## AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

227 SOUTH CALHOUN STREET P.O. BOX 391 (ZIP 32302) TALLAHASSEE, FLORIDA 32301 (850) 224-9115 FAX (850) 222-7560

August 25, 2006

#### HAND DELIVERED

Ms. Blanca S. Bayo, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

060573-EQ

Re: Petition of Tampa Electric Company for Approval of 2006 Small Power Production Agreement

Dear Ms. Bayo:

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Enclosed for filing in the above-styled matter are the original and fifteen (15) copies of Tampa Electric Company's Petition for Approval of 2006 Small Power Production Agreement.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

JDB/pp Enclosure

> DOCUMENT NUMBER-DATE 07850 AUG 25 %

FPSC-COMMISSION CLERY

### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric ) Company for Approval of 2006 ) Small Power Production Agreement. )

DOCKET NO. <u>060573-EQ</u> FILED: August 25, 2006

### PETITION OF TAMPA ELECTRIC COMPANY FOR APPROVAL OF 2006 SMALL POWER PRODUCTION AGREEMENT

Tampa Electric Company ("Tampa Electric" or "the company") petitions the Florida Public Service Commission ("the Commission") for approval of a 2006 Small Power Production Agreement by and between Tampa Electric and the City of Tampa, Florida ("the City") and, in support thereof, says:

1. The name, address, telephone number and facsimile number of the petitioner are:

Tampa Electric Company Post Office Box 111 Tampa, FL 33601 (813) 228-4111 (813) 228-1770 (fax)

2. Tampa Electric is a public utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes.

3. All notices, pleadings and correspondence required to be served on the Petitioner

should be directed to:

Lee L. Willis James D. Beasley Ausley & McMullen Post Office Box 391 Tallahassee, FL 32302 (850) 224-9115 (850 222-7952 (fax) Brenda Irizarry, Coordinator Regulatory Affairs Tampa Electric Company Post Office Box 111 Tampa, FL 33601 (813) 228-1752 (813) 228-1770 (fax) 4. Currently, two documents contain the terms and conditions under which the City of Tampa ("the City") commits to sell capacity and energy to Tampa Electric from the City's McKay Bay Refuse to Energy Facility ("the Facility"). The documents are the Small Power Production Agreement dated August 26, 1982 and the Amendment to the Small Power Production Agreement dated May 25, 1989, collectively referred to as the "First Agreement."

5. The First Agreement provides for the City's sale and Tampa Electric's purchase of 15.5 MW of firm capacity and all energy from the Facility and addresses the possibility that physical modifications or additions to the Facility may enable the City to generate, and deliver to Tampa Electric, capacity and energy in excess of 15.5 MW of capacity and associated energy.

6. The First Agreement provides that the City may demonstrate the Facility's increased generating capacity and that after such successful demonstration, the City and Tampa Electric "may enter into a new agreement for Tampa Electric's purchase of additional generation from the City's generating facilities. Any such new contract or agreement may be based on the Commission designated avoided unit then in effect..."

7. The City was required to retrofit the Facility in order to meet new Clean Air Act requirements and from July 1999 through December 31, 2001 the City performed the environmental retrofit work and addressed performance and efficiency aspects of the Facility to increase steam and electricity production, including the replacement of the then existing furnace/grate systems and boilers at the Facility.

8. In 2005, the City notified Tampa Electric that its performance since 2002 sufficiently demonstrated that 3.5 MW of increased capacity were consistently available at the Facility.

9. Prior to and during the three-week open season subscription period of a Tampa Electric Standard Offer Contract that expired on September 12, 2005 ("2005 SOC"), the City expressed its desire to sell to Tampa Electric an incremental 3.5 MW of firm, committed capacity and associated energy. In lieu of the City signing a 2005 SOC, the parties agreed to develop a negotiated agreement based on the avoided unit of the 2005 SOC in order to more properly integrate the contract with the First Agreement.

10. Following a series of negotiations, the City and Tampa Electric on August 22, 2006 entered into a 2006 Small Power Production Agreement ("the 2006 Agreement"), a true copy of which is attached hereto as Exhibit "A". Under the 2006 Agreement Tampa Electric has agreed, subject to the Commission's approval, to purchase the City's additional capacity at the avoided unit pricing set forth in Tampa Electric's 2005 SOC which was based on a combustion turbine with a January 1, 2007 in-service date ("2007 CT").

11. The proposed capacity payment for the additional 3.5 MW starts at \$2.54 per kWmonth on January 1, 2007, escalates annually and ends on August 31, 2011 at \$2.78 per kWmonth.

12. The proposed energy payment under the 2005 SOC will be capped at the lesser of the as-available energy price or the avoided 2007 CT energy price.

13. The 2006 Agreement merits approval by the Commission since it: (1) is consistent with and was contemplated in the provisions of the fifth and sixth sentences of paragraph 1 of the 1989 Amendment to the First Agreement that was approved by the Commission; (2) was negotiated to benefit ratepayers and the City; (3) encourages the City to generate as much renewable energy as possible; and (4) pays for that energy at full avoided cost as called for under

FPSC regulations and Tampa Electric's tariff. All of this is consistent with the recently passed legislation intended to encourage production of renewable energy.<sup>1</sup>

14. Tampa Electric is not aware of the existence of any disputed issues of material fact relative to the matters alleged or the relief requested in this petition.

WHEREFORE, Tampa Electric Company respectfully urges the Commission to approve the 2006 Agreement including Tampa Electric's ability to recover amounts prudently paid to the City in accordance with the 2006 Agreement through the fuel and purchased power cost recovery clause.

DATED this 25 day of August 2006.

Respectfully submitted,

JAMES D. BEASLEY Ausley & McMullen Post Office Box 391 Tallahassee, FL 32302 (850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

<sup>&</sup>lt;sup>1</sup> Section 366.01, Florida Statutes, was enacted in 2005. This new law required each public utility subject to the jurisdiction of the FPSC to offer, on or before January 1, 2006, and continue to offer, a 10-year minimum purchase contract to producers of renewable energy. It requires the FPSC to establish requirements related to the purchase of capacity and energy from renewable energy producers based upon the utility's full avoided costs. It provides that prudent and reasonable costs associated with a renewable energy contract shall be recovered from ratepayers of the contracting utility through the appropriate cost-recovery clause mechanism.

#### **2006 SMALL POWER PRODUCTION AGREEMENT**

The City of Tampa, a municipal corporation organized under the laws of the state of Florida, hereinafter referred to as "the City" and Tampa Electric Company, a private utility corporation organized under the laws of and authorized to do business within the state of Florida, hereinafter referred to as "Tampa Electric," enter into this 2006 Small Power Production Agreement ("this Agreement" or "the 2006 Agreement") on this **22.**<sup>nd</sup> day of **August**, 2006. The City and Tampa Electric shall be referred to, individually, as the "Party" and, collectively, as the "Parties" for purposes of this Agreement.

#### WITNESSETH:

WHEREAS, the City and Tampa Electric are Parties to a Small Power Production Agreement dated August 26, 1982 ("1982 Agreement") and are Parties to a May 25, 1989 Amendment to Small Power Production Agreement ("1989 Amendment") which amended the 1982 Agreement; and

WHEREAS, it is the intent of the Parties that the provisions of the 1982 Agreement and the 1989 Amendment (hereinafter collectively referred to as "the First Agreement") shall remain in full force and effect; and

WHEREAS, it is the intent of the Parties that nothing contained herein shall in anyway amend, modify or terminate the First Agreement or be construed or interpreted to amend, modify or terminate the First Agreement; and

WHEREAS, under the First Agreement the City is committed to supply 15.5 megawatts ("MW") of firm capacity ("Committed Capacity") and energy from its McKay Bay Refuse to Energy Facility (the "Facility"); and

WHEREAS, it is the intent of the Parties that with respect to the amount of energy to be delivered, and the energy rate to be paid by Tampa Electric for such delivered energy, the delivered energy shall be assumed to be delivered under the First Agreement up to a capacity factor of ninety percent (90%) with respect to Committed Capacity, unless increased temporarily, on a monthly basis, by the City as provided in paragraph 3(c) of this Agreement; and

WHEREAS, to continue operating the Facility, the City was required to retrofit the Facility in order to meet new Clean Air Act requirements; and

WHEREAS, in conjunction with the environmental retrofit work, the City also addressed performance and efficiency aspects of the Facility, to increase steam and electricity production, including the replacement of the then existing furnace/grate systems and boilers at the Facility; and

WHEREAS, from July 1999 through December 31, 2001, the City performed the environmental retrofit work and the work to increase steam and electricity production at the Facility, thereby significantly increasing the overall electrical generating capability of the Facility; and

WHEREAS, prior to and during the pendency of a three-week open season subscription period of a Tampa Electric Company Standard Offer Contract that expired on September 12, 2005 the City expressed to Tampa Electric its desire to sell Tampa Electric an incremental 3.5 MW of firm, committed capacity and associated energy (having resulted from the recent retrofits at the Facility) from the Facility over and above the Committed Capacity under the First Agreement; and

WHEREAS, it is the intent of the Parties that all energy generated at the Facility in excess of a ninety percent (90%) capacity factor (unless increased temporarily by the City as

provided in paragraph 3(c) of this Agreement) with respect to the Committed Capacity under the First Agreement shall be treated as described in paragraphs 3(b) and 3(c) of this Agreement; and

WHEREAS, it is the intent of the Parties that entering into this Agreement is in accordance with the provisions of the fifth and sixth sentences of paragraph 1 of the 1989  $Amendment^{1}$ .

NOW, THEREFORE, in consideration of the premises, which shall be deemed integral parts of this Agreement, and of the mutual covenants and agreements set forth in this Agreement, the City and Tampa Electric, intending to be legally bound, agree as follows:

1. <u>First Agreement Capacity Factor for Capacity and Energy Payments</u>: The City will continue to provide Committed Capacity to Tampa Electric pursuant to the First Agreement. The 12-month rolling average capacity factor of seventy percent (70%), specified in the First Agreement, shall remain in full force and effect and continue to apply to the calculation of the capacity payment applicable to the First Agreement. However, with respect to the energy rate to be paid by Tampa Electric for energy delivered pursuant to the First Agreement, the energy delivered each hour will be first credited, on an hourly basis, to the First Agreement up to 90% of the Committed Capacity, unless increased by the City in accordance with the provisions of paragraph 3(c) of this Agreement.

2. <u>Retrofit Capacity and Energy</u>: In addition to the foregoing the City agrees to sell and Tampa Electric agrees to purchase an additional 3.5 MW of firm, committed capacity from the Facility ("Retrofit Capacity"). The monthly capacity payment rate applicable to Retrofit

<sup>&</sup>lt;sup>1</sup> If such future modifications or additions (such as the installation of an additional generator or a solid waste treatment combustion line) are made (the "modified facility"), the City shall have an opportunity to demonstrate the increased generating capacity thus made available, after which the City and Tampa Electric may enter into a new agreement for Tampa Electric's purchase of additional generation from the City's generating facilities. Any such new contract or agreement may be based on the Commission designated avoided unit then in effect and shall not incorporate any of the energy or capacity pricing provisions hereof unless agreed to by both parties.

Capacity shall be the Retrofit Capacity rate described in paragraph 8(a) of this Agreement. For purposes of this Agreement, "Retrofit Energy" shall mean the energy associated with Retrofit Capacity.

3. <u>Allocation and Pricing of Energy Delivered Pursuant to the First Agreement and</u> <u>this Agreement</u>: Electric energy delivered to Tampa Electric from the Facility during each clock hour of each calendar day of the Term (as described in paragraph 7 of this Agreement) shall be credited and assigned the applicable energy rate(s) as follows:

- (a) To the extent that the City delivers 13.95 MWh of energy ("Hourly Energy Threshold"), or less, during a clock hour, the entire amount of energy delivered shall be credited towards satisfying the energy delivery commitment established in the First Agreement. The applicable energy rate for the entire amount of energy delivered during such clock hour shall be the energy rate described in the First Agreement;
- (b) To the extent that the City delivers more than 13.95 MWh of energy during a clock hour, 13.95 MWh of the energy delivered shall first be credited towards satisfying the energy delivery commitment established in the First Agreement. The energy rate applicable to the 13.95 MWh of energy delivered during such clock hour shall be the energy rate described in the First Agreement. The amount of the energy delivered during such clock hour in excess of 13.95 MWh shall be credited towards satisfying the energy delivery commitment established in this Agreement. The energy rate applicable to the amount of the energy delivered during such

clock hour in excess of 13.95 MWh shall be the energy rate described in paragraph 8(b) of this Agreement.

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(c) Notwithstanding the provisions of the foregoing paragraphs 3(a) and 3(b), the City may, from time to time and at its sole discretion, for any billing month during the Term, provide written notice to Tampa Electric that the City desires to increase the Hourly Energy Threshold at least two (2) business days prior to the commencement of a billing month. The City's notice shall specify the increased Hourly Energy Threshold ("Interim Hourly Energy Threshold") that the City desires Tampa Electric to apply towards satisfying the energy delivery commitment required by the First Agreement for the billing month immediately following the receipt date of the notice. Such notice shall also state on which subsequent billing month the City desires that Tampa Electric cease application of the Interim Hourly Energy Threshold and resume application of the Hourly Energy Threshold towards satisfying the energy delivery commitment required by the First Agreement. The energy rate applicable to the amount of energy delivered during each clock hour up to the Interim Hourly Energy Threshold shall be the energy rate under the First Agreement. The energy rate applicable to the amount of the energy delivered during each clock hour in excess of the Interim Hourly Energy Threshold shall be the energy rate described in paragraph 8(b) of this Agreement.

4. <u>Interconnection Specifications</u>: The City and Tampa Electric agree that the interconnection requirements, specifications and considerations described in paragraph 4.1

(Interconnection Specifications) and paragraph 4.2 (Additional Interconnection Considerations), of the 1982 Agreement shall apply to this Agreement.

5. <u>Electrical and Metering Details</u>: The City and Tampa Electric agree that the metering installations described in paragraph 4.3 (Electrical and Metering Details) of the 1982 Agreement shall apply to this Agreement.

6. <u>Invoice Adjustment</u>: The existing invoice format and process between Tampa Electric and the City shall be modified to include the parameters relevant to this Agreement. A sample modified invoice that includes the parameters relevant to this Agreement is located in Exhibit A of this Agreement.

7. <u>Term</u>: This paragraph 7 defines the term ("Term") of this Agreement. This Agreement shall become effective on the date that FPSC Approval, as described in paragraph 16 of this Agreement, is obtained as evidenced by issuance of an FPSC Order approving the Agreement ("Commencement Date") and this Agreement is properly executed by both Parties. This Agreement shall terminate on the termination date of the First Agreement as determined in accordance with the March 8, 1999 Agreement on Force Majeure Procedures between the City of Tampa and Tampa Electric Company (currently, 12:01 A.M., August 1, 2011), unless such termination date is modified or renegotiated pursuant to the provisions of paragraph 16 of this Agreement. The operation and effect of this Agreement is intended to remain in place only for so long as the First Agreement remains in effect. Should the First Agreement for any reason be terminated earlier than as provided above, this Agreement shall automatically terminate on the same date as the termination date of the First Agreement.

8. <u>Rates for Retrofit Capacity and Associated Energy Purchased Under this</u> <u>Agreement:</u> Retrofit Capacity and associated energy are purchased at unit costs, in dollars per

kilowatt per month (\$/kW/month) and cents per kilowatt-hour (¢/kWh), respectively, based on the value of deferring additional Tampa Electric generating capacity. The City shall not receive a Retrofit Capacity payment during any calendar / billing month in which the City's Monthly Capacity and Availability Factors for Retrofit Capacity do not equal or exceed eighty percent (80%) and ninety percent (90%), respectively, as defined in Appendix C of this Agreement.

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For the purpose of this Agreement, Tampa Electric's "Designated Avoided Unit" shall mean a 3.5 MW portion of a 180 MW combustion turbine generating unit with an in-service date of January 1, 2007. Appendix A of this Agreement describes the methodology used to calculate payment schedules, general terms, and conditions applicable to Tampa Electric's Standard Offer Contract pursuant to FPSC Rules 25-17.080 through 25-17.091, F.A.C.

(a) <u>Retrofit Capacity Rates:</u> The City selected the Value of Deferral Capacity Payments Option under Tampa Electric's Standard Offer Contract as the method of payment under this Agreement for the Retrofit Capacity produced by the City and delivered to Tampa Electric during the Term of this Agreement. Exemplary payment schedules, shown in Table 1 at the end of this subparagraph contain the monthly rate per kilowatt (kW) of Retrofit Capacity the City has contractually committed to deliver to Tampa Electric during the Term of this Agreement. Value of Deferral Capacity Payments, as calculated in Appendix A, shall commence on January 1, 2007, the in-service date of the Designated Avoided Unit, provided the City is delivering Retrofit Capacity and associated energy to Tampa Electric in accordance with the Minimum Performance Standards (MPS) as described in Appendix C. Capacity payments under this option

shall consist of monthly payments, escalating annually, of the avoided capital and fixed operating and maintenance expense associated with the Designated Avoided Unit and shall be equal to the value of the year-by-year deferral of the Designated Avoided Unit, calculated in conformance with FPSC Rule 25-17.0832, F.A.C., as described in Appendix A.

Tampa Electric will provide the City with a schedule of capacity payment rates based on the month and year in which the delivery of Retrofit Capacity and associated energy are to commence over the Term of this Agreement. The following exemplary payment schedules are based on the Term of this Agreement. The currently approved parameters used to calculate the following schedule of payments are found in Appendix B of this Agreement.

| TERM YEAR |          | NORMAL PAYMENT<br>STARTING 1/1/2007 |  |
|-----------|----------|-------------------------------------|--|
| FROM :    | TO:      | \$/kW/Month                         |  |
|           |          |                                     |  |
| 1/1/07    | 12/31/07 | 2.54                                |  |
| 1/1/08    | 12/31/08 | 2.60                                |  |
| 1/1/09    | 12/31/09 | 2.66                                |  |
| 1/1/10    | 12/31/10 | 2.72                                |  |
| 1/1/11    | 08/31/11 | 2.78                                |  |

Table 1 -- Capacity Payment Schedule

(b) <u>Retrofit Energy Payment Rates:</u> The Energy Payment Rate for Retrofit Energy delivered by the City to Tampa Electric in each hour will be the lesser of the "Unit Energy Payment Rate" that is based on the Designated Unit energy cost (fuel and variable operation and maintenance expense) as defined in Appendix C or the "As-Available Energy Payment Rate" based on system avoided energy costs as defined in Appendix D. The calculation of energy payments to the City shall be based on the sum, over all hours of the monthly period, of the product of each hour's Energy Payment Rate times the energy associated with the Retrofit Capacity that Tampa Electric purchased from the City for that hour. All purchases shall be adjusted for losses reflecting delivery voltage thereby resulting in an increase in the energy payment to the City.

9. <u>Technical Requirements, Operations and Maintenance Conditions</u>: The general provisions of section 5 of the First Agreement and the specific provisions of subsections 5.1 (Maintenance) and 5.2 (Site Access) of the First Agreement shall apply to this Agreement.

10. <u>Electricity Production Scheduling</u>: During the Term of this Agreement, the City agrees to the following:

- (a) During the Term of this Agreement, the City shall employ qualified personnel for managing, operating and maintaining the Facility and for coordinating such with Tampa Electric. During the Term of this Agreement, the City shall operate and maintain the Facility in such a manner as to reasonably ensure compliance with its obligations hereunder;
- (b) Tampa Electric shall not be obligated to purchase and may require curtailed or reduced deliveries of Retrofit Energy, to the extent necessary to maintain the reliability and integrity of any part of Tampa Electric's system, or if Tampa Electric reasonably determines that a failure to do so is likely to endanger life or property, or is likely to result in significant

disruption of electric service to Tampa Electric's customers. Tampa Electric shall give the City prior notice, if practicable, of its intent to refuse, curtail or reduce Tampa Electric's acceptance of Retrofit Energy pursuant to this paragraph 10 and will act to minimize the frequency and duration of such occurrences;

- (c) Tampa Electric shall not be required to accept or purchase Retrofit Energy during any period in which, due to operational circumstances, acceptance or purchase of such Retrofit Energy would result in Tampa Electric's incurring costs greater than those which it would incur by generating an equal additional amount of energy with its own resources. Tampa Electric shall give the City as much prior notice as practicable of its intent not to accept energy pursuant to this paragraph 10;
- (d) The City shall promptly update the yearly generation schedule and maintenance schedule as and when any changes may be determined necessary; and
- (e) The City shall comply with reasonable requirements of Tampa Electric regarding day-to-day or hour-by-hour communications between the Parties relative to the City's performance under this Agreement.

11. <u>Performance Criteria:</u> In addition to the following provisions, payments for Firm Capacity are conditioned on the City's ability to meet or exceed the Minimum Performance Standards (MPS) for Tampa Electric's Designated Avoided Unit as described in Appendix C of this Agreement:

- (a) <u>Monthly Availability and Monthly Capacity Factor</u>: Payments for Retrofit Capacity shall be made monthly in accordance with the Value of Deferral Capacity Payments Option under Tampa Electric's Standard Offer Contract and shall be subject to the provision that the City equals or exceeds the MPS for Monthly Availability and Monthly Capacity Factor of Tampa Electric's Designated Avoided Unit, as defined in Appendix C of this Agreement.
- (b) Additional Criteria:

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With respect to Retrofit Energy, the City shall provide monthly generation estimates by April 1 of each year for the next calendar year; and

- (i) The City shall promptly update its yearly generation schedule when any changes are determined necessary; and
- (ii) The City shall agree to reduce generation or take other appropriate action as requested by Tampa Electric for safety reasons or to preserve system integrity; and
- (iii) The City shall coordinate scheduled outages with Tampa Electric; and
- (iv) The City shall comply with the reasonable requests of Tampa Electric regarding daily or hourly communications.

12. <u>Delivery Voltage Adjustment:</u> Energy Payments to the City shall be adjusted according to the delivery voltage by the applicable multiplier for GSD, GSLD, SBF rate schedules as identified in the following table:

| TABLE 2        |                          |  |  |  |
|----------------|--------------------------|--|--|--|
| Rate Schedule  | <b>Adjustment Factor</b> |  |  |  |
| RS, GS         | 1.0616                   |  |  |  |
| GSD, GSLD, SBF | 1.0561                   |  |  |  |
| IS-1, IS-3     | 1.0254                   |  |  |  |
| SBI-1, SBI-3   | 1.0254                   |  |  |  |

13. City Waiver: The City is entering into and intends to perform this Agreement with civil liability for damages to Tampa Electric in the event the City breaches this Agreement. The City expressly disclaims, waives, and denies the applicability of any and all immunity or exemption from actions, lawsuits, third-party claims, judgments or executions, judicial or administrative, brought by Tampa Electric which, by virtue of the City's sovereignty, might otherwise apply with regard to the City's rights, obligations, or actions as a Party to this Agreement. The City, however, does not disclaim, waive, or deny the applicability of any such immunity or exemption which it may have by virtue of its sovereignty for actions, third-party claims, lawsuits, judgments or executions, judicial or administrative, brought by any person or entity other than Tampa Electric. Anything to the contrary herein notwithstanding, Tampa Electric's sole and exclusive remedy for the City's failure to meet the Minimum Performance Standards of this Agreement, resulting in a default, shall be suspension of capacity payments for Retrofit Capacity under this Agreement, in which event energy payments to the City will thereafter be calculated and paid to the City based on the energy payment provisions of the First Agreement.

14. <u>Permits:</u> The City hereby agrees to obtain any and all governmental permits, certifications, or other authority the City is required to obtain as a prerequisite to engaging in the activities provided for in this Agreement. Tampa Electric hereby agrees to obtain any and all

governmental permits, certifications or other authority Tampa Electric is required to obtain as a prerequisite to engaging in the activities provided for in this Agreement.

15. Indemnification: The City agrees to indemnify and save harmless Tampa Electric against any and all liability, loss, damage, costs or expense which Tampa Electric may hereafter incur, suffer or be required to pay by reason of negligence on the part of the City in performing its obligations pursuant to this Agreement or the City's failure to abide by the provisions of this Agreement. Tampa Electric agrees to indemnify and save harmless the City against any and all liability, loss, damage, costs or expense which the City may hereafter incur, suffer, or be required to pay by reason of negligence on the part of Tampa Electric in performing its obligations pursuant to this Agreement or Tampa Electric's failure to abide by the provisions of this Agreement. The City agrees to include Tampa Electric as an additional insured in any liability insurance policy or policies the City obtains to protect the City's interests with respect to the City's indemnity and hold harmless assurances to Tampa Electric contained in this paragraph.

16. <u>FPSC Approval</u>: The obligations of the Parties to this Agreement are contingent on the final approval of this Agreement by the Florida Public Service Commission ("FPSC Approval") and the Tampa City Council. Tampa Electric's obligation to make payments to the City as prescribed herein is contingent on Tampa Electric obtaining the continuing approval of the Florida Public Service Commission to fully recover such payments from Tampa Electric's Customers. Anything in this Agreement to the contrary notwithstanding, should Tampa Electric at any time during the Term of this Agreement fail to obtain or be denied the Florida Public Service Commission, or the authorization of any other regulatory body which now has or in the future may have jurisdiction over Tampa Electric's rates and charges, to recover from its customers all of the payments required to be made to the City under the terms

and conditions of this Agreement or any subsequent amendment to this Agreement, the Parties agree, at Tampa Electric's option, to renegotiate this Agreement or any applicable amendment. If Tampa Electric exercises such option to renegotiate, Tampa Electric shall not thereafter be required to make such payments to the extent Tampa Electric's authorization to recover them from its customers is not obtained or is denied. It is the intent of the Parties that Tampa Electric's payment obligations under this Agreement or any amendment hereto are conditioned upon Tampa Electric being fully reimbursed for such payments through fuel adjustment charges, conservation cost recovery charges or other authorized rates or charges. Anything to the contrary herein notwithstanding, Tampa Electric shall use reasonable efforts to secure FPSC approval of payments to the City.

17. Force Majeure: If either Party shall be unable, by reason of force majeure, to carry out its obligations under this Agreement, either wholly or in part, the Party so failing shall give written notice and full particulars to such cause or causes to the other Party as soon as possible after the occurrence of any such cause; and such obligations shall be suspended during the continuance of such hindrance, which, however, shall be remedied with all possible dispatch; and the obligations, terms and conditions of this Agreement shall be extended for such period as may be necessary for the purpose of making good any suspension so caused. The term "force majeure" shall be taken to mean acts of God, strikes, lockouts or other industrial disturbances, wars, blockades, insurrections, riots, arrests and restraints of rules and people, environmental constraints lawfully imposed by federal, state or local governmental bodies, explosions, fires, floods, lightning, wind, perils of the sea, accidents to equipment or machinery or similar occurrences; provided, however, that no occurrences may be claimed to be a force majeure occurrence if it is caused by the negligence or lack of due diligence on the part of the Party

attempting to make such claim. The City agrees to pay the costs necessary to reactivate the Facility and/or the interconnection with Tampa Electric's system if the same are rendered inoperable due to actions of the City, its agents, or <u>force majeure</u> events affecting the Facility or interconnection with Tampa Electric. Tampa Electric agrees to reactivate at its own cost the interconnection with the Facility in circumstances where any interruptions to such interconnections are caused by Tampa Electric or its agents.

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18. <u>Charges/Credits to the City:</u> Customer charges that are directly attributable to the purchase of Retrofit Capacity and associated energy from the City are deducted from the City's total monthly payment. A statement covering the charges and payments due the City is rendered monthly and payment normally is made by the 20<sup>th</sup> business day following the end of the monthly period.

(a) <u>Customer Charges</u>: A monthly Customer Charge will be rendered for maintaining an account for the City engaged in either an As-Available Energy or Firm Capacity and Energy transaction and for other applicable administrative costs. Actual charges will depend on how the City is interconnected to Tampa Electric

Monthly customer charges, applicable to QFs directly interconnected to Tampa Electric, by Rate Schedule are:

| TABLE 3          |                    |                  |                    |
|------------------|--------------------|------------------|--------------------|
| Rate<br>Schedule | Customer<br>Charge | Rate<br>Schedule | Customer<br>Charge |
| RS               | \$8.50             | RST              | \$11.50            |
| GS               | \$8.50             | GST              | \$11.50            |
| GSD              | \$42.00            | GSDT             | \$49.00            |
| GSLD             | \$255.00           | GSLDT            | \$255.00           |
| SBF              | \$280.00           | SBFT             | \$280.00           |
| IS-1             | \$1,000.00         | IST-1            | \$1,000.00         |

| IS-3  | \$1,000.00 | IST-3  | \$1,000.00 |
|-------|------------|--------|------------|
| SBI-1 | \$1,025.00 | SBIT-1 | \$1,025.00 |
| SBI-3 | \$1,025.00 | SBIT-3 | \$1,025.00 |

When appropriate, the Customer Charge will be deducted from the City's monthly payment. A statement of the charges or payments due the City will be rendered monthly. Payment normally will be made by the 20<sup>th</sup> business day following the end of the billing period.

(b) <u>Taxes and Assessments</u>: The City shall be billed monthly an amount equal to the taxes, assessments, or other impositions, if any, for which Tampa Electric is liable as a direct result of its purchases of Retrofit Capacity and associated energy produced by the City provided however the City shall not be responsible for any of Tampa Electric's income tax liability.

> If Tampa Electric obtains any tax savings as a result of its purchases of Retrofit Capacity and associated energy produced by the City, which tax savings would not have otherwise been obtained, those tax savings shall be credited to the City.

(c) <u>Emission Allowance Clause</u>: Subject to approval by the FPSC, the City shall receive a monthly credit, to the extent Tampa Electric can identify the same, equal to the value, if any, of any reduction in the number of air emission allowances used by Tampa Electric as a result of its purchase of Retrofit Capacity and associated energy produced by the City; provided that no such credit shall be given if the cost of compliance associated with

air emission standards is included in the determination of full avoided cost.

19. <u>Assignment:</u> The City shall have the right, subject to Tampa Electric's approval which approval shall not be unreasonably withheld or delayed, to assign this Agreement, and the City shall notify Tampa Electric sixty (60) days in advance of any proposed assignment. Tampa Electric shall provide its written notice of approval or disapproval of said proposed assignment within sixty (60) days of receipt of notification of said proposed assignment. Any notice of disapproval shall include the reasons for such disapproval. Prior to the effectiveness of any assignment, the proposed transferee shall agree in writing to assume all of the obligations undertaken by the City by virtue of this Agreement. Any Tampa Electric disapproval of such assignment shall be based upon Tampa Electric's reasonable determination that any such transferee is incapable of carrying out the terms and conditions of this Agreement. Upon any such assignment and assumption, the City shall be under no further obligation, to Tampa Electric pursuant to this Agreement, except for liabilities previously incurred by the City.

20. <u>Disclaimer</u>: In executing this Agreement, Tampa Electric does not, nor should it be construed, to extend its credit or financial support for the benefit of any third parties lending money to or having other transactions with the City or any assignee of this Agreement.

21. <u>Notifications:</u> For purposes of making any and all non-emergency oral and written notices, payments or the like required under the provisions of this Agreement, the parties designate the following to be notified or to whom payment shall be sent, until such time as either Party furnishes the other Party written instructions to contact another individual.

For the City:

Attn: David W. McCary, Director, Solid Waste Department Street: 4010 W. Spruce Street City: Tampa, FL Zip: 33607 Phone: (813) 348-1148 Facsimile: (813) 348-1156

.

Attn: Nancy McCann, Urban Environmental Coordinator Street: 4010 W. Spruce Street City: Tampa, FL Zip: 33607 Phone: (813) 348-1118 Facsimile: (813) 348-1156

Attn: David L. Smith, City Attorney Street: 315 E. Kennedy Boulevard City: Tampa, FL Zip: 33602 Phone: (813) 274-7312 Facsimile: (813) 274-5908

For Tampa Electric:

#### All Notices:

Street: 702 N. Franklin Street

City: Tampa, Florida Zip: 33602

Attn: Ms. Joann T. Wehle, Director Wholesale Marketing and Fuels Phone: (813)-228-1509 Facsimile: (813)-228-4922 Duns: 00-692-4286 Federal Tax ID Number: 59-0475140

#### **Questions Concerning Invoices:**

Attn: Ms. Mary M. Livingston, Contract Administrator Phone: (813) 228-1256 Facsimile: (813) 228-4922

## **Interim Threshold Nomination Notices:**

Attn: Ms. Barbara B. Johnson, Administrator Energy Accounting and Billing Phone: (813) 630-6264 Facsimile: (813) 630-6299

# With additional Notices of an Event of Default or Potential Event of Default to:

Attn: Assistant General Counsel Phone: (813) 228-1810 Facsimile: (813) 228-1328 22. <u>Construction</u>: This Agreement shall be governed by and construed in accordance with the laws of the State of Florida.

23. <u>Nonperformance Provisions</u>: The City shall not receive a capacity payment during any month in which the City fails to meet the MPS for Monthly Availability and Monthly Capacity Factor of Tampa Electric's Designated Avoided Unit as defined in Appendix C in COG-2.

- 24. <u>Default:</u>
  - (a) <u>Mandatory Default</u>: The City shall be in default under this Agreement if:
    - (i). The City voluntarily declares bankruptcy; or
    - (ii). The City fails to achieve a minimum Monthly Availability Factor of 25% and fails to achieve a minimum Monthly Capacity Factor of 25%, during the same month, for 12 consecutive months starting January 1, 2007; or
    - (iii). The City fails to maintain its status as a QF as required herein; or
  - (b) <u>Optional Default</u>: Tampa Electric may declare the City to be in default:
    - (i). If at any time after Monthly Capacity Payments have begun, Tampa Electric has sufficient reason to believe that the City is unable to deliver its Actual Contracted Capacity; or
    - (ii). After Monthly Capacity Payments have begun, the City fails each month, for 24 consecutive months, to meet the MPS; or
    - (iii). The City refuses, is unable or anticipatorily breaches its obligation to deliver its Actual Contracted Capacity after January 1, 2007.

25. <u>Default Remedy</u>: In the event of default by the City as set forth in paragraph 24, this Agreement will terminate and the energy rate paid for the energy thereafter delivered in each hour by the City to Tampa Electric from the Facility will revert to the energy rate paid under the First Agreement.

26. <u>Severability</u>: If any part of this Agreement, other than those parts related to payments to the City by Tampa Electric, for any reason, is declared invalid, or unenforceable by a public authority of appropriate jurisdiction, then such decision shall not affect the validity of the remainder of this Agreement, which remainder shall remain in force and effect as if this Agreement had been executed without the invalid or unenforceable portion. It is hereby declared the intention of the City and Tampa Electric that they would have executed the remainder of this Agreement without including any portion that is subsequently declared invalid or unenforceable by a public authority of appropriate jurisdiction, unless such portion relates to payments to be made by Tampa Electric to the City in which case this entire Agreement may, at the City's option, be deemed invalid, unenforceable, null and void. Furthermore, notwithstanding that this Agreement is for any reason deemed invalid, unenforceable, null or void as provided in this paragraph, the First Agreement will continue in full force and effect.

27. Paragraph 1 of the 1989 Amendment: The third sentence of paragraph 1 of the 1989 Amendment states that "The City agrees not to utilize any of the electric power generated at the existing Facility in the operation of the Hookers Point Advanced Wastewater Treatment Plant or for any purpose other than the operation of the existing Facility." The City agrees that for purposes of this Agreement and only during the Term of this Agreement, the phrase "any of the electric power generated at the existing Facility" in the aforementioned sentence includes Retrofit Capacity and associated energy (including energy delivered from the Facility in excess

of Retrofit Capacity at a one hundred percent (100%) capacity factor) purchased by Tampa Electric pursuant to the provisions of this Agreement.

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28. <u>Renewable Energy Attributes</u>: To the extent that the Facility is a renewable energy facility or the electricity produced by the Facility is considered to be renewable energy, the City retains any and all rights to own and sell any and all non-energy attributes associated with the electricity from the Facility, including but not limited to any and all renewable energy certificates, "green tags," or other tradable environmental and non-electricity interests (collectively "RECs"), of any description.

29. <u>Limitations</u>: Service under this Agreement is subject to the rules and regulations of Tampa Electric and the FPSC. The purchase described in this Agreement is also subject to Tampa Electric's "General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System," "NERC Planning Standards," September 1997, [Copyright @ 1997 by the North American Electric Reliability Council] that are applicable to generation and transmission facilities connected to Tampa Electric's transmission system (document provided upon request) and to FPSC Rules 25-17.080 through 25-17.091, F.A.C. and are limited to the Facility which is defined by FPSC Rule 25-17.082(4)(a), F.A.C. and to the City which commits to commence deliveries of Retrofit Capacity and associated energy no later than January 1, 2007, and to continue such deliveries through the end of the Term of this Agreement.

30. <u>Complete Agreement and Amendments:</u> With the exception of the First Agreement which shall remain unchanged and in full force and effect without modification, all previous communications or agreements between the parties, whether verbal or written, with reference to the subject matter of this Agreement are hereby abrogated. No amendment or

modification to this Agreement shall be binding unless it shall be contained in a duly authorized and executed writing.

This Agreement is executed in four duplicate originals. 31.

IN WITNESS WHEREOF, the City and Tampa Electric have executed this Agreement the day and year first above written.

**ATTEST:** 

## **CITY OF TAMPA**

Toxy-Knowles City Clerk

By: Mayor

Witnesses:

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Approved as to Legal Sufficiency

alnon (

Assistant City Attorney

#### TAMPA ELECTRIC COMPANY

By: Charles R

President, Tampa Electric Company

#### APPENDIX A

## STANDARD OFFER CONTRACT RATE FOR PURCHASE OF FIRM CAPACITY AND ENERGY FROM SMALL QUALIFYING FACILITIES OR MUNICIPAL SOLID WASTE FACILITIES SCHEDULE COG-2 APPENDIX A

Appendix A provides a detailed description of the methodology used by Tampa Electric to calculate the monthly value of deferring the Designated Avoided Unit referred to in Schedule COG-2. When used in conjunction with the current FPSC approved cost parameters associated with the Designated Avoided Unit contained in Appendix B, the City may determine the applicable value of deferral capacity payment rate associated with the timing and operation of its particular Facility should the City enter into a Standard Offer Contract with Tampa Electric.

Also contained in Appendix A is a discussion of the types and forms of surety bond requirements or equivalent assurance of repayment of early capacity payments acceptable to Tampa Electric in the event of contractual default by the City.

<u>CALCULATION OF VALUE OF DEFERRAL</u>: FPSC Rule 25-17.0832(6), F.A.C., specifies that avoided capacity costs, in dollars per kilowatt per month, associated with firm capacity sold to Tampa Electric by the City pursuant to Tampa Electric's Standard Offer shall be defined as the value of a year-by-year deferral of the Designated Avoided Unit and shall be calculated as follows:

$$VAC_m = 1/12 [KI_n (1-R_p) / (1-R_p^{-L}) +$$

FPSC Rule 25-17.0832(6)(a), F.A.C., specifies that, beginning with the in-service date of Tampa Electric's Designated Avoided Unit, for a one year deferral:

- VAC<sub>m</sub> = Company's monthly value of avoided capacity, \$/kW/month, for each month of year n;
- K = present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year;

I<sub>n</sub> = total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit(s) that would have been paid had the Designated Avoided Unit(s) been constructed;

- O<sub>n</sub> = total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);
- i = annual escalation rate associated with the plant cost of the Designated Avoided Unit(s);
- i<sub>o</sub> = annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);
- r = annual discount rate, defined as Tampa Electric's incremental after tax cost of capital;
- L = expected life of the Designated Avoided Unit(s); and

 $R_p = (1 + i_p) / (1 + r)$ 

n = year for which the Designated Avoided Unit(s) is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.

#### **CALCULATION OF EARLY CAPACITY PAYMENTS:**

FPSC Rule 25-17.0832(6)(b), F.A.C., specifies that, normally, payment for Firm Capacity shall not commence until the in-service date of the Designated Avoided Unit(s). At the option of the City, however, Tampa Electric may begin making early capacity payments consisting of the fixed operation and maintenance expense and the capital cost component of the value of a year-by-year deferral of the Designated Avoided Unit(s) starting as early as 2 years prior to the inservice date of the Designated Avoided Unit(s). When such early capacity payments are elected, capacity payments shall be paid monthly commencing no earlier than the Commercial In-Service date of the City, and shall be calculated as follows:

$$A_m = [A_c (1 + i_p)^{(m-1)} + A_o (1 + i_o)^{(m-1)}] / 12$$
 for  $m = 1$  to t

Beginning with the earliest avoidance date of Tampa Electric's Designated Avoided Unit(s), for a one year deferral:

A<sub>m</sub> = monthly early capacity payments to be made to the City starting as early as two years prior to the in-service date of Tampa Electric's Designated Avoided Unit(s), in \$/kW/month;

m = earliest year for which capacity payments to the City may be made;

t = the minimum term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;

$$A_{c} = F [(1 - R_{p}) / (1 - R_{p}^{t})]$$

Where:

F = the cumulative present value of the annual avoided capital cost component of capacity payments for a 5 year period, commencing with the in-service date of the Designated Avoided Unit(s) (in \$/kW/year in 2007 dollars);

$$A_{o} = G [(1 - R_{o}) / (1 - R_{o}^{t})]$$

Where:

G = the cumulative present value in the year that the contractual payments will begin, of the avoided fixed operation and maintenance expense component of capacity payments which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s).

$$R_o = (1 + i_o) / (1 + r)$$

## **CALCULATION OF LEVELIZED AND EARLY LEVELIZED CAPACITY PAYMENTS:** FPSC Rule 25-17.0832(6)(c), F.A.C., specifies that, Monthly Levelized and Early Levelized Capacity Payments shall be calculated as follows:

$$P_L = F / 12 \{ r / [1 - (1 + r)^{-t}] \} + O$$

Where:

- $P_L$  = the monthly Levelized Capacity Payment, starting on or prior to the in-service date of the Designated Avoided Unit(s);
- O = the monthly fixed operation and maintenance component of the capacity payments, calculated in accordance with FPSC Rule 25-17.0832, paragraph 6(a) for Levelized Capacity Payments or with paragraph 6(b) for Early Levelized Capacity Payments, F.A.C.

Currently approved parameters applicable to the formulas above are found in Appendix B.

**CALCULATION OF MONTHLY CAPACITY FACTOR:** At the end of each monthly period beginning with the first monthly period of the contract, Tampa Electric will calculate the City's monthly capacity factor.

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#### APPENDIX B

## DESIGNATED AVOIDED UNIT PARAMETERS FOR AVOIDED CAPACITY COSTS SCHEDULE COG-2 APPENDIX B

Beginning with the in-service date (1/1/2007) of Tampa Electric's Designated Avoided Unit (a 180 MW (Winter Rating) natural gas-fired Combustion Turbine), for a 1 year deferral: Value VAC \_= Company's monthly value of avoided capacity, in \$/kW/month, for 2.54 each month of year n; K= present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present 1.6926 value to the middle of the first year I\_= total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit with an inservice date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit(s) that would have been paid had the Designated Avoided Unit(s) 214.48 been constructed; O<sub>n</sub>= total fixed operation and maintenance expense for the year n, in 2.68 mid-year \$/kW/year, of the Designated Avoided Unit(s); annual escalation rate associated with the plant cost of the i\_= 2.3% Designated Avoided Unit(s); i\_= annual escalation rate associated with the operation and 2.2% maintenance expense of the Designated Avoided Unit(s); r= annual discount rate, defined as Tampa Electric's incremental after 9.09% tax cost of capital; 26 L= expected life of the Designated Avoided Unit(s); and n= year for which the Designated Avoided Unit(s) is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and 2007 energy;

|  | vulue  |
|--|--|
| monthly early capacity payments to be made to the City starting as<br>early as 2 years prior to the in-service date of Tampa Electric's<br>Designated Avoided Unit(s), in \$/kW/month;   | 1.62   |
| earliest year for which capacity payments to the City may be made;   | 2005   |
| the cumulative present value of the annual avoided capital cost<br>component of capacity payments for a five year period,<br>commencing with the in-service date of the Designated Avoided<br>Unit(s) (in \$/kW/year in 2004 dollars); | 103.25   |
| the minimum term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m.   | 7  |
|  | <ul> <li>early as 2 years prior to the in-service date of Tampa Electric's Designated Avoided Unit(s), in \$/kW/month;</li> <li>earliest year for which capacity payments to the City may be made;</li> <li>the cumulative present value of the annual avoided capital cost component of capacity payments for a five year period, commencing with the in-service date of the Designated Avoided Unit(s) (in \$/kW/year in 2004 dollars);</li> <li>the minimum term, in years, of the contract for the purchase of firm</li> </ul> |

Value

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## Parameters for Avoided Energy and Variable Operation and Maintenance Costs

Beginning on January 1, 2006, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by Tampa Electric:

| O <sub>v</sub> = | total variable operating and maintenance expense, in \$/MWh, of the | 8.56 |
|------------------|---|------|
|                  | Designated Avoided Unit(s), in year n;                              |      |

h = the average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s).

#### APPENDIX C

## DESIGNATED AVOIDED UNIT MINIMUM PERFORMANCE STANDARDS SCHEDULE COG-2 APPENDIX C

Tampa Electric's Standard Offer Contract is based on a 180 MW fully dispatchable simple cycle, natural gas fired Combustion Turbine generating unit at Bayside Power Station with an inservice date of January 1, 2007.

#### **BASIS FOR MONTHLY CAPACITY PAYMENT CALCULATION:**

- 1. Monthly Availability Factor: The City's Monthly Availability Factor will be calculated by averaging the Hourly Availability Factors for each hour of the monthly period. The Hourly Availability Factor may not exceed 100% and shall be defined as the hourly Committed Capacity expressed as a percentage of Contracted Capacity to the nearest whole percentile. The City is required to achieve a minimum Monthly Availability Factor of 90% in order to meet the MPS and be eligible to receive a Monthly Capacity Payment. Periods of Annual Planned Maintenance will be excluded from the calculation of the Monthly Availability Factor. For purposes of calculating the Monthly Availability Factor, the City's Committed Capacity may not exceed its Contracted Capacity.
- 2. Monthly Capacity Factor: In addition to the MPS for Monthly Availability, the City shall provide Committed Capacity into Tampa Electric's electric grid in order to meet or exceed a Monthly Capacity Factor of 80%. The Monthly Capacity Factor for the period April 1 through October 31, shall be defined as the sum of 80% of the Monthly Average On-peak Capacity Factor plus 20% of the Monthly Average Off-peak Capacity Factor. The Monthly Capacity Factor for the period November 1 through March 31, shall be

defined as the sum of 90% of the Monthly Average On-peak Capacity Factor plus 10% of the Monthly Average Off-peak Capacity Factor.

- 3. Off-Peak and On-Peak Hours: Those weekday hours occurring April 1 through October 31, from 12:00 noon to 9:00 p.m. and November 1 through March 31, from 6:00 a.m. to 10:00 a.m. and from 6:00 p.m. to 10:00 p.m. All other weekday hours and weekends shall be deemed Off-peak Hours including the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Tampa Electric shall have the right to change such On-peak Hours by providing written notice to the City a minimum of 90 calendar days prior to such change.
- 4. Annual Scheduled Maintenance: Each year the City shall provide to Tampa Electric by April 1<sup>st</sup>, a schedule of all planned maintenance for the balance of the current year and following calendar year. A maximum of 2 weeks (336 hours) will be allowed each year for annual maintenance and a total of 5 weeks (840 hours) for major overhauls will be allowed once during the Term of this Agreement. Scheduled outage time may be utilized from time-to-time by the City to improve the City's Availability and Capacity Factors and, upon written notification to Tampa Electric, such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. The City may not, however, use maintenance hours to improve Availability and Capacity Factors during the months of December, January, or February even though the City shall be entitled to schedule maintenance during those months. Once the allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations. The City will use reasonable efforts to

avoid scheduling major turbine generator maintenance during the months of December, January or February.

- 5. <u>Monthly Capacity Payment:</u> Starting January 1, 2007, (provided that the City has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each monthly period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the City. That is:

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MCP= $0
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b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

MCP= [(BCC) x (.02 x (CF- 45))] x CC

c. In the event that the Monthly Capacity Factor is greater than or equal to 90%, the Monthly Capacity Payment shall be calculated from the following formula:

$$MCP = (BCC) \times CC$$

Where:

MCP = Monthly Capacity Payment in dollars.

- BCC = Base Capacity Credit in \$/KW-Month pursuant to Tariff Sheet No. 8.225.
- CC = Contracted Capacity in KW.
- CF = Monthly Capacity Factor; or

During April 1 - October 31:

= 80% x Monthly Average On-peak Capacity Factor +

20% x Monthly Average Off-peak Capacity Factor

During November 1 - March 31:

= 90% x Monthly Average On-peak Capacity Factor +

10% x Monthly Average Off-peak Capacity Factor

# BASIS FOR MONTHLY ENERGY PAYMENT CALCULATION:

- Energy Payment Rate: The Energy Payment Rate shall be the lesser of Tampa Electric's As-Available Energy Payment Rate, as defined in Appendix D or the Unit Energy Payment Rate described in item 2 immediately below.
- Unit Energy Payment Rate (UEPR): The UEPR, which is based on Tampa Electric's Designated Avoided Unit fuel cost, variable operation and maintenance expense and Heat Rate value of 11,250 Btu/kWh, will be calculated monthly by the following formula:

 $UEPR = FC + O_v$ 

where;

O<sub>v</sub> = Unit Variable Operation & Maintenance Expense in \$/MWh defined in Rate Schedule COG-2, Appendix B.

FC= Fuel Component of the Energy Payment in \$/MWh as defined by:

FC = 11,250 Btu/kWh x FP

1,000

where;

FP= Fuel Price in \$/MMBTU determined by:

FP = GC + TC + GRI + ACA + PPS + TCR + FRC,

where;

- GC = Fuel Price in \$/MMBTU determined by taking the first publication of each month of <u>Inside FERC's Gas Market Report</u> low price quotation under the column titled "Range" for "Florida Gas Transmission Co., Louisiana" listings.
- TC = then currently approved Florida Gas Transmission (FGT) Company tariff rate in \$/MMBTU for Interruptible Transmission Service (ITS-1).
- GRI = then currently approved FGT Company tariff rate in \$/MMBTU for recovery of charges for the Gas Research Institute.
- ACA = then currently approved FGT Company tariff rate in \$/MMBTU for recovery of charges permitted by Section 154.38(d)(6) of the FERC regulations under the Natural Gas Act.
- PPS = then currently approved FGT Company tariff rate in \$/MMBTU for recovery of costs associated with electrical usage used to operate FGT's electrical compressor units.
- TCR = then currently approved FGT Company tariff rate in \$/MMBTU for recovery of costs associated with FGT's obligation to satisfy long term take-or-pay agreements.
- FRC = then currently approved FGT Company tariff rate in \$/MMBTU for recovery of costs associated with the natural gas used to operate FGT's pipeline system.

#### **APPENDIX D**

# METHODOLOGY TO BE USED IN THE CALCULATION OF AVOIDED ENERGY COST SCHEDULE COG-2 APPENDIX D

The methodology Tampa Electric has implemented in order to determine the appropriate avoided energy costs and any payments thereof to be rendered to QFs is consistent with the provisions of Order No. 23625 in Docket No. 891049-EU, issued on October 16, 1990, and with the Amendment of FPSC Rules 25-17.080 et seq, F.A.C.

The avoided energy costs methodology used to determine payments to QFs on an hourly basis is based on the incremental cost of fuel using the average price of replacement fuel purchased in excess of contract minimums and is further described in Exhibit 1. Generally, avoided energy costs are defined to include incremental fuel, identifiable variable operation and maintenance expenses, identifiable variable purchased power costs and an adjustment for line losses reflecting delivery voltage.

Under normal conditions Tampa Electric will have additional generation resources available which can carry its native load and firm interchange sales without the QF's contribution. When this is the case and the QF is present, the incremental fuel portion of the avoided energy cost is equal to the difference between Tampa Electric's production cost at 2 load levels, with and without the QF's contribution.

In those situations where Tampa Electric's available maximum generation resources (not including its minimum spinning reserves) are insufficient to carry its native load and firm interchange sales, in the absence of the QF contribution, Tampa Electric's incremental fuel component of the avoided energy cost will be determined by:

- system lambda if "off-system purchases " are not being made and all available generation has been dispatched; or
- the highest incremental cost of any "off-system purchases" that are being made for native load.

Examples of these situations are found in Exhibits 2 through 5 of this Appendix D.

The As-Available Avoided Energy Cost, as determined by this methodology, is priced at a level not to exceed Tampa Electric's incremental fuel and identifiable variable operating and maintenance (O&M) expenses including the cost of any off-system purchases for native load.

# PARAMETERS FOR DETERMINING AS-AVAILABLE AVOIDED ENERGY COSTS:

Tampa Electric uses production costing methods for determining avoided energy cost payments to QFs. Computerized production costing is accomplished on an hourly basis. The parameters used are as follows:

- 1. The system load is the actual system load at the Hour Ending with the clock hour (HE).
- 2. The first allocation of load for production costing is to those units that are base loaded at a certain level for operating reasons. The remainder of the load is allocated to units available for economic dispatch through the use of incremental cost curves.

- 3. The fuel costs associated with each of Tampa Electric's units operating at its allocated level of generation is determined by using the individual units input/output equation, its heat rate performance factor and the composite price of supplemental fuel.
- 4. Tampa Electric's own production cost for each hour of operation at a particular generation level equals the sum of the individual units' fuel cost for that hour. The production cost, thus determined, consists of the composite price of replacement fuel based on supplemental purchases and the incremental heat rate for the generating system.
- 5. Tampa Electric's total cost equals its own production cost (Paragraph 4 above), identified variable O&M, plus the cost of any off-system purchases to serve native load.
- 6. Native load includes all firm and non-firm retail load.
- 7. The cost of off-system firm and non-firm variable purchases is defined as the highest energy cost energy block purchased for native load during the hour.
- 8. Firm interchange sales are included in production cost calculations.
- 9. Tampa Electric's available maximum generation resources in this methodology is defined as the maximum capacity less spinning reserve requirements.
- 10. The "Standard Tariff Block" is defined to be an x-megawatt (X MW) block equivalent to the combined actual hourly generation delivered to Tampa Electric from all QFs making as-available energy sales to Tampa Electric. In the absence of metered information on exports from a QF making as-available energy sales to Tampa Electric, an estimate of the hourly exports from that Facility will be used, rounded to the nearest 5 MW and then added to the sum of all other known as-available energy purchases for that hour.

**PARAMETERS FOR DETERMINING ENERGY PAYMENT RATES:** Tampa Electric uses production costing methods for determining avoided energy cost payments to QFs. Computerized production costing is accomplished on an hourly basis. The parameters used are as follows:

The lesser of the Unit Energy Payment Rate, as defined in Appendix C, or the As-Available Energy Payment Rate, in ¢/kWh, will apply in each hour. The As-Available Energy Payment Rate is based on Tampa Electric's actual hourly avoided energy costs which are calculated by Tampa Electric in accordance with FPSC Rule 25-17.0825, F.A.C. as described in this Appendix.

**SUPPLEMENTAL FUEL:** The term "supplemental fuel" refers to that fuel purchased in excess of Tampa Electric's long-term contract minimum requirements. As illustrated in Exhibit 1, supplemental fuel can be composed of contract fuel (coal and natural gas) purchases above minimums and fuel purchases on the spot market. When spot prices are lower than prices for minimum quantities on long term contract purchases, spot prices are "supplemental." Under market conditions where spot prices are greater than the price of fuel purchased under contract, it is economical for Tampa Electric to purchase more than the contract minimums. In this instance the supplemental price is a combination of the contract price of fuel above minimum contract requirements and any fuel purchased on the spot market. Tampa Electric looks to the supplemental fuel for purposes of incremental pricing to determine the level of as-available energy payments because contract minimum purchases are a fixed expense.

Supplemental fuel is composed of contract fuel purchases above minimum levels and fuel purchases on the spot market. Tampa Electric pursues the least expensive alternative whether it

be spot purchases or purchases of contract fuel above the contract minimum, or a mixture of both. The supplemental fuel price is calculated by weight averaging all of the supplemental fuel purchases, by fuel type, during the preceding month.

With regard to oil-fired generation, Tampa Electric treats all of its oil purchases as supplemental fuel inasmuch as it has no contract minimums. For graphic portrayal of Tampa Electric's definition of supplemental fuel see Exhibit 1 attached.

### **AVOIDED ENERGY COST CALCULATIONS:**

**Example: 1** Off-system purchases are not being made. Tampa Electric's generation is capable of carrying its native load and firm sales.

The procedure used to deterministically calculate the incremental avoided energy cost associated with as-available energy on an hour by hour basis when no off-system purchases are taking place is as follows:

In these instances, the \$/MWh price that Tampa Electric will pay the QFs is determined by calculating the production cost at two load levels.

The first calculation determines Tampa Electric's production cost without the benefit of cogeneration.

The second calculation determines Tampa Electric's production cost with the benefit of cogeneration.

After each of the two calculations are made, the avoided energy cost rate is calculated by dividing the difference in production cost between the two calculations described above by the "Standard Tariff Block." [The "Standard Tariff Block" is defined to be an X MW block equivalent to the combined actual hourly generation delivered to Tampa Electric from all OFs making as-available energy sales to Tampa Electric. In the absence of metered information on exports from a QF making as-available energy sales to Tampa Electric, an estimate of the hourly exports from that Facility will be used, rounded to the nearest five MWs and then added to the sum of the other as-available purchases for that hour. Prior to the in-service date of the appropriate designated avoided unit, firm energy sales will be equivalent to as-available sales. Beginning with the in-service date of the appropriate Designated Avoided Unit(s), firm energy purchases from QFs shall be treated as "as-available" energy for the purposes of determining the X MW block size only during the periods that the appropriate designated avoided unit would not be operated.] The difference in production costs divided by the X MW block determines the As-Available Energy Payment Rate (AEPR) for the hour. The AEPR will be applied to the "Actual" QF MWs purchased during the hour to determine payment to each QF supplying as-available energy, and each QF supplying firm energy in those instances where the avoided unit would not have been operated during the hour. See Exhibit 2.

**Example 2** Off-system purchases are not being made. Tampa Electric's generation can only carry its native load and firm sales with the QF contribution.

The procedure used to deterministically calculate the incremental avoided energy cost associated with as-available energy on an hour by hour basis whenever Tampa Electric is not purchasing off-system interchange is as follows:

In this instance, the avoided energy cost that Tampa Electric will pay the QFs will be determined by calculating the production cost at the last MW load level. The avoided energy cost is the production cost at system lambda. See Exhibit 3.

In the situation where Tampa Electric's generation is not fully dispatched, and additional generation capability is available to price a portion of the QF block, then the QF block will be priced at a combination of the difference between Tampa Electric's production cost at two load levels as previously defined and at system lambda. See Exhibit 4.

**Example 3** Off-system purchases are being made to serve native load.

The procedure used to deterministically calculate the incremental avoided energy cost associated with as-available energy on an hour by hour basis whenever Tampa Electric is making offsystem purchases for native load is as follows:

In this instance, the \$/MWh price that Tampa Electric will pay is determined by applying the highest incremental cost of the off-system purchases to the QF block. See Exhibit 5.

**DELIVERY VOLTAGE ADJUSTMENT:** A credit for avoided line losses reflecting the voltage at which generation by the QF is received is included in Tampa Electric's procedure for the determination of incremental avoided energy cost associated with as-available energy. Tampa Electric uses the adjustment factors shown on Sheet No. 8.255 for calculating the compensation for avoided line losses at the transmission and distribution system voltage levels based on the appropriate classification of service.

Example: (Firm Standby Time-of-Day)

Actual Incremental Hourly Avoided Energy Cost is: \$14.80/MWh Adjustment Factor for Line Losses: 1.0561

The Actual Incremental Hourly Avoided Energy Cost adjusted for avoided line losses associated with as-available energy provided to Tampa Electric would then become, in this example, \$15.63/MWh.

<u>"IDENTIFIABLE" INCREMENTAL VARIABLE O&M</u>: Tampa Electric's methodology for determining incremental avoided energy costs associated with as-available energy includes a procedure for calculating "identifiable" incremental variable O&M (VOM) expense.

A VOM rate (\$/MWh) is calculated annually for each Tampa Electric generating group. A generating group comprises units of the same type with similar size and operating characteristics (e.g., Big Bend coal units, Bayside CCs, Polk IGCC, all 180 MW CTs, etc.). The VOM rate for

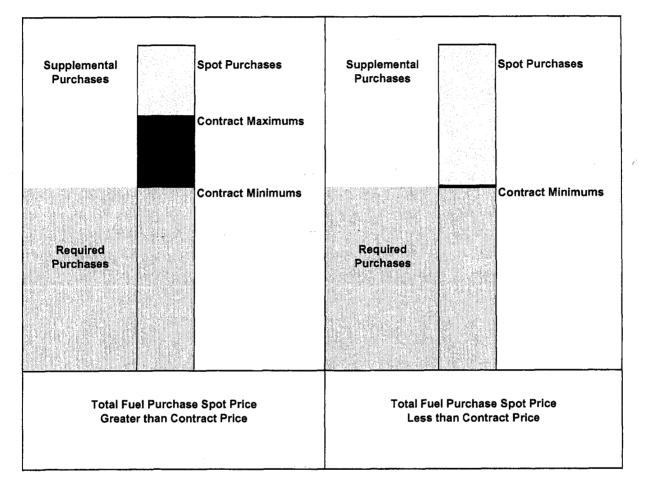
a generating group is calculated by dividing the previous year's identifiable VOM expenses for the group by the previous year's generation in megawatt-hours for the group.

The incremental avoided energy cost associated with as-available energy is adjusted in each hour by the applicable VOM group rate(s) for the generation being avoided in that hour.

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# EXHIBIT 1 (of this APPENDIX D)

# REQUIRED AND SUPPLEMENTAL FUEL PURCHASES UNDER DIFFERENT MARKET CONDITIONS



## EXHIBIT 2 (of this APPENDIX D)

**Example**: Off-system purchases are not being made. Tampa Electric's generation is capable of carrying its native load and firm sales.

Given:

Actual QF Energy = 50 MWs

Tampa Electric's Maximum Available Generation = 1560 MWs

Native Load = 1550 MWs

Firm Sales = 10 MWs

First Calculation (WITHOUT QF):

Production Cost at 1560 MWs = \$20,275/hour

Second Calculation (WITH QF):

Production Cost at 1510 MWs = \$19,500/hour

Third Calculation (QF Rate \$/MWh):

Actual Hourly Avoided Energy Cost =

(\$20,275/hour - \$19,500/hour) / (50 MW)

or

As-Available Energy Payment Rate (AEPR) = \$15.50/MWh

### EXHIBIT 3 (of this APPENDIX D)

**Example**: Off-system purchases are not being made. Tampa Electric's generation can carry its native load and firm sales only with the QF contribution.

Given:

Actual QF Energy = 50 MWs

Tampa Electric's Maximum Available Generation = 1460 MWs

Native Load = 1500 MWs

Firm Sale = 10 MWs

First Calculation:

Production Cost at 1460 MWs = \$18,900/hour

Second Calculation:

Production Cost at 1459 MWs = \$18,882.50/hour

Third Calculation (QF Rate \$/MWh):

Actual Hourly Avoided Energy Cost at 1 MW (system lambda<sup>1</sup>) =

(\$18,900/hour - \$18,882.50/hour) / (1 MW)

or

As-Available Energy Payment Rate (AEPR) = \$17.50/MWh

NOTE 1: In this example, system lambda is the production cost for the last MW segment to meet the load after dispatching all available generation capacity.

### EXHIBIT 4 (of this APPENDIX D)

**Example**: Off-system purchases are not being made to serve native load and firm sales. Available generation capacity is not fully dispatched. Without the QF's contribution, Tampa Electric's native load and firm sales can be carried only with additional power purchases.

Given:

Actual QF Energy = 50 MWs

Tampa Electric's Maximum Available Generation = 1530 MWs

Tampa Electric's Actual Generation = 1500 MWs

Native Load = 1540 MWs

Firm Sale = 10 MWs

Step 1 (Calculations for First 30 MWs)

First Calculation (Without QF):

Production Cost at 1530 MWs = \$20,590/hour

Second Calculation (With QF):

Production Cost at 1500 MWs = \$20,050/hour

Third Calculation:

Actual Hourly Avoided Energy Cost at 30 MWs =

(\$20,590/hour) - (\$20,050/hour) = \$540/hour

Step 2 (Calculations for Remaining 20 MWs)

First Calculation:

Production Cost at 1530 MWs = \$20,590/hour

Second Calculation:

Production Cost at 1529 MWs = \$20,571.50/hour

Third Calculation:

Actual Hourly Avoided Energy Cost at 1 MW (system lambda<sup>1</sup>) for 20 MWs

=(\$20,590/hour - \$20,571.50/hour) X (20 MWs) = \$370/hour

Step 3 (Calculation of Composite Rate for Total 50 MW Block)

Composite Actual Hourly Avoided Energy Cost of 50 MW Block =

(\$540 + \$370) / 50 MW

#### or

As-Available Energy Payment Rate (AEPR) = \$18.20/MWh

NOTE 1: In this example, system lambda is the production cost for the last MW segment to meet the load after dispatching all available generation capacity.

## EXHIBIT 5 (of this APPENDIX D)

**Example**: Off-system purchases are being made. Tampa Electric's native load and firm sales can be carried only with additional purchase power.

Given:

Actual QF Energy = 50 MWs

Tampa Electric's Maximum Available Generation = 1500 MWs

Tampa Electric's Actual Generation = 1500 MWs

Native Load = 1540 MWs

Firm Sales = 20 MWs

Off-System Purchase<sup>1</sup> = 10 MWs Costing 400/hour

Actual Incremental Hourly Avoided Energy Cost = \$400 / 10 MW

or

As-Available Energy Payment Rate (AEPR) = \$40/hour

NOTE 1: Off-System Purchase shall be the highest cost purchased energy block bought during the hour for native load.

EXHIBIT "A"

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P. O. Box 111 Tampa, FL 33601-0111

TOTAL PAYMENT \$ (817,765.65)

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COGENERATION July 2005

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MCKAY BAY REFUSE-TO-ENERGY PROJECT CITY OF TAMPA 4010 W. SPRUCE ST. TAMPA, FL 33607

|                                   |   |          |         |           | 1 |        |                    |                           |          |                  |   |
|-----------------------------------|---|----------|---------|-----------|---|--------|--------------------|---------------------------|----------|------------------|---|
|                                   | MCKAY BAY REFUSE-TO-ENERGY PROJECT<br>CITY OF TAMPA<br>4010 W. SPRUCE ST.<br>TAMPA, FL 33607                        |          |         |           |   |        |                    | COGENERATION<br>July 2005 |          |                  |   |
|                                   | CUSTOMER CHARGE (First Agreement)<br>CUSTOMER CHARGE (2006 Agreement)   |          |         |           |   |        |                    |                           | \$<br>\$ | 280.00<br>280.00 |   |
|                                   | ENERGY PAYMENT  |          |         |           |   |        |                    |                           |          |                  |   |
|                                   | ENERGY PAYMENT (FIRST AGREEMENT)<br>METERED ENERGY MWH<br>METERED ENERGY DOLLARS<br>LINE LOSS ADJUSTMENTS<br>ENERGY |          |         |           |   |        | 10.354             |                           |          |                  |   |
|                                   |   |          |         |           |   |        | 0,507.41)          | )                         |          |                  |   |
|                                   |   |          |         |           |   |        |                    |                           |          |                  |   |
|                                   | 1.056   |          | \$ (270 | 0,507.41) |   | \$ (28 | 5,682.88)          | 1                         |          |                  |   |
|                                   |   | ŧΤ       | \$      | 16.61     | x |        | 15,500             | кw                        | \$ (2    | 257,455.00)      | ) |
|                                   | 12 MO ROLLING AV  | G C.F. % |         |           |   |        | 120.63%            | ı                         |          |                  |   |
|                                   | ENERGY PAYMENT (2006 AGREEMENT)<br>METERED ENERGY MWH<br>METERED ENERGY DOLLARS                                     |          |         |           |   | \$ (25 | 3,590<br>5,418.99) | -                         |          |                  |   |
|                                   | LINE LOSS ADJUSTMENTS<br>ENERGY   |          |         |           |   |        |                    |                           |          |                  |   |
|                                   | 1.0561  |          | \$ (255 | 5,418.99) |   | \$ (26 | 9,748.00)          | I                         |          |                  |   |
|                                   | CAPACITY PAYMEN   | Т        | \$      | 2.00      | х |        | 3,500              | ĸw                        | \$       | (5,880.00)       | ) |
|                                   | MINIMUM PERFORMANCE STANDARD<br>MONTHLY AVAILABILITY FACTOR<br>MONTHLY CAPACITY FACTOR<br>TOTAL ENERGY CREDIT       |          |         |           |   |        |                    | %                         |          |                  |   |
|                                   |   |          |         |           |   |        |                    |                           | \$ (     | 555,430.87)      | ) |
|                                   | PRELIMINARY TOTAL PAYMENT<br>TRUE-UP ADJUSTMENT   |          |         |           |   |        |                    |                           | \$ (1    | 318,485.87)      | ) |
|                                   |   |          |         |           |   |        |                    |                           | \$       | 440.22           |   |
|                                   | TOTAL ADJUSTED PAYMENT  |          |         |           |   |        |                    |                           | \$ (8    | 317,765.65)      | - |
| AVG ENERGY CREDIT PER METERED MWH |   |          |         |           |   | \$     | (39.83)            |                           |          |                  |   |