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

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

TECO
TAMPA ELECTRIC

DIRECT TESTIMONY AND EXHIBIT

OF

WILLIAM R. ASHBURN

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WILLIAM R. ASHBURN

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

A. My name is William R. Ashburn. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am the Director, Pricing and Financial Analysis for Tampa Electric Company ("Tampa Electric" or "company").

Q. Please provide a brief outline of your educational background and business experience.

A. I graduated from Creighton University with a Bachelor of Science degree in Business Administration. Upon graduation, I joined Ebasco Business Consulting Company where my consulting assignments included the areas of cost allocation, computer software development, electric system inventory and mapping, cost of service filings and property record development. I joined Tampa Electric in 1983 as a Senior Cost Consultant in the Rates and Customer Accounting Department. At Tampa Electric I have held a

series of positions with responsibility for cost of service studies, rate filings, rate design, implementation of new conservation and marketing programs, customer surveys and various state and federal regulatory filings. In March 2001, I was promoted to my current position of Director, Pricing and Financial Analysis in Tampa Electric's Regulatory Affairs Department. I am a member of the Rate and Regulatory Affairs Committee of the Edison Electric Institute ("EEI") and the Rate Committee of the Southeastern Electric Exchange ("SEE").

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

A. Yes. I have testified or filed testimony before this Commission in several dockets. Most recently I testified for Tampa Electric in Docket No. 000061-EI regarding the company's Commercial/Industrial Service Rider tariff, in Docket No. 020898-EI regarding a self-service wheeling experiment, and in Docket No. 080317-EI which was Tampa Electric's last base rate proceeding on the same topics I testify to in this case. In Docket Nos. 000824-EI, 001148-EI, 010577-EI and 020898-EI, I testified at different times for Tampa Electric and as a

joint witness representing Tampa Electric, Florida Power & Light Company ("FP&L") and Progress Energy Florida, Inc. ("PEF") regarding rate and cost support matters related to the GridFlorida proposals. In addition, I have represented Tampa Electric numerous times at workshops and in other proceedings regarding rate, cost of service and related matters. I have also provided testimony and represented Tampa Electric before the Federal Energy Regulatory Commission ("FERC") in rate and cost of service matters.

Q. Please state the purpose of your direct testimony.

A. The purpose of my direct testimony is to present the proposed rates and service charges that will produce the company's proposed jurisdictional revenue requirement increase of $134,841,000. Specifically, I present the following information:

1) The development and application of billing determinants, the forecast of base revenues from the sale of electricity, revenues from service charges for the 2013 and 2014 projected periods using present rates and for 2014 under proposed rates to achieve proposed class revenues;

2) The Jurisdictional Separation Study and resultant

jurisdictional separation factors used for the 2012 historical period and the 2013 and 2014 projected periods that determine the portion of Tampa Electric's system rate base and operating expenses subject to the jurisdiction of the FPSC and form the basis for the company's proposed revenue requirement for the test year;

3) The 2014 projected period Retail Class Allocated Cost of Service and Rate of Return Studies that used a 12 Coincident Peak ("CP") and 50 Percent Average Demand ("AD") production capacity cost allocation methodology, which I will refer to as 12 CP and 50 Percent AD;

4) The methods employed, facts considered, and principles upon which the Jurisdictional Separation Study and Cost of Service Study were prepared;

5) Conclusions regarding the adequacy of the aforementioned studies and the reasonableness of the resulting costs being used to support the proposed rate design; and

6) Explanation of the company's proposed rate structure modifications, rate designs and rates, service charges and schedules to be implemented.

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

A. Yes, I am sponsoring Exhibit No._(WRA-1) consisting of four documents, prepared under my direction and supervision. These consist of:

Document No. 1	List Of Minimum Filing Requirement Schedules Sponsored Or Co-Sponsored By William R. Ashburn
Document No. 2	Development Of Proposed (Target) Base Revenue Increase By Rate Class
Document No. 3	IS Customer Billing Comparisons
Document No. 4	Summary Of Resultant Class Parity Ratios

Q. Are you sponsoring any sections of Tampa Electric's Minimum Filing Requirements ("MFRs")?

A. Yes. I am sponsoring or co-sponsoring the MFRs shown in Document No. 1 of my exhibit.

Q. Are Tampa Electric's billing determinants, forecast of base revenues from the sale of electricity and service charges, Jurisdictional Separation Study, Cost of Service Study, proposed rate design and rate schedules

provided as part of Tampa Electric's MFRs?

A. Yes, they are provided within the portion of the MFRs designated Section E, "Rate Schedules". I have provided the Jurisdictional Separation Study and two sets of Cost of Service Studies as well as work papers in separate bound volumes due to their voluminous size. Volume I contains the Jurisdictional Separation Study and the Cost of Service Studies using the MFR-required 12 CP and 1/13 AD methodology without Minimum Distribution System ("MDS") concept with present and proposed rates. Volume II contains the Cost of Service Studies using the company's proposed 12 CP and 50 Percent AD methodology and employing the MDS concept with present and proposed rates and work papers. Volume III contains the company's Lighting Incremental Cost Study which is a supplement to MFR Schedule E-13d.

Q. What are the company's primary goals for the proposed cost of service and rate design changes in this case?

A. There are four primary goals that are reflected in the cost of service and rate design proposals of Tampa Electric in this case. First, is the use of the 12 CP and 50 Percent AD production capacity allocation

methodology in the cost of service study. Second, is the use of the MDS within the cost of service study. Third, is to complete the transition of Interruptible Service ("IS") customers to the same General Service Demand ("GSD") rate schedules available to all other interruptible service customers. Fourth, is to better recognize in the rate design the cost of providing service to customers taking service at higher voltages.

BILLING DETERMINANTS

Q. Please explain the term billing determinants.

A. Billing determinants are the parameters to which prices are applied to derive billed revenues. They include 1) the number of customers (*i.e.*, bills) to which the customer charges are applied, 2) the amount of energy or kilowatt-hours ("kWh") sold to which the energy charges are applied, and 3) the amount of demand or kilowatts ("kW") to which the demand charges are applied. They also include the number of units to which any additional charges, discounts and/or penalties are applied. Some rate schedules are only billed using customer and kWh billing determinants, while others may include a kW billing determinant as well. Lighting schedules are billed based on lighting facility billing determinants

(*e.g.*, poles and fixtures) along with kWh.

Q. Where are the billing determinants found in the company's filing?

A. Billing determinants for present and proposed rates are contained in MFR Schedules E-13c and E-13d.

Q. How were the billing determinants derived?

A. The basis for the billing determinants by rate schedule was historical billing data maintained by Tampa Electric's Customer Information System. Details of the derivation of these numbers are explained in MFR Schedule E-15. The foundation for the billing determinants was the company's customer, peak demand and energy sales forecasts for test year 2014, which are supported in Tampa Electric witness Lorraine L. Cifuentes' direct testimony. The forecasts produce the number of customers, energy consumption and demand by revenue classifications of residential, commercial, industrial, public street and highway lighting, and sales to public authorities. Witness Cifuentes also forecasts the expected requirements for phosphate industry load.

The forecasts of customers and kWh sales were then distributed to rate schedule classifications. This distribution was made in proportion to customer and sales relationships of revenue classifications to rate schedule classifications that were experienced in recent years by analyzing actual data for the most recent 12 months.

Historical customer and kWh sales relationships were also established for other billing units in each rate schedule. These relationships were applied to the apportioned number of customers and sales of each respective rate schedule to derive the various other billing units, including billing demands, time-of-day rate billing quantities, and metering and service voltage level distinctions, as well as various other billing quantities subject to additional charges or credits.

Q. How were these billing determinants used?

A. The forecasted billing determinants were applied to current rates to calculate the base revenues from the sale of electricity for the 2014 test year based on the company's present rate structure.

Q. Were these same billing determinants used to derive the base revenues from the sale of electricity for the 2014 test year based on the proposed rate structure?

A. Yes. The billing determinants are the same quantities as those used to derive present rate revenues but were distributed differently to reflect the proposed rate design, which combines certain current rate schedules and changes some charges. In addition, because of the proposed changes in rate design, certain customers were transferred from their current rate schedule to another new rate schedule, either because of schedule parameters or because of other rate options which were more economical for the customers.

Q. Will customers who are transferred or who may benefit from transfer under the proposed rate changes be informed of the proposed changes in order to assist them with making the appropriate rate choice?

A. Yes. Tampa Electric will use multiple means to inform customers of these changes and their options, depending on the size of the customer group being affected and the type of choices available. Company representatives will contact some customers directly by phone call or visit,

as well as by bill inserts. The company will inform others through direct mail letters and bill inserts.

FORECAST OF BASE REVENUES AND SERVICE CHARGES

Q. Did the company prepare a forecast of base revenues from the sale of electricity for 2014? If so, how was the forecast of base revenues derived?

A. Yes. The base 2014 sales revenue forecast for present and proposed rates is summarized in MFR Schedule E-13a and calculated in detail in MFR Schedules E-13c and E-13d. The rates currently in effect were applied to the forecasted billing determinants to derive total annual base revenues forecasted for the 2014 test year before the proposed change in rates were considered.

Q. What is the projected retail billed electric revenue for 2014?

A. The projected retail billed electric revenue shown in MFR Schedule E-13a for 2014 is $907,769,000 under present rates and $1,041,409,000 under proposed rates, an increase of $133,640,000.

Q. The revenues you just described are for billed sales.

Does the company make a calculation for unbilled sales?

A. Yes. For the 2014 test period, an amount of unbilled revenues has been determined to be ($174,000) under present rates, and ($196,000) under proposed rates, resulting in a change of ($22,000) for unbilled sales.

Q. Did the company prepare a forecast of service charge revenues? If so, how was the forecast of service charge revenues derived?

A. Yes. The 2014 forecast of service charge revenues for present and proposed rates is presented in MFR Schedule E-13b. The current effective rates were applied to the forecasted billing determinants to derive service charge revenues. This represents the forecasted amount of service charge revenues before any proposed change to rates is considered.

Q. What is the projected billed service charge revenue for 2014?

A. The projected billed service charge revenue shown in MFR Schedule E-13b for 2014 is $21,593,000 under present rates and $22,787,000 under proposed rates, an increase

of $1,194,000.

Q. What is the total amount of additional base revenues from the sale of electricity and service charges that are produced by the company's proposed rate design changes?

A. The total amount is $134,812,000 in additional revenues in 2014. This is comprised of $133,640,000 of additional billed electric base sales revenues, ($22,000) of additional unbilled electric base sales revenues, and $1,194,000 of additional service charge revenues. Thus, the company's proposed rate design changes results in an increase that is only $29,000 less than its proposed revenue requirement increase of $134,841,000.

JURISDICTIONAL SEPARATION STUDY

Q. What is a Jurisdictional Separation Study?

A. A Jurisdictional Separation Study allocates costs between the company's wholesale and retail customers or jurisdictions. While all costs are allocated, the allocation of joint costs is the focal point of the study. Joint or common costs are costs that are

incurred to serve many customers at the same time. One example is a generating plant that provides power not only to one customer or one group of customers, but to the aggregate load requirements of all power customers on the company's system. The joint costs of the generating plant are recorded on the company's books and records in total, and the Jurisdictional Separation Study allocates the joint costs between retail and wholesale customers. Only the costs associated with retail customers are applicable in this proceeding.

The Jurisdictional Separation Study allocates revenue, rate base and operating expense items, whether jointly or specifically assigned to a single jurisdiction, to derive the company's retail jurisdiction cost of service for the test period. Costs are first functionalized, then classified, and finally allocated between the wholesale and retail jurisdictions. These allocations utilize load and other factors that best represent each jurisdiction's cost responsibility to achieve this purpose. A description of how costs are functionalized, classified and allocated is provided below. The overall methodology is the same in both the Jurisdictional Separation Study and the Retail Cost of Service Studies, which I will discuss later.

Q. Why is it necessary to prepare a Jurisdictional Separation Study for Tampa Electric?

A. Since early 1991, Tampa Electric has provided wholesale power sales and transmission service to some wholesale power purchasers in Florida at rates that are under the jurisdiction of the Federal Energy Regulatory Commission ("FERC"). Although the company operates in two regulatory jurisdictions, its investments, revenue, and expenses are maintained on a total company basis in accordance with the Uniform System of Accounts prescribed by the FERC and the FPSC. The Jurisdictional Separation Study is designed to directly assign or allocate total system costs to each jurisdiction.

Q. Is the Jurisdictional Separation Study provided in this proceeding consistent with Tampa Electric's previous Commission filings and industry practice?

A. Yes. Tampa Electric provided a Jurisdictional Separation Study in its last base rate proceeding that led to an approved methodology by the FPSC. That methodology has been used to produce separation factors for the annual projected surveillance reports, which are the same factors that have been used as separation

factors for the 2012 and 2013 MFRs.

Q. What were the major steps followed in performing the Jurisdictional Separation Study?

A. There are several steps. First, the company's accounting information provided by FERC account, shown in the MFR Schedules B, C and D, is adjusted for the 2014 test period. The accounts are then functionalized into production, transmission, distribution, and general functions. Next, they are classified into demand, energy or customer groups. After classification, the groupings are allocated into the retail and wholesale jurisdictions using allocation factors. The allocation factors are predominantly based on demand data for the retail and wholesale jurisdictions during the time of the company's projected system monthly peaks, although other factors are used that directly allocate certain costs to the specific jurisdiction for which the costs are incurred. In addition, other metrics such as energy sales and number of customers are used.

Q. What wholesale power sales customers are included in the 2014 test year?

A. None. Currently and as forecasted for the 2014 test year, Tampa Electric is not providing long-term firm requirements electric power service to any wholesale customers.

Q. Does Tampa Electric currently provide transmission service to other Open Access Transmission Tariff ("OATT") customers?

A. Yes. Tampa Electric is providing long-term firm transmission service in the test year under the company's OATT to Seminole Electric Cooperative Inc., Auburndale Power Partners ("APP") and Calpine. However, pro forma adjustments, which are more fully described in the direct testimony of Tampa Electric witness Jeffrey S. Chronister, have been made to remove the load effects of the APP and Calpine transmission service agreements from the jurisdictional separation in 2014. The APP agreement terminates as of December 31, 2013 which puts it outside the 2014 test year. The Calpine Agreement terminates as of May 31, 2014. Removing these loads best reflects the appropriate jurisdictional separation effects on retail revenue requirement measurement for the test year and going forward. Each of these transmission customers has the option under FERC rules to request rollover of its

existing contracts before they end but have not yet done so. If such a request is made and a new contract is created or the existing contract is extended during the pendency of this case, Tampa Electric is prepared to reflect that change, for whatever portion of their existing contracted capacity that they secure for extension, in revised transmission separation factors. With respect to the revenues that will be collected from the Calpine contract during the first portion of 2014, the retail portion of those 2014 revenues is proposed to be flowed back to retail customers through the retail fuel adjustment clause. This is described in greater detail in the testimony of witness Chronister.

Q. Please summarize the results of the Jurisdictional Separation Study.

A. In 2014, the retail business represents the vast majority of the electric service provided by Tampa Electric. As the results show in Volume I, Jurisdictional Separation Study, the retail business is responsible for all of production and distribution plant and 98.37 percent of transmission plant.

COST OF SERVICE STUDY

Q. What is a Retail Class Allocated Cost of Service and Rate of Return Study ("Cost of Service Study")?

A. The Cost of Service Study is an extension of the Jurisdictional Separation Study. It starts with the retail separated costs derived from the Jurisdictional Separation Study and further allocates and assigns costs to individual retail rate classes. These rate classes represent relatively homogeneous groups of customers having similar service requirements and usage characteristics. Typically, the prices charged for service to different rate classes vary based on cost of service as well as other factors. Allocations of costs to each of these groups, like the Jurisdictional Separation Study, are based upon the results of cost analysis. The Cost of Service Study results are considered, along with other factors described below, in the allocation of the revenue requirement among rate classes when designing rates. The study provides class rates of return at present and proposed rates, class revenue surplus or deficiency from full cost of service, and functional unit cost information for use in rate design. Thus, the study serves as an important guide in determining the revenue requirement by rate class, as well as the specific charges for each rate schedule.

Q. What retail rate classes were used in the preparation of the Cost of Service Study?

A. For purposes of preparing the Cost of Service Study using present rates, existing retail rate classes were used. The rate classes used are 1) Residential, 2) General Service Non-Demand, 3) General Service Demand, 4) Interruptible, and 5) Lighting Energy and Facilities. For purposes of preparing the proposed rates, the Cost of Service Study presents a different set of retail rate classes. They are 1) Residential, 2) General Service Non-Demand, 3) General Service Demand, and 4) Lighting Energy and Facilities.

Q. Why are there two columns of information presented under the present and proposed rates in the Cost of Service Studies for lighting service: Lighting Energy and Lighting Facilities?

A. Dividing the lighting rate class into the two components, Lighting Energy and Lighting Facilities, provides better unit cost information for designing the energy and facilities components of this rate class. The two components are distinct types of service and are not always provided as a bundled service by the company.

Q. Why is the IS rate class omitted in the proposed rates Cost of Service Study?

A. As mentioned earlier in my direct testimony, one of the company's rate design goals is to complete the transition of customers receiving service under the closed IS rate schedules to the applicable GSD rate schedules where, with interruptible service provided through the GSLM-2 and GSLM-3 rate riders, such service is available for all other interruptible service customers. This proposed elimination is reflected in part by the interruptible class being omitted in the proposed rates Cost of Service Study. This proposal is more fully explained later in my direct testimony.

Q. How is the Cost of Service Study used as a guide in rate design?

A. Cost of service studies are useful in the design of rates to help ensure that the prices customers pay for electric service bear a reasonable relationship to the costs of providing that service. Costing and pricing are two distinct and separate steps in the ratemaking process. Costing attempts to objectively determine costs incurred in rendering service to the rate classes.

While economic considerations and other subjective factors may be considered in the ultimate design of rates, cost of service should be the paramount consideration and the Cost of Service Study provides this information. I describe more fully the rate design process later in my direct testimony.

Q. After establishing the rate classes, what were the next steps in the Cost of Service Study process?

A. Similar to the Jurisdictional Separation Study, the development of cost of service studies consists of three steps: 1) grouping all costs by function (functionalization), 2) classifying the functionalized costs by causal service characteristics (classification), and 3) apportioning the resulting classified costs to rate classes (allocation).

Q. How were Tampa Electric's costs functionalized?

A. Tampa Electric functionalized costs in accordance with the Uniform System of Accounts by dividing utility plant costs into the broad functions of production, transmission, distribution, and general. O&M and other expenses were functionalized in a comparable manner.

Q. How were Tampa Electric's costs classified after they were functionalized?

A. Tampa Electric's operations are classified into three categories: demand, energy and customer cost. Demand cost is a function of the capacity of plant, which in turn depends on the maximum kW for power demanded by customers. Energy cost is a function of the kWh volume consumed by customers over time. Customer cost is a function of the number of customers served by the company.

Similarly, Tampa Electric's cost of service is measured by these same three cost categories: demand, energy, and customer. The three categories are appropriately called cost causations. The assignment of costs to these cost causation categories is called classification. Once classified, Tampa Electric's costs are then allocated to retail rate classes based upon cost behavior.

Q. Are all of the company's production plant facilities classified as demand-related in the cost of service studies?

A. No. For purposes of jurisdictional separation, all production plant facilities are classified as demand-related consistent with prior jurisdictional separation practices. However, there are portions of two production facilities that are classified as energy-related for purposes of allocating the FPSC jurisdictional component of these facilities on an energy basis. These facilities consist of the gasifier train equipment ("gasifier") for Polk Unit 1 and the scrubber portion of the environmental equipment for Big Bend Unit 4.

Polk Unit 1 is an Integrated Gasified Combined Cycle ("IGCC") plant which has two main sections - the power block, which produces the power through gas turbines and heat recovery steam generators, and the gasifier, which converts coal as the fuel feedstock into gas used in the power block. The gasifier performs a fuel conversion function that is completely associated with the provision of fuel to the unit and not the supply of capacity. The classification of the gasifier as energy-related was applied in Tampa Electric's last approved cost of service study.

The classification of the Big Bend Unit 4 scrubber as

energy-related was applied in Tampa Electric's last two approved cost of service studies. This treatment remains appropriate because the main purpose of the plant investment is related to energy output. Since the decision to classify the scrubber investment as energy-related, additional scrubber and Selective Catalytic Removal ("SCR") investments made by the company have been recovered through the Environmental Cost Recovery Clause ("ECRC") where they have been classified and allocated on an energy basis. Customers benefit from lower energy costs as the result of these investments, not primarily because of their contribution to serve system peak demand.

Q. How are costs classified to the customer function?

A. Costs classified to the customer function are those generally independent of consumption. They have traditionally included the cost of service drops, meters, meter reading, billing and customer information. In addition, the company has reviewed and employed a costing methodology in this case that is described in the industry as the MDS method. This method determines the minimum size and respective cost of distribution transformers, poles, and conductors that would be

required to connect customers to the company's power grid. This minimum cost is also classified as customer-related, and the remaining cost of these facilities is classified as capacity-related. The methodology is described in the NARUC cost allocation manual and has recently been employed by Gulf Power Company ("Gulf Power") in its cost of service study presented in Docket No. 110138-EI before this Commission and then accepted by the Commission in the settlement of rate and cost of service matters in that docket.

Q. Why does the company believe the MDS method is a more appropriate classification of these distribution costs than previously recognized?

A. Previously, the costs of distribution facilities (*i.e.*, transformers, poles, conductors, and cables, etc.) were classified as capacity-related and allocated to rate classes based on the maximum load imposition on the distribution system. The company now recognizes certain deficiencies in this classification and rate design treatment for distribution costs and seeks to remedy them in this proceeding. First, the company seeks to recognize in its costing treatment the obligation it fulfills to electrically connect any customer desiring to energize

their premise, no matter how much load the customer may impose or energy the customer may use. This requires the company to incur the cost to install transformers, poles and conductors in place to simply connect the customer to its power grid. The previous treatment of classifying these costs as only capacity-related ignored an important cost-causative responsibility to be energized and ready to serve. Second, for rate schedules employing demand metering and billing, distribution costs are included and recovered in a demand charge. However, the Residential Service and General Service Non-Demand rate schedules do not employ a demand charge. As a result, all of the costs of these distribution facilities were being recovered through the Energy Charge for these classes. The company believes these classifications of cost and resulting recovery has been deficient and finds that a portion of such costs should more appropriately be classified as customer-related and then recovered as a component of the Customer Charge.

Q. Can you summarize the resultant classifications of distribution facilities that you have derived under the MDS concept and incorporated in the company's Cost of Service Study?

A. Yes. The resultant classifications by type of distribution facility are shown below:

	Percentage Cost Classification		
Facility	Customer	Capacity	Total
Poles	64%	36%	100%
Conductors	9%	91%	100%
Transformers	24%	76%	100%

Q. Does the employment of the MDS methodology result in cost support for a higher Customer Charge and lower Energy Charge and thus has a greater impact on the total bill for a low usage residential customer as compared to a high usage customer?

A. Yes. Many residential customers are low energy use by virtue of residing in apartments or condominiums, smaller homes, second homes, part-time occupancy, having alternative energy sources, etc. It is only appropriate and equitable for all customers that the company be able to recover its connection-related costs from these low energy use customers and not depend on recovering these costs based on usage which places the burden of their collection on higher energy usage customers.

Q. After costs were functionalized and classified, how were they allocated?

A. After determining the functionalization and classification of costs based upon causation, the tools for cost apportionment to classes were determined. These tools, called allocation factors, are used to measure demand, energy and customer cost responsibilities. The derivation of the allocation factors used in the 2014 Cost of Service Study is shown in MFR Schedule E-10.

Q. What are the principal considerations when allocating demand costs?

A. The principal considerations in allocating demand costs include 1) customer demand usage characteristics and their related responsibility for system coincident and non-coincident peaks, 2) the design and configuration of production, transmission and distribution facilities, and 3) unique customer service and/or reliability requirements and system operating data. These considerations provide guidance in determining what components should be used to derive the demand factor. CP demands, non-coincident peak

demands ("NCP"), customer demands, and percentage of energy have been used to best represent those considerations.

Q. Please explain CP, NCP and customer peak demand.

A. Coincident Peak or CP demand reflects a class contribution to the total system monthly peak demand. For example, at the hour of the system peak in one particular month, the CP demand for the residential class would be that class's proportion of that hour's peak demand. NCP demand reflects the monthly peak demand of a class on its own as a group, regardless of when the system peak occurs. For example, a class may peak during the nighttime hours, while the system may peak during the late afternoon. The NCP for that class would be the demand during that nighttime hour. Customer peak demand is the aggregation of all individual customers' monthly peak demands, regardless of when they occur. These different measurements of demand are utilized to allocate different cost elements because those elements represent the best way of identifying what causes certain costs to be incurred.

Q. Why is the company proposing a change in this proceeding

to the 12 CP and 50 Percent AD methodology for allocation of production demand classified costs?

A. The company believes that the 12 CP and 50 Percent AD methodology provides the most appropriate classification and allocation of production plant within the Cost of Service Study when considering how power plants are planned and operated in Florida in response to customer energy and demand needs. The appropriate percentage of production demand classified plant to be allocated on an energy basis has been a debated topic in Florida for many decades. The percentage in prior Commission-approved studies for Tampa Electric has ranged from 8 percent (derived using the 1/13 portion of the 12 CP and 1/13 AD methodology) to over 70 percent (derived from the Equivalent Peaker method approved in 1985) with 25 percent being approved for the company in its last base rate proceeding. The debate over what is the appropriate percent to be allocated is about how much of the fixed production plant cost is incurred to meet system peak demand and how much is incurred to reduce variable operating costs, primarily fuel, by running the plant beyond peak demand periods. The higher the percentage of average demand applied, the more cost responsibility is allocated to higher load factor classes

that benefit more from the additional investment in types of generating plant that produce more efficient energy production.

Q. Is the type of generation installed important in the selection of the appropriate production demand allocation methodology?

A. Yes. The company has installed a significant amount of base- and intermediate-load generation which is more expensive to install than alternative peaking generation, but less expensive to operate over time. The base- and intermediate-load generators provide lower fuel costs for each unit of energy produced compared to peakers. In fact, Tampa Electric is in the process of converting four of its existing simple cycle peakers at the Polk Power Station to a combined cycle structure that will accomplish this as well. Investment in more expensive generating units and associated equipment to provide more efficient fuel conversion for the generation of electricity drives the need to use a greater energy allocation within the production demand classified cost allocator.

Q. The company presented these arguments in its last base

rate proceeding and at that time proposed a 25 percent energy allocation as a balance between the prior percentages that had been approved by the Commission in the past. The Commission approved that 25 percent allocation in that case. Why is the company proposing to increase the percentage in this case?

A. The 25 percent represented an appropriate balance at that time and in those circumstances. Use of the 25 percent allocates production demand classified costs to classes in closer proportion to the energy-based benefits those classes receive from those costs. The 25 percent, together with the energy classification to certain investments such as the gasifier and Big Bend scrubber equipment described earlier, are essential in capturing the production cost impact of higher load factor customers who benefit from the lower variable costs of base- and intermediate-load units. As the Commission recognized in their final decision in the company's last rate proceeding, the increase in that case to 25 percent resulted in a reduced revenue requirement allocation to the residential and small commercial rate classes. Increasing the percentage to 50 percent will further reduce that allocation. While the support for a higher energy allocation based on cost causation

principles is strong, the selection of a proper percentage to reflect that principle is more judgmental and case specific. In this case, in concert with the impact of the proposed implementation of the MDS methodology on cost allocation, an increase to 50 percent is appropriate to recognize cost causation principles and minimize revenue requirement impacts to the RS and GS rate classes.

Q. Would the adoption of the 12 CP and 50 Percent AD methodology have implications for other cost recovery mechanisms?

A. Yes. The costs classified as production capacity-related in the cost recovery clauses should also consistently be allocated on the basis of the 12 CP and 50 Percent AD methodology.

Q. Please explain the treatment of demand allocated transmission and distribution costs in the Cost of Service Study.

A. The transmission demand classified costs are allocated on a 12 CP basis while distribution demand classified costs are allocated on a mixture of NCP and customer demand

bases. This is the same allocation methodology as was adopted and relied on in the company's last base rate proceeding.

RATE DESIGN CRITERIA AND OBJECTIVES

Q. What criteria and objectives were used in designing the new rate schedules and how were they used in the rate design?

A. The basic criteria used in designing Tampa Electric's new rate schedules included 1) cost to serve the various classes, 2) rate history, 3) public acceptance of rate structures, 4) customer understanding and ease of application, 5) consumption and load characteristics of the classes, and 6) revenue stability and continuity. This Commission has recognized these criteria as good ratemaking practices.

Cost to serve is a major consideration in rate design and in the preparation of the Cost of Service Study. The use of derived unit cost is a major tool in the design of the company's proposed rates. Rate history is another important tool. This includes understanding how Tampa Electric rates were designed in the past, whether they achieved their intended objectives and what

rate structures have been successfully applied in Florida and around the country by other utilities. I have worked in the regulatory area at Tampa Electric for almost thirty years and am well aware of the company's rate history. In addition, I track rate decisions made by the Commission that affect other jurisdictional electric utilities and participate frequently in EEI and SEE rate committee meetings where alternative rate designs, as well as successes and failures of such rates, are discussed. Public acceptance of rate structures, customer understanding, and ease of application are important considerations. I obtain information from frequent contact with the company's customer service team members and interaction with some customers that I factor into my work. Class consumption and load characteristics are used both within the Cost of Service Study as well as in the proposed design in developing appropriate projected billing determinants to assure successful recovery of revenue requirements. Revenue stability and continuity are criteria that factor into the rate design when selection of appropriate billing units to apply under the rates is considered, as well as the appropriate forecast of those billing units.

Q. With these criteria in mind, did the company have

specific objectives that were considered in the proposed rate design?

A. Yes. First and foremost, the rates should be designed for each rate schedule so that their application to the test year billing determinants produces the target class and the total required revenues. The company also had two other specific objectives for the rate design in this case: 1) to complete the transition of IS customers to GSD rate schedules available to all other interruptible service customers and 2) to reflect the appropriate cost responsibility of providing service to customers served at higher voltage levels.

Q. Did the company meet these objectives?

A. Yes. The proposed rates and tariffs incorporate both of the additional specific objectives previously described and produce the company's proposed revenue requirements.

PROPOSED SERVICE CHARGES

Q. What was the first step in designing rates and charges to produce the company's revenue requirement?

A. The first step was to determine revenues from service

charges. Cost support for the development of service charges is provided in MFR Schedule E-7. This cost support formed the basis of the proposed changes in service charges that are shown on MFR E-13b. In total, the proposed changes produce $1,194,000 in additional revenue. These revenues serve as a credit to offset a portion of the revenue requirement that would otherwise increase the company's base rates.

Q. What changes are being proposed for the company's service charges?

A. The cost support that is presented in MFR Schedule E-7 indicated that certain service charges should be increased in price to better reflect the cost and best provide cost recovery for these services. The proposed service charge increases are shown on MFR Schedule E-13b column 2. No increase was proposed for the initial service connection charge even though an increase was cost supported given that this charge was substantially increased in the company's last base rate proceeding.

One change being proposed is to rename the current "Field Credit Visit" charge to "Field Visit" charge. This proposed change would permit this charge to apply in

cases where the company has made an appointment with a customer to discuss or perform work at the customer premise and the customer does not meet the appointment or the work cannot be performed because the customer has not made the premise ready for work to be performed. While this does not happen often, when it does occur it results in company resources not being used elsewhere for other customers. The company believes that such a fee will serve as an incentive for customers to keep their appointments and minimize the cost burden on other customers.

PROPOSED (TARGET) CLASS REVENUES

Q. After setting prices for service charges, what was the next step in designing rates?

A. Next, the company designed base rates to meet the proposed (target) class revenues. In designing new rates, the company first attempted to move unit prices toward unit costs for the various classes to determine parity. Parity is the comparison of the rate of return of a class to the system average rate of return. The term is used interchangeably with the term rate of return index. Since parity is calculated by dividing the rate of return for a particular class by the

system average rate of return, a class with parity of 100 percent would be earning the same rate of return as the system average, and a class with parity below 100 percent would be earning less than the system average. Parity is useful when determining the development of class revenue targets associated with the proposed base rate revenue increase.

Q. Please describe the procedure used to determine what portion of the company's proposed (target) base rate revenue increase was assigned to each rate class.

A. The focus in determining the portion of the company's proposed (target) base rate revenue increase to be assigned to each rate class is the Cost of Service Study. The Cost of Service Study using the 12 CP and 50 Percent AD methodology and employing the MDS concept at present rates was relied upon for this purpose. Ideally, the rates developed will produce revenues from each of the rate classes that equal the costs allocated to that class by the cost of service study. This will achieve full parity.

The first step in determining how much each rate class should share in the company's total revenue increase

(*i.e.*, the shortfall between total revenue requirements and total revenues under current rates) is to determine for each rate class the shortfall between the costs allocated to that class and the revenues produced by applying current rates to the class's test year billing determinants. The next step is to determine how much of each class's revenue shortfall will be offset by additional revenues from any increase in Other Operating Revenues that will occur as part of the proceeding, meaning any increase in service charge revenues being proposed. Once the net revenue deficiency of each rate class has been determined, the final step is to identify whether any ratemaking policy considerations should limit the amount of any rate class's revenue increase. Where an increase limit is imposed on a rate class, the other rate classes must make up the deficiency. This deficiency is spread to those other rate classes in proportion to their respective cost of service requirement to the extent that this resultant increase does not exceed an imposed limit.

The completion of this three-step procedure produces what is referred to as the target revenues for each class, the term "target" being used as the revenues become the target which the rate designer attempts to hit as close

as possible through the design of proposed rate charges as applied to test year billing determinants.

Q. Did you prepare a document that develops the proposed class target revenues using the procedure you have just described?

A. Yes. Document No. 2 of my exhibit was prepared for that purpose.

Q. Was it necessary to limit any class's rate increase from being set at the increase indicated by the cost of service study?

A. Yes. By adhering to the Commission's practice of limiting a rate class's increase to 1.5 times that of the system average increase (including recovery clause revenues) the increase to the Lighting Energy class was limited. Also, in adhering to the Commission's practice that no rate class receive a decrease in an overall rate increase proceeding, the revenue requirements of the Lighting Facilities class are being left unchanged.

Q. Have you combined the revenue requirements of the Residential ("RS") and General Service Non-Demand ("GS")

rate classes for developing the target revenues for these rate classes?

A. Yes. This is shown in Document No. 2 of my exhibit. It has been the company's practice since 1982 to set the base rate energy charges of the rate schedules associated with these two rate classes to be at the same rate level, with the only change to this practice being instituted in the last company rate proceeding where an inverted energy rate design was adopted for the RS standard rate, while the Energy Planner time-differentiated rate maintained an energy rate at the same level as the GS standard energy rate. This practice has led to combining the revenue requirements of these two classes when apportioning target revenues in rate proceedings.

Q. Have you combined the revenue requirements of the General Service Demand ("GSD") and Interruptible Service ("IS") rate classes developing the target revenues for these rate classes?

A. Yes. The IS rate class has been combined with the GSD rate class to complete the transition of the customers on the IS rate schedules to the GSD rate schedules. In this way the combined group will receive its appropriate

target revenues associated with the increase.

Q. Were you able to design proposed rates for each rate class in order to produce each class's targeted revenues and reflect the requested increase?

A. Yes. The result of this design is shown in Document No. 4 of my exhibit, which shows a comparison of each class's target revenues and those revenues produced by the application of the proposed charges. It shows that the company's proposed revenues are equal to or very close to target revenues for each class, and the company's proposed revenues in total are within $29,000 of its total target revenue requirement. The exhibit also shows a comparison of each class's proposed revenues to its revenue requirement from the company's cost of service study and each class's resultant rate of return under the proposed rates. The company believes this exhibit demonstrates that the company has designed its proposed rates based on cost of service to the extent practical.

RATE DESIGN

Q. Please summarize the rate design changes or revisions the company is incorporating in its proposed base rates.

A. In summary, the following changes are proposed:

a. Most base rate charges contained in the company's rate schedules are being revised in order to reflect the costs of providing service and produce the target revenue requirements.

b. The "Customer Charge" on all rate schedules is being renamed the "Basic Service Charge" to reflect a more appropriate description of the costs being recovered in this fixed monthly charge. The proposed charges appropriately reflect the cost of service.

c. The "closed to new business" IS rate schedules are proposed for elimination, and the affected metered accounts are being transferred to the otherwise applicable GSD rate schedules with interruptible credits provided through the GSLM-2 and GSLM-3 conservation rate riders. The affected metered accounts' credit for interruptible service remains the same as previously established under the IS rate schedule.

d. Credits for providing service at higher voltage are being recognized under the GSD and standby rate schedules to reflect full avoided distribution costs, and the name of these credits is proposed to be changed from

"Transformer Ownership Discount" to "Delivery Voltage Credit" to better recognize taking service at the higher voltage. Another proposed name change is to change "Metering Level Discount" to "Metering Voltage Adjustment." This is a name change only; no rate change is proposed for this adjustment.

Q. You indicated that you revised most base rate charges in the various rate schedules in order that the proposed charges would result in the target revenues. To accomplish this, did you make any rate restructuring changes to any of your rate schedules?

A. The company is not proposing any rate restructuring changes in this proposal. The company is proposing elimination of the closed IS rate schedules and the more appropriate cost-based recognition of delivery credits for higher voltage service, but these do not represent any true "restructuring" of rates. The fixed Basic Service Charge in each rate schedule has been set in each rate schedule at its unit cost from the cost of service study. The demand and energy charges have been revised in each rate schedule to produce the target revenues for each rate class. Prior Commission approved and prescribed practices have been continued in the

development of (a) the RS inverted energy rate with a one cent inversion after the 1,000 kWh usage level, (b) establishing the GS energy rate at an effective RS average rate, (c) maintaining an optional GSD energy rate set at 120 percent of the GS energy rate, (d) establishing time of use energy and demand charges for the GST and GSDT rate schedules in the manner previously adopted, and (e) establishing the standby rates in the manner prescribed by the Commission for the design of standby rates.

Q. Why did the company change the method of determining delivery voltage credits for customers taking service at higher voltages under demand-metered rate schedules?

A. This change is being made to provide a consistent treatment in rates with the allocation of costs in the cost of service study. Customers that take delivery at higher voltages, (*i.e.*, subtransmission or primary) are not allocated any cost responsibility in the cost of service study for the lower voltage facilities on which they do not impose their loads. Since rates are designed for application at the company's lowest service voltage, (*i.e.*, secondary), any customer taking higher voltage service should be credited for the avoidance of lower

voltage delivery costs which are embodied in those rates. In previous rate designs the avoidance of costs at lower voltages for higher voltage service customers was only partially recognized through a transformer ownership discount.

Q. Can you provide a brief history of the rate treatment afforded the IS customers and why the company no longer needs to recognize these customers as a separate rate class for establishing their base rate charges?

A. Yes. For many years Tampa Electric has established and designed IS rate schedules to have lower base rate charges than other customers to recognize their "interruptibility" value. In Docket No. 080317-EI, the company's last base rate proceeding, the Commission approved a rate restructuring for the closed IS rate schedules whereby an IS customer's "interruptibility" would be treated as a demand-side or load management program. As load management participants, IS base rates were no longer required to be set less than that of firm customers. Instead, the IS customers receive interruptible demand credits for their participation as load management customers, and these credits are recovered from all customers through the ECCR clause.

The interruptible demand credits were set in the last proceeding to be the same credits as had been previously established in Rate Schedules GSLM-2 and GSLM-3, which were also applicable to other general service demand customers desiring to be load management participants.

Q. Why did the Commission close the company's IS rate schedules to new customers?

A. Actually, the company's IS rate schedules were "closed to new business" even before the last base rate proceeding. The IS-1 rate schedules were "closed to new business" in 1985 and the IS-3 rate schedules were "closed to new business" in 2000 when the GSLM-2 and GSLM-3 conservation programs were opened. The Commission's decision in Docket No. 080317-EI was a continuation of such closure for the IS rate schedules. In that proceeding, the company sought to permanently eliminate the already "closed" IS rate schedules on the basis that they were no longer necessary since interruptible service was openly available to any customer under the company's GSD rate schedules who wished to subscribe to the GSLM-2 or GSLM-3 rider as load management program participants. However, the Commission chose to maintain an IS rate class and accompanying rate schedules for those remaining

metered accounts being served under the IS schedules.

Q. How would you describe the company's proposal in this proceeding for treating customers being served under the IS rate schedules?

A. The company is again proposing to bring an interim transition approach to final closure by eliminating the IS rate schedules. The affected metered accounts can be transferred to the applicable GSD rate schedules and continue to participate in the company's GSLM-2 or GSLM-3 load management program riders and obtain the same credits for interruptible service that they are paid now. As with other GSD customers on the GSLM-2 and GSLM-3 riders, these transferred customers' loads will be included in the company's biannual filed assessment of need of non-firm electric service. The IS schedules are no longer necessary, and their elimination will resolve inequitable situations that exist between the grandfathered customers taking service under them and new customers seeking to take interruptible service. The company believes the IS metered account holders are fully aware that their grandfathered status has been extended for decades and should now expect to be treated comparable to any other general service demand eligible

customer that is willing and able to incur interruptible service.

Q. Do the closed IS metered accounts pose more favorable load characteristics than the rate class consisting of all GSD customers, thereby translating to a lower level of cost of service deserving of rate recognition for these customers?

A. While the forty-two remaining IS metered accounts in the aggregate do have more favorable load characteristics than the aggregate of the fourteen thousand customers being served under the company's GSD rate schedules, the load characteristics of GSD customers are rather diverse, and it is not surprising to find that a small subset of forty-two metered accounts would have different aggregate characteristics than the aggregate of all the customers in a large class. No doubt, another group of existing GSD accounts could be put together that would have exactly the same aggregate load characteristics or perhaps more favorable characteristics. The existing IS metered accounts would favor preserving their cost supported rate advantage, however it had been created or maintained over many years.

Q. Can you quantify the rate advantage that an existing IS account presently enjoys as compared to that of a typical prospective GSD customer taking interruptible service under the GSLM-2 conservation program rider to demonstrate the inequity that you describe exists for this grandfathered class?

A. Yes. I have prepared a billing example that quantifies the rate advantage that exists currently for a typical GSD measured customer. This is provided on the first page of Document No. 3 of my exhibit. The example billing comparison shows the grandfathered IS customer is charged under present rates 7.24 percent less on the base rate costs than would be charged a comparable GSD customer. On a total billing basis, the IS customer realizes a 4.66 percent billing advantage under present rates. The company does not believe such a rate discrepancy should exist or is just.

Q. Instead of eliminating the IS rate class and its rate schedules, could the company have proposed to open up the IS rate schedules to any GSD customer who wants to take interruptible service and thus eliminate the inequity described above?

A. Although that would eliminate inequity, it would not be fair treatment for the other GSD customers that do not want to take interruptible service. The value of interruptibility has been established by the payment of the interruptible demand credits under GSLM-2 and GSLM-3. There should be no further differentiation in rate treatment for interruptible service than the payment of these credits. It would be inappropriate to establish cost of service and ratemaking treatment for just one subset of general service customers on top of that credit recognition. The company had been seeking over several rate proceedings, and the Commission has approved, a reduction in the number of rate schedules applicable to subsets of customers that could be created from its general service rate customers. The company has advocated that the fairest approach to cost of service and ratemaking for this diverse group of customers is to establish a single rate that recovers cost of service of GSD customers and to use rate design of that rate to minimize cost disparities that exist due to differences in load characteristics and that of the average load characteristic of the class as a whole.

Q. Have you prepared any billing comparisons of the effect on each of the forty-two remaining IS metered accounts by

their transfer to the proposed GSD rate schedules?

A. Yes. On page 2 of Document No. 3 of my exhibit, a billing comparison is presented for each of the forty-two IS customer accounts under their present rate charges and under the proposed applicable GSD rate charges for which they would be transferred. I believe this billing comparison reveals even more supportive information for the elimination of the IS rate schedules at this time. First, there are nine of these accounts that do not impose any load requirement on the company and are simply being retained as an active service location presumably to preserve the grandfathered rate status of that particular delivery point. Second, there are seven of these accounts that would actually benefit by transferring to the company's proposed applicable GSD rate schedule, primarily as a result of the change the company is seeking in its GSD rates regarding higher voltage delivery service. Third, the document shows the total proposed increase from all IS accounts results in a relatively moderate increase of 4.9 percent.

Q. Other than the transfer of IS metered accounts to their applicable GSD rate schedule, will the company's proposed rate changes result in any other customer transfers from

one rate schedule to another?

A. Yes. The company has analyzed all of its demand metered GSD customers and finds a number of low energy use customers, about 950 customers, who are presently taking service under the GS rate who would receive lower billings under the proposed GSD rates. This is due primarily to the change to a lower Basic Service Charge for GSD secondary customers under the proposed rates that now results in those customers finding the GSD rate to be more economically beneficial. The transfer of these customers has been taken into account in the development of the company's proposed revenues.

Q. What changes are being made to the facilities charges of Lighting Service Rate Schedule LS-1?

A. Because the Cost of Service Study shows the revenues from the Facilities part of the company's Lighting Service class recover more than its cost of service, no change is being made to any of the fixture, pole or maintenance charges of this rate schedule.

Q. Is the company proposing to add any new rate schedules to its tariff?

A. Yes. Tampa Electric is proposing that a Commercial/Industrial Service Rider ("CISR") tariff be reinstituted for the company in this proceeding. Tampa Electric had a CISR tariff previously, on an experimental basis, which was allowed to lapse in 2004. CISR tariffs are currently in effect for Progress Energy Florida, Inc. and for Gulf Power. CISR is an economic development mechanism used to attract new load or retain existing commercial or industrial load to the service territory with rate flexibility made available under the company's GSD rate schedules for special contract situations. The company believes that reinstituting the CISR now will provide a tool which can be used with speed to address special situations to assist in accommodating commercial or industrial economic development opportunities.

Q. Are there any other miscellaneous tariff changes being proposed?

A. Yes. The tariff includes a Facilities Rental Agreement that includes a monthly rental factor and annual termination factors applicable to facilities that the company may agree to lease to customers. New proposed factors have been derived reflecting the company's proposed cost of capital in this proceeding. The

revisions would only apply to new Facilities Rental Agreements and, since the company enters into very few of these agreements, no additional revenues have been projected in the 2014 test year. Additionally, certain administrative changes have been proposed for legal language in certain tariff agreements to reflect changes that have been previously approved by the Commission for similar tariff agreements but were overlooked at that time.

Q. Where can the results of the company's total rate design be found?

A. The revenue distribution by rate schedule is shown on MFR Schedule E-13a, supported by the detailed billing calculations in MFR Schedules E-13c and E-13d. The effect on customers' typical bills is shown on MFR Schedule A-2 and a comparison of present and proposed charges is shown on MFR Schedule A-3.

PARITY RESULTS OF PROPOSED RATE DESIGN

Q. Does your proposed rate design move rates closer to parity from a cost of service standpoint?

A. Yes. Document No. 4 of my exhibit presents the achieved

class revenue requirement indices. Overall, most rate classes are reasonably close to parity. An index ratio of 1.00 indicates rates are set exactly on the cost of service. A ratio of less than 1.00 indicates that class is served below cost, and a class ratio of more than 1.00 indicates that class is served above cost.

SUMMARY

Q. Please provide a summary of the company's proposed rates and Cost of Service Studies in this proceeding.

A. The support for and design of the proposed rates in the case as presented in the MFRs and proposed tariffs meet the company's primary goals as articulated previously in my direct testimony. These rates are cost-based and reflect appropriately measured changes from the present rates that also reflect rate history, public acceptance of rate structures, customer understanding and ease of application, consumption and load characteristics of the classes, and will result in revenue stability and continuity.

The use of the company's proposed 12 CP and 50 Percent AD production capacity allocation methodology in the cost of service study provides an appropriate allocation of costs

to the classes of service by Tampa Electric plant and equipment in the service territory. The application of the MDS approach to the company's cost of service methodology is an improvement in reflecting cost causation for the investment in distribution equipment. The completion of the transition of the IS customer class to the GSD rate in this case is appropriate, and the company proposal achieves that last transitional step appropriately. The rate design proposals that better reflect the cost of providing service to customers taking service at higher voltages are appropriate and assure that such customer's rates best reflect the cost of service they receive at the higher voltage levels. Finally, the proposed revenue increase has been apportioned to achieve class parity to the extent practical.

Q. Does this conclude your direct testimony?

A. Yes, it does.

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

EXHIBIT

OF

WILLIAM R. ASHBURN

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SPONSORED OR CO-SPONSORED BY WILLIAM R. ASHBURN

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TAMPA ELECTRIC COMPANY
DEVELOPMENT OF PROPOSED (TARGET) BASE REVENUE INCREASE BY RATE CLASS
TEST PERIOD: PROJECTED CALENDAR YEAR 2014
COST OF SERVICE: 12 CP & 50% AD; MINIMUM DISTRIBUTION SYSTEM (MDS)
($000)

Line		Rate Class	(A) Cost of Service	(B) Present Base Revenue	(C) Base Revenue Deficiency (A) - (B)	(D) Proposed Additional Revenue Credits	(E) Net Base Rev. Deficiency $ (C) - (D)	(F) Net Base Rev. Deficiency % (E) / (B)	(G) Proposed Base Revenue Increase * Increase $	(H) % Increase Based on: Present Base Rev. (G) / (B)	(I) % Increase Based on: Total Revenue Incl. clauses (G)/Tot.Rev.	(J) Proposed Base Revenue (B) + (G)	(K) Unbilled Revenue Change	(L) Target Proposed Billed Base Revenue (J) - (K)
1	I.	Residential (RS,RSVP)	$ 579,812	$ 489,649	$ 90,163	$ 1,049	$ 89,114	18.20%						
2														
3	II.	General Service												
4		Non-Demand (GS,TS)	66,188	57,954	8,234	$ 115	$ 8,118	14.01%						
5														
6														
7		Sub-Total: I. + II.	$ 646,000	$ 547,604	$ 98,396	$ 1,164	$ 97,232	17.76%	$ 94,742	17.30%	9.47%	$ 642,346	$ (13)	$ 642,359
8														
9														
10	III.	General Service												
11		Demand (GSD, SBF)	330,120	290,676	39,444									
12														
13	IV.	Interruptible Service (IS)	27,261	28,538	(1,277)									
14														
15														
16		Sub-Total: III. + IV.	357,381	319,213	38,168	23	$ 38,144	11.95%	$ 37,168	11.64%	5.17%	$ 356,381	$ (9)	$ 356,390
17														
18														
19	V.	Lighting (LS-1)												
20		A. - Energy	7,656	5,467	2,189	$ 6	$ 2,182	39.92%	$ 1,737	31.78%	11.32%	$ 7,204	$ -	$ 7,204
21		B. - Facilities	31,573	35,484	(3,911)	$ -	$ (3,911)	-11.02%	0	0%	0%	$ 35,484	$ -	$ 35,484
22														
23														
24		Total	$ 1,042,610	$ 907,769	$ 134,841	$ 1,194	$ 133,647	14.72%	$ 133,647	14.72%	7.55%	$ 1,041,416	$ (22)	$ 1,041,438
25											x 1.5			
26											11.32%			

Line				
27	Revenue Reconciliation Check			
28				
29	Present Operating Revenue			
30	Sales Revenue	907,769	E-13a	
31	Other Operating Revenue	42,895		
32	Total Present Revenue	950,664		
33				
34	Plus: Revenue Increase	134,841		
35	Equals: Revenue Requirement	1,085,505		
36				
37	Summary of Proposed Target Revenue			
38	Sales Revenue	1,041,438	Col (L), L.12	
39	Other Operating Revenue	42,895		
40	Plus: Service Charge Increase	1,194	Col (D), L.12	
41	Plus: Unbilled Revenue Change	(22)	Col (K), L.12	
42	Equals: Proposed Target Revenue	1,085,505		
43				
44	Summary of Proposed Rate Design Revenue			
45	Sales Revenue	1,041,409	E-13a	
46	Other Operating Revenue	44,067		
47	Equals: Prop.Rate Design Rev.	1,085,476		

* Proposed Base Revenue increase apportionment reflects the following:

- Rate Classes I and II have been combined to reflect prior practice of setting equivalent rate charges for these classes.
- Rate Classes III and IV have been combined to reflect proposal to eliminate IS rate schedules and transfer affected customers to GSD rate schedules.
- No revenue change has been proposed for Rate Class V.B. in accordance with FPSC practice that no class receive a decrease in an overall increase rate proceeding.
- The increase for Rate Class V.A. was limited to comply with FPSC practice that no rate class shall be increased more than 1.5 times the system average % revenue increase including clauses.
- Other than Rate Class V.A. and V.B., the remaining revenue deficency is allocated in proportion to each Rates Class's revenue deficency in Column E.

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IS Customer Billing Comparisons

IS Present Rate Monthly Billing vs. GSD Present Rate Monthly Billing
500kW, 60% Load Factor, Primary Delivery Customer

Line Number		Present IS Rate	Present GSD Rate	IS Difference to GSD $	IS Difference to GSD %
	Base Rate Charges				
1	Customer	$ 637.95	$ 133.33		
2	Demand	$ 743.59	$ 3,899.08		
3	Energy	$ 5,624.37	$ 3,520.10		
4	Total Base Rate	$ 7,005.91	$ 7,552.51	$ (546.61)	-7.24%
	Non-Fuel Recovery Clause Charges				
5	CCR	$ 307.69	$ 369.23		
6	ECCR	$ 471.79	$ 538.46		
7	ECRC	$ 1,212.92	$ 1,235.38		
8	Total Non-Fuel Recovery Clause	$ 1,992.41	$ 2,143.08	$ (150.67)	-7.03%
9	Fuel Recovery Clause	$ 8,270.34	$ 8,270.34	$ -	0.00%
10	Subtotal	$ 17,268.66	$ 17,965.93	$ (697.27)	-3.88%
11	Interruptible Credit	$ (2,991.32)	$ (2,991.32)	$ -	0.00%
12	Total Monthly Billing	$ 14,277.33	$ 14,974.61	$ (697.27)	-4.66%

IS Customer Billing Comparisons

Proposed Rate Impact on Customers Under Interruptible Rate Schedules IS/SBI
Actual 2012 Billings Including the Interruptible Credit

IS Transfers to GSD								
Customer Number	Delivery Voltage	Annual Billing KW	Annual kWh	Average Load Factor %	Annual Charges Under Present Rate Schedule IS	Annual Charges Under Proposed Rate Schedule GSD	Difference $	Difference %
1	PMPS	10,633	3,424,541	44.1%	$ 229,519	$ 280,708	$ 51,190	22.3%
2	PMPS	20,104	6,754,514	46.0%	$ 442,610	$ 542,826	$ 100,216	22.6%
3	PMPS	23,419	12,307,913	72.0%	$ 759,967	$ 846,548	$ 86,580	11.4%
4	PMPS	4,821	1,071,794	30.5%	$ 81,641	$ 104,916	$ 23,275	28.5%
5	PMPS	9,259	2,421,911	35.8%	$ 169,860	$ 217,583	$ 47,724	28.1%
6	PMPS	30,430	13,176,445	59.3%	$ 829,378	$ 963,456	$ 134,078	16.2%
IS Transfers to GSD Optional								
Customer Number	Delivery Voltage	Annual Billing KW	Annual kWh	Average Load Factor %	Annual Charges Under Present Rate Schedule IS	Annual Charges Under Proposed Rate Sched. GSD Opt.	Difference $	Difference %
7	PMPS	1,195	202,924	23.3%	$ 22,523	$ 21,436	$ (1,087)	-4.8%
8	PMPS	5,530	551,420	13.7%	$ 55,010	$ 55,503	$ 493	0.9%
9	PMPS	15,001	2,062,698	18.8%	$ 167,476	$ 203,235	$ 35,759	21.4%
10	PMPS	71,854	5,412,372	10.3%	$ 525,990	$ 530,675	$ 4,685	0.9%
IST Transfers to GSDT								
Customer Number	Delivery Voltage	Annual Billing KW	Annual kWh	Average Load Factor %	Annual Charges Under Present Rate Schedule IST	Annual Charges Under Proposed Rate Schedule GSDT	Difference $	Difference %
11	TMTS	50	25	0.1%	$ 29,326	$ 12,313	$ (17,013)	-58.0%
12	TMTS	2,617	1,199,091	62.8%	$ 101,631	$ 89,023	$ (12,609)	-12.4%
13	PMPS	-	-	0.0%	$ 7,655	$ 1,600	$ (6,055)	-79.1%
14	PMPS	59,098	39,267,754	91.0%	$ 2,357,763	$ 2,450,659	$ 92,896	3.9%
15	PMPS	19,266	12,237,603	87.0%	$ 742,644	$ 781,910	$ 39,266	5.3%
16	TMTS	33,500	17,986,650	73.5%	$ 1,100,788	$ 1,055,764	$ (45,025)	-4.1%
17	TMTS	42,180	13,043,520	42.4%	$ 853,104	$ 988,867	$ 135,763	15.9%
18	PMTS	-	-	0.0%	$ 29,194	$ 12,185	$ (17,009)	-58.3%
19	TMTS	392,450	182,645,825	63.8%	$ 11,041,896	$ 11,822,213	$ 780,317	7.1%
20	TMTS	681,202	323,920,189	65.1%	$ 19,529,561	$ 21,132,701	$ 1,603,140	8.2%
21	TMTS	239,589	88,294,661	50.5%	$ 5,483,920	$ 6,164,101	$ 680,180	12.4%
22	PMPS	11,154	2,767,138	34.0%	$ 194,539	$ 248,741	$ 54,201	27.9%
23	PMPS	-	-	0.0%	$ 7,655	$ 1,600	$ (6,055)	-79.1%
24	PMPS	343	113,522	45.3%	$ 14,974	$ 10,281	$ (4,693)	-31.3%
25	PMPS	54,330	30,818,292	77.7%	$ 1,877,249	$ 2,043,386	$ 166,137	8.9%
26	PMPS	12,535	7,160,896	78.3%	$ 441,626	$ 472,547	$ 30,921	7.0%
27	PMPS	30,180	15,298,360	69.4%	$ 946,097	$ 1,061,183	$ 115,085	12.2%
28	PMPS	-	-	0.0%	$ 7,655	$ 1,600	$ (6,055.38)	-79.1%
29	PMPS	58,186	39,957,534	94.1%	$ 2,393,055	$ 2,473,721	$ 80,665.62	3.4%
30	PMPS	20,639	11,565,809	76.8%	$ 710,246	$ 773,254	$ 63,007	8.9%
31	TMTS	-	-	0.0%	$ 29,194	$ 12,185	$ (17,009)	-58.3%
32	PMPS	72,156	26,028,836	49.4%	$ 1,667,153	$ 2,010,622	$ 343,469	20.6%
33	PMPS	15,638	6,270,073	54.9%	$ 402,933	$ 482,402	$ 79,469	19.7%
34	TMTS	-	-	0.0%	$ 29,194	$ 12,185	$ (17,009)	-58.3%
35	PMTS	-	-	0.0%	$ 29,194	$ 12,185	$ (17,009)	-58.3%
36	PMPS	70,414	16,419,237	31.9%	$ 1,133,134	$ 1,584,207	$ 451,073	39.8%
37	PMTS	-	-	0.0%	$ 29,194	$ 12,185	$ (17,009)	-58.3%
SBI Transfers to SBFT								
Customer Number	Delivery Voltage				Annual Charges Under Present Rate Schedule SBI	Annual Charges Under Proposed Rate Schedule SBFT	Difference $	Difference %
38	210001255				$ 4,752,317	$ 4,393,000	$ (359,317)	-7.6%
39	210001850				$ 1,320,490	$ 1,009,412	$ (311,078)	-23.6%
40	210001875				$ 8,948,540	$ 8,726,789	$ (221,751)	-2.5%
41	210000800				$ 4,536,414	$ 4,250,109	$ (286,306)	-6.3%
42	210050102				$ 519,501	$ 306,576	$ (212,925)	-41.0%
Total IS/SBI					$ 74,551,814	$ 78,176,388	$ 3,624,575	4.9%

TAMPA ELECTRIC COMPANY
TEST PERIOD: PROJECTED CALENDAR YEAR 2014
SUMMARY OF RESULTANT CLASS PARITY RATIOS
($000)

Line	Rate Class	(A) Target vs. Proposed Base Sales Revenue: Target Base Revenue per Exh. (WRA), Doc. No. 2	(B) Target vs. Proposed Base Sales Revenue: Proposed Base Sales Revenue	(C) Target vs. Proposed Base Sales Revenue: Difference (B) - (A)	(D) Revenue Requirement Index: Cost of Service w/incr. credit per COS	(E) Revenue Requirement Index: Proposed Base Sales Revenue	(F) Revenue Requirement Index: Revenue Requirement Index (E) / (D)	(G) Rate of Return Index: ROR at Proposed. Rates per COS	(H) Rate of Return Index: ROR Index (G) / Total (G)
1	I. Residential (RS,RSVP)		$ 572,993		$ 578,787	$ 572,993	0.99	6.59%	0.98
2	II. General Service Non-Demand (GS,TS)		$ 69,356		66,077	$ 69,356	1.05	7.50%	1.11
3	Sub-Total: I. + II.	$ 642,359	$ 642,349	$ (10)	$ 644,864	$ 642,350	1.00		
4	III. General Service Demand (GSD, SBF)								
5	IV. Interruptible Service (IS)								
6	Proposed GS Demand (GSD,SBF)	$ 356,390	$ 356,371	$ (19)	357,354	$ 356,371	1.00	6.70%	0.99
7	V. Lighting (LS-1)								
8	A. - Energy	$ 7,204	$ 7,204	$ -	7,652	$ 7,204	0.94	5.85%	0.87
9	B. - Facilities	$ 35,484	$ 35,484	$ -	31,567	$ 35,484	1.12	8.97%	1.33
10	Total	$ 1,041,438	$ 1,041,409	$ (29)	$ 1,041,438	$ 1,041,409	1.00	6.74%	1.00

TAMPA ELECTRIC COMPANY
DOCKET NO. 130040-EI
EXHIBIT NO. ____ (WRA-1)
WITNESS: ASHBURN
DOCUMENT NO. 4
PAGE 1 OF 1
FILED: 04/05/2013