Twitter Account and the Facebook group with the purpose of communicating preparedness and connecting Tampa Electric families during emergency response. Tampa Electric continues to participate in internal and external preparedness exercises, collaborating with government emergency management agencies, at local, state and federal levels.

For 2016, Tampa Electric will continue in leadership roles in county and national preparedness groups: Hillsborough County PDRP, Edison Electric Institute ("EEI"), ESCC, and the NFPA 1600 Committee on Emergency Management, Business Continuity and Disaster Recovery. In addition, Tampa Electric will continue to be active participants in LMS and Vulnerable Population Committees, as well as promote growth of Twitter and Facebook followers.

K) Wood Pole Inspection Program

Tampa Electric's Ground line Inspection Program for its distribution, lighting, and transmission poles is based on the requirements of the National Electrical Safety Code ("NESC") and is designed to inspect 12.5 percent or one-eighth of the pole population each year. Tampa Electric manages a total pole population of approximately 429,000 over the company's entire service area. Out of this population, there are approximately 316,000 distribution and lighting wood poles and 26,000 transmission poles appropriate for inspection for a total pole inspection population of approximately 342,000 over five counties within Florida.

In 2015, Tampa Electric performed the 47,000 planned 2015 inspections as well as 11,378 of the 2016 inspections for a total of 58,378 pole inspections.

For 2016, the company is not scheduling wood pole inspections and will resume inspections in 2017 to meet the eight-year wood pole inspection cycle.

SECTION I - Storm Preparedness Plans

A) Initiative 1: Four-year Vegetation Management

1) Program Overview

Tampa Electric's VMP provides a balanced approach to vegetation management and currently calls for a four-year tree trim cycle, which will improve the quality of line clearance while increasing system reliability related to system hardening activities. Tampa Electric began ramping up its VMP at the end of 2005, with an emphasis on critical trimming needed in areas identified by the company's reliability based methodology.

In 2015, the company trimmed approximately one-fourth of the system. Results for the year, on a system-wide basis as well as by specific service area, are provided in various tables contained in Section D of the Appendix.

2) Description of Vegetation Management Program

In 2015, Tampa Electric's VMP utilized eight full time company employees and approximately 215 contracted tree trim personnel to manage the company's distribution tree trimming requirements. The company's VMP utilizes ANSI A300 standards which are implemented through Tampa Electric's Transmission and Distribution Line Clearance Specification. This comprehensive document covers specifications related to operations, notification guidelines, tree trimming and removal, chemical application, targeted completion dates, overtime and non-compliance.

In 2015, Tampa Electric utilized approximately 26 contracted tree trim personnel to manage the company's transmission tree trimming requirements. In addition, Tampa Electric's Transmission Vegetation Management Program ("TVMP") continues to comply with the North American Electric Reliability Corporation ("NERC") standard for Transmission

Vegetation Management FAC-003-3.

3) Summary of Past and Future Activities

In 2015, Tampa Electric's System Reliability and Line Clearance Departments utilized a third party vegetation management software application. Using this application, an analysis was completed which took into consideration multi-year circuit performance data, trim cycles and cost. The analysis has resulted in the development of a multi-year VMP which optimizes activities from both a reliability based and cost-effective standpoint within the company's overall VMP.

For 2016, Tampa Electric will continue to review current reliability-based information and pertinent field and customer information along with the company's annual trimming plan, in order to maximize the overall effectiveness of the company's VMP.

4) Tree-related Terms and Definitions

Tampa Electric defines a "hazard tree" as any tree that is dead, diseased or damaged with the potential to impact the distribution or transmission facilities. All reactive or "hot-spot" trimming is defined as any internal or external customer driven request for tree trimming. Therefore, all tree trim requests outside of full circuit trimming activities are categorized as hot-spot trims.

5) Criteria Used to Select a Vegetation Management Response

Tampa Electric's Line Clearance and Inspection Rights-of-Way ("ROW") supervisors, in conjunction with a contracted tree trim general foreman, evaluate whether or not to remove a tree, hot-spot trim or execute full circuit trimming based on several variables. These variables include the date the circuit was last trimmed, circuit reliability data and visual inspection of the circuit. Specific to tree removal, any tree which cannot be trimmed in

accordance with ANSI A300 standards is considered for removal. On occasion, Tampa Electric has replaced a tree with a more suitable tree at the company's expense. The company promotes the Right Tree, Right Place Program, whereby customers are encouraged to plant trees that will not interfere with electrical facilities. Tampa Electric operates and maintains a customer information website which allows any customer to review the recommended set back distances for planting from electrical facilities.

6) **Vegetation Management Practices - Utility Easements and Rights of Way**

Tampa Electric's tree clearing practices within and outside utility easements and ROW utilize a variety of methods to determine the corrective actions to be taken on a case-by-case basis. On private properties, where tree and/or brush removal is required to complete the maintenance activity, the contractor or company representative is required to make every reasonable effort to secure permission of property owners prior to removing and/or chemically treating any trees or brush.

Tampa Electric's tree trimming practices, for trees that abut or intrude into easements and authorized ROW, also utilize a variety of methods to determine corrective actions to be taken on a case-by-case basis. Specific to trees that intrude into easements and authorized ROW, the contractor is required to make every reasonable effort to secure permission to trim these trees.

7) **Relevant Utility Tariffs**

Tampa Electric is not limited in terms of tariff language pertaining to vegetation management within easements and ROW.

8) Company Practices Regarding Trimming Requests

Most external based requests for tree trimming are routed to representatives in Tampa Electric's Customer Service - One Source Department for input into the work order management system. Work orders are received by Tampa Electric's Line Clearance personnel or assigned to tree trim contractors for a field inspection. Once the field inspection is complete, proper action is taken to satisfy the customer(s) request. These actions include communicating directly with the customer on-site or leaving a door hanger with detailed tree trimming information.

In 2015, approximately 78 percent of all customer driven tree trim requests resulted in some form of tree trimming. The balance of the requests did not require immediate action or they impacted other utilities.

For 2016, Tampa Electric has 179 dedicated distribution tree trim personnel throughout the company's seven service areas. These dedicated resources are broken out into two categories: proactive and reactive tree trim crews. The proactive tree trim crews are utilized for circuit tree trimming activities and consist of 155 personnel. The reactive tree trim crews consist of 24 personnel and are employed for hot spot trims, customer requested work, and work orders associated with circuit improvement process.

9) Local Community Participation

Tampa Electric has increased its efforts toward effective vegetation management as part of a coordinated plan with local governments and communities. The relationship between tree conservation and appropriate utility line clearance preservation is a delicate balance. Tampa Electric, in conjunction with local government and community partners, has developed tree-planting guides, which minimizes the company's tree trimming activities. Moreover, Tampa Electric's Line Clearance Department holds periodic

meetings with local governments and communities related to vegetation management.

In 2015, Tampa Electric partnered with the City of Temple Terrace for Arbor Day where volunteers spent the day planting trees throughout the community as part of Temple Terrace's Adopt-A-Tree Program. Tampa Electric also served on the Hillsborough County's Tree and Landscape Advisory Committee.

During the fourth quarter 2015, Tampa Electric submitted its renewal application to the National Arbor Day Foundation's Tree Line USA Program and expects to receive endorsement in the first quarter 2016. This will be the eighth consecutive year Tampa Electric has received the National Arbor Day Foundation's Tree Line USA Program designation.

10) Hazard Tree Program and Related Information

Data collection related to hazard tree and "top for removal" program was incorporated into Tampa Electric's work order management system effective January 2007 to enhance future reporting capabilities.

In 2015, Tampa Electric evaluated 204 potential hazard trees and "top for removal," resulting in the trees either being removed or trimmed.

11) Conclusion

Tampa Electric has set forth an aggressive program to effectively operate and manage the company's overall VMP and will continue to enhance the level of communication and coordination with local governments and communities.

In 2015, Tampa Electric trimmed approximately one-fourth of its system.

For 2016, the company will continue to operate the VMP on a four-year cycle in accordance with Commission approved Docket No. 120038-EI, Order No. PSC-12-0303-PAA-EI, issued June 12, 2012.

B) Initiative 2: Joint Use Pole Attachments Audit

1) Overview

In 2015, Tampa Electric conducted comprehensive loading analyses and continued to streamline processes to better manage attachment requests from attaching entities. A comprehensive loading analysis was performed on 1,548 poles and all poles determined to be overloaded will be corrected.

For 2016, Tampa Electric will continue conducting comprehensive loading analyses where necessary.

2) Joint Use Agreements

Due to the size of Tampa Electric's service area and the number of poles the company has, there will always be the potential for unknown foreign attachments to exist on facilities which could place additional loading on a facility which may create an overload situation. To help mitigate these potential overload situations, all Tampa Electric joint use agreements have provisions that allow for periodic inspections and/or audits of all joint use attachments to the company's facilities. In addition, all agreements have provisions that require the attaching party to build and maintain attachments within NESC guidelines or Tampa Electric specifications, whichever are more stringent. All of Tampa Electric's existing joint use agreements require attaching parties to receive authorization from the company prior to attaching any cable to its facilities.

In 2015, Tampa Electric reviewed all known attachment records and verified that the company has joint use agreements with all attaching entities. Tampa

Electric has a total of 31 joint use agreements with attaching entities.

For 2016, Tampa Electric's Joint Use department will continue working on new third party attachment agreements.

3) Tampa Electric's Joint Use Department

Tampa Electric's Joint Use Department strives to ensure the poles are not overloaded and meet the NESC or Tampa Electric Standards, whichever is more stringent, in an effort to lessen storm related issues on poles with joint use attachments. All joint use agreements require attaching entities to apply for and gain permission to make attachments to Tampa Electric's poles. Tampa Electric's permit application process requires a thorough review of the application, an engineering assessment of every pole where attachments are being proposed which includes comprehensive loading analysis and compliance with NESC or Tampa Electric's construction standards, the completion of any necessary construction to ensure poles are ready for attachments, Tampa Electric's permission to attach to the poles requested and a post inspection and authorization of the attachments that have been placed in the field. The company also uses National Joint Utility Notification Systems ("NJUNS") for the purpose of improving the coordination and notification process with attaching entities.

In 2015, Tampa Electric processed 27 pole attachment applications for 1,402 poles. As a result, the company identified 12 distribution poles that were overloaded due to joint use attachments and 44 poles were overloaded due to Tampa Electric's attachments. Out of the 1,402 poles that were assessed through the pole attachment application process and the comprehensive loading analysis, there were 160 poles that had NESC violations due to joint use attachments and 52 poles with NESC violations due to Tampa Electric attachments. All poles with NESC violations were either corrected by

adjustments to attachments, pole replacements or joint use entities' removal of the attachments in violation.

In 2015, effort was made by third party "attachers" to notify Tampa Electric of poles planned for over-lashing. Over-lashing is one specific area of concern which is when a joint use entity attaches to an existing attachment without prior Tampa Electric engineering and authorization. This concern continues to be mitigated through a stipulation agreement signed in 2010 whereby the attaching entities agreed to submit notification of all proposed over-lashed attachments to Tampa Electric.

4) Initiatives that Align with Tampa Electric's Pole Inspection Program

Tampa Electric's pole inspection program continues to align with two initiatives implemented in 2008. These initiatives are the Comprehensive Loading Analysis and the Pole Attachment Audit.

In 2015, poles were screened during the pole inspection program to identify those potentially overloaded. The poles screened included those with joint users attached. A comprehensive loading analysis was performed by Tampa Electric to determine if an overloading condition exists. If any pole is found overloaded, the company's engineering department will design and create a work request to make the necessary correction. Corrective actions to be taken include pole replacement, guying, or the pole could be upgraded to the appropriate strength level by installing an Extended and Tapered Truss ("E-T Truss").

Tampa Electric's Joint Use department completed the last pole attachment audit in 2014. The main benefit of performing the audit is the identification of unauthorized attachments. This allows Tampa Electric to perform the engineering and loading analysis on these poles to ensure that all loading

requirements are met.

5) Conclusion

In 2015, Tampa Electric's Joint Use department continued improving the processes necessary for attaching entities to attach to the company's poles as well as the Comprehensive Loading Analysis initiative.

For 2016, Tampa Electric's Joint Use department will continue to look for processes that will be more efficient for attaching entities to attach to the company's poles as well as the Comprehensive Loading Analysis initiative.

C) Initiative 3: Six-year Inspection Cycle for Transmission Structures

1) Overview

Tampa Electric's Transmission System Inspection Program identifies potential system issues along the entire transmission circuit by analyzing the structural conditions at the ground line and above ground as well as the conductor spans. The inspection program is a multi-pronged approach with inspection cycles of one and eight-years depending on the goals or requirements of the individual inspection activity. Formal inspection activities included in the program are ground line inspection, ground patrol, aerial infrared patrol, above ground inspection and substation inspections. Typically, the ground patrol, aerial infrared patrol and substation inspections are performed on one-year cycles. The ground line and above ground inspections are performed on an eight-year cycle. This is in line with the company's petition that was approved by the Commission in November of 2014 which changed the above ground inspection cycle from a six-year cycle. Additionally, pre-climb inspections are performed prior to commencing work on any structure.

For 2016, the ground line, above ground and aerial infrared inspections were completed in 2015. In 2015, Tampa Electric identified a scheduling

opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform all of the ground line, above ground and aerial inspections scheduled for 2016 in 2015. Due to the early completion of these inspections no ground line, above ground and aerial inspections are scheduled for 2016. The remaining budget for the 2016 ground patrol is $163,730.

2) Ground Line Inspection

Tampa Electric has continued the company's ground line inspection program that complies with the Commission's order requiring ground line inspection of wooden transmission structures. In addition, Tampa Electric included provisions in the ground line inspection program to identify deficiencies with non-wood structures. Ground line inspections are performed on an eight-year cycle. Each year approximately 12.5 percent of all transmission structures are scheduled for inspection.

In 2015, approximately 3,220 structures or 12.7 percent of the system, comprising 16 circuits, were inspected. The cost for the 2015 ground line inspection was $67,937.

In 2015, Tampa Electric identified a scheduling opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform all of the ground line inspections scheduled for 2016 at a cost of $45,398. Approximately 3,300 structures or 13 percent of the system, comprising 31 circuits, were inspected. Because of this early completion for the scheduled 2016 ground line inspections, ground line inspections will begin again in 2017.

3) Ground Patrol

The ground patrol is a visual inspection for deficiencies with poles, insulators,

switches, conductors, static wire and grounding provisions, cross arms, guying, hardware and encroachment.

In 2015, all 230 kV, 138 kV and 69 kV circuits were patrolled by ground at least once. The cost for the 2015 ground patrol inspections was $166,333.

For 2016, ground patrol is planned for all transmission circuits. All 230 kV, 138 kV and all critical 69 kV circuits will be ground patrolled prior to the peak of hurricane season with the remaining transmission circuits being completed by the end of 2016. Transmission circuits are typically scheduled to be patrolled by level of system criticality, with the most critical circuits patrolled first. The 2016 budget for the ground patrol inspections is $163,730.

4) Aerial Infrared Patrol

The aerial infrared patrol is typically performed on the entire transmission system. It is performed by helicopter with a contractor specializing in thermographic power line inspections and a company employee serving as navigator and observer. This inspection identifies areas of concern that are not readily identifiable by normal visual methods as well as splices and other connections that are heating abnormally and may result in premature failure of the component. This inspection also identifies system deficiencies such as broken cross arms and visibly damaged poles. Since many of these structures are on limited access ROW, this aerial inspection provides a frequent review of the entire transmission system and helps identify potential reliability issues in a timely manner.

In 2015, 100 percent of Tampa Electric's transmission circuits were inspected by aerial infrared patrol. The 2015 aerial infrared patrol inspections were completed early in the year at a cost of $59,862.

In December 2015, Tampa Electric identified a scheduling opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform the aerial infrared patrol scheduled for 2016 in December 2015 for 100 percent of the transmission circuits. The cost for performing these 2016 planned aerial infrared patrol inspections was $74,678. Because of this early completion of the scheduled 2016 aerial infrared patrol, aerial infrared patrol will begin again in 2017.

5) Above Ground Inspections

Above ground inspections will continue to be performed on transmission structures on an eight-year cycle; therefore, each year approximately 12.5 percent or one-eighth of transmission structures are inspected. This inspection is performed by a contractor specializing in above ground power pole inspection and may be performed by climbers, bucket truck or helicopter. The above ground inspection is a comprehensive inspection that includes assessment of poles, insulators, switches, conductors, static wire, grounding provisions, cross arms, guying, hardware, and encroachment issues. This program provides a detailed review of the above ground condition of the structure.

The 2015 above ground inspections were performed in 2014 and reported last year.

In May 2015, Tampa Electric identified a scheduling opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform all of the above ground inspections scheduled for 2016 in 2015. Above ground inspections were performed on 3,288 structures, or approximately 12.9 percent of the system, comprising 31 circuits. The cost for this planned 2016 above ground inspection was $254,299.

Because of this early completion for the scheduled 2016 above ground inspections, there will be no above ground inspections scheduled for 2016. The above ground inspections will begin again in 2017.

6) Substation Inspections

Substation inspections consist at a minimum of an annual inspection of all transmission substations as well as sample and perform dissolved gas analyses annually for all transmission system autotransformers. These inspections identify equipment deficiencies and the information is entered into a maintenance database. The database is reviewed by management for prioritization and facilitation of the remediation process across Tampa Electric's system.

In 2015, substation inspections were performed on all transmission substations.

For 2016, substation inspections are planned on all transmission substations.

7) Pre-Climb Inspections

While not a part of the formal inspection program outlined above, Tampa Electric crews are required to inspect poles prior to climbing. As part of these inspections, the employee is required to visually inspect each pole prior to climbing and sound each pole with a hammer if deemed necessary. These pre-climbing inspections provide an additional integrity check of poles prior to the employee ascending the pole and may also result in the identification of any structural deterioration issues.

8) Reporting

Standardized reports are provided for each of the formal inspections. Deficiencies identified during the inspections are entered into a maintenance

database. This maintenance database is used to prioritize and manage required remediation. Deficiencies identified during the pre-climb inspections are assessed by the on-site crew and reported to supervisory personnel for determination of corrective action.

D) Initiative 4: Storm Hardening Activities for Transmission Structures

1) Overview

Tampa Electric is hardening the existing transmission system in a prudent, cost-effective manner utilizing the company's inspection and maintenance program. This plan includes the systematic replacement of wood transmission structures with non-wood structures during the company's annual maintenance of the transmission system. Additionally, the company will utilize non-wood structures for all new transmission line construction projects as well as system rebuilds and line relocations. The company is also actively replacing insulators that have deteriorated over time with new polymer insulators.

In 2015, Tampa Electric hardened 726 structures at a cost of $12.2 million. This included 640 pole replacements with steel or concrete poles and 77 sets of insulators replaced with polymer insulators.

For 2016, Tampa Electric plans to harden 500 transmission structures as a part of the pole inspection and maintenance program with a budget of $12.5 million. This includes 500 structure replacements with steel or concrete poles as well as replacing insulators with polymer insulators as needed.

E) Initiative 5: Geographic Information System

1) Overview

GIS is fully integrated into Tampa Electric's process as the foundational database for all transmission, substation and distribution facilities. All new

computing technology requests are evaluated with an emphasis on full integration with GIS. Development and improvement of the GIS for users continues. In 2015, over 30 changes and enhancements were implemented in the GIS system. These changes included service pack upgrades, data updates, and metadata and functionality changes to better conform to business processes and improve the user experience.

All initiatives are evaluated with the goal to eliminate redundant, exclusive and difficult to update databases, further cementing GIS as the foundational database for Tampa Electric.

Tampa Electric has an ongoing activity directed toward improving the functionality of the company's GIS. User improvement requests are forwarded to Tampa Electric's GIS User's Group, which meets regularly to review, evaluate and recommend enhancements for implementation.

2) Conclusion

Tampa Electric has fully integrated GIS into the company's business processes. All technology requests are evaluated with a goal of full integration into GIS. Development and improvement of the GIS for users continues.

In 2015, many improvements and enhancement were implemented.

For 2016, Tampa Electric expects to identify more opportunities to continue enhancing and improving the company's GIS.

F) Initiative 6: Post-Storm Data Collection

1) Establishment of a Forensics Team

Tampa Electric has continued its relationship with its outside consultant to

perform the post-storm forensic analysis. Its purpose is to determine the root cause of storm damage after a major storm.

2) Establishment of Forensics Measurements

Tampa Electric utilizes a database that was constructed by a consultant in 2007 for the establishment of forensics measurements. The consultant used the company's existing data sources and built a database of distribution facilities on a geographic basis of Tampa Electric's service areas. Tampa Electric will continue utilizing the consultant to collect data and facilitate the completion of the database to provide a complete understanding of the total facilities exposed to storm conditions in a given area in order to effectively analyze the extent of damage.

Pole damage compared to damage on other overhead components, such as conductors and equipment, generally have the biggest impacts on the system reliability, restoration and resource allocation. Tampa Electric's forensic analysis will look at pole damage during storm events. Pole damage during hurricanes can be categorized into two major categories: pole leaning and pole breaking. Recommendations on pole setting depth in different soil types will be provided, if needed.

Contributing factors to pole breakages during hurricanes can include trees, debris, presence of deterioration and wind. Although these factors may seem independent, they will result in additional stress on poles causing breakage to occur. Therefore, the impacts of these external factors will be examined and analyzed. Meanwhile, internal factors such as pole material (e.g., concrete, wood, metal), pole height/class, framing types, conductors, attachments and equipment will also be considered to determine the current pole loading profile. The company's consultant will take both external and internal factors into account and evaluate pole loading in both normal conditions (based on

design criteria) and hurricane conditions.

Breakage rates (defined as the proportion of pole breakages to the total pole population) as opposed to absolute breakage counts will be considered in forensic analysis. Breakage rate analysis will be applied to every category of pole structures. Categories of pole structures are classified by each pole structure's unique combination of features including pole height/class, framing type, conductors, attachments and equipment and presence of deterioration, etc. Each category of pole structure will be studied in each wind region (region that has unique range of wind speed) to determine the breakage rate in each region.

3) Establishment of Forensics Database Format

Tampa Electric utilizes a database that was constructed by a consultant in 2007 for the establishment of post-storm forensics measurements. The consultant used the company's existing data sources and built a database of distribution facilities on a geographic basis of Tampa Electric's service areas.

Tampa Electric also utilizes a pole database that includes such information as pole size, average age, pole population by type of treatment, pole inspection and maintenance data such as last inspection or treatment, types of conductor, foreign utility attachment size and quantity, tree trimming cycles by area and a number of other important factors and variables used for forensic analysis.

The pole database was built from Tampa Electric's pole inventory, pole inspection records and joint use attachment records. To address additional infrastructure installed in the company's system since the raw data was collected, all data collected during the forensic analysis process will be cross checked against the database and any missing data will be added. This will

allow for all data collected during a storm event to be evaluated.

4) Forensics and Restoration Process Integration

As a severe storm approaches, the current plan calls for putting the consultant on notice when Tampa Electric activates the company's Incident Command System ("ICS"). This will likely occur when the storm is within three days of landfall. The consultant is required to mobilize data gathering personnel and equipment no later than one day prior to landfall to be ready for data gathering as soon as it is safe after the storm passes. The decision to mobilize the consultant will be made by the company in conjunction with the decision to mobilize foreign crews for restoration work.

Prior to data collection, the consultant will work with Tampa Electric to determine the geographical areas to be patrolled for data collection. This will be done using storm path and wind strength information, flood/surge information, initial damage assessment reports and other relevant data. Scheduling of the data collection effort will be done in conjunction with the company's restoration effort.

The consultant will be responsible for patrolling a representative sample of the damaged areas of the electrical system following a major storm event and perform the data collection process. At a minimum, the following types of information will be collected:

- Pole/Structure – type of damage, size and type of pole, age (birth mark), and likely cause of damage
- Conductor – type of damage, conductor or joint use size and type, and likely cause of damage
- Equipment - type of damage, overhead only, size and type, and likely cause of damage
- Hardware - type of damage, size and type, and likely cause of damage

To collect post-storm field data, a data collection model will be used by field personnel doing the damage assessments. This data collection model will exist electronically for use on computer tablets in the field. The electronic spreadsheet will be based on the available information from the initial data inventory and the additional information required from field collection. The input form of an electronic collection tool will include many drop down selections based on all the possible alternatives found on Tampa Electric's system to facilitate easy data entry for field personnel and ensure consistent information for later analysis.

5) Forensics Data Sampling Methodology

Tampa Electric will work with the consultant to perform the initial damage assessment of the storm damage area to determine the data sample to be collected. This initial assessment will provide information on the size of the area(s) impacted by the storm and the level of damage in the area(s).

From the damage assessment and initial data inventory, the consultant will make a correlation between size of damage area and the number of facilities exposed to storm force winds. This analysis will then lead to an estimated sample size to be collected and also direct the areas in which samples should be collected. The consultant will use weather reports and wind data from throughout the storm area to analyze the wind forces Tampa Electric facilities encountered during the storm.

6) Reporting Format Used to Report Forensics Results

Following a storm event and the subsequent forensic analysis, Tampa Electric's consultant will provide a full report containing the data collected and resulting findings. The data collected will be an electronic database, Excel or Access format, with accompanying analyses, charts and diagrams.

Reporting for this project will include a detailed written report of findings, analyses, conclusions and recommendations for improvement in system performance. The report format will typically include the following sections:

- Summary of Findings
- Available Data
- Analysis and Findings
- Integral Analysis and Interpretation
- Conclusions

7) Conclusion

Tampa Electric has an established process in place to gather the necessary data for forensics analysis following a significant storm. This data will be used to determine the root cause of damage after a storm event.

For 2016, depending upon the number of storm events, the company will incur costs based upon the category of storm and level of activation upon the forensic analysis contractor.

G) Initiative 7: Outage Data - Overhead and Underground Systems

1) Overview

Tampa Electric was not impacted by any storms in 2015. Should a major weather event occur in 2016, the company believes it has an established process in place for collecting post-storm data and forensic analyses. The company also has appropriate measures in place to manage outage performance data for both overhead and underground systems.

H) Initiative 8: Increase Coordination with Local Governments

The following is a summary of Tampa Electric's 2015 activities with local governments in support of ongoing programs, storm preparation and plans for

2016. This information is also represented in the matrix provided in the Appendix D.

1) Communication Efforts

Tampa Electric strives to maintain excellent communications with the local governments within the company's service territory. These communications are carried out by specifically assigned personnel from Tampa Electric's Community Relations and Emergency Management departments to each of the local governments served. Tampa Electric representatives engage in ongoing discussions with local officials regarding critical issues such as storm restoration, underground conversions and vegetation management. In addition, Tampa Electric is committed to improving these relationships even further and will increase coordination in a number of key areas.

In 2015, Tampa Electric's Emergency Management department communication efforts continued to focus on local, state and federal governments and agencies for all emergency management missions. Tampa Electric was invited to participate in local, state and federal government drills. In addition, Tampa Electric played an integral planning role in the development and execution of the NERC GridEx III. Other communication topics in 2015 included updating governmental officials of the company's transmission line inspections, structural upgrades, and in federal NERC/Federal Energy Regulatory Commission ("FERC") line clearance regulation changes.

In 2015, community focused communications included pre-hurricane season news releases to all major media outlets that serve Tampa Electric customers. All releases were also posted on Tampa Electric's web site. Hurricane guides were published in several major newspapers including the Tampa Tribune, Lakeland Ledger and the Winter Haven News Chief. In

addition, Tampa Electric in partnership with Hillsborough County, promoted the national flood insurance program to county residents through the company's Open Lines news and information forum.

2) Storm Workshop and Training with Local Government

In 2015, Tampa Electric participated in joint storm workshops and training with governmental officials including exercises with the FDEM, the FPSC, the COT, and Hillsborough and Pasco Counties. Locally, Tampa Electric organized and conducted the NERC GridEx III exercise, with participation from local emergency management officials and critical customers (i.e., Port Tampa and Tampa International Airport). In addition, the company played a key role in improving emergency response to vulnerable populations.

3) Emergency Operations Centers – Key Personnel Contact

In 2015, weather-related events caused various county and municipal agencies to open their Emergency Operations Centers ("EOC") at full or partial activation levels to support emergency response activities. Specifically, Pasco County EOC was under full activation in response to significant rain and subsequent flooding events in late July and early August; however, Tampa Electric was not greatly impacted by this event. In addition, in August 2015, in response to Tropical Storm ("TS") Erika, the State of Florida, Hillsborough County and the COT EOC were under full activation. Pinellas County EOC was under partial activation for TS Erika.

Tampa Electric continues to work with local, state and federal governments to streamline the flow of information that is helpful to the company's and local government's efforts to restore all services as quickly and as safe as possible. Prior to June 1 of each year, the company's Emergency Response Plan is reviewed and updated to ensure that Tampa Electric representatives that support EOC are in place and are fully trained in the event of EOC activation.

4) Search and Rescue Teams – Assistance to Local Government

In 2015, there was no activity to report regarding search and rescue activities. Tampa Electric, however, maintains a staff of lineman and vehicles ready to assist local fire departments with search and rescue activities should the company be called upon.

5) Tree Ordinances, Planting Guides and Trim Procedures

In previous years, Tampa Electric Line Clearance personnel communicated with municipal officials on several projects. Some of these projects include providing guidance to planning boards on changes to their landscaping ordinance, and covered issues including ROW landscaping issues, as well as assisting in the production of public information shows for radio and television.

For 2016, the company's Manager of Line Clearance will continue to work with Tampa Electric's Community Relations staff to offer meetings with local government's Public Works supervisory staff on how Tampa Electric can best work with city staff in pre-storm and post-storm events and to better coordinate the company's tree trimming procedures with governmental ordinances.

6) Underground Conversions

Over the past three years, the Dana Shores Civic Association and Tampa Electric have been working with Hillsborough County to create a Municipal Service Benefit Units ("MSBU") ordinance. The ordinance would allow neighborhoods to set up self-elected taxing districts that would fund capital upgrade through annual Ad Valorem taxes. Tampa Electric employees attended several meetings with officers of the association, county officials, as well as regular association meetings to provide assistance. Estimates for the

project have been presented jointly by the association's officers and Tampa Electric employees to the County Planning Commission Staff. Efforts are still underway with Hillsborough County to set up a special taxing district specifically for funding this project. In 2015, the ordinance was passed by the County Commission and now the Dana Shores Civic Association leadership is working to get the necessary neighborhood consensus documentation to put the County's processes in motion.

7) Conclusion

For 2016, Tampa Electric will continue to focus its government communication efforts to provide governmental officials with the company's emergency response contacts and review the company's Emergency Response Plan. Tampa Electric plans to host government and emergency response leaders and representatives for a pre-storm hurricane event and presentation. This pre-storm hurricane event will outline the company's ongoing emergency preparedness plan, what information is necessary to most effectively report damages, and the sharing of contact information to ensure open dialogue among stakeholders. Tampa Electric expects participants in this collaborative event to be similar to prior events which included representatives from Hillsborough, Polk and Pinellas Counties, Plant City, Temple Terrace, Lake Alfred, Mulberry, and Winter Haven. Tampa Electric will continue communicating storm preparedness information to customers through the annual media pre-hurricane season press release. Tampa Electric will also continue to train the company's EOC representatives and designated search and rescue personnel.

I) Initiative 9: Collaborative Research

1) PURC Collaborative Research Report

Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center
University of Florida

To the

Utility Sponsor Steering Committee

February 2016

I. Introduction

The Florida Public Service Commission (FPSC) issued Order No. PSC-06-00351-PAA-EI on April 25, 2006 (Order 06-0351) directing each investor-owned electric utility (IOU) to establish a plan that increases collaborative research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This order directed IOUs to solicit participation from municipal electric utilities and rural electric cooperatives in addition to available educational and research organizations. As a means of accomplishing this task, the IOUs joined with the municipal electric utilities and rural electric cooperatives in the state (collectively referred to as the Project Sponsors) to form a Steering Committee of representatives from each utility and entered into a Memorandum of Understanding (MOU) with the University of Florida's Public Utility Research Center (PURC). The third extension of this MOU was recently approved by the Research Collaboration Partners and now extends through December 31, 2018.

PURC manages the work flow and communications, develops work plans, serves as a subject matter expert, conducts research, facilitates the hiring of experts, coordinates with research vendors, advises the Project Sponsors, and provides reports for Project activities. The collaborative research has focused on undergrounding, vegetation management, hurricane-wind speeds at granular levels, and improved materials for distribution facilities.

This report provides an update on the activities of the Steering Committee since the previous report dated February 2015.

II. Undergrounding

The collaborative research on undergrounding has been focused on understanding the existing research on the economics and effects of hardening strategies, including undergrounding, so that informed decisions can be made about undergrounding policies and specific undergrounding projects.

The collaborative has refined the computer model developed by Quanta Technologies and there has been a collective effort to learn more about the function and functionality of the computer code. PURC and the Project Sponsors have worked to fill information gaps for model inputs and significant efforts have been invested in the area of forensics data collection. Since the state has not been affected by any hurricanes since the database software was completed, there is currently no data. Therefore, future efforts to refine the undergrounding model will occur when such data becomes available.

In addition, PURC has worked with doctoral and master's candidates in the University of Florida Department of Civil and Coastal Engineering to assess some of the inter-relationships between wind speed and other environmental factors on utility equipment damage. PURC has also been contacted by engineering researchers at the University of Wisconsin and North Carolina State University with an interest in the model, though no additional relationships have been established. In addition to universities, PURC was contacted by researchers at the Argonne National Laboratory who expressed interest in modeling the effects of storm damage. The researchers developed a deterministic model, rather than a probabilistic one, but did use many of the factors that the Collaborative have attempted to quantify. Every researcher that contacts PURC cites the model as the only non-proprietary model of its kind.

The research discussed in last year's report on the relationship between wind speed and rainfall is still under review by the engineering press. Further results of this and related research can likely be used to further refine the model.

III. Wind Data Collection

The Project Sponsors entered into a wind monitoring agreement with WeatherFlow, Inc., in 2007. Under the agreement, Florida Sponsors agreed to provide WeatherFlow with access to their properties and to allow WeatherFlow to install, maintain and operate portions of their wind monitoring network facilities on utility-owned properties under certain conditions in exchange for access to wind monitoring data generated by WeatherFlow's wind monitoring network in Florida. WeatherFlow's Florida wind monitoring network includes 50 permanent wind monitoring stations around the coast of Florida, including one or more stations located on utility-owned property. The wind monitoring agreement expired in early 2012; however, the wind, temperature, and barometric pressure data being collected at these stations is being made available to the Project Sponsors on a complimentary basis.

IV. Public Outreach

In last year's report we discussed the impact of increasingly severe storms on greater interest in storm preparedness. PURC researchers discussed the collaborative effort in Florida with the engineering departments of the state regulators in Connecticut, New York, and New Jersey, and regulators in Jamaica, Grenada, Curacao, Samoa, and the Philippines. While all of the regulators and policymakers showed great interest in the genesis of the collaborative effort, and the results of that effort, they have not, at this point, shown further interest in participating in the research effort.

PURC researchers continue to utilize the insight gained through the hurricane hardening research to contribute to the debate on undergrounding in the popular press, and reinforce the state of Florida as a thought leader in this area. PURC Director of Energy Studies Ted Kury was asked to contribute an article to the second quarter issue of *Utility Horizons* describing the modeling methodology for assessing the undergrounding of power lines. The essay also provided a link to an *Electricity Journal* article by Kury and Lynne Holt, another PURC researcher, which discusses Florida's cooperative approach and holds it up as a "best practice" in regulation. In addition, Kury has conducted interviews for the general press on

the costs and benefits of underground power lines.

V. Conclusion

In response to the FPSC's Order 06-0351, IOUs, municipal electric utilities, and rural electric cooperatives joined together and retained PURC to coordinate research on electric infrastructure hardening. The steering committee has taken steps to extend the research collaboration MOU so that the industry will be in a position to focus its research efforts on undergrounding research, granular wind research and vegetation management when significant storm activity affects the state.

J) Initiative 10: Disaster Preparedness and Recovery Plan

1) 2015 Emergency Management Summary

In 2015, Tampa Electric worked with the local governments within the company's service areas to further enhance dialogue and seek opportunities to partner in training. As in the past, the company provided local communities with public service information at the beginning of storm season via local news media. During the State of Florida and Hillsborough County joint storm exercise, Tampa Electric's Emergency Response Team tested its response and communication plans.

Prior to June 1, 2015, all emergency support functions were reviewed, personnel trained, and ICS Logistics and Planning Section plans were tested.

2) 2016 Emergency Management Activities & Budget

For 2016, the company's Emergency Response Plan will be reviewed in January to ensure it is up to date and ready for the 2016 storm season. Tampa Electric's Emergency Management budget for 2016 is $226,648, which will be used to cover labor costs, preparedness resources such as emergency notification system, weather services, resilience management products, internal and external training, exercises to test plans and the

following initiatives:

- Tampa Electric Emergency Preparedness Fair with representation from government agencies, and support additional external county fairs
- Annual cyber security exercise
- Internal maritime security exercises
- Training over 40 Tampa Electric certified emergency response team members
- Participate in local, state and federal emergency management and business continuity forums
- Participation in the Southeast Electric Exchange ("SEE") Logistics Committee
- Support of Hillsborough County in communicating the national flood insurance to county residents
- Support Electric Subsector Coordinating Council ("ESCC") strategy
- Support Hillsborough County PDRP Planning, State of Florida Division of Emergency Management and Department of Homeland Security ("DHS")
- Chair the Hillsborough County PDRP Infrastructure Technical Advisory Committee
- Support the DHS Infrastructure Dependencies Pilot Project
- Participation in the DHS Protective Security Advisor Program
- Support community preparedness through participation in various government committees (e.g., Maritime Security, Florida Department of Law Enforcement, Regional Domestic Security Task Force), and activate as necessary during major community events
- Planning with the Hillsborough County Department of Health ("DOH") on the Cities Readiness Initiative; pandemic and bio-terrorism emergency response (i.e., Mass Casualty exercise)
- Support Hillsborough County LMS Working Group

- Participate in public/private storm related exercises
- Conduct all-hazards internal preparedness exercises and training sessions using the company ICS model to test plans

3) 2015 Energy Delivery Emergency Management

In 2015, Tampa Electric's Energy Delivery department was involved in many activities throughout the entire storm season. The department facilitated training sessions in various locations to include roles and responsibilities before, during and after storm activation. Tampa Electric's Emergency Management Coordinator facilitated and oversaw multiple training meetings and storm exercises across the Energy Delivery department.

In May 2015, Energy Delivery facilitated a centralized functional exercise focusing on the Estimated Time of Restoration ("ETR") and 2-Man Cut-N-Clear crew processes. The event was based on a Category 2 hurricane with sustained winds of 120 - 125 mph and a storm surge of 8 feet which impacted the Tampa Electric Service Area and neighboring counties. The scenario was preceded by an Energy Delivery conference call that included other key employees across the company. As a result of both these exercises, 87 action items were identified for follow-up and lessons learned. All action items have been followed up on and implemented.

Tampa Electric annually reviews sites for incident bases and staging sites which ensure primary and backup locations for distribution, transmission, and materials. Additionally, logistical needs and equipment requirements are reviewed for each incident base site. Throughout Tampa Electric's service territory, the company is constantly developing and maintaining relationships with property owners for potential incident bases and staging sites. Energy Delivery also annually reviews existing purchase orders and contacted

vendors who would assist the company with restoration efforts. All these activities were performed in 2015.

In 2015, Energy Delivery participated in numerous conference calls with other SEE utilities regarding rain, wind and ice events. The company's participation in these calls was to offer mutual assistance to a requesting company needing restoration support. No Tampa Electric resources were deployed through mutual assistance groups in 2015 to assist other electric utilities.

In August 2015, with TS Erika forecasted to run up the center of the state and through the middle of Tampa Electric's service territory, Tampa Electric requested the assistance of crews through the SEE Mutual Assistance. The company was able to secure the services of approximately 100 outside utility crews and/or their contractors to travel to assist the company if TS Erika impacted the electric system. Fortunately, TS Erika dissipated and any threat to Tampa Electric's service territory from the storm was eliminated.

In 2015, part two of the review of Energy Delivery's emergency restoration project was completed. In 2014, Energy Delivery engaged the services of an outside consulting firm to perform a review of Energy Delivery's emergency restoration process. The consultant made a total of 17 recommendations in their review of the emergency restoration process. This consulting firm has long been involved in reviewing emergency restoration practices of electric utilities across the country. The firm also participated in the development of the National Response Event ("NRE") plan. The review for Energy Delivery consists of two parts with a potential third part. Part one involves securing outside restoration resources which was completed in 2014. Part two involved the review of the emergency restoration plan which was completed in 2015. Part three is the potential evaluation of alternatives for hardening the Transmission and Distribution ("T&D") system and formulating a multi-year

plan for the Distribution System. At this time, Tampa Electric has decided to not engage the consultant for part three.

Finally, prior to hurricane season, Energy Delivery management reviewed all employees' storm assignments and communicated roles and expectations. Meetings and training were held as needed throughout the year.

4) 2016 Energy Delivery Emergency Management

For 2016, Tampa Electric's Energy Delivery department will continue to pursue additional incident base and staging sites as backup locations. Service area managers and incident base leaders will maintain relationships with property owners of existing sites and locations.

Energy Delivery will conduct a mock storm drill in the second quarter of 2016 to include key employees across all levels of the company. The plan is to practice a hurricane making landfall on peninsula Florida. Various scenarios will be injected throughout the exercise. Follow-up items and lessons learned will be recorded.

Prior to hurricane season, Tampa Electric's Energy Delivery management will review all employees' storm assignments and communicate roles and expectations. Meetings, training and exercises will be scheduled at various locations. Additionally, employee preparedness will be emphasized prior to storm season via training materials and presentations.

K) Storm Hardening Plan Update

Tampa Electric's 2013-2015 Storm Hardening Plan was approved by the Commission in Docket No. 130138-EI, Order No. PSC-13-0640-PPA-EI, issued December 3, 2013. The plan is largely a continuation of previously approved plans with an overall focus aimed at improving the company's

energy delivery system to withstand severe weather events. Activities discussed below have been either completed in prior plans or are ongoing efforts in the current plan, all of which are designed to harden the company's system.

1) Undergrounding Distribution Interstate Crossings

The continued focus of this activity is to harden limited access highway crossings so as to prevent the hindrance of first responders, emergency vehicles and others due to fallen distribution lines blocking traffic. The restoration of downed overhead power lines over interstate highways can be lengthy due to heavy traffic congestion following a major storm. Tampa Electric's current preferred construction standard requires all distribution line interstate crossings to be underground. Therefore, the company initially converted several overhead distribution line crossings to underground on major interstate highways. Through 2015 a total of 16 distribution crossings have been converted. Any remaining distribution interstate highway crossings will be converted to underground as construction and maintenance activities present opportunities

2) Testing Network Protectors

The Tampa downtown network is a small area of dense loads made up of mostly high-rise office buildings. This area is considered critical infrastructure because of the high concentration of business and governmental buildings in this area. The types of businesses include telecommunications switching center, banking, city and county governmental offices, federal and county courthouses as well as approximately 2,500 hotel rooms and 6.5 million square feet of office space. The Marion Street substation serves the downtown network with six underground distribution circuits. The downtown network consists of 361 manholes and 56 network vaults. Most network vaults contain two network transformers and two network protectors. In 2015,

a total of 70 network protectors were tested and 10 units were replaced. Tampa Electric will continue to remotely monitor the network protectors daily, address any issues that arise and visually inspect each unit at least once bi-annually. Further analysis will be conducted on the network protectors to determine the benefit of these hardening efforts in the unfortunate event that a hurricane impacts the downtown network.

3) 4 kV Conversions

Since 2008, Tampa Electric's distribution circuits operate at a uniform 13.2 kV. This uniformity reduces the amount of required inventory and removes any uncertainty about distribution voltages for operation personnel.

4) Extreme Wind Pilot Projects

As part of Tampa Electric's previous storm hardening plans, the company upgraded the distribution systems for two critical facilities in its service area, namely, the Port of Tampa and Saint Joseph's Hospital. The Port of Tampa delivers 40 percent of the gasoline consumed in the State of Florida. Saint Joseph's Hospital is a Level 2 Trauma Center centrally located in Tampa. The upgrade activities for these two facilities were pilot projects designed to harden their distribution systems to extreme wind criteria.

In 2013, Tampa Electric hardened the two distribution circuits to the COT Tippins Water Treatment Plant. This plant serves 95 percent of the daily water consumed by the COT water customers. This activity included upgrading one circuit to extreme wind criteria, upgrading the other circuit to current standards and modifying the feed into the plant from overhead to underground. In addition, animal protection was added to the substations where the circuits originate and circuit breakers and relays for both circuits were replaced.

Tampa Electric will monitor the behavior of these hardened locations before and after a hurricane event to determine the effectiveness of these types of hardening efforts and their appropriateness for broader system deployment.

5) Underground Equipment Construction Standard

Tampa Electric's standard specifies the use of stainless steel transformers and switchgear. Tampa Electric will continually evaluate and implement reliable and cost-effective options that improve the performance of all underground installations exposed to saturated conditions.

In 2015, Tampa Electric began deploying a dead-front submersible switchgear unit designed to prevent outages due to animals, and harsh and wet environments.

In 2015 two live-front switchgear were retrofitted with submersible switchgear in downtown Tampa which is geographically located in an area that will be impacted by storm surge. The cost of these retrofits was approximately $74,000. Maintenance plans are to continue replacing the live-front gear in the downtown area with submersible gear.

6) Coordination with Third Party Attachers

Tampa Electric has conducted meetings with third party attachers to discuss the hardening projects identified in the company's Three-year Storm Hardening Plan as well as coordination between companies. Documentation and follow-up are integral to the process. Conflicts that have been brought to Tampa Electric's attention are being reviewed and addressed. Overall, the coordination with third party attachers has been positive and productive.

SECTION II - Storm Season Ready Status

A) Storm Season Ready Status: 2015 Accomplishments

1) Transmission

In 2015, Tampa Electric completed ground patrols on the transmission system including all 230 kV, 138 kV circuits and 69 kV circuits. The ground patrols identified access, encroachment and vegetation management issues and facilitated a visual review of the system.

The company continued to execute its eight-year transmission structure inspection program with priority given to critical facilities and coastal facilities with progression to inspection of older inland circuits. As inspections were completed, the inspections moved to interconnection circuits, circuits serving co-generators and other inland circuits. The transmission structure inspections took into consideration the condition of each pole and span of wire, including issues with structural hardware such as nuts that have backed off their bolts, corroded equipment, deteriorated appurtenance arms, unbraided conductors and woodpecker holes. This inspection work is completed when the system is under load.

Also in 2015, Tampa Electric hardened 726 structures that included 649 pole replacements utilizing steel or concrete poles and 77 sets of insulators replaced with polymer insulators.

In 2015, Tampa Electric performed a thorough overhaul of circuits 230014 & 230018 that are tie lines with Florida Power and Light. Insulator sets, dampers, static dead ends and preforms as well as bolted connections on the tower structures were addressed, hardened and made more reliable during this overhaul. This overhaul cost $1.12 million to make these circuits significantly more reliable.

2) Vegetation Management

In 2015, Tampa Electric continued to maximize the effectiveness of its VMP efforts relative to storm season. All 230 kV and 138 kV transmission lines as well as priority 69 kV tie lines were patrolled twice for vegetation management. Any vegetative conditions identified from those patrols were either resolved immediately or scheduled for full circuit maintenance.

These efforts, along with the company's ongoing, aggressive trimming of the distribution system in 2015, have better prepared Tampa Electric for future storm seasons.

3) Updated and Reviewed Circuit Priority

In 2015, Tampa Electric continued to work with all county and municipal agencies in reviewing and updating the restoration priorities following established procedures.

4) Capacitor Maintenance Program

In support of maintaining balanced voltage to both the transmission and distribution systems and in maintaining the interconnection with Tampa Electric's neighbors, the company continued its capacitor maintenance program in 2015. The company remotely monitors capacitor banks and when apparent problems were identified, a Tampa Electric field crew was dispatched to resolve any operational problems. In 2015, the company conducted field visits for 709 capacitor banks and made repairs as needed.

5) Increased Equipment Inventory

The company reviewed and increased its storm inventory prior to the 2015 hurricane season. The stock increase secured a full four-day supply of overhead distribution materials such as splices, fuses, connectors, service

clamps, brackets, wire, poles, transformers, etc. The company has procurement contracts in place that provide for additional supplies being delivered within four days of landfall and it will replenish required stock for the duration of a major restoration event.

6) **Communication/Coordination with Key EOC and Governmental Organizations**

In 2015, Tampa Electric continued its communication efforts focusing on maintaining vital governmental contacts and participation on standing disaster recovery planning committees. Tampa Electric was invited to participate in several Hillsborough County led initiatives, focusing on joint efforts to identify temporary housing, rebuild infrastructure and revive the area's economy in the aftermath of a disaster. These committees are standing committees and will continue to meet. Tampa Electric also participated in joint storm exercises with the FDEM, the FPSC, the COT, and Hillsborough and Pasco Counties, and federal with DHS, Department of Energy ("DOE"), NERC and the White House.

7) **Secured and Expanded Incident Bases**

Tampa Electric annually reviews the company's current sites for incident bases and staging sites which ensure primary and backup locations for distribution, transmission and materials. Additionally, logistical needs and equipment requirements are reviewed for each incident base site. Throughout Tampa Electric's service territory, the company is constantly developing and maintaining relationships with property owners for potential incident bases and staging sites. Tampa Electric's Energy Delivery department also annually reviews existing purchase orders and contacts vendors who would support and assist the company with restoration efforts. All these activities were performed in 2015.

8) Hurricane Preparedness Exercises

In May 2015, Energy Delivery facilitated a centralized functional exercise focusing on the ETR and 2-Man Cut-N-Clear crew processes. The event was based on a category two hurricane with sustained winds of 120-125 miles per hour ("mph") with a storm surge of eight feet which impacted Tampa Electric's service area and neighboring counties. The scenario was preceded by an Energy Delivery conference call that included other key employees across the company. As a result of this exercise, 87 action items were identified for follow-up and lessons learned. All action items have been followed up on and implemented.

9) Post-Storm Data Collection and Forensic Analysis Implemented

In 2015, Tampa Electric continued its relationship with its outside consultant for performing post storm forensic analysis. This analysis will be completed to gather a statistically significant representative sample of damage and using this sample to determine root causes of failure during major storms.

10) Storm Hardening

See Section K for update to this section.

B) Storm Season Ready Status: 2016 Planned Activities

1) Program Summary

Tampa Electric's 2016 Storm Season Readiness preparation focuses on a number of areas including pre-storm transmission inspections and maintenance, wood pole inspections and replacements, vegetation management, capacitor maintenance, local government interaction, increased equipment inventory, circuit priority reviews, hurricane preparation exercises, industry research for best practices and procedures for storm restoration.

2) Transmission Inspections and Maintenance

In preparation for the 2016 storm season, Tampa Electric has performed aerial infrared inspections on all 230kV, 138kV and 69kV circuits including approximately 26,000 structures in late December 2015. Prior to hurricane season, all 230kV, 138kV and all critical 69kV circuits will be patrolled with the remaining transmission circuits being completed by the end of 2016.

Tampa Electric plans to change out approximately 500 wood transmission poles throughout the year with steel or concrete structures. Also, Tampa Electric intends to replace existing insulators with polymer insulators as needed, with much of this work being completed prior to the peak of hurricane season.

3) Pole Inspections

In October 2015, Tampa Electric identified a scheduling opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform all of the transmission ground line inspections scheduled for 2016 and a portion of the 2016 distribution and lighting wood pole inspections. For 2016, Tampa Electric has planned no ground line inspections to be conducted. The ground line inspections will begin again in 2017. The future inspections coupled with the company's pole replacement program will enhance the storm resiliency of Tampa Electric's distribution system.

4) Capacitor Maintenance Program

For 2016, the company will continue monitoring and maintaining capacitor banks. In preparation for summer peak loads, and in anticipation of the significant impact of summer storms on workforce availability and capacitor failure rates, Tampa Electric continues to make aggressive efforts to make capacitor bank repairs during the spring of 2016. Repairs during the summer are generally limited to an as needed basis. Regularly scheduled repairs will

continue in the fall as the need and weather permits. For 2016, the company estimates that approximately 675 capacitor banks will be field visited, tested and repaired if needed.

5) Communication with Local Governments

Tampa Electric has and will continue to meet with various governmental agencies to enhance communication and coordination of emergency and vegetation management as well as provide education on coordinating and facilitating underground conversions, to the extent that these inquiries occur.

6) Increase Equipment Inventory

As was the case in 2015, the company will review and increase storm stock in 2016 to ensure a four-day supply of overhead distribution materials such as splices, fuses, connectors, service clamps, brackets, wire, poles, transformers, etc., as well as transmission and substation materials. The company will also ensure that procurement contracts are in place to support additional supplies being delivered within four days of landfall and it will replenish required stock for the duration of a major restoration event.

7) Circuit Priority Review

For 2016, Tampa Electric will continue working with all county and municipal agencies in reviewing and updating the restoration priorities for the areas the company serves.

8) Hurricane Preparedness Exercises

Tampa Electric's Energy Delivery will conduct a mock storm drill in the second quarter of 2016 to include key employees across all levels of the company. The plan is to practice a hurricane making landfall on peninsula Florida. Various scenarios will be injected throughout the exercise. Follow-up items and lessons learned will be recorded and followed up on and

implemented as appropriate.

9) Storm Hardening Plan

All projects in Section K of this report have been either completed or are a continuation of previous activities. Should a severe weather event strike Tampa Electric's service area, the company will evaluate the performance of the pilot projects to determine next steps to be taken. Tampa Electric will continue hardening its energy delivery system in accordance with the company's currently approved storm hardening plan. That plan continues to define the criteria, construction standards, maintenance practices, system inspection programs and other policies and procedures utilized for transmission, distribution, and substation facilities in Tampa Electric's service territory. Tampa Electric's proposed 2016-2018 Storm Hardening Plan will be filed on May 1, 2016.

SECTION III - Wood Pole Inspection Program

A) Wood Pole Inspection Program

1) Program Summary

Tampa Electric's Wood Pole Ground line Inspection Program is part of a comprehensive program initiated by the FPSC for Florida investor-owned electric utilities to harden the electric system against severe weather and unauthorized and unnoticed non-electric pole attachments which affect the loadings on poles.

This inspection program complies with Order No. PSC-06-0144-PAA-EI, issued February 27, 2006 in Docket No. 060078-EI which requires each investor-owned electric utility to implement an inspection program of its wooden transmission, distribution and lighting poles on an eight-year cycle

based on the requirements of the NESC. This program provides a systematic identification of poles that require repair or replacement to meet strength requirements of NESC.

2) Inspection Cycle

Tampa Electric performs inspections of all wood poles on an eight-year cycle. Tampa Electric has approximately 316,000 distribution and lighting wood poles and 26,000 transmission poles appropriate for inspection for a total pole population of approximately 342,000. Approximately 12.5 percent of the known system will be targeted for inspections annually although the actual number of poles may vary from year to year due to recently constructed circuits, de-energized circuits, reconfigured circuits, etc.

3) Inspection Method and Procedure

Tampa Electric will utilize three basic inspection procedures for determining the condition of wooden poles. These procedures include a visual inspection, sound and bore, and excavation if required.

a) Inspection in Conjunction with Other Field Work

As part of day-to-day operations, personnel are sometimes required to climb poles to perform different types of field work. Prior to climbing any pole, personnel will make an assessment of the condition of the pole. This will include a visual check and may include sounding to determine pole integrity. This type of inspection will supplement the systematic inspection approach otherwise outlined in this pole inspection program.

b) Visual Inspection

An initial visual inspection shall be made on all poles from the ground line to the pole top to determine the condition of the pole before any

additional inspection work is completed. The visual inspection shall include a review of the pole condition itself and any attachments to the pole for conditions that jeopardize reliability and are in need of replacement, repair or minor follow-up. After a pole has passed the initial visual inspection, the balance of the required inspection method will be performed.

c) Sound and Bore

After passing the visual inspection, the pole shall be sounded to a minimum height of seven feet above the ground line to locate any rotten conditions or pockets of decay inside the pole. Borings shall be made to determine the location and extent of internal decay or voids. All borings shall be plugged with preservative treated wooden dowels. After the pole has passed the sound and bore inspection, an excavation inspection will be performed, if required.

d) Excavation

For poles requiring excavation, the pole shall be excavated to a minimum depth of 18 inches below the ground line. Any external decay shall be removed to expose the remaining sound wood. The remaining pole strength shall be determined.

For a pole in concrete or pavement where excavation is not possible, Tampa Electric will utilize the Osmose Utility Services, Inc. shell boring technique. This will consist of boring two 3/8 inch holes at a 45-degree angle to a depth of 16 to 18 inches below ground level. The technician will determine the pole strength by the resistance while drilling. Upon withdrawing the drill bit, the technician will examine the condition of the wood shavings to determine whether decay is present. All borings shall be plugged as previously described.

e) Hardware Inspection

The inspector shall inspect all of Tampa Electric's guying, grounding provisions and hardware that is visible from the ground.

f) Inspection and Treatment Labeling

After completion of the ground line inspection, an aluminum tag identifying the contractor and date of inspection shall be attached to the pole above the birthmark. Additionally, a tag shall be attached identifying any preservative treatments applied and the date of application.

g) Pole Attachment/Loading Analysis

In some circumstances, Tampa Electric will conduct a pole loading data collection and analysis as part of the ground line inspection. The analysis will ensure that the condition of the pole meets the requirements in Table 261-1A of the NESC. The analysis will not be performed on poles having only Tampa Electric attachments since these facilities were addressed in the original design.

h) Data Collection

The collected data shall be managed in a database and include information related to pole class, material, vintage, location, joint use attachments, and any pole deficiencies that required follow-up actions, if any.

4) Disposition of Poles

Poles with early stage decay that do not require remediation to meet the NESC strength requirements shall be treated with an appropriate preservative treatment. Poles with moderate decay that have substantial sound wood

shall be considered for reinforcement. Analysis shall be performed to determine if reinforcement will bring the deficient pole into compliance with the requirements of the NESC. If it is determined that the pole can be reinforced, the pole shall be treated with an appropriate preservative treatment and reinforced. Poles with advanced decay shall fail the inspection and be replaced.

5) Routing of Inspections

a) Distribution

Tampa Electric's distribution system is a radial system with many laterals and service drops. The company has determined the most cost-effective and reasonable approach for routing the work of the annual inspection program is by geographic location. Therefore, inspectors will be given an area that is defined by specific boundaries and distribution and lighting poles within that area will be systematically inspected.

b) Transmission

Tampa Electric's transmission system is primarily a network system with few laterals. The company has determined the most cost-effective and reasonable approach for routing the inspection work to be on a circuit basis. Therefore, annual inspections will be performed sequentially from substation to substation completing an entire circuit in the process.

6) Shared Poles

Tampa Electric supports the Commission's effort to establish pole inspection requirements on the owners of all utility poles. Tampa Electric will coordinate with third party owners of utility poles that carry the company's facilities. With regard to the third party's inspection process, the company will rely upon the

third party's inspection requirements and share data requested by the third party to be utilized in their inspection procedure. Tampa Electric will cooperate, as requested, in the work associated with pole replacement where joint use exists.

7) Standards Superseding NESC Requirements

At this time there are no standards that supersede NESC requirements. Tampa Electric's Wood Pole Ground line Inspection Program complies with NESC requirements.

8) Pole Inspection Program Performance Verification

Qualified Tampa Electric personnel or an independent contractor will conduct a quality control audit on the pole inspection work to verify compliance with the pole inspection services contract. This quality control audit shall consist of selecting random poles, determining the proper course of action per the inspection services contract, and comparing the independent audit recommendation against the proposed recommendation by the pole inspection service.

9) Reporting

Tampa Electric will file an annual Pole Inspection Report by March 1 of each year in full accordance with the reporting requirements set forth in Docket No. 070634-EI, Order No. PSC-07-0918-PAA-PU, issued November 14, 2007. The report will contain the methods used to determine the strength and structural integrity of wooden poles, the selection criteria for inspected poles, a summary of the results of the inspections, the cause(s) of inspection failures, and the corrective action taken for the failures.

10) 2015 Accomplishments

Tampa Electric's Ground line Pole Inspection Program was conducted by

three contracted crews and one supervisor who inspected a total of 51,959 poles. The pole failure rate for distribution and lighting was 15.3 percent due to the vintage of poles inspected. Of these failures, 0.16 percent was reinforced; therefore, the overall distribution and lighting wooden pole replacement rate was 15.5 percent. Tampa Electric's spending levels for the Ground line Pole Inspection Program, which included transmission, distribution and lighting pole reinforcements was $1,668,062.

The 2015 Ground line Pole Inspection Program results include:

- 39,500 planned distribution and lighting pole inspections with 51,959 completed.
- 3,250 planned transmission poles inspections with 6,419 completed.
- 42,750 planned distribution, lighting, and transmission ground line pole inspections with a total of 58,378 completed.

Expenditures for the 2015 Ground line Pole Inspection Program include:

- Distribution and lighting ground line pole inspections: $1,554,727
- Transmission ground line pole inspections: $113,335
- Distribution and lighting pole reinforcements: $27,791

11) 2016 Activities and Budget Levels

In October 2015, Tampa Electric identified a scheduling opportunity that would benefit overall reliability. This scheduling opportunity enabled the company to perform all of the transmission ground line inspections scheduled for 2016 and a portion of the 2016 distribution and lighting wood pole inspections in addition to the 2015 planned transmission, distribution and lighting wood pole inspections that were completed throughout the year. For 2016, there are no planned ground line inspections. The ground line inspections will begin again in 2017.

Projected expenditures for the 2016 Ground line Pole Inspection Program

include:

- Distribution and lighting pole reinforcements: $50,000

Tampa Electric's Ground line Inspection Program strategy takes a balanced approach and has produced excellent results in a cost effective manner. The future inspections coupled with its pole replacement program will enhance the storm resilience of Tampa Electric's distribution, lighting, and transmission poles.

12) Chromated Copper Arsenate Pole Inspections

In Docket No. 080219-EI, Order No. PSC-08-0615-PAA-EI, issued September 28, 2008 the FPSC approved a modification to Tampa Electric's Wood Pole Inspection Program involving chromated copper arsenate ("CCA") poles. Specifically, the modification requires CCA treated poles less than 16 years of age to be sound and selectively bored. Selective boring shall be performed on poles suspected of internal decay. Additionally, one percent of the annual number of CCA treated poles inspected less than 16 years of age shall be excavated to validate this inspection method. Finally, all CCA treated poles over 16 years of age shall be excavated.

SECTION IV - Rule 25-6.0455 F.A.C.

A) 2015 Reliability Performance

1) Overview

Tampa Electric's 2015 distribution reliability indices, both actual and adjusted, represented positive results in comparison to 2014. The company saw improved performance in the actual and adjusted SAIDI, the actual and adjusted CAIDI and in the actual and adjusted MAIFIe. The actual and adjusted SAIFI, CEMI-5 and L-Bar indices increased.

2) Summary

Tampa Electric's actual 2015 SAIDI decreased by 1.69 minutes as compared to 2014 representing a 2.00 percent decrease. The adjusted 2015 SAIDI decreased by 0.68 minutes as compared to 2014 representing a 0.85 percent decrease. Actual 2015 CAIDI decreased by 5.28 minutes as compared to 2014 representing a 7.30 percent decrease. The adjusted 2015 CAIDI decreased by 7.62 minutes as compared to 2014 representing a 9.01 percent decrease. Actual 2015 SAIFI increased by 0.06 average events as compared to 2014 representing a 5.13 percent increase. The adjusted 2015 SAIFI increased by 0.09 average events as compared to 2014 representing a 9.57 percent increase. Actual 2015 MAIFIe decreased by 0.41 events as compared to 2014 representing a 3.77 percent decrease. Adjusted 2015 MAIFIe decreased by 0.44 events as compared to 2014 representing a 4.38 percent decrease. A summary table of Tampa Electric's reliability performance for 2015 as compared to 2014 is below:

Tampa Electric's 2015 Reliability Performance Summary				
Actual	**2014**	**2015**	**Difference**	**Percent Change**
SAIDI	84.44	82.75	-1.69	-2.00%
CAIDI	72.36	67.08	-5.28	-7.30%
SAIFI	1.17	1.23	0.06	5.13%
MAIFIe	10.88	10.47	-0.41	-3.77%
L-Bar	170.15	174.94	4.79	2.82%
CEMI-5	1.40%	1.42%	0.02%	1.43%
Adjusted	**2014**	**2015**	**Difference**	**Percent Change**
SAIDI	79.8	79.12	-0.68	-0.85%
CAIDI	84.54	76.92	-7.62	-9.01%
SAIFI	0.94	1.03	0.09	9.57%
MAIFIe	10.04	9.6	-0.44	-4.38%
L-Bar	172.84	179.43	6.59	3.81%
CEMI-5	0.66%	0.81%	0.15%	22.73%

The overall improvement and decreases in the SAIDI, CAIDI and MAIFIe indices are attributed to Tampa Electric's aggressive tree trimming plan, installation of additional reclosers and the continued use of two-man crews that work 24-hours a day, 5 days a week focusing mainly on restoration work. Tampa Electric's continued decrease in MAIFIe is attributed to the use of the company's relay and control setting in substations. During non-storm months these relays were temporarily disabled to reduce the number of momentary events customers would experience.

Tampa Electric experienced a decrease of 212 overall outages in 2015 as compared to 2014. Five primary outage causes in 2015 had a decrease in outages and six primary causes had an increase in outages as compared to 2014. The following five primary causes had a decrease of 473 outages as compared to 2014:

- Animals decreased by 162
- Electrical decreased by 72
- Other Weather decreased by 43
- Lightning decreased by 138
- Unknown decreased by 58

The following six primary causes had an increase of 261 outages as compared to 2014:

- Defective Equipment increased by 6
- Down Wire increased by 51
- Bad Connection increased by 19
- Vegetation increased by 90
- Vehicle increased by 54
- All Remaining Causes increased by 41

This decrease in overall outages supported a decrease in the total number of

outages in 2015 as compared to the last five-year average. In comparison to the last five-year average, Tampa Electric experienced 144 less events in 2015 representing a 1.51 percent decrease. For the 2015 outage causes, six of the eleven categories are lower when compared to the five-year average totals. Here is the listing of how the eleven categories changed as compared to the five-year average:

- Animals decreased by 41.32 percent
- Bad Connection decreased by 3.68 percent
- Defective equipment decreased by 16.71 percent
- Electrical decreased by 2.18 percent
- Other Weather decreased by 102.29 percent
- Unknown decreased by 4.12 percent
- Down Wire increased by 18.40 percent
- Lightning increased by 15.67 percent
- Vegetation increased by 9.00 percent
- Vehicle increased by 24.74 percent
- All Remaining Causes increased by 10.85 percent

Tampa Electric currently tracks outage records in the company's Distribution Outage Database ("DOD") according to date, duration, customers affected, cause, equipment-type, associated field reports, breakers operations, etc., and uses this information to track and report interdepartmental, intercompany and external regulatory requests as required.

Tampa Electric continues reviewing system performance and related metrics on a daily basis. Primary areas of focus include incremental and year-to-date semi-weekly SAIDI, CAIDI, and SAIFI performance for transmission, substation and distribution, year-to-date MAIFIe and associated breaker operations, customer outages by system and service area and major unplanned outages. In addition, Tampa Electric reviews the status of de-

energized underground cables, reclosers, online capacitor banks and street lights previously identified as needing maintenance.

In 2015, Tampa Electric continued the company's increased focus on the priority of feeder restoration activities. One example of this priority is the review and report of lessons learned on feeder outages where the outage duration exceeded acceptable thresholds. This review and report is done semi-weekly in pursuit of continued improvements with response time.

In addition to reviewing semi-weekly performance as noted above, the company analyzes distribution circuit performance, including feeders represented on the three percent feeder list, through a number of different ongoing processes. These processes include tree trimming analysis and circuit analysis.

3) Conclusion

In 2015, Tampa Electric customers experienced a decrease in the number of outages, the system average interruption duration, customer average interruption duration and the momentary average interruption frequency as compared to 2014.

B) Generation Events – Adjustments

Tampa Electric experienced no outages due to generation events that would have impacted distribution reliability. Because of this, there are no exclusions in the company's 2015 Annual Distribution Reliability Report related to generation outage events.

C) Transmission Events - Adjustments

1) Transmission Outage Summary

In 2015, there were 13 transmission outages that affected customers. These

transmission outages included five outages that were due to equipment failures, three outages due to inclement weather and lightning, three outages due to vehicles, one outage due to a broken water main and one outage due to bird nest fouling. A total of 3,177,842 Customer Minutes of Interruption ("CMI") and 61,208 Customer Interruptions ("CI") were excluded from the 2015 Annual Distribution Reliability Report per Rule 25-6.0455.

2) Equipment Failure Outages

There were five outages attributed to insulator, wire, switch, and equipment failures, as well as one structure failure. The repair or replacement of structures and associated components has been identified and prioritized.

3) Vehicle Collision Outages

There were three outages due to vehicle collisions in 2015.

4) Human Error Outages

There were no outages due to human error in 2015.

5) Vegetation Related Outages

There were no outages due to vegetation in 2015. Tampa Electric Lineman have been instructed to report vegetation growth that is in close proximity with the conductor. Once a location is identified, the Line Clearance department will be contacted to remove the overgrown vegetation.

6) Animal Related Outages

There was one outage due to a bird nest fouling a circuit in 2015.

7) Clearance Outages

There were no outages due to insufficient clearance in 2015.

8) Other and Weather Outages

There were three weather related outages and one outage due to a broken water main that was near a substation in 2015.

9) Transmission Outage Detail

69 KV Circuit

February 2015

Date: 2/5/2015 Circuit: 66603

Customers Affected: 10,331 SAIDI Impact: 77.28 seconds

Discussion: Service was interrupted when a bird nest dropped onto a pole top switch. The fouling was removed and the circuit was returned to service.

Event: Localized

April 2015

Date: 4/20/2015 Circuit: 66091

Customers Affected: 13,696 SAIDI Impact: 120.61 seconds

Discussion: Service was interrupted when a vehicle hit a pole outside of Ruskin substation. The pole was repaired and the circuit was returned to service.

Event: Localized

May 2015

Date: 5/10/2015 Circuit: 66061

Customers Affected: 3,384 SAIDI Impact: 9.85 seconds

Discussion: Service was interrupted when a static dead-end failed. The static was repaired and the circuit was returned to service.

Event: Localized

Date: 5/30/2015 Circuit: 66012
Customers Affected: 1,233 SAIDI Impact: 0.21 seconds
Discussion: Service was interrupted when a static wire failed. The static was repaired and the circuit was returned to service.
Event: Localized

July 2015

Date: 7/11/2015 Circuit: 66838
Customers Affected: 4,719 SAIDI Impact: 1.18 seconds
Discussion: Service was interrupted due to storms in the area. The circuit was patrolled and no additional damage was found. The circuit was returned to service.
Event: Localized

Date: 7/16/2015 Circuit: 66042
Customers Affected: 4,762 SAIDI Impact: 0.64 seconds
Discussion: Service was interrupted when a piece of equipment failed inside the substation. Patrol of the circuit found structure damage from an unknown source. The structure was replaced and the circuit returned to service.
Event: Localized

August 2015

Date: 8/1/2015 Circuit: 66061
Customers Affected: 4,485 SAIDI Impact: 7.98 seconds
Discussion: Service was interrupted when water from a broken water main sprayed onto the circuit. The water was turned off and the circuit returned to service.
Event: Localized

Date: 8/8/2015 Circuit: 66051

Customers Affected: 2,282 SAIDI Impact: 11.76 seconds

Discussion: Service was interrupted when the circuit grounded by an unknown source. The circuit was patrolled and didn't find a cause. The circuit was returned to service.

Event: Localized

November 2015

Date: 11/15/2015 Circuit: 66840

Customers Affected: 1,272 SAIDI Impact: 1.33 seconds

Discussion: Service was interrupted due to a slack span being blown into the distribution lines. The span of wire was repaired and the circuit was returned to service.

Event: Localized

Date: 11/22/2015 Circuit: 66072

Customers Affected: 6,435 SAIDI Impact: 0.62 seconds

Discussion: Service was interrupted due to a static wire failing outside a substation. The static was repaired and the circuit was returned to service.

Event: Localized

December 2015

Date: 12/9/2015 Circuit: 66436

Customers Affected: 1,300 SAIDI Impact: 3.84 seconds

Discussion: Service was interrupted due to a failed static wire. The wire was repaired and the circuit returned to service.

Event: Localized

Date: 12/14/2015 Circuit: 66832
Customers Affected: 3,932 SAIDI Impact: 19.39 seconds
Discussion: Service was interrupted due to a vehicle hitting a pole. The pole was repaired and the circuit returned to service.
Event: Localized

Date: 12/14/2015 Circuit: 66832
Customers Affected: 3,377 SAIDI Impact: 11.18 seconds
Discussion: Service was interrupted due to a vehicle hitting a pole. The pole was repaired and the circuit returned to service.
Event: Localized

138 kV Circuit

There were no outages on the 138kV circuits in 2015.

230 kV Circuit

There were no outages on the 230kV circuits in 2015.

D) Extreme Weather

Tampa Electric experienced no extreme weather events during 2015 which affected the customers in the company's service territory.

E) Other Distribution – Adjustments

In 2015, there were 667 Other distribution outages that affected customers. A total of 2,630,633 CMI and 148,639 CI were excluded from the 2015 Annual Distribution Reliability Report per Rule 25-6.0455. All outages were attributed to planned events as noted within the 2015 Adjustments: Other Distribution in Appendix.

F) Distribution Substation

1) 2015 Distribution Substation Adjustments

In 2015, there were 157 Distribution Substation outages that affected customers. A total of 7,578,334 CMI and 150,084 CI were excluded from the 2015 Annual Distribution Reliability Report per Rule 25-6.0455. All outages were attributed to substation equipment as noted within the 2015 Adjustments: Distribution Substation in Appendix B.

2) Patterns and Trends - Distribution Substation Reliability Performance

In 2015, Substation outages due to breaker failure contributed the most to SAIDI. 69 kV Transmission circuit breaker failures that caused 13 kV bus outages were a factor in 2015. Tampa Electric has been replacing these circuit breakers as they have been identified with issues.

In 2015, Substation outages due to animal contact were the second leading contributor to SAIDI. Tampa Electric has installed animal protection on 56 percent of the company's substation equipment. Tampa Electric is implementing the strategy developed in 2015 to complete installation of animal protection on the remaining 44 percent of the company's substation equipment.

The third leading contributor to SAIDI can be attributed to breaker mechanism failures. Tampa Electric continues to perform root cause analyses to determine the cause of mis-operation of the breaker and to take corrective actions to resolve the issues, which includes the replacement of the breaker if required.

Since 2008, the total number of 13 kV circuit breakers that have been replaced through the program is 163. In 2015, 10 breakers were replaced as part of the company's capital asset replacement program.

3) Tracking Distribution Substation Reliability

All major substation equipment nameplate data and maintenance activities are tracked in an asset management database. All work orders, findings and corrective actions related to substation outages are added to the asset management database. Tampa Electric's Substation Operations Supervisors review the maintenance and outage history of equipment involved in outages on a daily basis.

4) Process to Promote Substation Reliability

Tampa Electric utilizes the following processes and activities to determine the actions to promote substation reliability:

- Quarterly inspections of all substations
- Root cause analysis of each outage
- Track and review of all substation outages

Tampa Electric findings during the above processes and activities support the following ongoing activities:

- Review of all breaker mis-operations
- Installation of animal protection in substations
- Install microprocessor based relays for reclosing in all new construction and upgrade projects
- Replace station wide static under frequency relays with feeder based microprocessor under frequency relays in all new construction projects
- Replacing 13 kV circuit breakers that have been identified as problem breakers
- Increased lightning withstand protection on Tampa Electric Large Autotransformers
- An improved standard of all polymer/composite bushings on all new transformers and circuit breakers

In addition to the above ongoing activities, Tampa Electric has implemented automatic bus restoration schemes in select substations with multiple transformers. The tables and exhibits that follow provide the performance results for distribution substations.

Table 1: Distribution Substation Inspections by Year

Year	Number of Distribution Substation Inspections
2011	271
2012	520
2013	527
2014	396
2015	377

Exhibit 1: 2015 Distribution Substation Outages

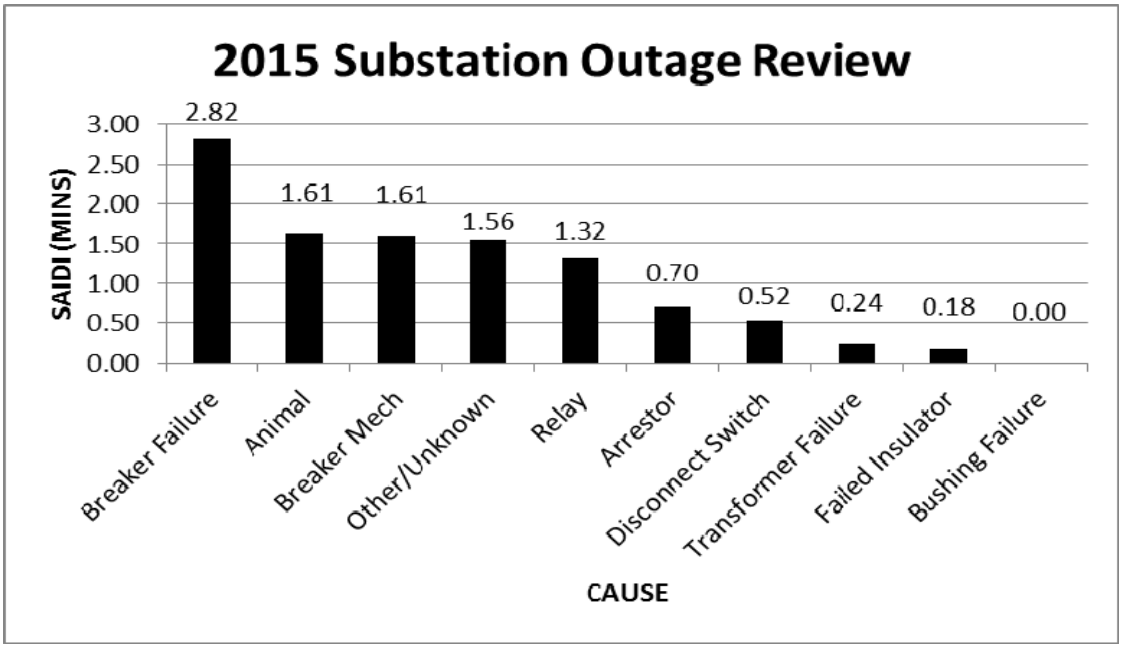


Exhibit 2: 2014 Distribution Substation Outages

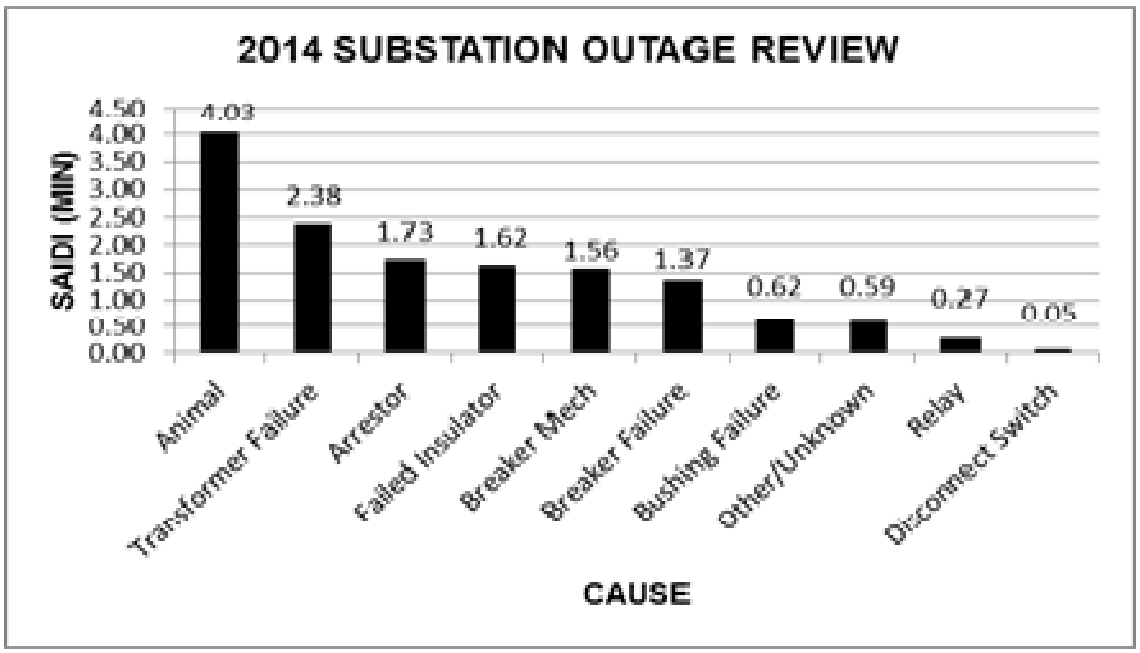


Exhibit 3: 2013 Distribution Substation Outages

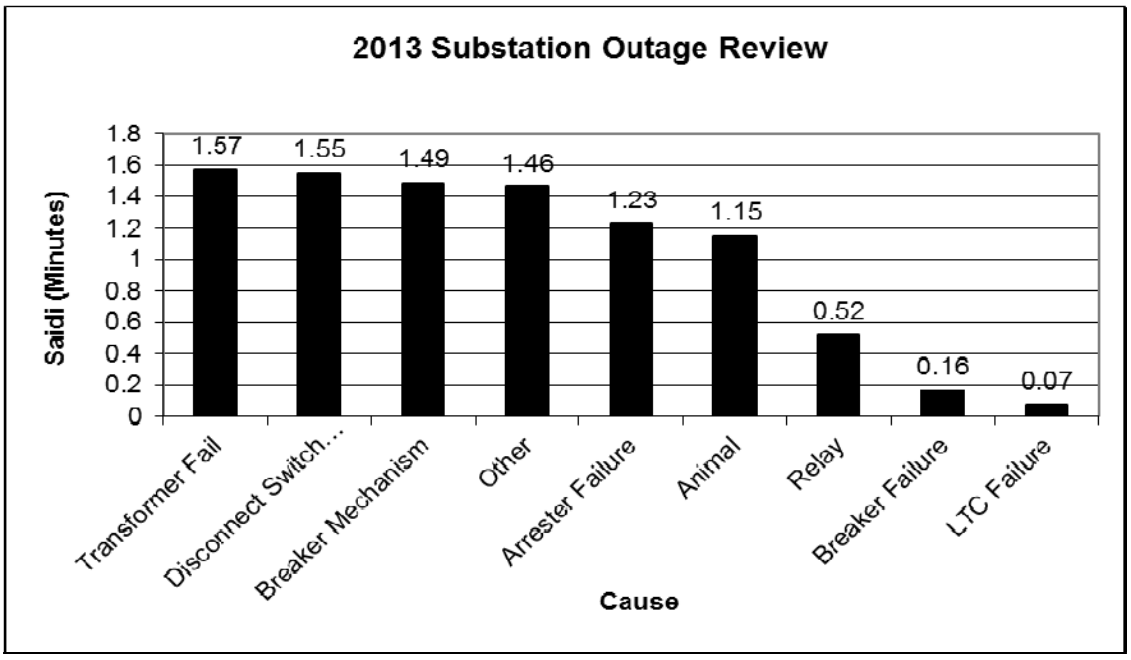


Exhibit 4: 2012 Distribution Substation Outages

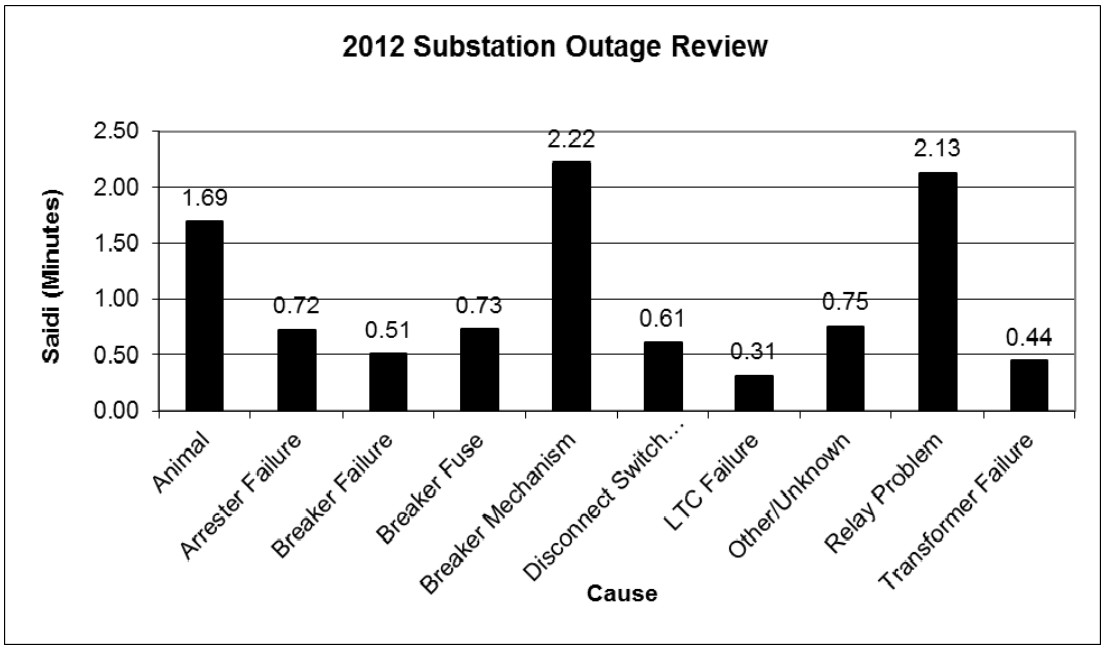


Exhibit 5: 2011 Distribution Substation Outages

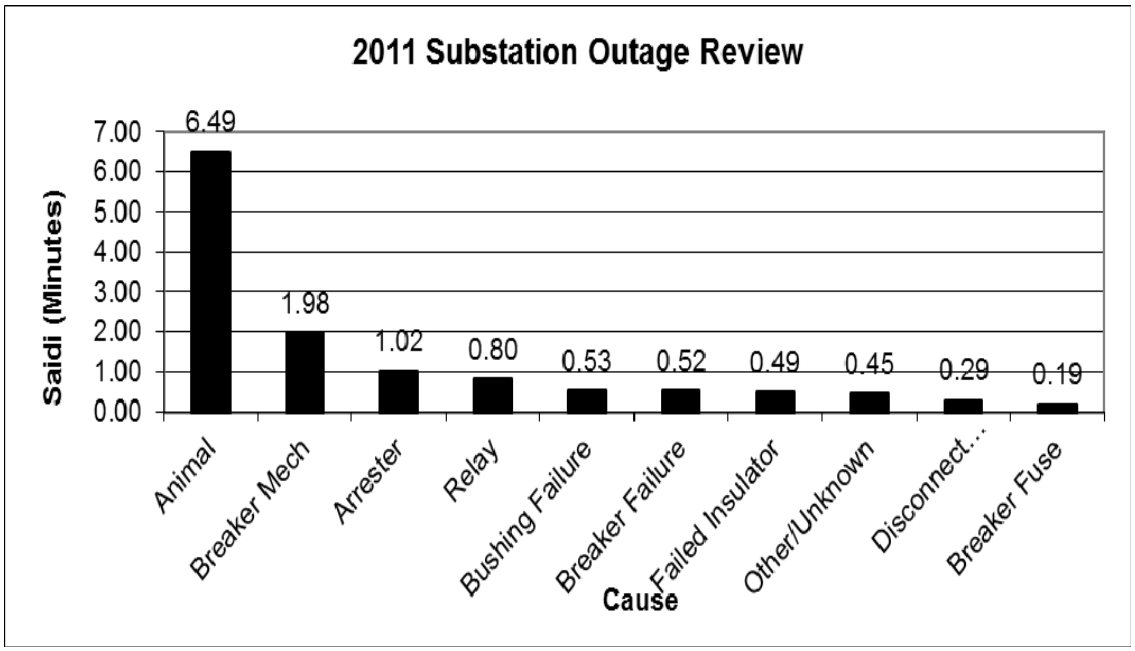


Exhibit 6: Substation Outages due to Breaker Failure

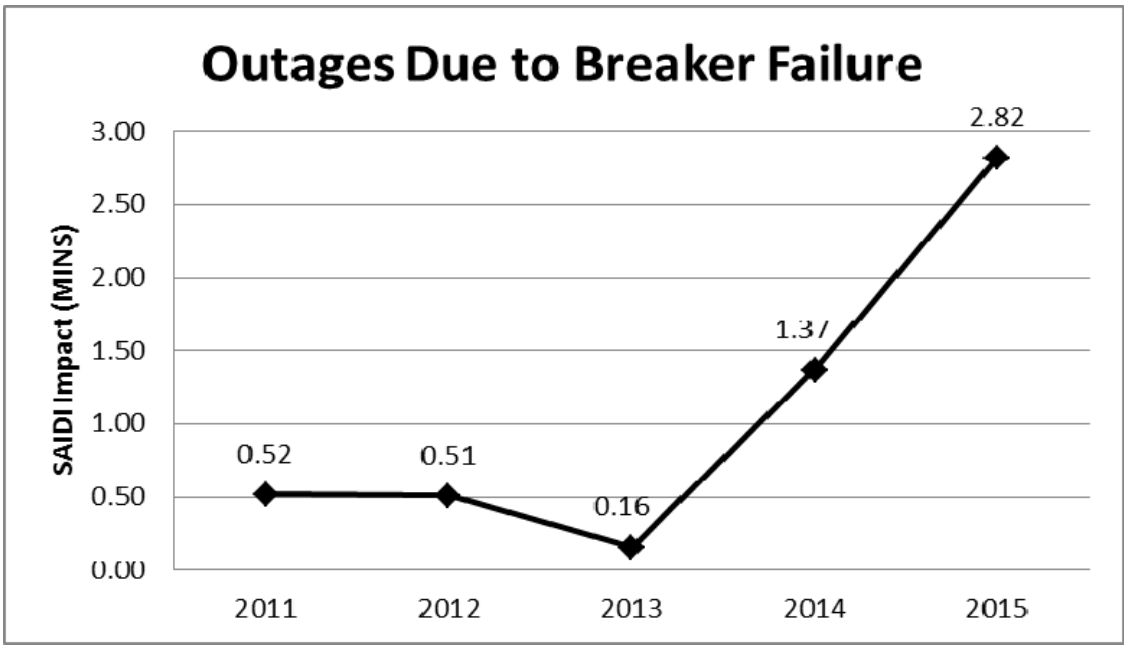


Exhibit 7: Substation Outages due to Animal Contact

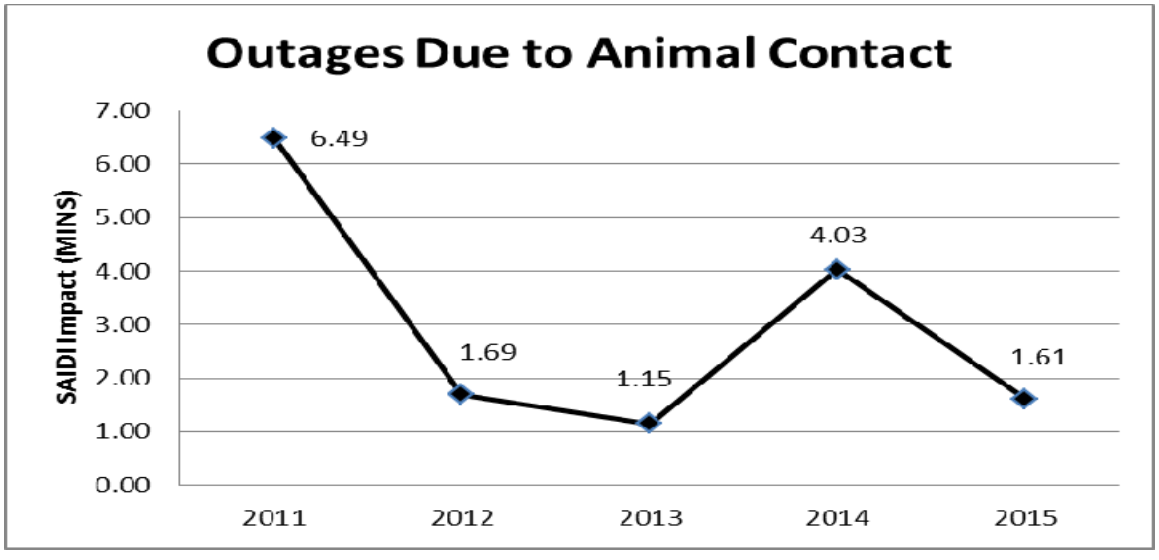
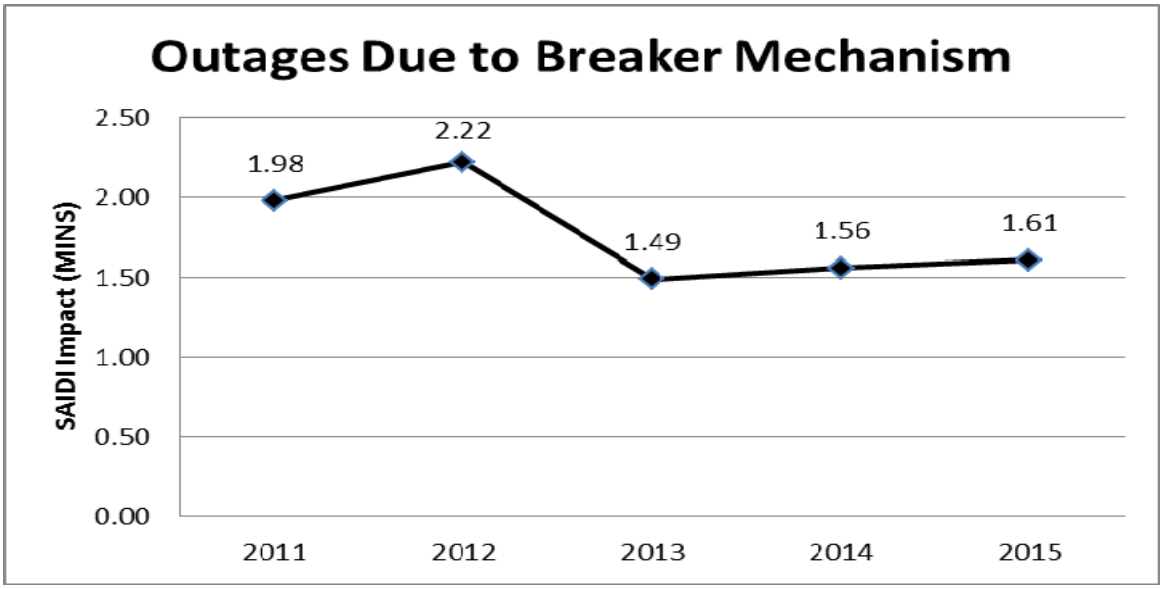


Exhibit 8: Substation Outages due to Breaker Mechanism



G) 2015 Adjusted Distribution Reliability

1) Causes of Outages

Table 2: Cause of Outage Events by Year

	2011	2012	2013	2014	2015
Vegetation	1,806	1,677	1,959	1,974	2,064
Animals	2,157	1,736	1,918	1,483	1,321
Lightning	1,392	1,327	1,639	1,917	1,779
Electrical	1,172	1,068	1,154	1,256	1,184
Bad Connection	848	905	837	856	875
Unknown	849	779	892	850	792
Down Wire	325	525	599	512	563
Vehicle	285	315	306	343	397
Other Weather	222	260	261	209	166
Defective Equipment	196	181	206	164	170
All Remaining Causes	223	215	187	182	223
System Totals	9,475	8,988	9,958	9,746	9,534

2) Three Percent Feeder

In reviewing both actual and adjusted Three Percent Feeder Lists (Forms 102 and 103, Part II) included within the Appendix of this report, seven circuits have been identified to have been listed once before in the prior five years. These circuits include Fort King 13422, Florida Avenue 13838, Fern Street 13042, Temple Terrace 13026, Blanton 13815, Mulberry 13010 and South Seffner 13128.

Actual events for Fort King 13422 included eight circuit outages as reported. The company completed corrective activities on this circuit in 2015 including capacitor bank repair, replacement of lightning arresters, installation of a reclosers and circuit reconfiguration.

Actual events for Florida Avenue 13838 included six circuit outages as reported. The company completed corrective activities on this circuit in 2015 including complete circuit tree trimming, the replacement of defective transformers, replacement fuses and cutouts, replacement of crossarms and the replacement lightning arresters.

Actual events for Fern Street 13042 included four circuit outages as reported. The company completed corrective activities on this circuit in 2015 including hot spot tree trimming, the replacement of defective transformers, replacement fuses and cutouts, the replacement of crossarms and the replacement lightning arresters.

Actual events for Temple Terrace 13026 included four circuit outages as reported. The company completed corrective activities on this circuit in 2015 including the replacement of underground cables, replacement of lightning arresters, the replacement of defective padmount transformers and the

replacement fuses and cutouts

Actual events for Blanton 13815 included four circuit outages as reported. The company completed corrective activities on this circuit in 2015 including hot spot tree trimming and the installation of a recloser.

Actual events for Mulberry 13010 included four circuit outages as reported. The company completed corrective activities on this circuit in 2015 including full circuit tree trimming, pole replacements, the replacement of defective transformers and the replacement lightning arresters.

Adjusted events for South Seffner 13128 included three circuit outages as reported. The company completed corrective activities on this circuit in 2015 including full circuit tree trimming, pole replacement, replacement fused cutouts, the replacement of underground cables, replacement of switches and the replacement lightning arresters.

Other circuits identified in both “Actual” and “Adjusted” reports have had maintenance activities performed as noted on the Three Percent Feeder Report. The company will continue to monitor circuit outage performance as part of its daily and ongoing review of system reliability and will respond accordingly at a regional level.

H) Regional Reliability Indices

1) Summary

Table 3 below represents customers by service area over the 2015 period. Dade City, Plant City and Winter Haven have the fewest customers and represent the most rural, lowest customer density per line mile in comparison to the other four Tampa Electric service areas. Actual reliability indices for the rural areas have varied from those of the more urban, densely populated

areas for this period. This is due to the much greater distance traveled for service restoration in rural areas.

In 2015, SAIDI by service area decreased as compared to 2014 in all areas except for Central, Plant City and South Hillsborough as represented in Table 4 below. The 2015 SAIDI performance for four out of the seven service areas improved and was lower than the five-year average. The Central, Plant City and South Hillsborough service areas SAIDI performance was higher than the five-year average. Actual results by service area and year have varied for the five-year period.

Table 5 data below represents a decrease in the 2015 CAIDI performance as compared to 2014 for all service areas with the exceptions of the Dade City and Plant City. 2015 CAIDI performance for all service areas, with the exception of Dade City, was higher than the five-year average. Actual results by service area and year have varied for the five-year period.

In 2015, SAIFI performance for the Dade City, Eastern, Plant City and Winter Haven service areas improved as compared to 2014 as noted in Table 6 below. SAIFI performance in the service areas of Central, South Hillsborough and Western declined as compared to the 2014 results. Five out of seven service areas performed below the five-year average with the exception of the Dade City and Winter Haven areas.

In 2015, MAIFIe performance improved as compared to 2014 in all service areas, with the exception of the Central and South Hillsborough areas, as seen in Table 7 below. All service areas with the exception of the Dade City area had improved MAIFIe performance when compared to the five-year average.

2) Regional Reliability Trends

Tampa Electric focuses on region/service area reliability through the company's operational management structure, which includes service area operations managers and engineers. Planned and corrective maintenance is engineered and coordinated to completion by service area operations staff. The service area management teams receive daily reports on outage activity, including date and time of outage, duration, cause, and customers affected, etc., and identify any discrepancies in the data. This daily outage reporting also affords each service area's staff with key performance information and opportunities to identify and improve any trends that might have developed on feeders or laterals in their respective areas. Tampa Electric will continue to track and trend feeder and lateral performance in support of improving service area reliability.

Table 3: Number of Customers by Service Area per Year

	2011	2012	2013	2014	2015
Central	181,797	185,005	188,161	190,459	193,436
Dade City	13,700	13,822	13,965	14,165	14,372
Eastern	109,876	111,069	113,053	115,122	117,268
Plant City	54,725	55,472	56,438	57,220	58,472
South Hillsborough	62,761	64,530	67,071	69,431	72,340
Western	189,200	191,083	193,320	196,085	198,224
Winter Haven	67,222	67,735	68,529	69,687	70,799
System	679,281	688,716	700,537	712,169	724,911

Table 4: SAIDI by Service Area per Year

	2011	2012	2013	2014	2015
Central	54.40	75.88	69.51	62.95	69.57
Dade City	170.11	161.12	260.65	206.10	199.20
Eastern	60.95	56.76	92.53	76.33	67.28
Plant City	99.39	109.73	130.57	116.88	116.91
South Hillsborough	66.77	89.70	93.59	74.22	86.24
Western	91.22	77.48	75.24	81.39	77.79
Winter Haven	86.24	66.76	61.42	76.58	65.74
System	75.96	78.07	85.05	79.80	79.12

Table 5: CAIDI by Service Area per Year

	2011	2012	2013	2014	2015
Central	85.32	88.10	87.53	79.05	65.78
Dade City	85.06	96.56	94.81	87.37	103.99
Eastern	75.93	78.07	106.37	79.62	74.61
Plant City	87.87	82.02	87.35	79.37	80.18
South Hillsborough	88.77	84.83	84.18	87.83	78.44
Western	93.92	95.79	87.84	94.24	87.04
Winter Haven	82.93	66.14	75.76	82.69	70.64
System	86.83	85.55	89.43	84.54	76.92

Table 6: SAIFI by Service Area per Year

	2011	2012	2013	2014	2015
Central	0.64	0.86	0.79	0.80	1.06
Dade City	2.00	1.67	2.75	2.36	1.92
Eastern	0.80	0.73	0.87	0.96	0.90
Plant City	1.13	1.34	1.49	1.47	1.46
South Hillsborough	0.75	1.06	1.11	0.85	1.10
Western	0.97	0.81	0.86	0.86	0.89
Winter Haven	1.04	1.01	0.81	0.93	0.93
System	0.87	0.91	0.95	0.94	1.03

Table 7: MAIFIe by Service Area per Year

	2011	2012	2013	2014	2015
Central	11.23	10.17	10.01	8.31	8.46
Dade City	15.64	15.76	17.42	19.84	17.95
Eastern	14.38	10.85	13.76	9.85	9.08
Plant City	17.61	19.84	17.80	15.08	11.80
South Hillsborough	13.56	11.21	12.87	8.73	11.03
Western	12.57	10.58	10.90	9.64	8.71
Winter Haven	14.47	9.98	12.56	11.36	11.07
System	13.25	11.36	12.16	10.04	9.59

Table 8: CEMI5 by Service Area per Year

	2011	2012	2013	2014	2015
Central	0.60%	0.44%	0.20%	0.83%	0.51%
Dade City	0.67%	3.66%	1.48%	5.94%	10.41%
Eastern	0.69%	0.37%	0.41%	0.33%	0.27%
Plant City	0.85%	0.90%	1.65%	1.37%	2.61%
South Hillsborough	0.30%	3.49%	0.84%	0.23%	0.82%
Western	0.58%	0.26%	0.33%	0.15%	0.42%
Winter Haven	0.80%	0.71%	0.01%	0.54%	0.15%
System	0.62%	0.79%	0.47%	0.63%	0.81%

l) Overhead – Underground Reliability

1) Five-Year Trends - Reliability Performance

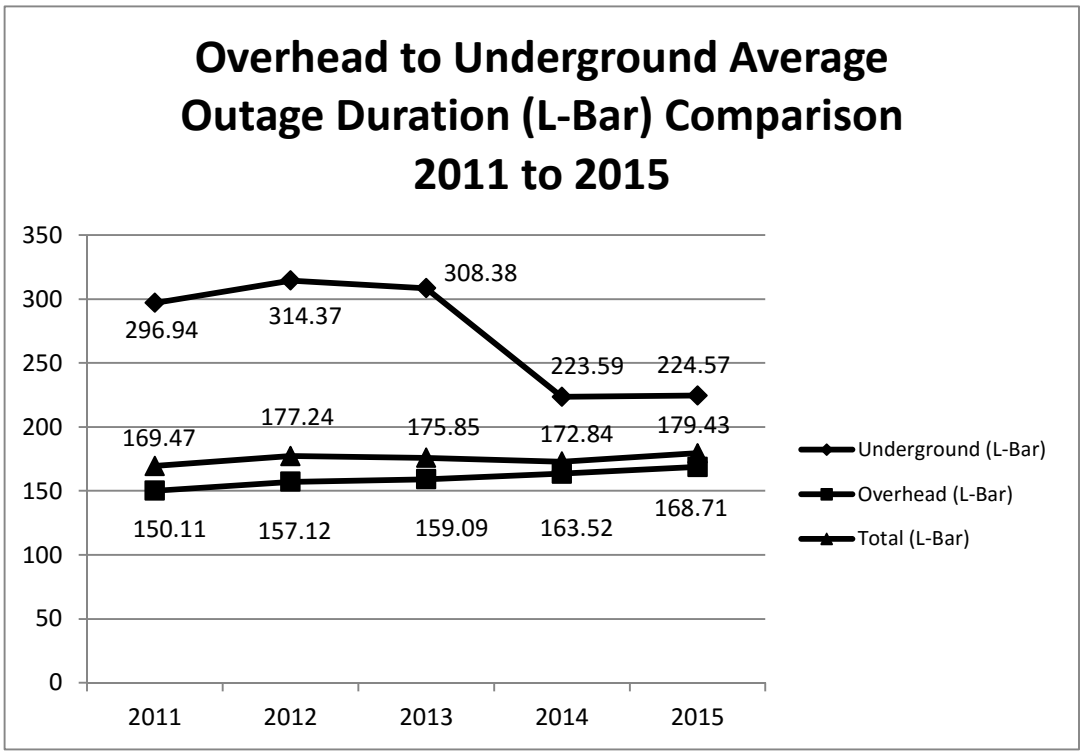
Table 9: Outages per Year

System Totals	2011	2012	2013	2014	2015
Number of Outages Events (N)	9,475	8,988	9,958	9,746	9534
System Average Duration (L-Bar)	169.47	177.24	175.85	172.84	179.43
Average Restoration Time (CAIDI)	86.83	85.55	89.43	84.54	76.92

Overhead	2011	2012	2013	2014	2015
Number of Outages Events (N)	8,226	7,838	8,840	8,233	7705
Overhead Average Duration (L-Bar)	150.11	157.12	159.09	163.52	168.71
Average Restoration Time (CAIDI)	82.65	80.87	85.77	79.08	70.55

Underground	2011	2012	2013	2014	2015
Number of Outages Events (N)	1,249	1,150	1,118	1,513	1829
Underground Average Duration (L-Bar)	296.94	314.37	308.38	223.59	224.57
Average Restoration Time (CAIDI)	246.51	277.23	261.46	132.80	139.73

Exhibit 9: Overhead to Underground Outage Duration



2) Tracking Overhead to Underground Reliability Performance

Tampa Electric tracks outage records in the company's DOD according to cause and equipment type. These equipment types are designed and associated with the overhead and underground systems. Reporting capability allows the company to track CMI, CI, Number of Outages, Average Duration and CAIDI as referenced in Section C – Overhead to Underground in the Appendix. In addition, separate reporting was undertaken in order to align miles and customers for overhead and underground distribution.

The company tracks and reports MAIFIe by system and circuit. Interruption data is electronically captured, recorded and tracked at each individual distribution circuit breaker. As a result, a momentary interruption occurring down-line from the circuit breaker in which the circuit breaker does not operate is not currently captured and cannot be reported.

The company currently measures CEMI-5 through a query that is run through the company's outage management system ("OMS"). There is no option to run a query for overhead or underground systems. Therefore, the company is unable to provide CEMI5 as previously requested by Commission Staff.

3) Underground Distribution System Conversions

In 2015, the Dana Shores Community received approval from the Hillsborough County Commission for funding of $150,000 for an overhead to underground conversion. The total cost for converting this overhead system to underground is projected to exceed $2,000,000. The Dana Shores Community will incur the additional cost above $150,000 for this conversion. This project is projected to start and be completed in 2016. If successful, this may become the model to fund overhead to underground conversions for other communities in Tampa Electric's service territory. This model ensures that the costs are incurred by the customers benefitting from the conversion, and not at the expense of other rate payers.

J) Reliability-Related Customer Complaints

During 2015, Tampa Electric experienced a decrease of 9 formal service-related complaints as logged by the Florida Division of Consumer Affairs and noted in Exhibit 10 below. In addition, service-related complaints as tracked by the company and including FPSC Formal, Three-Day, Transfer-Connect, eWarm Transfer and Executive Level decreased by 66 complaints in 2015 as noted in Exhibit 11 below. In comparison to the five-year average, overall complaints decreased by 24.37 percent in 2015.

When comparing formal complaints logged against the company to reliability performance (Exhibits 12 and 13 below) over the last five years, the reliability performance has varied and complaints have tracked accordingly. The company believes that a continued focus on activities such as vegetation

management, circuit review activity and resulting line improvements and other maintenance activities will contribute toward minimizing service-related complaints in 2016 and beyond.

Tampa Electric's current process for responding to all service related complaints includes the central intake and coordination of complaint resolution through the company's Quality Assurance Department and extends out to operations engineers who are responsible for the daily oversight of feeders in their respective service area. Operations engineers are involved in customer interactions, identifying needs and corrective measures and are responsible for coordination through to completion. Working through and responding to complaints at a regional/service area level provides the company an opportunity to be aware of any trends that may occur for a given feeder or lateral.

In addition, the group of Operations Engineers and System Reliability meet on a monthly basis to review common areas of concern across the system and identifies opportunities for improvement.

Exhibit 10: Tampa Electric Formal Reliability Complaints Filed with the FPSC by Year

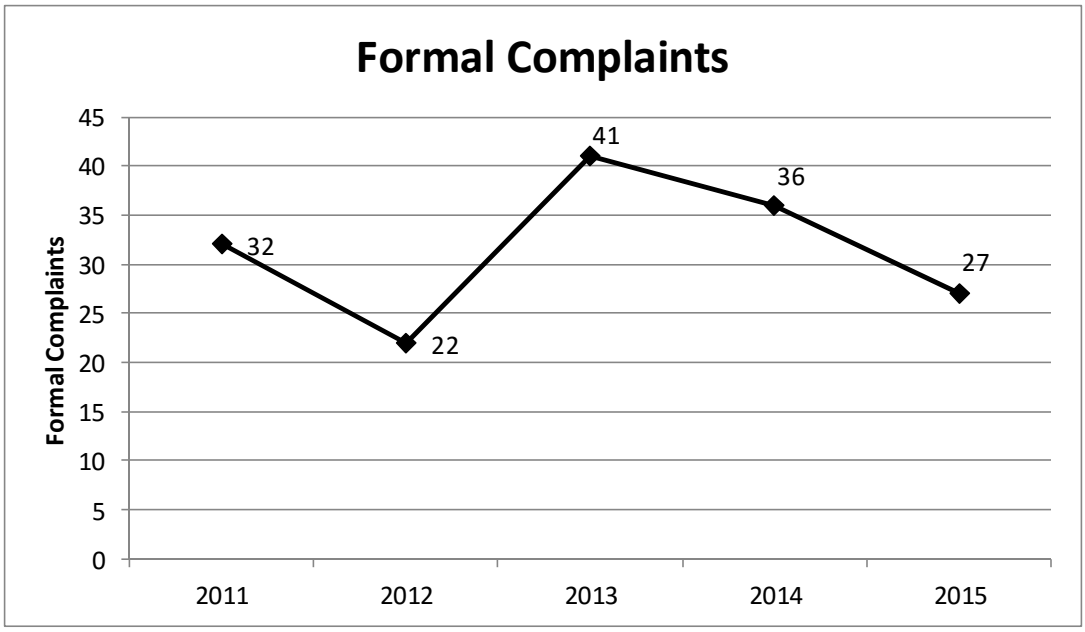
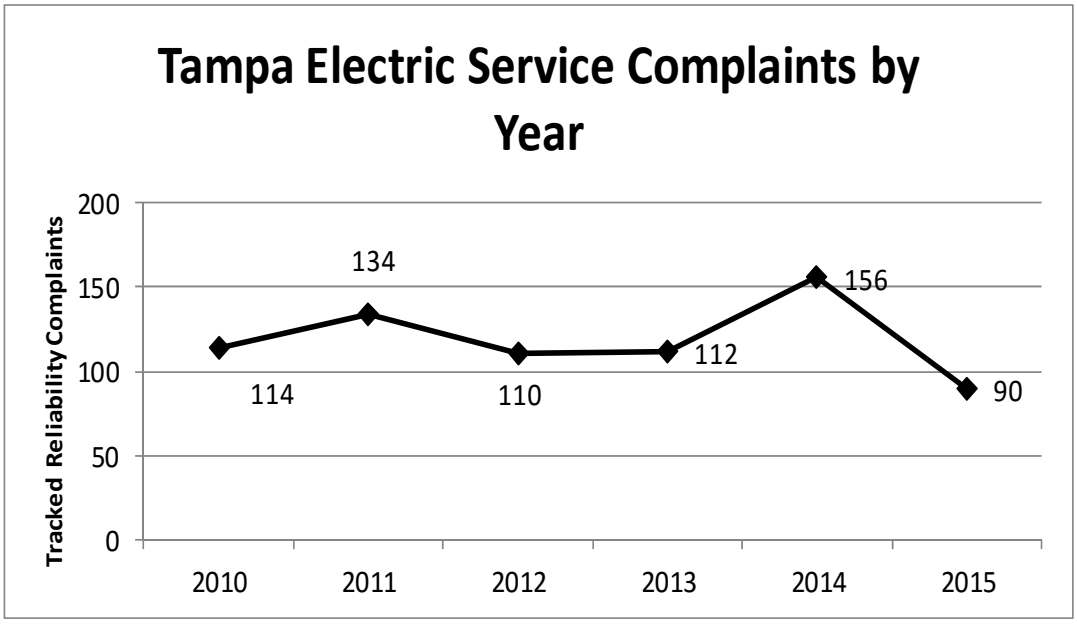


Exhibit 11: Tampa Electric Service Reliability Complaints by Year



Note: Consists of all "Service" complaints logged by the company including FPSC Formal, Three-day, Transfer-Connect, eWarm Transfer and Executive Level.

Exhibit 12: Formal Complaints *vs.* SAIDI by Year

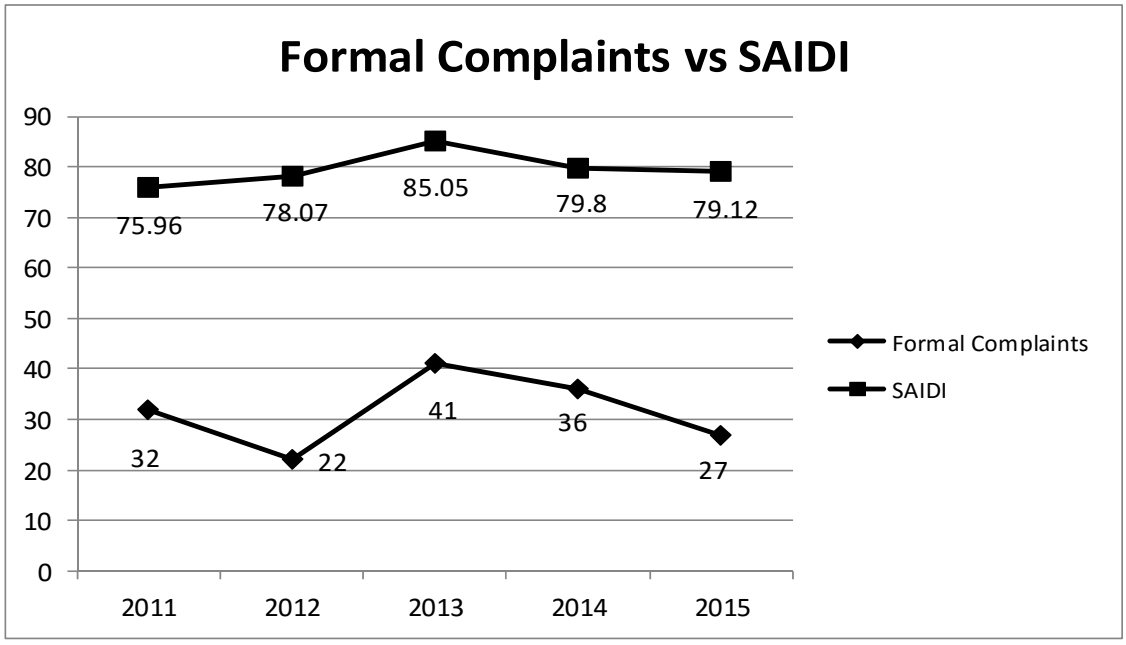
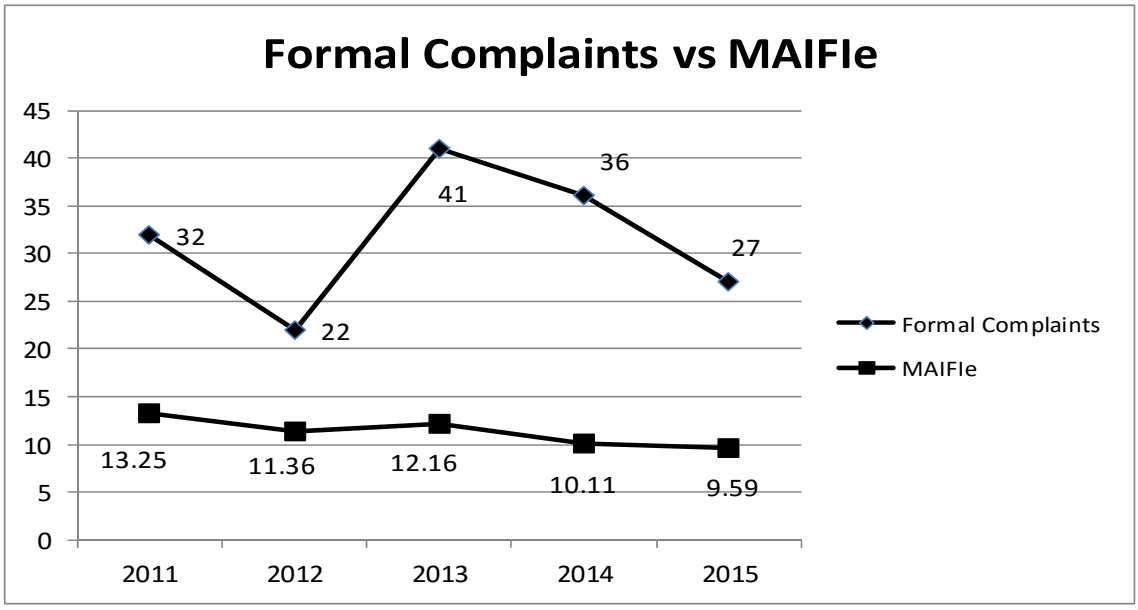


Exhibit 13: Formal Complaints *vs.* MAIFIe by Year



APPENDIX

2015

STORM IMPLEMENTATION PLAN
&
ANNUAL RELIABILITY PERFORMANCE REPORTS

Appendix A)

Form PSC/ECR 102-1(a) (8/06)

Causes of Outage Events - Actual

Utility Name: Tampa Electric Year: 2015

Cause (a)	Number of Outages Events (N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
1. Vegetation	2,079	189.67	91.00
2. Lightning	1,779	217.78	118.76
3. Animals	1,325	100.55	68.56
4. Electrical	1,199	196.34	76.91
5. Bad Connection	882	218.01	115.42
6. Unknown	792	124.88	32.48
7. Down Wire	565	185.56	83.60
8. Planned Outage	527	101.84	14.85
All Remaining Causes	1,053	175.23	59.75
Total	10,201	174.94	67.08

Note: L-Bar and CAIDI are expressed in minutes.

Form 102 – Part II – Actual

FPSC Annual Report - 3 Percent Feeder List

			Number of Customers									
Primary Circuit Id. No. or Name (a)	Substation Origin (b)	Location (c)	Residential (d)	Commercial (e)	Industrial (f)	Total (g)	Circuit Outages "N" (h)	Avg. Duration "L-Bar" (i)	CAIDI (j)	Listed Last Year? (k)	Years in the Last 5 (l)	Action Completion Date (n)
13422	FORT KING	Dade City	1,266	126	3,548	1,401	8	158.76	67.55	Yes	3	1/2015,3/2015,4/2015,5/2015,7/2015,8/2015,10/2015
13838	FLORIDA AV	Central	1,521	182	7,579	1,725	6	196.51	38.86	Yes	2	7/2015,5/2015,2/2015
13418	JUNEAU	Central	1,325	85	3,038	1,418	6	157.00	113.95	No	0	5/2015,7/2015,10/2015,12/2015
13171	MADISON AV	Eastern	1,324	119	8,624	1,467	6	159.17	41.46	No	0	1/2015,2/2015,4/2015,5/2015,6/2015,7/2015,8/2015,9/2015,10/2015
13183	11TH.AVE	Central	187	175	14,608	401	5	155.60	68.00	No	0	2/2015,7/2015,8/2015
14012	GTE COLLIER	Central	860	143	15,704	1,047	5	124.82	45.34	No	0	7/2015,9/2015,10/2015
13390	KIRKLAND RD	Plant City	1,511	204	6,372	1,732	5	188.14	89.68	No	0	1/2015,2/2015,3/2015,4/2015,5/2015,6/2015,8/2015,9/2015
13080	BAYCOURT	Western	1,652	81	6,364	1,752	5	189.33	45.17	No	0	1/2015,3/2015,5/2015,8/2015
13754	GRANADA	Western	1,343	91	6,669	1,453	5	192.84	56.07	No	0	2/2015,3/2015,8/2015,11/2015,12/2015
13158	30TH.ST	Central	1,535	69	2,499	1,612	4	156.76	17.59	No	0	7/2015,9/2015,11/2015,12/2015
13400	3RD AVE	Central	736	99	9,292	860	4	124.87	31.65	No	0	3/2015,8/2015,9/2015
13042	FERN ST	Central	1,359	105	7,210	1,483	4	177.64	28.18	No	1	6/2015,7/2015
13631	PINE LAKE	Central	1,245	106	3,785	1,361	4	155.59	39.95	No	0	1/2015,7/2015
13715	TAMPA PALMS	Central	1,092	96	6,002	1,209	4	193.52	60.54	No	0	2/2015,5/2015,9/2015
13026	TEMP.TER	Central	1,585	199	13,974	1,823	4	206.71	55.06	No	1	5/2015,6/2015,8/2015
13815	BLANTON	Dade City	637	114	2,555	758	4	170.20	120.02	Yes	2	1/2015,2/2015,3/2015,4/2015,5/2015,6/2015,7/2015,8/2015,9/2015,10/2015,11/2015,12/2015
13231	BRANDON	Eastern	1,188	80	6,403	1,288	4	167.69	58.77	No	0	1/2015,3/2015,4/2015,6/2015,8/2015,10/2015,11/2015
14114	LAKEWOOD	Eastern	1,390	24	1,095	1,417	4	151.11	55.38	No	0	1/2015,6/2015,7/2015,10/2015
13327	PORT SUTTON	Eastern	0	21	3,986	32	4	182.29	89.74	No	0	1/2015,2/2015,5/2015,8/2015,9/2015
13808	KNIGHTS	Plant City	1,800	132	4,606	1,946	4	167.59	56.00	No	0	1/2015,2/2015,3/2015,4/2015,5/2015,6/2015,7/2015,8/2015,9/2015,10/2015,11/2015,12/2015
13010	MULBERRY	Plant City	1,401	139	11,519	1,573	4	157.39	75.66	Yes	3	2/2015,4/2015,6/2015,8/2015
13489	DEL WEBB	South Hillsborough	401	97	17,427	547	4	113.29	48.05	No	0	5/2015,7/2015
13817	RUSKIN	South Hillsborough	2,003	139	6,851	2,162	4	151.64	27.18	No	0	5/2015,8/2015,11/20015
14144	SUN CITY	South Hillsborough	1,469	19	3,006	1,497	4	192.93	59.98	No	0	2/2015,5/2015,7/2015,8/2015,9/2015
13535	CARROLWD	Western	2,063	61	4,340	2,137	4	180.25	34.25	No	0	1/2015,8/2015,9/2015,11/2015
13061	HIMES	Western	639	26	2,920	673	4	137.62	34.16	No	0	1/2015,4/2015,5/2015
13036	BELMONT	Central	1,113	101	9,260	1,238	3	183.30	83.35	No	0	7/2015,11/2015

Form 102 – Part III – Actual

ANNUAL DISTRIBUTION RELIABILITY REPORT - 2015
Utility Name: Tampa Electric

SAIDI: System Average Interruption Duration Index
= Sum of All Customer Minutes Interrupted (CMI) / Total number of Customers Served (C)
59,989,058 / 724,911 = **82.75**

CAIDI: System Average Interruption Duration Index
= Sum of All Customer Minutes Interrupted (CMI) / Total number of Customer Interruptions (CI)
59,989,058 / 894,335 = **67.08**

SAIFI: System Average Interruption Frequency Index
= Total number of Customer Interruptions (CI) / Total number of Customers Served (C)
894,335 / 724,911 = **1.23**

MAIFIe: Momentary Average Interruption Event
= Sum of All Customer Momentary Interruption Events (CME) / Total number of Customers Served (C)
7,586,783 / 724,911 = **10.47**

LBar:
= Minutes of Interruption / Total number of Outages
1,784,601 / 10,201 = **174.94**

District	C	CMI	CI	CME	# Cust > 5
Central	193,436	14,210,423	247,426	1,812,061	2,506
Dade City	14,372	2,922,668	34,633	280,180	2,044
Eastern	117,268	8,135,686	118,802	1,164,706	415
Plant City	58,472	7,225,905	103,662	761,484	2,388
South Hillsborough	72,340	6,503,947	96,632	864,023	1,225
Western	198,224	16,168,151	224,178	1,869,978	1,355
Winter Haven	70,799	4,822,278	69,002	834,351	333
System Total:	724,911	59,989,058	894,335	7,586,783	10,302

Form 102 – Part III continued – Actual

Service Reliability Indices - Actual					
Utility Name: Tampa Electric				Year: 2015	
District or Service Area (a)	**SAIDI** (b)	**CAIDI** (c)	**SAIFI** (d)	**MAIFIe** (e)	**CEMI-5 %** (f)
Central	73.46	57.43	1.28	9.37	1.30 %
Dade City	203.36	84.39	2.41	19.49	14.22 %
Eastern	69.38	68.48	1.01	9.93	0.35 %
Plant City	123.58	69.71	1.77	13.02	4.08 %
South Hillsborough	89.91	67.31	1.34	11.94	1.69 %
Western	81.56	72.12	1.13	9.43	0.68 %
Winter Haven	68.11	69.89	0.97	11.78	0.47 %
System Total:	82.75	67.08	1.23	10.46	1.42 %

Form PSC/ECR 102-3, Docket No. 011351-EI, Rule 25-6.0455(c)
Note: L-Bar and CAIDI are expressed in minutes

Appendix B)

Form PSC/ECR 102-1(b) (8/06)

Causes of Outage Events - Adjusted

Utility Name: Tampa Electric Year: 2015

Cause (a)	Number of Outages Events (N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
1. Vegetation	2,064	190.14	90.98
2. Lightning	1,779	217.78	118.76
3. Animals	1,321	100.08	69.22
4. Electrical	1,184	196.88	76.90
5. Bad Connection	875	217.76	115.15
6. Unknown	792	124.88	32.48
7. Down Wire	563	185.43	83.24
8. Vehicle	397	199.17	62.46
All Remaining Causes	559	165.62	55.94
Total	9,534	179.43	76.92

Note: L-Bar and CAIDI are expressed in minutes.

FORM 103 - PART II – Adjusted

FPSC Annual Report - 3 Percent Feeder List

Primary Circuit Id. No. or Name (a)	Substation Origin (b)	Location (c)	Number of Customers: Residential (d)	Commercial (e)	Industrial (f)	Total (g)	Circuit Outages "N" (h)	Avg. Duration "L-Bar" (i)	CAIDI (j)	Listed Last Year? (k)	Years in the Last 5 (l)	Action Completion Date (n)
13422	FORT KING	Dade City	1,266	126	3,548	1,401	6	171.63	93.04	Yes	3	1/2015,3/2015,4/2015,5/2015,7/2015,8/2015,10/2015
13183	11TH.AVE	Central	187	175	14,608	401	5	143.04	63.97	No	0	2/2015,7/2015,8/2015
13838	FLORIDA AV	Central	1,521	182	7,579	1,725	5	207.37	44.72	Yes	2	7/2015,5/2015,2/2015
14012	GTE COLLIER	Central	860	143	15,704	1,047	5	131.22	45.42	No	0	7/2015,9/2015,10/2015
13171	MADISON AV	Eastern	1,324	119	8,624	1,467	5	165.33	51.99	No	0	1/2015,2/2015,4/2015,5/2015,6/2015,7/2015,8/2015,9/2015,10/2015
13390	KIRKLAND RD	Plant City	1,511	204	6,372	1,732	5	198.84	90.59	No	0	1/2015,2/2015,3/2015,4/2015,5/2015,6/2015,8/2015,9/2015
13418	JUNEAU	Central	1,325	85	3,038	1,418	4	162.85	165.72	No	0	5/2015,7/2015,10/2015,12/2015
13815	BLANTON	Dade City	637	114	2,555	758	4	177.70	120.08	Yes	2	1/2015,2/2015,3/2015,4/2015,5/2015,6/2015,7/2015,8/2015,9/2015,10/2015,11/2015,12/2015
13231	BRANDON	Eastern	1,188	80	6,403	1,288	4	168.25	58.76	No	0	1/2015,3/2015,4/2015,6/2015,8/2015,10/2015,11/2015
14114	LAKEWOOD	Eastern	1,390	24	1,095	1,417	4	151.59	55.35	No	0	1/2015,6/2015,7/2015,10/2015
13010	MULBERRY	Plant City	1,401	139	11,519	1,573	4	158.06	75.65	Yes	3	2/2015,4/2015,6/2015,8/2015
13489	DEL WEBB	South Hillsborough	401	97	17,427	547	4	113.29	48.05	No	0	5/2015,7/2015
14144	SUN CITY	South Hillsborough	1,469	19	3,006	1,497	4	192.93	59.98	No	0	2/2015,5/2015,7/2015,8/2015,9/2015
13080	BAYCOURT	Western	1,652	81	6,364	1,752	4	198.21	55.42	No	0	1/2015,3/2015,5/2015,8/2015
13400	3RD AVE	Central	736	99	9,292	860	3	137.30	33.65	No	0	3/2015,8/2015,9/2015
13036	BELMONT	Central	1,113	101	9,260	1,238	3	183.30	83.35	No	0	7/2015,11/2015
13042	FERN ST	Central	1,359	105	7,210	1,483	3	197.42	31.68	No	1	6/2015,7/2015
13826	FOWLER	Central	1,593	112	4,395	1,716	3	162.25	65.56	No	0	3/2015,4/2015,7/2015,8/2015
13829	FOWLER	Central	762	63	1,414	828	3	176.13	74.77	No	0	8/2015,12/2015
13631	PINE LAKE	Central	1,245	106	3,785	1,361	3	161.13	50.12	No	0	1/2015,7/2015
13715	TAMPA PALMS	Central	1,092	96	6,002	1,209	3	218.27	53.68	No	0	2/2015,5/2015,9/2015
13103	YUKON	Central	582	62	6,059	661	3	142.13	39.32	No	0	3/2015,5/2015,8/2015,10/2015
13685	PEARSON RD	Eastern	1,111	105	4,141	1,228	3	120.47	49.90	No	0	3/2015,4/2015,6/2015,9/2015,11/2015,12/2015
13327	PORT SUTTON	Eastern	0	21	3,986	32	3	203.82	113.11	No	0	1/2015,2/2015,5/2015,8/2015,9/2015
13128	S.SEFNER	Eastern	1,122	56	3,558	1,189	3	176.24	51.98	Yes	1	2/2015,3/2015,4/2015,9/2015,10/2015,12/2015
13507	SR.574	Eastern	0	6	6,906	25	3	94.40	70.92	No	0	3/2015,6/2015,10/2015
13535	CARROLWD	Western	2,063	61	4,340	2,137	3	174.14	43.04	No	0	1/2015,8/2015,9/2015,11/2015

Form 103 – Part III – Adjusted

PART III
ANNUAL DISTRIBUTION RELIABILITY REPORT - 2015
Utility Name: Tampa Electric

SAIDI: System Average Interruption Duration Index
= Sum of All Customer Minutes Interrupted (CMI) / Total number of Customers Served (C)
57,358,425 / 724,911 = **79.12**

CAIDI: System Average Interruption Duration Index
= Sum of All Customer Minutes Interrupted (CMI) / Total number of Customer Interruptions (CI)
57,358,425 / 745,696 = **76.92**

SAIFI: System Average Interruption Frequency Index
= Total number of Customer Interruptions (CI) / Total number of Customers Served (C)
745,696 / 724,911 = **1.03**

MAIFIe: Momentary Average Interruption Event
= Sum of All Customer Momentary Interruption Events (CME) / Total number of Customers Served (C)
6,957,772 / 724,911 = **9.60**

LBar:
= Minutes of Interruption / Total number of Outages
1,710,678 / 9,534 = **179.43**

District	C	CMI	CI	CME	# Cust > 5
Central	193,436	13,456,920	204,572	1,637,017	989
Dade City	14,372	2,862,841	27,531	257,978	1,496
Eastern	117,268	7,889,609	105,748	1,064,879	321
Plant City	58,472	6,835,783	85,255	689,808	1,524
South Hillsborough	72,340	6,238,298	79,526	797,680	592
Western	198,224	15,420,837	177,179	1,727,018	841
Winter Haven	70,799	4,654,136	65,885	783,392	109
System Total:	724,911	57,358,425	745,696	6,957,772	5,876

Form 103 – Part III continued – Adjusted

Service Reliability Indices - Adjusted					
Utility Name: Tampa Electric				Year: 2015	
District or Service Area (a)	**SAIDI** (b)	**CAIDI** (c)	**SAIFI** (d)	**MAIFIe** (e)	**CEMI-5 %** (f)
Central	69.57	65.78	1.06	8.46	0.51 %
Dade City	199.20	103.99	1.92	17.95	10.41 %
Eastern	67.28	74.61	0.90	9.08	0.27 %
Plant City	116.91	80.18	1.46	11.80	2.61 %
South Hillsborough	86.24	78.44	1.10	11.03	0.82 %
Western	77.79	87.04	0.89	8.71	0.42 %
Winter Haven	65.74	70.64	0.93	11.07	0.15 %
System Total:	79.12	76.92	1.03	9.59	0.81 %

Form PSC/ECR 102-3, Docket No. 011351-EI, Rule 25-6.0455(c)
Note: L-Bar and CAIDI are expressed in minutes

Actual Data: CMI, CI and Documented Exclusions

2015	CMI		CI	
	Value	% of Actual	Value	% of Actual
Reported Actual Data	70,745,234.20	100.00%	1,105,627	100
Documented Exclusions				
Planned Service Interruptions	2,630,633.15	3.72%	148,639	13.44%
Named Storm	0.00	0.00%	0	0.00%
Tornadoes	0.00	0.00%	0	0.00%
Ice on Lines	0.00	0.00%	0	0.00%
Planned Load Management Events	0.00	0.00%	0	0.00%
Generation/Transmission Events	10,756,175.80	15.20%	211,292	19.11%
Extreme Weather (EOC Activation/Fire)	0.00	0.00%	0	0.00%
Reported Adjusted Data	57,358,425.25	81.08%	745,696	67.45%

2015 Adjustments: Planned Distribution Outage Events

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Circuit Out	PLANNED OUTAGE	1/1/2015 7:51:16 AM	6194.42	2,009
Circuit Out	PLANNED OUTAGE	1/10/2015 2:56:14 PM	13343.83	1,357
PLF	PLANNED OUTAGE	1/10/2015 2:57:02 PM	7267.50	285
Circuit Out	PLANNED OUTAGE	1/10/2015 6:37:11 PM	3822.22	1,357
OH Other	PLANNED OUTAGE	1/12/2015 10:24:09 AM	3480.97	26
Switchgear	PLANNED OUTAGE	1/13/2015 12:33:13 PM	73.63	94
Service - Non Crew	PLANNED OUTAGE	1/13/2015 12:56:36 PM	390.35	1
Cut Out 100 amp - PLF	PLANNED OUTAGE	1/13/2015 9:29:20 AM	3878.00	21
UG Other	PLANNED OUTAGE	1/14/2015 4:59:05 PM	105.97	1
OH Other	PLANNED OUTAGE	1/14/2015 5:31:21 PM	79.83	1
UG Other	PLANNED OUTAGE	1/14/2015 8:14:06 PM	56.73	1
PLF	PLANNED OUTAGE	1/14/2015 8:42:41 PM	433.95	11
Service - Non Crew	PLANNED OUTAGE	1/14/2015 9:00:09 AM	250.02	1
OH Other	PLANNED OUTAGE	1/15/2015 11:27:56 AM	29.55	1
Service - Non Crew	PLANNED OUTAGE	1/15/2015 7:36:07 PM	1350.48	13
Circuit Out	PLANNED OUTAGE	1/15/2015 8:15:33 PM	4108.50	1,494
Service - Crew	PLANNED OUTAGE	1/15/2015 8:46:57 AM	83.90	1
Service - Crew	PLANNED OUTAGE	1/15/2015 8:47:33 AM	88.68	1
OH Other	PLANNED OUTAGE	1/15/2015 9:47:55 AM	25.78	1
Circuit Out	PLANNED OUTAGE	1/19/2015 11:25:52 AM	23205.00	1,300
Service - Non Crew	PLANNED OUTAGE	1/2/2015 10:21:38 AM	54.40	1
OH Other	PLANNED OUTAGE	1/2/2015 3:52:12 PM	17.88	1
OH Other	PLANNED OUTAGE	1/2/2015 8:05:44 AM	62.72	1
Service - Crew	PLANNED OUTAGE	1/20/2015 1:39:16 PM	48.85	1
UG Other	PLANNED OUTAGE	1/20/2015 8:17:46 AM	321.28	1
OH Other	PLANNED OUTAGE	1/20/2015 9:03:49 PM	86.18	1
TX Pad	PLANNED OUTAGE	1/22/2015 7:47:20 AM	406.70	6
OH Other	PLANNED OUTAGE	1/23/2015 1:52:40 PM	22.72	1
Circuit Out	PLANNED OUTAGE	1/23/2015 10:06:12 PM	2423.85	1,287
Service - Non Crew	PLANNED OUTAGE	1/23/2015 10:09:21 AM	49.05	1
TX Repaired (OH)	PLANNED OUTAGE	1/23/2015 11:04:17 AM	54.30	1
OH Other	PLANNED OUTAGE	1/24/2015 1:28:48 PM	42.93	1
OH Other	PLANNED OUTAGE	1/24/2015 3:33:15 PM	99.52	1
Circuit Out	PLANNED OUTAGE	1/24/2015 3:33:42 AM	1570.00	785
Step Restoration	PLANNED OUTAGE	1/24/2015 6:19:04 AM	19291.25	759
Circuit Out	PLANNED OUTAGE	1/24/2015 6:19:04 AM	1342.00	132
Circuit Out	PLANNED OUTAGE	1/25/2015 5:33:23 PM	21545.73	1,142
PLF	PLANNED OUTAGE	1/25/2015 5:38:06 PM	12091.07	212

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	1/27/2015 10:50:15 AM	61141.67	145
Service - Non Crew	PLANNED OUTAGE	1/27/2015 8:09:01 AM	119.37	1
OCR, Sec.	PLANNED OUTAGE	1/27/2015 8:45:04 PM	8249.20	328
Service - Crew	PLANNED OUTAGE	1/29/2015 10:11:23 AM	154.23	1
Service - Crew	PLANNED OUTAGE	1/3/2015 3:09:18 PM	91.48	1
Service - Non Crew	PLANNED OUTAGE	1/31/2015 9:52:02 AM	639.10	11
Service - Non Crew	PLANNED OUTAGE	1/4/2015 3:00:19 PM	1308.60	18
Service - Crew	PLANNED OUTAGE	1/5/2015 1:58:53 PM	69.80	1
OH Other	PLANNED OUTAGE	1/5/2015 11:16:14 AM	117.02	1
Service - Non Crew	PLANNED OUTAGE	1/5/2015 11:43:14 AM	42.58	1
Circuit Out	PLANNED OUTAGE	1/5/2015 12:47:30 PM	4502.50	1,801
Service - Non Crew	PLANNED OUTAGE	1/7/2015 3:05:59 PM	81.97	1
OH Other	PLANNED OUTAGE	1/8/2015 2:35:04 PM	42.93	1
TX Repaired (OH)	PLANNED OUTAGE	1/9/2015 10:01:58 AM	48.62	1
UG Other	PLANNED OUTAGE	1/9/2015 11:32:41 AM	188.10	1
PLF	PLANNED OUTAGE	10/1/2015 10:08:28 PM	563.07	8
TX Replaced (PM)	PLANNED OUTAGE	10/1/2015 10:08:28 PM	2764.53	8
Connections	PLANNED OUTAGE	10/10/2015 11:30:11 AM	200.77	1
Step Restoration	PLANNED OUTAGE	10/10/2015 4:32:23 PM	101.57	22
OH Other	PLANNED OUTAGE	10/10/2015 9:28:35 PM	1940.58	11
OH Other	PLANNED OUTAGE	10/12/2015 9:19:09 AM	73.13	1
OH Other	PLANNED OUTAGE	10/13/2015 8:45:31 AM	150.55	1
Service - Non Crew	PLANNED OUTAGE	10/14/2015 2:45:28 PM	124.95	1
PLF	PLANNED OUTAGE	10/14/2015 4:25:26 PM	91.10	2
OH Other	PLANNED OUTAGE	10/15/2015 10:19:05 AM	1430.93	16
OH Other	PLANNED OUTAGE	10/15/2015 11:38:48 AM	623.40	18
OH Other	PLANNED OUTAGE	10/15/2015 12:32:45 PM	19.15	1
OH Other	PLANNED OUTAGE	10/16/2015 11:13:45 AM	1521.00	12
Circuit Out	PLANNED OUTAGE	10/18/2015 10:32:48 PM	8845.33	1,070
OH Other	PLANNED OUTAGE	10/19/2015 10:50:24 AM	355.85	1
UG Other	PLANNED OUTAGE	10/20/2015 1:07:27 PM	62.85	1
OH Other	PLANNED OUTAGE	10/20/2015 2:00:41 PM	108.15	1
Circuit Out	PLANNED OUTAGE	10/21/2015 6:10:12 PM	4282.13	1,036
UG Other	PLANNED OUTAGE	10/21/2015 9:16:24 AM	744.27	16
Circuit Out	PLANNED OUTAGE	10/24/2015 12:22:16 AM	3288.38	1,033
Primary Insulator	PLANNED OUTAGE	10/27/2015 8:55:10 AM	6401.50	21
Service - Non Crew	PLANNED OUTAGE	10/28/2015 12:02:39 PM	61.08	1
Service - Non Crew	PLANNED OUTAGE	10/28/2015 2:00:46 PM	44.78	1
Cut Out 100 amp - PLF	PLANNED OUTAGE	10/28/2015 5:54:31 PM	2451.60	81
Service - Non Crew	PLANNED OUTAGE	10/28/2015 9:50:53 AM	72.10	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	10/29/2015 9:11:41 AM	123.40	1
OCR, Sec.	PLANNED OUTAGE	10/3/2015 2:44:44 PM	140.70	134
TX Repaired (PM)	PLANNED OUTAGE	10/3/2015 8:18:53 AM	84.88	1
OH Other	PLANNED OUTAGE	10/5/2015 11:05:21 AM	81.87	1
OH Other	PLANNED OUTAGE	10/6/2015 9:56:21 AM	53.80	1
UG Other	PLANNED OUTAGE	10/7/2015 11:22:39 AM	10966.80	888
Service - Non Crew	PLANNED OUTAGE	10/7/2015 7:40:17 AM	93.27	1
Service - Non Crew	PLANNED OUTAGE	10/7/2015 8:49:34 PM	47.07	1
Circuit Out	PLANNED OUTAGE	10/9/2015 7:42:09 PM	1462.67	1,097
Circuit Out	PLANNED OUTAGE	11/10/2015 12:25:32 AM	1242.00	184
Circuit Out	PLANNED OUTAGE	11/10/2015 12:30:33 AM	13953.90	1,446
Circuit Out	PLANNED OUTAGE	11/10/2015 12:58:32 PM	5785.87	1,669
Circuit Out	PLANNED OUTAGE	11/10/2015 3:46:20 AM	43520.63	497
Step Restoration	PLANNED OUTAGE	11/10/2015 3:46:20 AM	22202.13	626
Circuit Out	PLANNED OUTAGE	11/11/2015 9:55:27 PM	1338.75	945
TX Repaired (OH)	PLANNED OUTAGE	11/12/2015 1:47:27 PM	145.10	2
UG Other	PLANNED OUTAGE	11/12/2015 4:25:42 PM	125.02	1
Service - Crew	PLANNED OUTAGE	11/12/2015 6:05:58 PM	249.87	1
OH Other	PLANNED OUTAGE	11/12/2015 9:04:30 AM	682.70	6
OH Other	PLANNED OUTAGE	11/13/2015 1:03:25 PM	58.78	1
Service - Crew	PLANNED OUTAGE	11/13/2015 6:32:46 PM	282.27	1
UG Other	PLANNED OUTAGE	11/13/2015 9:50:14 AM	46.03	1
Connections	PLANNED OUTAGE	11/13/2015 9:59:06 AM	81.67	1
UG Other	PLANNED OUTAGE	11/15/2015 7:44:28 PM	26446.20	33
UG Other	PLANNED OUTAGE	11/15/2015 8:36:41 AM	89.10	1
Cut Out 100 amp - PLF	PLANNED OUTAGE	11/16/2015 7:53:08 PM	694.57	67
Circuit Out	PLANNED OUTAGE	11/16/2015 8:22:47 AM	118958.07	1,462
Step Restoration	PLANNED OUTAGE	11/16/2015 8:22:47 AM	16242.45	279
Service - Non Crew	PLANNED OUTAGE	11/17/2015 10:36:22 AM	204.37	1
OH Other	PLANNED OUTAGE	11/17/2015 8:05:15 AM	1440.53	8
OH Other	PLANNED OUTAGE	11/17/2015 8:59:07 AM	433.95	9
Service - Non Crew	PLANNED OUTAGE	11/18/2015 9:43:38 AM	2.48	1
Service - Non Crew	PLANNED OUTAGE	11/19/2015 10:22:10 AM	374.40	4
UG Other	PLANNED OUTAGE	11/19/2015 12:09:25 PM	34.83	1
Service - Non Crew	PLANNED OUTAGE	11/2/2015 9:22:31 AM	208.48	1
OH Other	PLANNED OUTAGE	11/20/2015 11:03:38 AM	53.28	1
Service - Non Crew	PLANNED OUTAGE	11/20/2015 11:28:36 AM	194.13	1
OH Other	PLANNED OUTAGE	11/20/2015 9:12:52 AM	90.92	1
Service - Non Crew	PLANNED OUTAGE	11/21/2015 5:41:45 PM	36.42	1
OH Other	PLANNED OUTAGE	11/21/2015 7:03:21 AM	973.67	5

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Service - Non Crew	PLANNED OUTAGE	11/21/2015 9:45:33 AM	128.43	1
Primary Wire	PLANNED OUTAGE	11/22/2015 7:39:10 PM	44505.60	76
Secondary Wire	PLANNED OUTAGE	11/23/2015 11:53:11 AM	885.20	6
OH Other	PLANNED OUTAGE	11/23/2015 12:03:53 PM	186.67	7
OH Other	PLANNED OUTAGE	11/24/2015 8:11:26 AM	67.05	1
Circuit Out	PLANNED OUTAGE	11/26/2015 11:11:15 AM	7362.80	948
Service - Non Crew	PLANNED OUTAGE	11/27/2015 3:21:27 PM	73.40	1
TX Repaired (OH)	PLANNED OUTAGE	11/30/2015 2:28:25 PM	682.65	9
Service - Crew	PLANNED OUTAGE	11/4/2015 9:42:29 AM	198.73	1
PLF	PLANNED OUTAGE	11/5/2015 9:57:25 AM	18453.93	107
Meter Damaged	PLANNED OUTAGE	11/7/2015 8:18:39 PM	52.23	1
Service - Non Crew	PLANNED OUTAGE	11/9/2015 11:27:13 AM	29.88	1
Service - Crew	PLANNED OUTAGE	12/1/2015 2:27:45 PM	23.25	1
OH Other	PLANNED OUTAGE	12/1/2015 7:44:07 AM	196.00	1
TX Repaired (OH)	PLANNED OUTAGE	12/10/2015 2:06:23 PM	63.10	1
UG Other	PLANNED OUTAGE	12/10/2015 3:28:06 PM	225.98	1
Circuit Out	PLANNED OUTAGE	12/10/2015 7:09:57 PM	35947.65	653
UG Other	PLANNED OUTAGE	12/11/2015 7:34:08 AM	73.73	1
UG Other	PLANNED OUTAGE	12/12/2015 10:36:37 PM	26.72	1
TX Repaired (PM)	PLANNED OUTAGE	12/13/2015 7:59:42 AM	3245.40	18
Service - Non Crew	PLANNED OUTAGE	12/14/2015 4:20:37 PM	57.80	1
Service - Crew	PLANNED OUTAGE	12/14/2015 7:35:04 AM	259.82	1
OH Other	PLANNED OUTAGE	12/15/2015 10:01:10 AM	145.60	8
UG Other	PLANNED OUTAGE	12/15/2015 10:35:10 AM	322.03	1
OH Other	PLANNED OUTAGE	12/16/2015 8:22:41 AM	157.07	1
Service - Non Crew	PLANNED OUTAGE	12/17/2015 10:03:40 AM	62.47	1
OH Other	PLANNED OUTAGE	12/17/2015 8:46:36 AM	32.88	1
OH Other	PLANNED OUTAGE	12/17/2015 8:50:34 AM	820.13	8
OH Other	PLANNED OUTAGE	12/18/2015 12:59:37 PM	26.73	1
UG Other	PLANNED OUTAGE	12/18/2015 9:16:38 AM	236.18	1
UG Other	PLANNED OUTAGE	12/18/2015 9:17:01 AM	237.12	1
UG Other	PLANNED OUTAGE	12/18/2015 9:17:29 AM	237.85	1
OH Other	PLANNED OUTAGE	12/19/2015 3:06:18 PM	47.92	1
Circuit Out	PLANNED OUTAGE	12/19/2015 5:02:50 AM	5938.67	524
PLF	PLANNED OUTAGE	12/2/2015 1:16:02 PM	1087.50	9
Service - Non Crew	PLANNED OUTAGE	12/2/2015 8:25:11 AM	51.40	1
Service - Non Crew	PLANNED OUTAGE	12/21/2015 2:56:42 PM	92.10	1
Circuit Out	PLANNED OUTAGE	12/21/2015 9:54:58 AM	12031.75	969
Service - Non Crew	PLANNED OUTAGE	12/22/2015 7:51:49 AM	70.28	1
OH Other	PLANNED OUTAGE	12/22/2015 9:19:41 AM	184.87	4

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
TX Repaired (PM)	PLANNED OUTAGE	12/23/2015 5:06:23 PM	3162.40	48
Connections	PLANNED OUTAGE	12/23/2015 6:45:02 PM	69.88	1
OH Other	PLANNED OUTAGE	12/25/2015 1:01:16 PM	48.22	1
OH Other	PLANNED OUTAGE	12/29/2015 3:35:59 PM	154.00	3
Service - Non Crew	PLANNED OUTAGE	12/4/2015 5:57:08 PM	112.87	1
Circuit Out	PLANNED OUTAGE	12/5/2015 12:43:07 PM	4815.02	1,151
OH Other	PLANNED OUTAGE	12/5/2015 7:24:23 AM	63.72	1
OH Other	PLANNED OUTAGE	12/7/2015 7:35:34 AM	447.43	1
UG Other	PLANNED OUTAGE	12/7/2015 8:16:31 AM	171.58	1
Primary Wire	PLANNED OUTAGE	12/8/2015 11:00:43 AM	6648.42	65
Cross Arm Brace	PLANNED OUTAGE	12/9/2015 2:51:07 PM	9199.55	17
OH Other	PLANNED OUTAGE	12/9/2015 4:43:58 PM	47.55	1
OH Other	PLANNED OUTAGE	2/10/2015 12:34:43 PM	63.15	1
OH Other	PLANNED OUTAGE	2/11/2015 3:03:59 PM	48.42	1
OH Other	PLANNED OUTAGE	2/12/2015 2:01:13 PM	58.45	1
Service - Non Crew	PLANNED OUTAGE	2/12/2015 4:05:21 PM	72.50	1
Service - Crew	PLANNED OUTAGE	2/14/2015 1:24:37 PM	148.22	1
Cut Out 200 amp - PLF	PLANNED OUTAGE	2/14/2015 7:36:56 AM	10836.93	119
Circuit Out	PLANNED OUTAGE	2/14/2015 7:42:22 AM	3713.00	1,410
Cut Out 200 amp - PLF	PLANNED OUTAGE	2/14/2015 8:47:47 AM	2567.52	127
Circuit Out	PLANNED OUTAGE	2/17/2015 4:43:19 PM	4415.33	370
Circuit Out	PLANNED OUTAGE	2/17/2015 5:53:31 PM	3748.07	836
OH Other	PLANNED OUTAGE	2/19/2015 10:21:07 AM	249.87	8
Circuit Out	PLANNED OUTAGE	2/19/2015 10:59:21 PM	2413.35	279
OH Other	PLANNED OUTAGE	2/19/2015 8:34:09 AM	146.15	1
TX Repaired (OH)	PLANNED OUTAGE	2/2/2015 1:51:53 PM	44.22	1
Circuit Out	PLANNED OUTAGE	2/20/2015 11:04:06 PM	2082.60	534
OH Other	PLANNED OUTAGE	2/20/2015 8:30:51 AM	166.88	1
Service - Non Crew	PLANNED OUTAGE	2/20/2015 9:47:59 AM	17.67	1
OH Other	PLANNED OUTAGE	2/23/2015 3:32:31 PM	1263.42	5
UG Other	PLANNED OUTAGE	2/23/2015 5:11:01 PM	95.13	1
OH Other	PLANNED OUTAGE	2/23/2015 9:35:40 AM	188.30	2
OH Other	PLANNED OUTAGE	2/24/2015 11:25:19 AM	1957.20	12
OH Other	PLANNED OUTAGE	2/24/2015 9:10:58 AM	148.80	1
OH Other	PLANNED OUTAGE	2/25/2015 1:23:49 PM	65.53	1
OH Other	PLANNED OUTAGE	2/25/2015 10:07:15 AM	25.00	1
OH Other	PLANNED OUTAGE	2/25/2015 10:53:38 AM	43.17	1
Secondary Wire	PLANNED OUTAGE	2/25/2015 2:31:08 PM	4033.00	15
OH Other	PLANNED OUTAGE	2/25/2015 2:44:14 PM	87.02	1
OH Other	PLANNED OUTAGE	2/25/2015 9:23:14 AM	33.67	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	2/26/2015 10:25:18 AM	1101.10	11
OH Other	PLANNED OUTAGE	2/26/2015 7:53:52 AM	312.53	2
OH Other	PLANNED OUTAGE	2/26/2015 8:58:51 AM	331.92	1
Service - Non Crew	PLANNED OUTAGE	2/27/2015 8:52:51 AM	57.13	1
Circuit Out	PLANNED OUTAGE	2/28/2015 2:57:04 PM	20730.87	2,087
UG Other	PLANNED OUTAGE	2/4/2015 10:07:16 AM	71.95	1
Circuit Out	PLANNED OUTAGE	2/4/2015 4:23:33 AM	5332.93	184
Circuit Out	PLANNED OUTAGE	2/5/2015 3:16:48 AM	45478.40	1,672
Circuit Out	PLANNED OUTAGE	2/5/2015 3:36:50 AM	13174.47	1,813
TX Repaired (OH)	PLANNED OUTAGE	2/5/2015 9:14:10 AM	48.12	1
UG Other	PLANNED OUTAGE	2/6/2015 2:46:38 PM	282.90	3
TX Replaced (PM)	PLANNED OUTAGE	2/8/2015 8:02:16 PM	7271.47	17
Service - Crew	PLANNED OUTAGE	3/10/2015 3:49:40 PM	430.55	1
TX Repaired (PM)	PLANNED OUTAGE	3/10/2015 4:44:17 PM	11200.80	26
UG Other	PLANNED OUTAGE	3/10/2015 6:27:16 PM	1165.32	29
OH Other	PLANNED OUTAGE	3/10/2015 6:44:07 PM	503.07	8
Service - Non Crew	PLANNED OUTAGE	3/10/2015 8:32:40 AM	57.38	1
OH Other	PLANNED OUTAGE	3/10/2015 9:18:39 AM	606.65	11
OH Other	PLANNED OUTAGE	3/11/2015 12:36:51 PM	380.85	9
OH Other	PLANNED OUTAGE	3/11/2015 2:53:03 PM	89.85	1
UG Other	PLANNED OUTAGE	3/11/2015 3:14:35 PM	63.93	1
Step Restoration	PLANNED OUTAGE	3/11/2015 3:14:35 PM	1396.63	22
OH Other	PLANNED OUTAGE	3/11/2015 9:51:15 AM	778.95	9
OH Other	PLANNED OUTAGE	3/13/2015 10:59:40 AM	25.38	1
TX Replaced (PM)	PLANNED OUTAGE	3/13/2015 12:40:34 PM	139.97	13
TX Replaced (PM)	PLANNED OUTAGE	3/13/2015 12:40:49 PM	231.00	15
Circuit Out	PLANNED OUTAGE	3/13/2015 7:14:44 PM	2539.92	29
UG Other	PLANNED OUTAGE	3/14/2015 11:21:00 AM	53.03	1
OH Other	PLANNED OUTAGE	3/16/2015 10:46:59 AM	66.82	1
Service - Crew	PLANNED OUTAGE	3/17/2015 10:16:26 AM	441.30	1
OH Other	PLANNED OUTAGE	3/17/2015 12:18:14 PM	30.90	1
Service - Non Crew	PLANNED OUTAGE	3/18/2015 3:46:23 PM	46.75	1
OH Other	PLANNED OUTAGE	3/2/2015 12:45:53 PM	85.87	1
OH Other	PLANNED OUTAGE	3/22/2015 2:14:29 AM	61278.90	321
Service - Non Crew	PLANNED OUTAGE	3/23/2015 5:33:04 PM	5.18	1
UG Other	PLANNED OUTAGE	3/23/2015 7:40:24 AM	429.85	1
Circuit Out	PLANNED OUTAGE	3/23/2015 9:41:57 AM	27162.85	377
Service - Non Crew	PLANNED OUTAGE	3/24/2015 1:16:18 PM	174.97	1
OH Other	PLANNED OUTAGE	3/24/2015 1:28:55 PM	1830.83	10
Service - Non Crew	PLANNED OUTAGE	3/24/2015 12:28:42 PM	221.40	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	3/24/2015 12:58:31 PM	84.63	1
OH Other	PLANNED OUTAGE	3/25/2015 10:43:24 AM	27.28	1
OH Other	PLANNED OUTAGE	3/25/2015 3:36:30 PM	66.48	1
TX Repaired (OH)	PLANNED OUTAGE	3/25/2015 4:30:43 PM	106.52	1
TX Repaired (OH)	PLANNED OUTAGE	3/25/2015 8:56:21 PM	38.85	1
OH Other	PLANNED OUTAGE	3/26/2015 1:06:20 PM	46.07	1
OH Other	PLANNED OUTAGE	3/26/2015 1:40:02 PM	44.30	1
PLF	PLANNED OUTAGE	3/26/2015 6:00:45 PM	5769.50	22
Circuit Out	PLANNED OUTAGE	3/27/2015 7:58:51 PM	32098.95	2,511
Service - Non Crew	PLANNED OUTAGE	3/28/2015 10:03:55 AM	43.53	1
Pole	PLANNED OUTAGE	3/29/2015 1:55:43 AM	9283.70	17
Circuit Out	PLANNED OUTAGE	3/29/2015 2:19:10 PM	1310.40	936
Service - Non Crew	PLANNED OUTAGE	3/3/2015 11:06:02 AM	57.47	1
Circuit Out	PLANNED OUTAGE	3/3/2015 12:14:46 PM	1541.58	1,423
UG Other	PLANNED OUTAGE	3/3/2015 4:06:13 PM	74.73	1
UG Other	PLANNED OUTAGE	3/3/2015 7:32:56 AM	108.75	1
UG Other	PLANNED OUTAGE	3/3/2015 7:42:22 AM	74.78	1
OH Other	PLANNED OUTAGE	3/3/2015 9:51:19 AM	68.63	1
UG Other	PLANNED OUTAGE	3/30/2015 1:51:54 PM	83.82	1
OH Other	PLANNED OUTAGE	3/30/2015 3:57:20 PM	1225.87	8
UG Other	PLANNED OUTAGE	3/30/2015 8:39:15 AM	164.47	1
UG Other	PLANNED OUTAGE	3/31/2015 6:15:11 PM	75.23	1
Service - Non Crew	PLANNED OUTAGE	3/31/2015 9:45:09 AM	186.88	1
UG Other	PLANNED OUTAGE	3/5/2015 1:08:42 PM	67.18	1
Service - Non Crew	PLANNED OUTAGE	3/5/2015 11:51:48 AM	326.10	1
Service - Non Crew	PLANNED OUTAGE	3/5/2015 11:53:47 AM	64.38	1
UG Other	PLANNED OUTAGE	3/5/2015 7:21:38 AM	111.50	1
TX Repaired (OH)	PLANNED OUTAGE	3/6/2015 12:04:35 PM	60.65	1
TX Repaired (PM)	PLANNED OUTAGE	3/6/2015 3:02:40 PM	4745.00	12
OH Other	PLANNED OUTAGE	3/6/2015 9:44:39 AM	342.52	1
Service - Crew	PLANNED OUTAGE	3/9/2015 5:08:18 PM	381.98	1
UG Other	PLANNED OUTAGE	3/9/2015 8:14:21 AM	118.62	1
UG Other	PLANNED OUTAGE	4/10/2015 1:53:14 PM	182.02	1
Circuit Out	PLANNED OUTAGE	4/10/2015 5:42:16 PM	26177.07	776
Service - Non Crew	PLANNED OUTAGE	4/10/2015 7:43:45 AM	19.68	1
Circuit Out	PLANNED OUTAGE	4/11/2015 8:07:57 PM	4973.25	1,745
Circuit Out	PLANNED OUTAGE	4/12/2015 12:30:40 AM	3682.20	969
OH Other	PLANNED OUTAGE	4/13/2015 10:24:06 AM	78.73	1
OH Other	PLANNED OUTAGE	4/14/2015 4:46:29 PM	1011.92	5
PLF	PLANNED OUTAGE	4/14/2015 6:08:06 PM	18955.75	55

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Circuit Out	PLANNED OUTAGE	4/14/2015 8:07:24 AM	13090.00	840
UG Other	PLANNED OUTAGE	4/14/2015 9:28:57 AM	77.38	1
Service - Non Crew	PLANNED OUTAGE	4/15/2015 2:15:47 PM	67.22	1
Circuit Out	PLANNED OUTAGE	4/15/2015 6:31:59 PM	5980.00	624
Service - Non Crew	PLANNED OUTAGE	4/15/2015 8:55:24 AM	142.98	1
Connections	PLANNED OUTAGE	4/16/2015 1:09:48 PM	450.97	1
Circuit Out	PLANNED OUTAGE	4/16/2015 8:10:33 PM	15591.60	1,278
OH Other	PLANNED OUTAGE	4/16/2015 8:30:37 AM	125.52	1
Service - Non Crew	PLANNED OUTAGE	4/17/2015 10:29:47 AM	228.35	1
Circuit Out	PLANNED OUTAGE	4/18/2015 1:41:56 AM	4129.20	1,116
OH Other	PLANNED OUTAGE	4/19/2015 3:47:20 PM	88.38	1
OCR, Sec.	PLANNED OUTAGE	4/19/2015 9:47:31 PM	3270.52	119
Service - Non Crew	PLANNED OUTAGE	4/2/2015 9:17:01 AM	61.38	1
OH Other	PLANNED OUTAGE	4/20/2015 5:32:46 PM	253.87	1
OH Other	PLANNED OUTAGE	4/20/2015 7:53:00 PM	48.75	1
Circuit Out	PLANNED OUTAGE	4/20/2015 8:08:04 AM	5157.87	608
OH Other	PLANNED OUTAGE	4/20/2015 8:10:23 PM	144.32	1
OH Other	PLANNED OUTAGE	4/20/2015 8:29:43 PM	1455.85	3
Cut Out 100 amp - Tx	PLANNED OUTAGE	4/20/2015 8:56:17 AM	283.72	1
Service - Non Crew	PLANNED OUTAGE	4/21/2015 1:52:36 PM	278.53	1
Service - Non Crew	PLANNED OUTAGE	4/21/2015 9:29:41 AM	348.87	1
Service - Non Crew	PLANNED OUTAGE	4/22/2015 4:08:59 PM	237.92	1
Service - Non Crew	PLANNED OUTAGE	4/23/2015 1:05:50 PM	34.80	1
Meter Damaged	PLANNED OUTAGE	4/23/2015 12:52:56 PM	44.22	1
Circuit Out	PLANNED OUTAGE	4/23/2015 2:42:25 PM	8149.17	1,778
Circuit Out	PLANNED OUTAGE	4/23/2015 2:44:00 PM	21402.00	1,189
OCR, Sec.	PLANNED OUTAGE	4/23/2015 3:35:00 AM	14660.80	616
Circuit Out	PLANNED OUTAGE	4/23/2015 5:46:33 PM	10954.13	376
Step Restoration	PLANNED OUTAGE	4/23/2015 5:46:33 PM	125306.13	1,144
Step Restoration	PLANNED OUTAGE	4/23/2015 5:46:33 PM	13084.90	258
Service - Non Crew	PLANNED OUTAGE	4/24/2015 10:33:37 AM	169.02	1
Service - Non Crew	PLANNED OUTAGE	4/24/2015 11:03:00 AM	43.78	1
OH Other	PLANNED OUTAGE	4/24/2015 11:36:38 AM	98.37	1
OH Other	PLANNED OUTAGE	4/24/2015 11:37:13 AM	50.58	1
OH Other	PLANNED OUTAGE	4/24/2015 3:09:03 PM	67.05	1
Service - Non Crew	PLANNED OUTAGE	4/24/2015 8:32:08 AM	1.95	1
Circuit Out	PLANNED OUTAGE	4/26/2015 1:01:04 PM	4394.67	824
Service - Non Crew	PLANNED OUTAGE	4/26/2015 4:20:17 PM	2.37	1
OH Other	PLANNED OUTAGE	4/27/2015 1:43:37 PM	641.33	8
OH Other	PLANNED OUTAGE	4/27/2015 4:37:31 PM	63.53	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Service - Non Crew	PLANNED OUTAGE	4/27/2015 5:36:14 PM	0.73	1
Service - Non Crew	PLANNED OUTAGE	4/27/2015 6:14:35 PM	155.70	1
Service - Non Crew	PLANNED OUTAGE	4/27/2015 7:53:55 AM	20.75	1
UG Other	PLANNED OUTAGE	4/27/2015 9:40:39 AM	64.60	1
OH Other	PLANNED OUTAGE	4/28/2015 8:05:41 AM	299.18	1
Service - Non Crew	PLANNED OUTAGE	4/29/2015 8:24:06 AM	58.88	1
UG Other	PLANNED OUTAGE	4/30/2015 1:06:19 PM	5304.00	36
UG Other	PLANNED OUTAGE	4/30/2015 11:32:05 AM	102.07	1
Service - Non Crew	PLANNED OUTAGE	4/30/2015 4:42:45 PM	48.83	1
Service - Non Crew	PLANNED OUTAGE	4/30/2015 4:46:35 PM	87.68	1
Service - Non Crew	PLANNED OUTAGE	4/30/2015 5:29:15 PM	59.12	1
Circuit Out	PLANNED OUTAGE	4/4/2015 4:51:14 AM	8463.77	902
Circuit Out	PLANNED OUTAGE	4/5/2015 9:09:56 PM	1003.20	198
Circuit Out	PLANNED OUTAGE	4/5/2015 9:39:45 PM	295.00	236
Primary Wire	PLANNED OUTAGE	4/6/2015 10:42:34 PM	17450.00	1,000
PLF	PLANNED OUTAGE	4/8/2015 2:59:06 PM	13492.80	72
OH Other	PLANNED OUTAGE	4/9/2015 9:57:49 AM	52.68	1
OCR, Sec.	PLANNED OUTAGE	5/1/2015 10:05:32 PM	5274.73	623
Service - Non Crew	PLANNED OUTAGE	5/1/2015 7:52:07 AM	142.87	1
Step Restoration	PLANNED OUTAGE	5/10/2015 4:40:39 PM	75208.02	439
Circuit Out	PLANNED OUTAGE	5/11/2015 10:04:40 PM	2780.00	1,390
Circuit Out	PLANNED OUTAGE	5/12/2015 10:56:15 PM	8417.25	783
Pole	PLANNED OUTAGE	5/12/2015 11:51:52 PM	366.38	1
Step Restoration	PLANNED OUTAGE	5/12/2015 11:51:52 PM	12431.53	34
Circuit Out	PLANNED OUTAGE	5/12/2015 6:39:09 PM	1829.70	642
OH Other	PLANNED OUTAGE	5/13/2015 10:00:50 AM	1910.18	7
OH Other	PLANNED OUTAGE	5/13/2015 11:07:40 AM	145.07	1
UG Other	PLANNED OUTAGE	5/13/2015 9:10:06 AM	223.02	1
Pole	PLANNED OUTAGE	5/16/2015 11:24:15 AM	1727.25	3
Step Restoration	PLANNED OUTAGE	5/16/2015 11:24:15 AM	37361.33	56
Step Restoration	PLANNED OUTAGE	5/16/2015 11:24:15 AM	14680.97	22
Step Restoration	PLANNED OUTAGE	5/16/2015 11:24:15 AM	14017.15	21
Cross Arm	PLANNED OUTAGE	5/17/2015 12:03:28 PM	3843.48	31
Service - Crew	PLANNED OUTAGE	5/17/2015 12:53:47 AM	476.10	6
Service - Non Crew	PLANNED OUTAGE	5/18/2015 4:13:45 PM	167.48	1
TX Repaired (PM)	PLANNED OUTAGE	5/18/2015 4:41:54 PM	3024.80	8
Service - Non Crew	PLANNED OUTAGE	5/20/2015 2:52:55 PM	81.18	1
Circuit Out	PLANNED OUTAGE	5/20/2015 3:46:45 PM	4779.03	461
UG Other	PLANNED OUTAGE	5/22/2015 7:02:26 AM	55.12	1
Circuit Out	PLANNED OUTAGE	5/24/2015 6:37:29 PM	15838.87	772

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Circuit Out	PLANNED OUTAGE	5/24/2015 6:43:00 PM	3184.00	398
Step Restoration	PLANNED OUTAGE	5/24/2015 6:43:00 PM	4323.47	124
Circuit Out	PLANNED OUTAGE	5/26/2015 3:48:45 PM	1920.00	1,536
Step Restoration	PLANNED OUTAGE	5/26/2015 7:54:13 PM	9198.00	15
TX Repaired (PM)	PLANNED OUTAGE	5/26/2015 7:54:13 PM	2679.60	4
TX Replaced (PM)	PLANNED OUTAGE	5/27/2015 12:40:26 PM	33415.20	119
UG Other	PLANNED OUTAGE	5/27/2015 9:21:42 AM	75.43	1
OH Other	PLANNED OUTAGE	5/27/2015 9:57:22 AM	5782.07	86
OH Other	PLANNED OUTAGE	5/28/2015 11:31:29 AM	22.63	1
TX Repaired (OH)	PLANNED OUTAGE	5/28/2015 12:34:14 PM	44.47	1
Step Restoration	PLANNED OUTAGE	5/28/2015 2:50:00 PM	160.67	20
Circuit Out	PLANNED OUTAGE	5/28/2015 2:50:28 AM	3632.00	320
OH Other	PLANNED OUTAGE	5/28/2015 3:21:43 PM	42.43	1
Circuit Out	PLANNED OUTAGE	5/29/2015 11:09:08 PM	2454.67	2,104
Circuit Out	PLANNED OUTAGE	5/30/2015 1:53:56 AM	12764.27	2,104
OH Other	PLANNED OUTAGE	5/30/2015 4:54:49 PM	145.00	15
Circuit Out	PLANNED OUTAGE	5/30/2015 9:41:37 PM	1460.33	1,348
PLF	PLANNED OUTAGE	5/31/2015 6:49:31 PM	947.78	19
TX Replaced (PM)	PLANNED OUTAGE	5/31/2015 6:49:31 PM	1607.40	3
PLF	PLANNED OUTAGE	5/31/2015 6:49:31 PM	2563.80	4
Service - Non Crew	PLANNED OUTAGE	5/4/2015 1:31:53 PM	108.58	1
Circuit Out	PLANNED OUTAGE	5/4/2015 9:10:32 PM	2623.53	1,357
Circuit Out	PLANNED OUTAGE	5/9/2015 6:39:24 PM	2275.20	1,422
OH Other	PLANNED OUTAGE	6/1/2015 10:15:19 AM	1120.83	5
Circuit Out	PLANNED OUTAGE	6/1/2015 2:04:10 PM	14666.53	694
Step Restoration	PLANNED OUTAGE	6/1/2015 2:04:10 PM	8941.67	290
Step Restoration	PLANNED OUTAGE	6/1/2015 2:04:10 PM	10251.50	303
Service - Crew	PLANNED OUTAGE	6/10/2015 10:20:49 AM	459.83	1
Service - Non Crew	PLANNED OUTAGE	6/10/2015 10:39:30 AM	141.90	1
Circuit Out	PLANNED OUTAGE	6/10/2015 5:09:20 PM	10123.50	1,530
UG Other	PLANNED OUTAGE	6/11/2015 12:00:21 PM	90.80	1
PLF	PLANNED OUTAGE	6/11/2015 5:32:59 PM	80111.15	903
Service - Non Crew	PLANNED OUTAGE	6/12/2015 10:57:14 AM	242.60	1
OH Other	PLANNED OUTAGE	6/12/2015 12:39:12 PM	43.50	1
OH Other	PLANNED OUTAGE	6/13/2015 1:32:37 PM	36.77	1
OH Other	PLANNED OUTAGE	6/14/2015 12:23:08 PM	123.17	1
Service - Crew	PLANNED OUTAGE	6/14/2015 12:52:04 PM	159.78	1
Service - Non Crew	PLANNED OUTAGE	6/14/2015 7:02:48 AM	229.78	1
Circuit Out	PLANNED OUTAGE	6/14/2015 8:00:10 AM	3788.10	1,647
OH Other	PLANNED OUTAGE	6/15/2015 2:39:53 PM	387.83	10

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Circuit Out	PLANNED OUTAGE	6/15/2015 5:26:59 PM	12663.00	1,340
Service - Non Crew	PLANNED OUTAGE	6/16/2015 1:59:48 PM	33.37	1
PLF	PLANNED OUTAGE	6/16/2015 3:14:23 AM	51798.50	338
OH Other	PLANNED OUTAGE	6/16/2015 7:28:06 PM	83.75	1
Circuit Out	PLANNED OUTAGE	6/16/2015 7:51:37 AM	11389.17	1,730
OH Other	PLANNED OUTAGE	6/16/2015 8:34:47 AM	47.75	1
Service - Non Crew	PLANNED OUTAGE	6/17/2015 1:18:37 PM	37.07	1
OH Other	PLANNED OUTAGE	6/17/2015 8:02:06 AM	60.12	1
UG Other	PLANNED OUTAGE	6/17/2015 9:27:46 AM	188.30	2
OH Other	PLANNED OUTAGE	6/18/2015 9:42:53 AM	252.00	4
Service - Non Crew	PLANNED OUTAGE	6/19/2015 10:37:08 AM	87.80	1
Circuit Out	PLANNED OUTAGE	6/2/2015 1:47:25 AM	4071.15	747
Circuit Out	PLANNED OUTAGE	6/2/2015 10:48:58 PM	10891.65	693
Service - Non Crew	PLANNED OUTAGE	6/2/2015 11:54:19 AM	49.55	1
TX Repaired (OH)	PLANNED OUTAGE	6/2/2015 5:35:14 PM	140.07	2
Circuit Out	PLANNED OUTAGE	6/2/2015 8:06:26 PM	339.43	34
Circuit Out	PLANNED OUTAGE	6/20/2015 10:28:08 PM	5005.80	729
Circuit Out	PLANNED OUTAGE	6/20/2015 7:54:05 AM	1610.00	552
Pole	PLANNED OUTAGE	6/21/2015 2:00:37 AM	41652.27	64
OH Other	PLANNED OUTAGE	6/22/2015 9:53:16 AM	115.40	1
Circuit Out	PLANNED OUTAGE	6/23/2015 10:26:05 PM	6151.20	2,097
Service - Non Crew	PLANNED OUTAGE	6/23/2015 11:00:51 AM	105.52	1
OH Other	PLANNED OUTAGE	6/23/2015 11:59:39 AM	48.72	1
Service - Crew	PLANNED OUTAGE	6/23/2015 4:25:50 PM	75.48	1
OH Other	PLANNED OUTAGE	6/24/2015 1:06:20 PM	145.37	1
Service - Non Crew	PLANNED OUTAGE	6/24/2015 1:23:39 PM	35.82	1
Service - Non Crew	PLANNED OUTAGE	6/24/2015 10:45:53 AM	285.25	1
OH Other	PLANNED OUTAGE	6/24/2015 10:50:23 PM	360.20	1
UG Other	PLANNED OUTAGE	6/24/2015 6:16:45 PM	34.25	1
Circuit Out	PLANNED OUTAGE	6/24/2015 7:49:16 AM	4147.73	808
UG Other	PLANNED OUTAGE	6/24/2015 9:28:00 AM	32.95	1
OH Other	PLANNED OUTAGE	6/25/2015 11:34:05 AM	64.92	1
OH Other	PLANNED OUTAGE	6/25/2015 11:41:49 AM	96.33	1
OCR, Sec.	PLANNED OUTAGE	6/25/2015 12:37:03 AM	49365.80	836
Switch 600 amp	PLANNED OUTAGE	6/25/2015 12:40:36 PM	6608.80	751
UG Other	PLANNED OUTAGE	6/25/2015 4:46:28 PM	19541.17	290
UG Other	PLANNED OUTAGE	6/25/2015 8:46:04 PM	10672.00	290
Service - Non Crew	PLANNED OUTAGE	6/25/2015 9:41:41 AM	46.53	1
Service - Non Crew	PLANNED OUTAGE	6/26/2015 1:55:32 PM	66.20	1
Service - Non Crew	PLANNED OUTAGE	6/26/2015 9:11:25 AM	11.62	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	6/27/2015 4:41:34 PM	30.88	1
OH Other	PLANNED OUTAGE	6/27/2015 6:56:53 PM	88.68	1
Pole	PLANNED OUTAGE	6/28/2015 12:44:37 AM	1381.53	4
Step Restoration	PLANNED OUTAGE	6/28/2015 12:44:37 AM	6914.05	143
UG Other	PLANNED OUTAGE	6/29/2015 11:36:58 AM	87.05	1
Circuit Out	PLANNED OUTAGE	6/29/2015 3:19:21 PM	501.90	14
OH Other	PLANNED OUTAGE	6/3/2015 10:26:25 AM	162.27	1
OH Other	PLANNED OUTAGE	6/3/2015 12:55:55 PM	80.73	1
OH Other	PLANNED OUTAGE	6/30/2015 10:00:29 AM	254.13	2
Service - Crew	PLANNED OUTAGE	6/30/2015 10:02:06 AM	67.03	1
Service - Non Crew	PLANNED OUTAGE	6/30/2015 10:37:37 AM	52.07	1
OH Other	PLANNED OUTAGE	6/30/2015 4:06:59 PM	125.58	1
Connections	PLANNED OUTAGE	6/30/2015 4:34:57 PM	202.45	1
OH Other	PLANNED OUTAGE	6/4/2015 1:07:22 PM	66.02	1
Service - Non Crew	PLANNED OUTAGE	6/4/2015 11:31:20 PM	23.00	1
UG Other	PLANNED OUTAGE	6/4/2015 9:30:20 PM	120.88	1
TX Repaired (OH)	PLANNED OUTAGE	6/5/2015 10:14:32 AM	70.50	1
Circuit Out	PLANNED OUTAGE	6/5/2015 7:35:38 AM	5158.73	694
OH Other	PLANNED OUTAGE	6/5/2015 9:24:47 AM	942.40	12
OH Other	PLANNED OUTAGE	6/8/2015 12:47:50 PM	388.07	1
OH Other	PLANNED OUTAGE	6/8/2015 9:31:49 PM	869.98	7
OH Other	PLANNED OUTAGE	6/8/2015 9:48:15 AM	22.47	1
Service - Non Crew	PLANNED OUTAGE	6/9/2015 10:28:09 AM	54.12	1
TX Replaced (PM)	PLANNED OUTAGE	6/9/2015 7:10:06 PM	3231.33	10
OH Other	PLANNED OUTAGE	6/9/2015 9:08:30 AM	141.83	1
OH Other	PLANNED OUTAGE	7/1/2015 8:10:59 AM	178.07	1
OH Other	PLANNED OUTAGE	7/10/2015 1:42:11 PM	30.02	1
Circuit Out	PLANNED OUTAGE	7/11/2015 9:04:38 PM	3262.17	1,058
UG Other	PLANNED OUTAGE	7/12/2015 9:11:29 AM	477.53	1
TX Repaired (PM)	PLANNED OUTAGE	7/13/2015 2:29:48 PM	2203.73	8
OH Other	PLANNED OUTAGE	7/14/2015 11:30:05 AM	208.12	1
OH Other	PLANNED OUTAGE	7/14/2015 11:45:53 AM	58.77	1
OH Other	PLANNED OUTAGE	7/14/2015 2:46:25 PM	133.32	1
OH Other	PLANNED OUTAGE	7/14/2015 3:39:24 PM	37.72	1
Service - Crew	PLANNED OUTAGE	7/14/2015 5:54:08 PM	141.77	1
OH Other	PLANNED OUTAGE	7/14/2015 7:41:35 AM	63.37	1
UG Other	PLANNED OUTAGE	7/15/2015 1:46:36 PM	92.82	1
UG Other	PLANNED OUTAGE	7/15/2015 10:27:11 AM	95.40	1
Service - Crew	PLANNED OUTAGE	7/15/2015 12:31:45 PM	176.18	1
Service - Non Crew	PLANNED OUTAGE	7/15/2015 12:38:50 PM	66.18	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Connections	PLANNED OUTAGE	7/15/2015 2:07:39 PM	61.70	1
Circuit Out	PLANNED OUTAGE	7/15/2015 7:31:54 PM	7540.75	695
Service - Non Crew	PLANNED OUTAGE	7/16/2015 10:34:13 AM	545.87	1
OH Other	PLANNED OUTAGE	7/16/2015 10:39:05 AM	29.92	1
Service - Non Crew	PLANNED OUTAGE	7/16/2015 12:00:09 PM	56.13	1
OH Other	PLANNED OUTAGE	7/16/2015 12:15:38 PM	11.03	1
OH Other	PLANNED OUTAGE	7/16/2015 3:03:50 PM	88.63	1
OH Other	PLANNED OUTAGE	7/17/2015 11:45:36 AM	122.27	1
UG Other	PLANNED OUTAGE	7/17/2015 3:03:45 PM	79.85	1
Primary Wire	PLANNED OUTAGE	7/17/2015 4:59:13 AM	2917.50	50
Service - Non Crew	PLANNED OUTAGE	7/17/2015 7:52:20 AM	61.53	1
Circuit Out	PLANNED OUTAGE	7/18/2015 3:47:53 AM	2512.80	1,047
OH Other	PLANNED OUTAGE	7/2/2015 11:29:08 AM	93.67	1
Service - Non Crew	PLANNED OUTAGE	7/2/2015 8:00:58 AM	42.32	1
OH Other	PLANNED OUTAGE	7/20/2015 11:33:54 AM	33.58	1
Circuit Out	PLANNED OUTAGE	7/20/2015 5:55:06 PM	221.55	63
Service - Non Crew	PLANNED OUTAGE	7/20/2015 7:13:45 AM	110.75	1
OH Other	PLANNED OUTAGE	7/20/2015 9:29:51 AM	147.45	1
Circuit Out	PLANNED OUTAGE	7/21/2015 4:04:37 PM	10525.87	2,467
OH Other	PLANNED OUTAGE	7/22/2015 3:10:56 PM	1394.40	36
TX Replaced (PM)	PLANNED OUTAGE	7/22/2015 5:31:11 PM	1339.35	9
Service - Non Crew	PLANNED OUTAGE	7/22/2015 8:00:41 AM	101.60	1
Cut Out 100 amp - PLF	PLANNED OUTAGE	7/22/2015 9:55:13 AM	1305.67	10
Service - Non Crew	PLANNED OUTAGE	7/23/2015 1:35:29 PM	2.30	2
Service - Non Crew	PLANNED OUTAGE	7/23/2015 8:42:59 AM	28.63	1
OH Other	PLANNED OUTAGE	7/24/2015 10:30:49 AM	6599.47	46
Circuit Out	PLANNED OUTAGE	7/24/2015 10:57:56 AM	7910.93	1,304
OH Other	PLANNED OUTAGE	7/24/2015 12:54:29 PM	63.72	1
Service - Non Crew	PLANNED OUTAGE	7/24/2015 12:56:46 PM	33.45	1
Service - Non Crew	PLANNED OUTAGE	7/24/2015 3:58:02 PM	83.85	1
TX Repaired (PM)	PLANNED OUTAGE	7/24/2015 5:35:57 PM	2025.65	11
PLF	PLANNED OUTAGE	7/25/2015 11:29:25 PM	6915.33	44
PLF	PLANNED OUTAGE	7/25/2015 11:29:25 PM	15355.20	96
OH Other	PLANNED OUTAGE	7/26/2015 7:36:10 AM	66.85	1
TX Replaced (PM)	PLANNED OUTAGE	7/26/2015 9:58:07 AM	1979.33	5
UG Other	PLANNED OUTAGE	7/27/2015 10:05:41 AM	101.12	1
UG Other	PLANNED OUTAGE	7/27/2015 4:15:10 PM	58.97	1
Service - Crew	PLANNED OUTAGE	7/27/2015 4:34:50 PM	60.17	1
TX Repaired (PM)	PLANNED OUTAGE	7/28/2015 10:53:18 AM	546.42	5
UG Other	PLANNED OUTAGE	7/28/2015 11:45:37 AM	107.93	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Service - Non Crew	PLANNED OUTAGE	7/28/2015 3:29:14 PM	113.95	1
Circuit Out	PLANNED OUTAGE	7/28/2015 6:46:36 AM	2642.55	669
UG Other	PLANNED OUTAGE	7/3/2015 1:14:23 AM	4798.72	499
Circuit Out	PLANNED OUTAGE	7/3/2015 4:34:23 PM	14404.72	1,739
Circuit Out	PLANNED OUTAGE	7/3/2015 7:34:00 PM	47416.40	2,584
OH Other	PLANNED OUTAGE	7/30/2015 12:08:57 PM	42.13	1
OH Other	PLANNED OUTAGE	7/30/2015 7:36:14 AM	104.10	1
Service - Non Crew	PLANNED OUTAGE	7/30/2015 7:49:36 AM	1498.38	11
UG Other	PLANNED OUTAGE	7/31/2015 10:41:36 AM	65.60	1
Circuit Out	PLANNED OUTAGE	7/31/2015 9:37:01 AM	1629.83	1,397
Circuit Out	PLANNED OUTAGE	7/4/2015 3:58:50 PM	3483.67	2,986
OH Other	PLANNED OUTAGE	7/4/2015 8:36:02 AM	36.15	1
Circuit Out	PLANNED OUTAGE	7/5/2015 6:48:56 PM	6824.10	1,587
Circuit Out	PLANNED OUTAGE	7/6/2015 10:12:13 PM	2480.62	1,391
TX Repaired (PM)	PLANNED OUTAGE	7/6/2015 12:41:26 PM	2060.57	7
Circuit Out	PLANNED OUTAGE	7/6/2015 2:49:25 PM	2944.35	727
OH Other	PLANNED OUTAGE	7/6/2015 3:17:20 AM	1034.13	14
UG Other	PLANNED OUTAGE	7/7/2015 1:11:37 PM	74.00	1
UG Other	PLANNED OUTAGE	7/7/2015 1:14:02 PM	73.38	1
Circuit Out	PLANNED OUTAGE	7/7/2015 4:43:03 PM	3333.50	1,130
UG Other	PLANNED OUTAGE	7/7/2015 4:48:49 PM	28.75	1
Circuit Out	PLANNED OUTAGE	7/7/2015 5:46:28 PM	1603.87	1,046
UG Other	PLANNED OUTAGE	7/7/2015 8:42:35 AM	244.65	1
OH Other	PLANNED OUTAGE	7/7/2015 9:11:15 AM	726.30	6
UG Other	PLANNED OUTAGE	7/7/2015 9:14:16 AM	85.82	1
Service - Non Crew	PLANNED OUTAGE	7/7/2015 9:42:14 AM	145.78	1
Service - Non Crew	PLANNED OUTAGE	7/8/2015 3:22:43 PM	87.07	1
Circuit Out	PLANNED OUTAGE	7/8/2015 6:53:01 AM	1034.72	343
Service - Non Crew	PLANNED OUTAGE	7/8/2015 9:31:49 AM	178.18	1
OH Other	PLANNED OUTAGE	7/8/2015 9:40:03 AM	93.87	1
UG Other	PLANNED OUTAGE	7/9/2015 10:07:10 AM	291.68	1
OH Other	PLANNED OUTAGE	7/9/2015 11:20:42 AM	148.93	4
Cap Bank	PLANNED OUTAGE	7/9/2015 11:40:44 AM	17380.73	44
Step Restoration	PLANNED OUTAGE	7/9/2015 11:40:44 AM	17354.40	42
OH Other	PLANNED OUTAGE	7/9/2015 8:40:36 AM	60.30	1
OH Other	PLANNED OUTAGE	8/1/2015 1:25:30 PM	7635.47	22
Service - Non Crew	PLANNED OUTAGE	8/1/2015 5:16:45 PM	188.80	1
OH Other	PLANNED OUTAGE	8/1/2015 7:25:02 AM	1366.00	15
Circuit Out	PLANNED OUTAGE	8/10/2015 1:02:48 PM	5972.00	2,986
UG Other	PLANNED OUTAGE	8/10/2015 10:21:58 AM	134.57	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	8/10/2015 12:47:10 PM	717.80	12
Service - Crew	PLANNED OUTAGE	8/10/2015 8:28:00 AM	242.40	1
Service - Non Crew	PLANNED OUTAGE	8/10/2015 9:09:37 AM	70.83	1
Service - Non Crew	PLANNED OUTAGE	8/11/2015 7:23:32 AM	337.35	1
Circuit Out	PLANNED OUTAGE	8/12/2015 1:43:16 PM	21253.10	834
Service - Non Crew	PLANNED OUTAGE	8/12/2015 11:10:57 AM	42.40	1
OH Other	PLANNED OUTAGE	8/12/2015 5:37:22 PM	95.67	1
PLF	PLANNED OUTAGE	8/13/2015 9:30:30 PM	2959.20	36
TX Repaired (OH)	PLANNED OUTAGE	8/13/2015 9:53:32 AM	201.98	1
OH Other	PLANNED OUTAGE	8/14/2015 10:41:53 AM	65.10	1
UG Other	PLANNED OUTAGE	8/14/2015 10:53:54 AM	67.82	1
Circuit Out	PLANNED OUTAGE	8/14/2015 10:58:36 PM	3096.33	1,327
OCR, Sec.	PLANNED OUTAGE	8/14/2015 11:15:15 PM	1309.87	307
TX Repaired (OH)	PLANNED OUTAGE	8/14/2015 3:42:26 PM	76.43	1
Switch 600 amp	PLANNED OUTAGE	8/15/2015 10:07:58 AM	20061.37	191
Switchgear	PLANNED OUTAGE	8/18/2015 11:55:07 AM	118.10	1
OH Other	PLANNED OUTAGE	8/18/2015 3:54:00 PM	240.30	9
OH Other	PLANNED OUTAGE	8/18/2015 9:02:44 PM	409.20	18
OH Other	PLANNED OUTAGE	8/2/2015 10:38:16 AM	18.20	1
OH Other	PLANNED OUTAGE	8/2/2015 7:57:58 AM	117.60	1
Connections	PLANNED OUTAGE	8/2/2015 9:59:50 PM	90.17	1
OH Other	PLANNED OUTAGE	8/20/2015 10:33:22 AM	237.05	3
TX Replaced (OH)	PLANNED OUTAGE	8/20/2015 12:07:44 PM	4975.75	39
Service - Crew	PLANNED OUTAGE	8/20/2015 9:55:26 AM	159.22	1
OCR, Sec.	PLANNED OUTAGE	8/21/2015 10:54:12 PM	4259.53	706
UG Other	PLANNED OUTAGE	8/22/2015 10:59:45 AM	835.80	7
Secondary Wire	PLANNED OUTAGE	8/22/2015 2:01:23 PM	5379.25	15
Circuit Out	PLANNED OUTAGE	8/22/2015 7:50:50 PM	1767.55	667
OH Other	PLANNED OUTAGE	8/22/2015 9:21:01 AM	862.43	2
Circuit Out	PLANNED OUTAGE	8/23/2015 12:33:36 PM	2207.05	1,193
Step Restoration	PLANNED OUTAGE	8/23/2015 6:01:35 PM	99601.17	886
Step Restoration	PLANNED OUTAGE	8/23/2015 6:01:35 PM	24177.08	125
Circuit Out	PLANNED OUTAGE	8/23/2015 6:50:59 PM	3139.73	112
PLF	PLANNED OUTAGE	8/23/2015 9:21:15 AM	1612.00	24
Circuit Out	PLANNED OUTAGE	8/24/2015 7:14:20 PM	2141.33	584
Service - Non Crew	PLANNED OUTAGE	8/25/2015 7:28:10 AM	69.82	1
Circuit Out	PLANNED OUTAGE	8/28/2015 8:15:25 AM	5998.42	791
Circuit Out	PLANNED OUTAGE	8/29/2015 3:35:56 PM	36999.30	2,067
OH Other	PLANNED OUTAGE	8/3/2015 10:59:26 AM	673.23	1
Service - Non Crew	PLANNED OUTAGE	8/3/2015 12:55:32 PM	57.90	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OCR, Sec.	PLANNED OUTAGE	8/30/2015 8:15:22 PM	3191.63	529
Service - Non Crew	PLANNED OUTAGE	8/31/2015 8:33:32 AM	260.30	1
Circuit Out	PLANNED OUTAGE	8/31/2015 9:22:42 PM	8930.40	976
Service - Non Crew	PLANNED OUTAGE	8/31/2015 9:29:59 AM	331.32	1
UG Other	PLANNED OUTAGE	8/31/2015 9:30:55 AM	853.73	8
Service - Non Crew	PLANNED OUTAGE	8/4/2015 12:50:05 PM	179.92	1
Circuit Out	PLANNED OUTAGE	8/4/2015 3:11:40 PM	1208.33	580
UG Other	PLANNED OUTAGE	8/5/2015 10:08:12 AM	352.42	1
OH Other	PLANNED OUTAGE	8/5/2015 7:32:28 AM	165.67	1
UG Other	PLANNED OUTAGE	8/5/2015 8:19:18 AM	404.07	1
OH Other	PLANNED OUTAGE	8/6/2015 10:12:44 AM	80.95	1
OH Other	PLANNED OUTAGE	8/6/2015 11:41:40 AM	138.37	1
Service - Non Crew	PLANNED OUTAGE	8/6/2015 8:07:25 AM	50.35	1
Circuit Out	PLANNED OUTAGE	8/6/2015 8:45:15 AM	6401.37	2,122
UG Other	PLANNED OUTAGE	8/6/2015 8:58:04 AM	186.10	1
UG Other	PLANNED OUTAGE	8/7/2015 1:17:54 PM	206.68	1
OH Other	PLANNED OUTAGE	8/7/2015 1:28:01 PM	221.87	1
OH Other	PLANNED OUTAGE	8/7/2015 10:29:06 AM	136.75	1
Service - Non Crew	PLANNED OUTAGE	8/7/2015 12:28:25 PM	108.20	1
Circuit Out	PLANNED OUTAGE	8/7/2015 3:59:33 PM	3796.67	850
UG Other	PLANNED OUTAGE	8/7/2015 8:47:28 AM	126.33	1
Service - Non Crew	PLANNED OUTAGE	8/8/2015 3:04:39 PM	138.75	3
OH Other	PLANNED OUTAGE	8/9/2015 1:39:09 PM	140.03	1
Step Restoration	PLANNED OUTAGE	8/9/2015 10:56:56 PM	23083.20	378
Circuit Out	PLANNED OUTAGE	8/9/2015 6:06:37 AM	16098.13	1,408
OH Other	PLANNED OUTAGE	8/9/2015 8:27:22 AM	67.32	1
UG Other	PLANNED OUTAGE	9/1/2015 10:50:46 AM	88.75	1
Service - Non Crew	PLANNED OUTAGE	9/10/2015 11:24:39 AM	144.27	1
Switch 600 amp	PLANNED OUTAGE	9/11/2015 12:04:12 AM	676.00	30
Service - Non Crew	PLANNED OUTAGE	9/11/2015 4:42:14 PM	202.28	1
Circuit Out	PLANNED OUTAGE	9/12/2015 3:03:08 AM	1018.33	940
PLF	PLANNED OUTAGE	9/15/2015 3:31:58 PM	412.50	22
OH Other	PLANNED OUTAGE	9/16/2015 9:54:50 AM	36.63	1
TX Repaired (PM)	PLANNED OUTAGE	9/17/2015 10:28:11 AM	63.80	4
OH Other	PLANNED OUTAGE	9/17/2015 10:46:57 AM	55.07	1
Service - Non Crew	PLANNED OUTAGE	9/17/2015 11:50:00 AM	56.88	1
Service - Crew	PLANNED OUTAGE	9/17/2015 9:46:56 AM	155.72	1
Service - Non Crew	PLANNED OUTAGE	9/18/2015 12:17:15 PM	48.22	1
Service - Crew	PLANNED OUTAGE	9/2/2015 9:45:01 AM	323.65	1
Service - Non Crew	PLANNED OUTAGE	9/21/2015 12:56:45 PM	31.47	1

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
OH Other	PLANNED OUTAGE	9/21/2015 2:50:29 PM	121.30	1
OH Other	PLANNED OUTAGE	9/22/2015 2:33:07 PM	484.17	10
OH Other	PLANNED OUTAGE	9/22/2015 8:29:43 AM	104.95	1
Service - Non Crew	PLANNED OUTAGE	9/23/2015 11:03:04 AM	40.48	1
OH Other	PLANNED OUTAGE	9/23/2015 11:30:06 AM	58.75	1
UG Other	PLANNED OUTAGE	9/24/2015 2:41:49 PM	100.00	2
Handhole	PLANNED OUTAGE	9/24/2015 7:33:15 AM	606.58	1
OH Other	PLANNED OUTAGE	9/25/2015 7:43:38 AM	96.62	1
Service - Non Crew	PLANNED OUTAGE	9/25/2015 8:56:09 AM	312.38	1
Circuit Out	PLANNED OUTAGE	9/27/2015 8:04:00 PM	3009.07	832
Circuit Out	PLANNED OUTAGE	9/27/2015 9:54:20 AM	3683.83	1,922
Service - Non Crew	PLANNED OUTAGE	9/28/2015 11:50:11 AM	72.25	1
TX Repaired (OH)	PLANNED OUTAGE	9/29/2015 1:01:24 PM	38.03	1
OH Other	PLANNED OUTAGE	9/29/2015 10:27:02 AM	136.92	1
Service - Non Crew	PLANNED OUTAGE	9/29/2015 11:35:54 AM	51.58	1
Service - Non Crew	PLANNED OUTAGE	9/3/2015 10:21:01 AM	43.68	1
OH Other	PLANNED OUTAGE	9/30/2015 1:56:13 PM	158.33	1
UG Other	PLANNED OUTAGE	9/4/2015 10:09:46 AM	216.42	1
Circuit Out	PLANNED OUTAGE	9/5/2015 8:32:55 AM	2944.58	955
Circuit Out	PLANNED OUTAGE	9/5/2015 9:46:58 AM	20713.75	1,825
Step Restoration	PLANNED OUTAGE	9/6/2015 7:04:17 PM	7144.90	118
Primary Wire	PLANNED OUTAGE	9/6/2015 7:04:17 PM	26672.00	60
Step Restoration	PLANNED OUTAGE	9/6/2015 7:04:17 PM	899.63	2
OCR, Sec.	PLANNED OUTAGE	9/7/2015 10:27:32 AM	3128.48	557
UG Other	PLANNED OUTAGE	9/8/2015 12:11:23 PM	231.05	1
PLF	PLANNED OUTAGE	9/8/2015 2:20:27 PM	1959.65	77
Service - Non Crew	PLANNED OUTAGE	9/8/2015 7:35:19 AM	82.38	1
OH Other	PLANNED OUTAGE	9/8/2015 8:04:16 AM	111.42	1
OH Other	PLANNED OUTAGE	9/9/2015 7:37:35 AM	57.22	1

2015 Adjustments: Other Distribution Outage Events

Outage Event Description

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Substation	FPSC Commission Rule 25-6.0455	1/23/2015 3:24:05 PM	2834.33	773
Substation	FPSC Commission Rule 25-6.0455	1/29/2015 9:45:07 AM	16631.78	379
Substation	FPSC Commission Rule 25-6.0455	1/7/2015 7:58:28 PM	83405.40	1,924
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 10:16:27 AM	34553.65	771
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 10:17:27 AM	98602.40	1,497
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 10:18:02 AM	74673.57	1,237
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 10:18:27 AM	80955.55	1,389
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 4:31:56 PM	49816.67	1,525
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 4:31:56 PM	8543.40	261
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 4:31:56 PM	23951.75	745
Substation	FPSC Commission Rule 25-6.0455	10/4/2015 4:31:56 PM	87545.30	1,783
Substation	FPSC Commission Rule 25-6.0455	11/23/2015 9:45:03 AM	29031.10	938
Substation	FPSC Commission Rule 25-6.0455	11/24/2015 1:57:48 PM	435.42	275
Substation	FPSC Commission Rule 25-6.0455	12/12/2015 1:48:25 PM	31055.83	898
Substation	FPSC Commission Rule 25-6.0455	12/31/2015 1:35:51 AM	68348.80	832
Substation	FPSC Commission Rule 25-6.0455	12/5/2015 5:42:47 PM	9667.35	1,701
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	19869.60	408
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	33408.20	686
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	26054.50	535
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	41589.80	854
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	15973.60	328
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	59024.40	1,212
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	59560.10	1,223
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	34382.20	706
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	16850.20	346
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	33213.40	682
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:46:18 AM	39300.90	807
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:48:16 AM	13281.03	319
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:48:16 AM	27095.53	943
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:48:16 AM	18880.27	404
Substation	FPSC Commission Rule 25-6.0455	2/11/2015 9:48:16 AM	6972.00	180
Substation	FPSC Commission Rule 25-6.0455	2/17/2015 8:11:50 PM	20277.83	955
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 4:02:13 AM	102480.70	1,686
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 4:12:52 PM	2803.87	1,237
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 4:12:52 PM	5083.00	1,380
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 4:12:57 PM	1380.10	746
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 4:12:57 PM	4966.17	1,795

Outage Event Description				
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 5:41:53 AM	29186.62	511
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 5:41:53 AM	21877.93	428
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 5:41:53 AM	70253.95	1,131
Substation	FPSC Commission Rule 25-6.0455	2/18/2015 5:41:53 AM	47273.42	715
Substation	FPSC Commission Rule 25-6.0455	2/22/2015 9:48:08 AM	9379.53	1,414
Substation	FPSC Commission Rule 25-6.0455	2/25/2015 3:31:07 PM	138761.50	1,453
Substation	FPSC Commission Rule 25-6.0455	2/25/2015 3:31:17 PM	209765.50	2,555
Substation	FPSC Commission Rule 25-6.0455	2/25/2015 3:31:18 PM	91703.70	1,062
Substation	FPSC Commission Rule 25-6.0455	2/25/2015 3:31:41 PM	70988.90	786
Substation	FPSC Commission Rule 25-6.0455	3/20/2015 9:26:15 AM	35439.25	789
Substation	FPSC Commission Rule 25-6.0455	3/21/2015 8:03:11 AM	61.53	52
Substation	FPSC Commission Rule 25-6.0455	3/23/2015 11:26:24 AM	571.13	52
Substation	FPSC Commission Rule 25-6.0455	3/23/2015 9:38:57 AM	3594.80	1,419
Substation	FPSC Commission Rule 25-6.0455	3/23/2015 9:41:17 AM	7852.58	391
Substation	FPSC Commission Rule 25-6.0455	3/28/2015 2:16:39 PM	196.08	181
Substation	FPSC Commission Rule 25-6.0455	3/30/2015 9:32:04 AM	6375.85	663
Substation	FPSC Commission Rule 25-6.0455	3/30/2015 9:32:04 AM	3196.87	316
Substation	FPSC Commission Rule 25-6.0455	3/30/2015 9:32:04 AM	9510.88	989
Substation	FPSC Commission Rule 25-6.0455	3/30/2015 9:32:04 AM	4773.60	468
Substation	FPSC Commission Rule 25-6.0455	3/9/2015 11:24:32 AM	74511.73	1,561
Substation	FPSC Commission Rule 25-6.0455	3/9/2015 11:24:34 AM	49830.97	1,871
Substation	FPSC Commission Rule 25-6.0455	3/9/2015 11:24:44 AM	32064.00	668
Substation	FPSC Commission Rule 25-6.0455	3/9/2015 11:24:53 AM	45898.20	1,161
Substation	FPSC Commission Rule 25-6.0455	4/10/2015 12:51:17 PM	7739.25	765
Substation	FPSC Commission Rule 25-6.0455	4/10/2015 12:51:17 PM	8092.70	1,051
Substation	FPSC Commission Rule 25-6.0455	4/10/2015 12:51:17 PM	11729.20	1,416
Substation	FPSC Commission Rule 25-6.0455	4/17/2015 9:16:58 AM	50698.90	1,407
Substation	FPSC Commission Rule 25-6.0455	4/17/2015 9:17:06 AM	40411.80	942
Substation	FPSC Commission Rule 25-6.0455	4/17/2015 9:17:21 AM	87135.75	1,655
Substation	FPSC Commission Rule 25-6.0455	4/17/2015 9:17:41 AM	32411.92	685
Substation	FPSC Commission Rule 25-6.0455	4/17/2015 9:17:57 AM	37294.50	690
Substation	FPSC Commission Rule 25-6.0455	4/19/2015 1:51:09 PM	871.00	804
Substation	FPSC Commission Rule 25-6.0455	4/19/2015 7:27:01 PM	32653.50	990
Substation	FPSC Commission Rule 25-6.0455	4/20/2015 5:03:29 PM	131973.30	1,458
Substation	FPSC Commission Rule 25-6.0455	4/20/2015 5:03:34 PM	88114.40	969
Substation	FPSC Commission Rule 25-6.0455	4/20/2015 5:03:34 PM	167223.35	2,443
Substation	FPSC Commission Rule 25-6.0455	4/21/2015 1:54:03 AM	79171.80	1,524
Substation	FPSC Commission Rule 25-6.0455	4/24/2015 5:06:37 AM	47156.75	795
Substation	FPSC Commission Rule 25-6.0455	4/24/2015 5:06:37 AM	24945.42	575
Substation	FPSC Commission Rule 25-6.0455	4/24/2015 5:06:37 AM	54709.63	1,006
Substation	FPSC Commission Rule 25-6.0455	5/10/2015 12:08:50 PM	18370.50	333

Outage Event Description				
Substation	FPSC Commission Rule 25-6.0455	5/10/2015 12:08:50 PM	94033.33	728
Substation	FPSC Commission Rule 25-6.0455	5/11/2015 7:20:26 PM	937.27	34
Substation	FPSC Commission Rule 25-6.0455	5/11/2015 7:21:16 PM	1520.93	34
Substation	FPSC Commission Rule 25-6.0455	5/11/2015 7:21:24 PM	7931.00	385
Substation	FPSC Commission Rule 25-6.0455	5/19/2015 7:42:27 AM	5387.53	1,532
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:49:12 PM	258816.00	1,920
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:49:12 PM	68644.00	655
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:49:12 PM	138542.80	1,369
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:50:24 PM	42501.20	602
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:51:03 PM	5881.45	57
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 7:52:28 PM	72985.17	745
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 8:38:38 PM	47805.78	269
Substation	FPSC Commission Rule 25-6.0455	5/26/2015 8:44:54 PM	5531.80	34
Substation	FPSC Commission Rule 25-6.0455	5/30/2015 7:09:26 PM	83485.67	2,110
Substation	FPSC Commission Rule 25-6.0455	5/6/2015 7:02:06 PM	77492.70	1,063
Substation	FPSC Commission Rule 25-6.0455	5/6/2015 7:03:37 PM	116935.50	1,710
Substation	FPSC Commission Rule 25-6.0455	5/6/2015 7:03:57 PM	71547.35	1,007
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:17:00 PM	103572.27	1,424
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:18:45 PM	99020.07	1,516
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:19:25 PM	110564.40	1,852
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:20:20 PM	71978.67	1,687
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:20:25 PM	148142.92	2,129
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:20:45 PM	43238.40	768
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:21:11 PM	109604.98	1,691
Substation	FPSC Commission Rule 25-6.0455	5/8/2015 8:23:46 PM	56766.53	1,108
Substation	FPSC Commission Rule 25-6.0455	6/10/2015 11:19:09 AM	2952.30	78
Substation	FPSC Commission Rule 25-6.0455	6/10/2015 11:19:09 AM	3349.00	85
Substation	FPSC Commission Rule 25-6.0455	6/10/2015 11:19:09 AM	4249.18	109
Substation	FPSC Commission Rule 25-6.0455	6/10/2015 11:19:09 AM	1687.03	43
Substation	FPSC Commission Rule 25-6.0455	6/11/2015 6:13:48 PM	2151.07	442
Substation	FPSC Commission Rule 25-6.0455	6/23/2015 9:03:21 PM	38262.25	965
Substation	FPSC Commission Rule 25-6.0455	6/23/2015 9:03:21 PM	25897.00	580
Substation	FPSC Commission Rule 25-6.0455	6/4/2015 7:19:36 PM	165846.00	2,110
Substation	FPSC Commission Rule 25-6.0455	6/4/2015 7:22:16 PM	36676.80	972
Substation	FPSC Commission Rule 25-6.0455	6/4/2015 7:22:17 PM	50237.83	1,490
Substation	FPSC Commission Rule 25-6.0455	6/4/2015 7:22:22 PM	576.65	19
Substation	FPSC Commission Rule 25-6.0455	6/8/2015 1:33:43 PM	76333.67	1,460
Substation	FPSC Commission Rule 25-6.0455	6/8/2015 1:33:43 PM	101672.68	1,873
Substation	FPSC Commission Rule 25-6.0455	6/8/2015 1:33:43 PM	428.98	7
Substation	FPSC Commission Rule 25-6.0455	7/2/2015 3:09:27 PM	3273.83	1,511
Substation	FPSC Commission Rule 25-6.0455	7/22/2015 1:15:55 AM	79855.83	790

Outage Event Description				
Substation	FPSC Commission Rule 25-6.0455	7/22/2015 1:16:48 AM	61984.00	745
Substation	FPSC Commission Rule 25-6.0455	7/22/2015 1:16:52 AM	50973.93	697
Substation	FPSC Commission Rule 25-6.0455	7/22/2015 1:17:08 AM	260647.53	2,351
Substation	FPSC Commission Rule 25-6.0455	7/23/2015 4:18:52 PM	59388.00	1,260
Substation	FPSC Commission Rule 25-6.0455	7/23/2015 4:43:48 PM	644.08	655
Substation	FPSC Commission Rule 25-6.0455	7/24/2015 2:08:20 PM	1636.20	1,212
Substation	FPSC Commission Rule 25-6.0455	7/29/2015 1:41:58 PM	114594.60	1,818
Substation	FPSC Commission Rule 25-6.0455	7/29/2015 1:41:58 PM	61142.33	970
Substation	FPSC Commission Rule 25-6.0455	7/29/2015 1:41:58 PM	25869.47	404
Substation	FPSC Commission Rule 25-6.0455	7/29/2015 1:41:58 PM	7427.87	116
Substation	FPSC Commission Rule 25-6.0455	7/3/2015 3:54:40 PM	118500.00	1,125
Substation	FPSC Commission Rule 25-6.0455	7/3/2015 4:58:23 PM	22219.10	498
Substation	FPSC Commission Rule 25-6.0455	7/3/2015 4:59:28 PM	1313.33	25
Substation	FPSC Commission Rule 25-6.0455	7/3/2015 6:58:23 PM	165.97	2
Substation	FPSC Commission Rule 25-6.0455	7/5/2015 5:13:52 PM	2787.40	1,991
Substation	FPSC Commission Rule 25-6.0455	7/5/2015 5:26:30 PM	1050.00	840
Substation	FPSC Commission Rule 25-6.0455	7/6/2015 4:50:24 PM	3279.08	2,071
Substation	FPSC Commission Rule 25-6.0455	7/7/2015 1:28:03 AM	24813.00	540
Substation	FPSC Commission Rule 25-6.0455	8/1/2015 2:15:50 PM	147797.33	2,048
Substation	FPSC Commission Rule 25-6.0455	8/11/2015 1:29:47 PM	5373.13	1,724
Substation	FPSC Commission Rule 25-6.0455	8/13/2015 3:28:57 PM	7806.13	146
Substation	FPSC Commission Rule 25-6.0455	8/13/2015 3:28:57 PM	10099.20	576
Substation	FPSC Commission Rule 25-6.0455	8/13/2015 3:28:57 PM	48868.53	914
Substation	FPSC Commission Rule 25-6.0455	8/13/2015 3:28:57 PM	89123.93	1,982
Substation	FPSC Commission Rule 25-6.0455	8/14/2015 5:54:36 PM	9718.80	267
Substation	FPSC Commission Rule 25-6.0455	8/14/2015 5:55:00 PM	8631.00	411
Substation	FPSC Commission Rule 25-6.0455	8/14/2015 5:55:57 PM	1701.70	34
Substation	FPSC Commission Rule 25-6.0455	8/15/2015 5:20:06 PM	2606.67	1,150
Substation	FPSC Commission Rule 25-6.0455	8/16/2015 7:53:14 PM	118916.25	1,425
Substation	FPSC Commission Rule 25-6.0455	8/16/2015 7:53:19 PM	116602.20	1,188
Substation	FPSC Commission Rule 25-6.0455	8/18/2015 2:43:00 PM	36185.37	691
Substation	FPSC Commission Rule 25-6.0455	8/2/2015 4:48:36 AM	190522.80	1,534
Substation	FPSC Commission Rule 25-6.0455	8/21/2015 4:47:11 PM	73854.20	1,486
Substation	FPSC Commission Rule 25-6.0455	8/3/2015 8:53:13 PM	56357.87	842
Substation	FPSC Commission Rule 25-6.0455	8/9/2015 9:57:18 PM	70949.30	809
Substation	FPSC Commission Rule 25-6.0455	9/26/2015 7:07:21 PM	523.25	5
Substation	FPSC Commission Rule 25-6.0455	9/26/2015 7:07:21 PM	93205.90	1,006
Substation	FPSC Commission Rule 25-6.0455	9/26/2015 7:07:21 PM	68464.35	1,059

2015 Adjustments: Transmission Events

Outage Event	Reason for Exclusion	Outage Date	CMI Excluded	CI Excluded
Transmission	FPSC Commission Rule 25-6.0455	11/15/2015 1:20:43 PM	16006.00	1,272
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	1354.50	1,161
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	787.50	675
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	1963.50	1,683
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	130.67	112
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	591.50	507
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	1066.33	914
Transmission	FPSC Commission Rule 25-6.0455	11/22/2015 11:36:42 PM	1613.50	1,383
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 2:34:26 AM	119020.83	1,970
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 2:36:16 AM	73932.17	1,262
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 2:36:50 AM	41031.67	700
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 3:38:07 AM	76697.13	1,876
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 3:38:17 AM	57842.70	1,494
Transmission	FPSC Commission Rule 25-6.0455	12/14/2015 3:38:33 AM	374.15	7
Transmission	FPSC Commission Rule 25-6.0455	12/9/2015 9:58:26 AM	46345.00	1,300
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	141817.40	2,361
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	136440.00	1,350
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	131841.80	867
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	44517.00	855
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	49382.67	715
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	9079.17	50
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	44713.47	757
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	89263.07	826
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	85279.83	469
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	160537.65	1,729
Transmission	FPSC Commission Rule 25-6.0455	2/5/2015 2:05:56 AM	26423.47	352
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:50:00 PM	146589.87	731
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:50:00 PM	286524.00	756
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	237900.00	3,050
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	75426.00	967
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	35334.00	453
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	42588.00	546
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	217230.00	2,785
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:51:00 PM	32682.00	419
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:53:20 PM	63379.33	923
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:53:28 PM	201097.67	2,105
Transmission	FPSC Commission Rule 25-6.0455	4/20/2015 11:54:14 PM	101849.98	961
Transmission	FPSC Commission Rule 25-6.0455	5/10/2015 12:08:50 PM	68582.00	1,941

Transmission	FPSC Commission Rule 25-6.0455	5/10/2015 12:08:50 PM	49302.50	1,443
Transmission	FPSC Commission Rule 25-6.0455	5/30/2015 1:30:00 PM	362.00	181
Step Restoration	FPSC Commission Rule 25-6.0455	5/30/2015 1:30:00 PM	1088.00	544
Step Restoration	FPSC Commission Rule 25-6.0455	5/30/2015 1:30:00 PM	1016.00	508
Transmission	FPSC Commission Rule 25-6.0455	7/11/2015 6:22:00 PM	5457.00	1,819
Transmission	FPSC Commission Rule 25-6.0455	7/11/2015 6:22:00 PM	4059.00	1,353
Transmission	FPSC Commission Rule 25-6.0455	7/11/2015 6:22:00 PM	888.00	296
Transmission	FPSC Commission Rule 25-6.0455	7/11/2015 6:22:00 PM	3753.00	1,251
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	90.93	88
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	275.90	267
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	213.90	207
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	962.03	931
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	984.77	953
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	58.90	57
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	804.97	779
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	228.80	78
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	346.13	118
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	1695.47	578
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	1270.13	433
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	249.33	85
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	319.73	109
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	105.60	36
Transmission	FPSC Commission Rule 25-6.0455	7/16/2015 9:39:38 AM	126.13	43
Transmission	FPSC Commission Rule 25-6.0455	8/1/2015 10:10:24 AM	37764.42	1,435
Transmission	FPSC Commission Rule 25-6.0455	8/1/2015 10:15:58 AM	21299.00	1,083
Transmission	FPSC Commission Rule 25-6.0455	8/1/2015 10:16:21 AM	36330.20	1,948
Transmission	FPSC Commission Rule 25-6.0455	8/1/2015 10:21:26 AM	371.77	19
Transmission	FPSC Commission Rule 25-6.0455	8/8/2015 12:05:21 PM	35350.80	712
Transmission	FPSC Commission Rule 25-6.0455	8/8/2015 12:05:27 PM	28920.00	360
Transmission	FPSC Commission Rule 25-6.0455	8/8/2015 12:05:27 PM	57833.15	969
Transmission	FPSC Commission Rule 25-6.0455	8/8/2015 12:05:27 PM	19079.17	241

Appendix C)

Annual Wood Pole Inspection Report

ORDER NO. PSC - 07 - 0918 - PAA - PU
DOCKET NOS. 070634-EI, 070635-TL

TAMPA ELECTRIC COMPANY
Annual Wood Pole Inspection Report
2015

a	b	c	d	e	f	g	h	i	j	k	l	m
Total # of Wooden Poles in the Company Inventory	# of Pole Inspections Planned this Annual Inspection	# of Poles Inspected this Annual Inspection	# of Poles Failing Inspection this Annual Inspection	Pole Failure Rate (%) this Annual Inspection	# of Poles Designated for Replacement this Annual Inspection	Total # of Poles Replaced this Annual Inspection	# of Poles Requiring Minor Follow-up this Annual Inspection (Anchors/Guys)	# of Poles Overloaded this Annual Inspection	Methods(s) V = Visual E = Excavation P = Prod S = Sound B = Bore R = Resistograph	# of Pole Inspections Planned for Next Annual Inspection Cycle	Total # of Poles Inspected (Cumulative) in the 8-Year Cycle to Date	% of Poles Inspected (Cumulative) in the 8-Year Cycle to Date
Distribution and Transmission **CYCLE TWO WOOD POLE POPULATION** Distribution 316,000 *Transmission 26,000 Total Poles 342,000	Distribution 39,500 Transmission 3,250 Total 42,750	Distribution 51,959 Transmission 6,419 Total 58,378	Distribution 8,073 Transmission 363 Total 8,436	Distribution Reinforcement 0.16% Distribution Replacement 15.38% Distribution 15.54% Transmission 5.66%	Distribution Reinforcement 84 Distribution Replacement 7,989 Distribution 8,073 Transmission 363 Total 8,436	Distribution Reinforcement 59 Distribution Replaced 5,333 Distribution 5,392 Transmission 649 Total 6,041	Distribution 318 Transmission 5 Total 323	Distribution Poles Overloaded 666 Transmission 0 Total 666	Visual Sound Bore Excavation	** Distribution 0 Transmission 0 Total 0	Distribution 88,127 Transmission 9,719 Total 97,846	Distribution 27.89% Transmission 37.38% Total 28.61%
If b - c > 0, provide explanation	Planned inspections are performed by circuit and area. The status of completion would be considered before moving into a new circuit or area											
If d - g > 0, provide explanation	Pole replacement funding is determined prior to the calendar year beginning. This funding level will be influenced by the poles identified in prior years for replacement. The company spent $24.1M replacing distribution poles and $12.6M replacing transmission poles in 2014.											
Description of selection criteria for inspections	* Transmission Total Pole Population Includes Concrete, Steel and Wood.											

Appendix D)

Storm Hardening Metrics

1) Initiative 1: Four-year Vegetation Management

2015 - System Vegetation Management Performance Metrics - SYSTEM

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer interruptions							
(C) Miles Cleared		453.6			1,146.0		1,599.6
(D) Remaining Miles		1,268.2			3,412.3		4,680.5
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		134			4,403		4,537
(H) All Vegetation Management Costs							$12,697,982
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							$11,013,662
(L) Vegetation Goal (current year)							1,570.0
(M) Vegetation Budget (next year)							$10,758,324
(N) Vegetation Goal (next year)							1,568.6
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs - SERVICE AREA - include ONLY contractor costs, All Vegetation Management Costs - SYSTEM - include ALL costs

Note L & N: Vegetation Goal shown in miles.

Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - CSA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		97.1			168.9		266.0
(D) Remaining Miles		239.4			540.4		779.8
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		55			1,463		1,518
(H) All Vegetation Management Costs							$1,899,266
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							261.4
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							261.2
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - DCA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		13.8			90.9		104.7
(D) Remaining Miles		40.7			224.3		265.1
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		9			124		133
(H) All Vegetation Management Costs							$620,042
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							92.4
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							92.4
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - ESA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		71.4			134.5		206.0
(D) Remaining Miles		222.7			412.5		635.1
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		13			584		597
(H) All Vegetation Management Costs							$1,847,927
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							210.3
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							210.1
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - PCA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		56.3			260.9		317.2
(D) Remaining Miles		186.5			734.2		920.7
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		5			421		426
(H) All Vegetation Management Costs							$1,467,451
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							309.5
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							309.5
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - SHA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		54.8			125.4		180.2
(D) Remaining Miles		138.9			422.4		561.3
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		2			192		194
(H) All Vegetation Management Costs							$806,644
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							185.4
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							184.8
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2014 - System Vegetation Management Performance Metrics - WSA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		91.1			200.1		291.2
(D) Remaining Miles		262.1			562.9		825.1
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		41			1,274		1,315
(H) All Vegetation Management Costs							$2,850,720
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							279.1
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							278.4
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2015 - System Vegetation Management Performance Metrics - WHA

	Feeders			Laterals			Total
	Unadjusted	Adjusted	Diff.	Unadjusted	Adjusted	Diff.	
(A) Number of Outages							
(B) Customer Interruptions							
(C) Miles Cleared		69.1			165.3		234.4
(D) Remaining Miles		177.7			515.7		693.4
(E) Outages per Mile [A ÷ (C + D)]							
(F) Vegetation CI per Mile [B ÷ (C + D)]							
(G) Number of Hotspot trims		9			345		354
(H) All Vegetation Management Costs							$673,285
(I) Customer Minutes of Interruption							
(J) Outage restoration costs							
(K) Vegetation Budget (current year)							
(L) Vegetation Goal (current year)							231.9
(M) Vegetation Budget (next year)							
(N) Vegetation Goal (next year)							232.2
(O) Trim-Back Distance							10’

Note H: All Vegetation Management Costs include ONLY contractor costs.
Note L & N: Vegetation Goal shown in miles.
Note O: 10' Represents an average, however to comply with ANSI A300, actual trim distances may vary.

2) Initiative 2: Joint-Use Pole Attachments Audit

Describe the extent of the audit and results pertaining to pole reliability and NESC safety matters. The intent is to assure the Commission that utilities know the status of their facilities and that reasonable efforts are taken to address pole reliability and NESC safety matters.

a) Percent of system audited: 100 percent
   feeders: N/A laterals: N/A
b) Date audit conducted: 4th quarter 2013 through June 2014.
c) Date of previous audit: Total system-wide audit completed 2008.
d) List of audits conducted annually
   - Through Tampa Electric's Pole Attachment Audit Application process, the company performed the following audits: attachment verification, NESC violation analysis, and pole loading assessment.
e) State whether pole rents are jurisdictional or non-jurisdictional. If pole rents are jurisdictional, then provide an estimate of lost revenue and describe the company's efforts to minimize the lost revenue.
   - Tampa Electric does not have any non-jurisdictional distribution poles

Joint-Use Attachment Data Table

(A) Number of company owned distribution poles.	307,341
(B) Number of company distribution poles leased.	13,184[1]
(C) Number of owned distribution pole attachments	199,092
(D) Number of leased distribution pole attachments.	13,184[2]
(E) Number of authorized attachments.	323,246
(F) Number of unauthorized attachments.	5,793[3]
(G) Number of distribution poles strength tested.	1,548
(H) Number of distribution poles passing strength test.	727
(I) Number of distribution poles failing strength test (overloaded).	44
(J) Number of distribution poles failing strength test (other reasons).	8,073 [4]
(K) Number of distribution poles corrected (strength failure).	353[5]
(L) Number of distribution poles corrected (other reasons).	93 [6]
(M) Number of distribution poles replaced.	5,007
(N) Number of apparent NESC violations involving electric infrastructure.	52
(O) Number of apparent NESC violations involving 3rd party facilities.	160

Note 1: These are the number of poles where Tampa Electric leases space on foreign owned poles.
Note 2: Each attachment is counted as one per pole on leased poles.
Note 3: Tampa Electric completed a pole attachment audit in June 2014 and identified unauthorized attachments at the completion of the audit in June 2014.
Note 4: These 8,073 poles were identified for replacement during Tampa Electric's Pole Inspection Program and failed the strength test due to wood damage at ground line or other locations on the pole.
Note 5: These poles were re-guyed or re-configured to pass strength loading.
Note 6: The company reinforced these poles with trusses

3) Initiative 3: Six-year Inspection Cycle for Transmission Structures

Transmission Circuit, Substation and Other Equipment Inspections

		Activity		Current Budget		Next Year	
		Goal	Actual	Budget	Actual	Goal	Budget
(A)	Total transmission circuits.		191				
(B1)	Planned transmission circuit inspections – Groundline (Structures)	16 (3,217)		$116,332		0	0
(B2)	Planned transmission circuit inspections – Above Ground (Structures).	0 (0)		0		0	0
(C1)	Completed transmission circuit inspections – Groundline (Poles)		47 (6,419)		$113,330		
(C2)	Completed transmission circuit inspections – Above Ground (Structures)		31 (3,301)		$254,300		
(D1)	Percent of transmission circuit inspections completed - Groundline		293%				
(D2)	Percent of transmission circuit inspections completed – Above Ground.		3100%				
(E)	Planned transmission substation inspections.	71				72	
(F)	Completed transmission substation inspections		71				
(G)	Percent transmission substation inspections completed.		100%				
(H)	Planned transmission equipment inspections (other equipment). – Ground Patrol/ IR Patrol	191/ 191		$235,428/ $92,065		191/ 191	
(I)	Completed transmission equipment inspections (other equipment) – Ground Patrol/ IR Patrol		191/ 382		$166,330/ $134,540		$163,730/ $0
(J)	Percent of transmission equipment inspections completed (other equipment) – Ground Patrol/ IR Patrol		100%/ 200%				

Transmission Pole Inspections

	Activity		Current Budget		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of transmission poles		25,435[1]				
(B) Number of transmission poles strength tested		0[2]				
(C) Number of transmission poles passing strength test		N/A				
(D) Number of transmission poles failing strength test (overloaded)		N/A				
(E) Number of transmission poles failing strength test (other reasons)		N/A				
(F) Number of transmission poles corrected (strength failure)		0				
(G) Number of transmission poles corrected (other reasons)		0				
(H) Total transmission poles replaced (Structures)		649			500[3]	

Note 1: The transmission pole count on the entire system is currently 25,435 this is a fluid number that will change as a function of time. Standards have been set to calculate this number based off of the Geographical Information System and provide an annual update prior to the submission of this report.

Note 2: The transmission pole strength test is budgeted as part of the groundline inspection. This information is included in the Transmission Circuit, Substation and Other Equipment Inspections section.

Note 3: The budget information for this table is included in the information supplied in the Hardening of Existing Transmission Structures section.

4) Initiative 4: Storm Hardening Activities for Transmission Structures

	Activity		Current Budget		Next Year	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Transmission structures scheduled for hardening.	548		$10.3M		500	$11.0M
(B) Transmission structures hardening completed.		649		$12.5M		
(C) Percent transmission structures hardening completed.		118%				

5) Initiative 5: Geographic Information System

See Section I – Storm Preparedness Plans, item E) Initiative 5: See Geographic Information System on pages 22 and 23 for a detailed discussion.

6) Initiative 6: Post-Storm Data Collection

See Section I – Storm Preparedness Plans, item F) Initiative 6: Post-Storm Data Collection on pages 23 through 28 for a detailed discussion

7) Initiative 7: Outage Data - Overhead and Underground Systems

See Section I – Storm Preparedness Plans, item G) Initiative 7: Outage Data – Overhead and Underground Systems on page 28 for a detailed discussion.

8) Initiative 8: Increase Coordination with Local Governments

See attached page 133 for a matrix of Tampa Electric's activities involving its coordination with local governments.

Government Entity	Municipal	Communication Efforts Presentations, Material, Etc.	Storm Workshop, Planning and Training With Local Gov't Officials and Fire and Police Personnel	Emergency Operation Centers Key Personnel Contact	Search and Rescue Teams Assistance to Local Gov't	Vegetation Management Tree Ordinances, Planting Guides, and Trim Procedures	Undergrounding Share Information, Estimates, and Materials
FEDERAL			NFPA 1600 Committee meeting - Emergency Management, Business Continuity, and Disaster Recovery Standard - 40 hours				
			Electric Subsector Coordinating Council Playbook, Exercise and Business Continuity Leadership - 40 hours				
			NERC GridEx III - 200 hours				
STATE		FEPA Public and Private Partnership meetings - 20 hours	State of Florida Mock Storm Exercise - 16 hours	Full activation (Tropical Storm Erika)			
Hillsborough County		ESF-12 Presentation to Hillsborough County Ops Group - 6 hours	THIRA meeting - 4 hours	Full activation (Tropical Storm Erika)			Dana Shores Community Association Undergrounding - 50 hrs
		Communication Strategy - 4 hours	PDRP Planning - 2 hours				
			Vulnerable Population Committee - 20 hours				
			Social Media Training - 8 hours				
			Hillsborough County Operations Group Training and Meetings - 16 hours				
			Hillsborough County Exercises - 48 hours				
			LMS Working Group - 15 hours				
			Emergency Management Accreditation Program - 40 hours				
			Critical Facility Index Working Group - 100 hours				
	City of Tampa		City of Tampa Mock Storm Exercise - 12 hours	Full activation (Tropical Storm Erika)			
	City of Tampa	Push Team Strategy - 20 hours	Port Tampa Push Route Exercise - 10 hours				
	City of Plant City	Forwarded information on transmission line inspections via helicopter - 1 hour		No activations in 2015			
	City of Temple Terrace			No activations in 2015			
Polk County	Winter Haven		Critical Facility Index Working Group - 8 hours	No activations in 2015			
	Mulberry	Forwarded information on transmission line inspections via helicopter - 1 hour					
Pasco County		Forwarded information on transmission line inspections via helicopter - 1 hour		Partial activation (July/August rain and flooding event) - 8 hours			
		Facilitated four (4) meetings on Unmanned Aerial Vehicles (UAV or Drone) use to inspect transmission - 120 hours					
	New Port Richey		Pasco County EOC Exercise - 2 hours	Operations and Logistics meetings for TS Erika - 1 hour			
	New Port Richey		Virtual tabletop exercise - 10 hours				
	New Port Richey		Critical Infrastructure Working Group - 15 hours				
	New Port Richey		Comprehensive Emergency Management Plan - 10 hours				
	New Port Richey		Volunteer Summit Meeting - 4 hours				
	Dade City	Forwarded information on transmission line inspections via helicopter - 1 hour					
	Dade City	Met with Police Chief to discuss EOC food planning - 1 hour					
	San Antonio	Forwarded information on transmission line inspections via helicopter - 1 hour					
	St. Leo	Forwarded information on transmission line inspections via helicopter - 1 hour					
Pinellas County	Largo		WebEOC Training - 8 hours	Partial activation (Tropical Storm Erika)			
	Oldsmar			No activations in 2015			
Other		Bay Area Legal Services - 6 hours					

9) Initiative 9: Collaborative Research

See Section I – Storm Preparedness Plans, item I) Initiative 9: Collaborative Research on pages 33 through 36 for a detailed description and related data.

10) Initiative 10: Disaster Preparedness and Recovery Plan

The company's Disaster Preparedness and Recovery Plan for 2015 was thoroughly reviewed and found to be appropriate; both the structure and operational functions did not change and are consistent with the document previously submitted to the Commission. For 2016, the Plan will undergo its customary annual review prior to storm season and any necessary updates or modifications will be made at that time.

11) Feeder Specific and Attached Laterals Data

See attached pages 135 through 174.