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March 13, 2007

**BY HAND DELIVERY**

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

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Re: Informational Filing (UNDOCKETED) 070000

Dear Ms. Bayo:

Enclosed are the original and seven (7) copies of Tampa Electric's 2013 Base Load Generation Capacity Request for Proposals ("RFP") issued on February 8, 2007 following a prebid meeting of potential participants on January 29, 2007. A further meeting of potential participants was held on February 21, 2007.

Timely notification of the issuance of the RFP was provided by publishing notices in major newspapers, periodicals and trade publications. In addition, a website, [www.tampaelectric.com/2013rfp](http://www.tampaelectric.com/2013rfp), was established to enable interested parties to have ready easy access to the RFP. Staff has been provided the RFP via this website. Questions and answers with respect to the RFP have been posted on the website. On March 9, 2007 all potential respondents were notified that Tampa Electric has lowered the minimum block size requirement in the RFP from 150 mw to 75 mw and provided a revision to Section 11.E.1. Resource Block Size mw and RFP Range on page 16. The revised RFP was modified on the company's website on March 9, 2007. The RFP document enclosed herein includes the modified page 16.

Responses to the RFP are due by May 8, 2007.

Sincerely,

Lee L. Willis

LLW/bjd  
Enclosure

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This is a printer-friendly format. The navigation and other graphical elements have been removed.

## Welcome to Tampa Electric's 2013 RFP Web site.

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**The following are upcoming activities related to the company's Request for Proposals (RFP):**

**RFP Release:**

March 9, 2007

Please be advised that on March 9, 2007, Tampa Electric lowered the minimum resource block size requirement of its 2013 Base Load Generation Capacity Request for Proposals ("RFP") from 150 MW to 75 MW. The only section that was updated in the RFP document is Section II. E.1. "Resource Block Size (MW) and RFP Capacity Range" on page 16.

The updated RFP is available to interested parties, on this Web site. A potential respondent must register on the site prior to having access to the RFP document.

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**Tampa Electric Company's**  
**2013 Base Load Generation Capacity**  
**Request for Proposals**

February 7, 2007



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### **Appendices:**

**Appendix A** - TEC Ten Year Site Plan for Electrical Generating Facilities and Associated Transmission Lines – January 2006 – December 2015

**Appendix B** – TEC Term Sheet Purchased Power Agreement for Base Load Generation

**Appendix C** - Forms

Forms Instructions

Form 1 – General Information Regarding Proposal

Form 2 – Executive Summary of the Proposal

Form 3 – Financial Information

Form 4 – Operations and Engineering Information

Form 5 – Pricing Information for Purchased Power Agreement or System Sale Proposals

Form 6 – Pricing Information for Sale of a New or an Existing Unit

Form 7 – Environmental & Permitting Information

Form 8 – Key Milestones

Form 9 – Receipt Point(s) to TEC

Form 10 – Respondent Exceptions

Form 11 – Proposal Certification

**Appendix D**- Technical Description of the Planned IGCC Unit



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

### **Section I – RFP Overview**

#### **A. Introduction and Objective**

This section provides an overview or summary of the information contained in this Request for Proposals (“RFP”). Included in this section is a schedule of critical dates for respondents. Much of the detailed RFP information is included in the Appendices of this document.

The overriding objective of this Tampa Electric Company (“TEC”) RFP is to solicit competitive bids to satisfy its projected solid fuel-fired base load capacity requirements and identify viable energy resources that will be compared to TEC’s Planned Base Load Unit (“PBLU”). When the RFP process is completed, it is envisioned that it will result in the addition of solid fuel-fired base load capacity in the approximate amount of six hundred megawatts (600 MW). Such capacity may be obtained, for the benefit of TEC’s customers, through power purchases agreement(s) (“PPA”) and/or a TEC self-build unit.

The RFP will enable TEC to select the most cost-effective combination of base load generating resources that satisfy TEC’s system reliability and performance standards and enhance solid fuel diversity in its system for the benefit of TEC’s customers. TEC prefers proposals that offer solid fuel-fired diversity. Solid fuel diversity refers to additional solid fuel-fired resources that offset the company’s current reliance on natural gas. Fuel diversity discussed in Section II.A.2.

TEC prefers proposals that supply the base load capacity and associated energy from generating resources located within the Florida Reliability Coordinating Council (“FRCC”) region of the North American Electric Reliability Council (“NERC”). All proposals, regardless of origin, must include the appropriate firm transmission service(s) and ancillary services to assure that capacity and associated energy can be delivered to TEC’s transmission system and can be designated as a TEC network resource.

TEC favors alternatives that provide the best value to its customers based on cost, reliability, and flexibility. TEC reserves the right to select a proposal, or proposals, that provide the best value, but which may not necessarily provide the lowest cost. TEC also reserves the right, at its discretion, to cancel, modify or withdraw this RFP, to reject any, and all responses, and to terminate negotiations at any time during this RFP process.

TEC invites proposals from all potential suppliers that are capable of satisfying the conditions of this RFP, including but not limited to other electric utilities, power marketers, exempt wholesale generators, independent power producers, and qualifying facilities (“Respondents”). Respondents that offer non-solid-fuel-fired



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options (e.g. natural gas or oil) must provide fuel price stability and firm fuel deliverability as minimum components of the proposal(s).

The RFP process gives all parties considering projects that can enhance TEC's fuel diversity beginning in 2013 adequate lead-time to develop those projects on a schedule that would allow such projects to be proposed, evaluated and, if selected, constructed and placed in operation in the required time period.

### B. Regulatory Background

TEC has a need for additional solid fuel-fired base load capacity commencing in 2013 and has determined that the most cost-effective TEC self-build option that can provide that additional capacity would require a Determination of Need. TEC recognizes that proposals submitted as alternatives to a self-build option may or may not require a Determination of Need.

### C. RFP Solicitation Schedule

The solicitation schedule will be comprised of the following phases:

<b>RFP Schedule*</b>		
<b>Event</b>	<b>Date</b>	<b>Comments</b>
RFP Pre-Release Meeting/Teleconference	January 31, 2007	Participant information posted on Web site.
Release RFP Solicitation	February 7, 2007	RFP available on Web site.
RFP Bid Workshop	February 21, 2007	Hosted by TEC in Tampa, FL Additional details to be posted on Web site.
Proposal Due Date	May 8, 2007	Proposals must be received by 12:00 Noon ET.
Bidder's Notice in Major Publications	May 18, 2007	Required of each respondent as needed. See Section II. D.2.





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RFP Schedule*		
Event	Date	Comments
Short List Notification	June 8, 2007	All Respondents notified of the status of their proposal. The Respondents selected for the Short List advised to begin work on their Best and Final Offers.
Commence Preliminary Negotiations with Short List Respondents	June 8, 2007	
Best and Final Offers Due	July 9, 2007	
Select Final Proposal(s) and Begin Final Negotiations	July 16, 2007	

\* TEC reserves the right to revise this schedule as necessary. Depending on the number and nature of proposals received, TEC may shorten or extend this RFP Schedule.

#### D. TEC Contact Person

All inquiries or contact about this RFP, including questions of clarification, requests for additional information, and submission of proposals, should be submitted in writing and directed to the TEC Contact Person listed below:

**Jose B. Quintas**  
**Manager Wholesale Contracts**  
Wholesale Marketing and Fuels Department  
Tampa Electric Company  
702 North Franklin Street  
Tampa, Florida 33602  
Telephone number: (813) 228-1344  
Fax number: (813) 228-4922  
E-mail address: [jbquintas@tecoenergy.com](mailto:jbquintas@tecoenergy.com)

Proposals must be received by **12:00 Noon Eastern Time ("ET") on May 8, 2007 (Proposal Due Date)**.



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

A web site, [www.tampaelectric.com/2013rfp](http://www.tampaelectric.com/2013rfp), has been established to provide information regarding the RFP. The web site contains the RFP schedule, a copy of the RFP, contact information and provides the ability for Respondents to submit questions. Questions and answers will be posted to the web site for the benefit of all potential Respondents. The web site will also contain any future updates/changes about the RFP.

### **E. Notices**

It is important that all Respondents to this RFP and all participants in this RFP process clearly understand that, in order to protect the interests of customers, TEC retains the right during the process to: select a combination of proposals, select a proposal or combination of proposals that is not the lowest-priced proposal or combination, waive a non-compliance in any proposal, reject any and all proposals, modify or cancel the RFP, refine the cost and/or performance assumptions of TEC's PBLU and refine TEC's projected need for resource additions. In the event that TEC modifies the cost and/or performance assumptions of TEC's PBLU, those Respondents that have viable and competitive proposals under evaluation at that time we will be given the opportunity to refine their proposals in those aspects that are affected by TEC's modifications.

This RFP is not an offer to enter into a contract. It is a solicitation of exclusive firm offers of fixed duration from Respondents. Nothing in this RFP, or any communication associated with this RFP, shall be taken as constituting an offer or representation between TEC and any other party. Neither issuance of this RFP, nor the entry of TEC into negotiations with any Respondent, will be deemed to create any commitment or obligation on the part of TEC to enter into a binding agreement with any Respondent. Those who submit proposals do so without recourse against TEC, its division, any of its affiliates, or its parent company, for either rejection or their proposal(s) or for failure to execute a purchase agreement for any reason.

### **F. TEC's Planned Base Load Unit ("PBLU")**

TEC desires to add low cost, reliable, base load generating capacity to its system that offers fuel diversity, produces low emissions and is capable of dealing with the potential regulation of greenhouse gases. TEC has experience with a broad range of generating technologies and fuel sources. The company's internal analysis indicates that a solid fuel-fired integrated gasification combined cycle ("IGCC") base load generating unit provides the most prudent and cost effective alternative of generation capacity additions on our system. IGCC has the capability of using reliable, low cost solid fuel such as coal and petroleum coke ("pet coke") efficiently and with low emissions. An IGCC unit can also be operated with a back-up fuel, natural gas,



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which provides additional reliability. Through the RFP process, TEC is willing to consider proposals that can offer the same low cost, reliable and environmentally sensitive generation for the benefit of our customers.

TEC has been selected to receive tax credits under Section 1307 of the Energy Policy Act of 2005 (EPAAct). The EPAAct is part of a comprehensive strategy to further promote the development, demonstration and deployment of emissions-free energy for the nation and, eventually, the world. TEC was awarded tax credits of \$133,500,000 for the Polk Unit 6 IGCC project, which is referred to in this RFP as the PBLU. TEC is in the process of finalizing the closing agreement with the Department of Treasury – Internal Revenue Service that defines the terms and conditions under which the tax credits will be granted.

For additional information on TEC's PBLU refer to Appendices A and D, TEC's 2006 Ten Year Site Plan and detailed information on the proposed Polk Power Station Unit 6.



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### **Section II – RFP Information and Requirements**

#### **A. Issues Influencing System Cost and Reliability**

##### **1. Geographic Location**

System cost-effectiveness and reliability are improved when new generation units are located near the system load center. The ability of a generator to deliver power in, or near, the area of greatest need lowers the cost of delivering that power and provides operational flexibility for the system. TEC's RFP evaluation methodology recognizes the value of geographic location.

##### **2. Fuel Diversity**

TEC seeks to maintain a balance of fuel types for the generating sources on its system as a means to manage the cost impacts of fuel price volatility and maintain fuel supply reliability. By developing a system that utilizes coal, pet coke, natural gas and fuel oil, TEC reduces the impact of market price volatility on the average cost of electricity for its customers. Recent commodity price increases and volatility in natural gas markets demonstrated that despite the low capital cost and emissions benefits associated with natural gas technologies, TEC must continue to pursue diversification of fuel sources.

This RFP specifically focuses on base load generation technology that provides fuel diversity to be compared to TEC's self-build, coal-gasification-based generation alternative. Therefore, TEC encourages proposals that help control exposure of the TEC system to the volatility of the fuel commodity markets.

TEC's RFP evaluation methodology recognizes the value offered by fuel diverse generation options. The unique aspects of such proposals will also be considered in the full context of the proposed offering during the non-economic evaluation of environmental and technical or operational factors. Proposals involving solid fuel-fired generation that cost effectively assist TEC in increasing the fuel diversity of the TEC system are encouraged.

##### **3. Firm Capacity and Associated Firm Energy**

TEC seeks proposals that would allow TEC to meet its firm capacity and associated firm energy requirement in future years. Therefore, proposals will be required to offer the commitment of firm capacity and associated firm energy. TEC considers "Firm Capacity" and "Associated Firm Energy" to mean all electric energy and capacity owned, or acquired, by the Respondent to be made



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available to TEC via firm transmission service pursuant to the RFP on a first call basis and priority, second to no other entity, as if TEC owned the generating capacity on its own system. The resource would have network resource designation for Tampa Electric load. The proposal shall not include any electric generating capacity that another party or entity, including the Respondent, has a priority to utilize that is in any manner superior to that of TEC.

Except for proposals offering system sales, the Firm Capacity and Associated Firm Energy must be fully dispatchable under the operational control of TEC and must include all of the facility output inclusive of ancillary service products. Ensuring that all proposals satisfy such firmness and dispatchability conditions allows TEC to evaluate proposals on an equal basis regarding total costs and reliability benefits.

### B. Respondent Obligations

#### 1. Regulatory Compliance

The Respondent is responsible for acquiring and maintaining compliance with all licenses, permits, and other regulatory approvals (including environmental) that will be required by current or future federal, state, or other local government laws, regulations, or ordinances to successfully implement the proposal. TEC will be a co-applicant in Determination of Need filing and the Site Certification Application for the power plant and associated facilities, as appropriate, whether or not the selected proposal requires new power plant construction falling under the Florida Electrical Power Plant Siting Act ("Siting Act"), Florida Statutes *Section 403.501 et seq.* TEC will cooperate with any selected Respondent(s) to provide information or such other assistance as may reasonably be necessary for the Respondent(s) to satisfy licensing and regulatory requirements. The selected Respondent(s) shall fully support all of TEC's regulatory requirements associated with this potential capacity and energy arrangement. A proposal that requires new power plant construction falling under the Siting Act must demonstrate a permitting and construction schedule that allows the new plant to be in commercial operation on or before the earlier of the Capacity Delivery Date ("CDD") or January 1, 2013. The Respondent's CDD is the date on which the proposed facility, system sale or existing facility begins delivering Firm Capacity and Associated Firm Energy hereunder. See Appendix C that requests, in part, the Respondents permitting and construction schedule information.

#### 2. Development Activities

The Respondent is completely responsible for the location, acquisition, and development of the plant site and other land or infrastructure that is needed for



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new generating units. TEC's Polk Power Station site is not available for site development by Respondents. The Respondent is also completely responsible for securing, locating, or guaranteeing any emissions allowances, credits, or offsets which may be required by the Clean Air Act Amendments, Clean Air Interstate Rule, Clean Air Mercury Rule or other federal, state, or local requirements to allow the construction and operation of the proposed facility. Respondents whose proposals offer the sale of an existing power plant(s) must secure the emission allowances, credits, or approvals necessary to operate the facility and comply with associated regulations until ownership of the facility and the emission allowances, credits, or approvals are transferred to TEC.

### **3. Project Execution**

The Respondent is completely responsible for ensuring that the implementation of any and all parts of the proposal are carried out in full compliance with laws, regulations, ordinances, licenses, permits, and other regulatory approvals, including environmental that affect the proposal. TEC shall not bear any price or cost risk associated with any changes, modifications, or additions to such laws, regulations, ordinances, licenses, permits, and other regulatory approvals, except in accordance with any provision that may be included within the PPA or except in the case of proposals offering the sale of an existing power plant(s) to the extent the contract for conveyance expressly places such risk(s) on TEC upon transfer of ownership of the facility.

### **4. Project Funding and Costs**

The Respondent is completely responsible for all financing activities related to the project and for engineering, design, procurement and construction of all aspects of the facility. These include, but are not limited to, the power block, environmental control systems, fuel delivery systems and transmission system interconnections and integration, etc. The Respondent is also completely responsible for sourcing and contracting for a reliable fuel supply and firm transportation (unless a tolling arrangement is proposed) and any other activity required for the reliable delivery of Firm Capacity and Associated Firm Energy to TEC at the identified delivery or interconnection point. All costs associated with the design, construction, operation, and maintenance of the transmission interconnection facilities (including but not limited to generator step-up transformers and high-voltage breakers) associated with the delivery of Firm Capacity and Associated Firm Energy to TEC will be the responsibility of the Respondent.

### **5. Interconnection and Transmission Service**

The Respondent must secure, with the appropriate transmission service provider(s), all needed transmission facilities and arrangements required to



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interconnect the proposed generating resource(s) to the transmission service provider's transmission system. The Respondent must secure, with the appropriate third-party transmission service provider(s), all needed firm, long-term transmission service(s) and ancillary services to deliver the capacity and energy to the TEC transmission system for the entire term of the proposal. Respondent acknowledges that TEC must be able to request and obtain network resource designation(s) from TEC's transmission function for all proposed power supply resource(s).

### **6. Regulatory Support**

Any selected Respondent(s) agrees by the act of submitting a proposal in response to this RFP to file, as needed, with TEC as co-applicant, an application for Determination of Need and to fully support, as requested by TEC, any TEC regulatory proceeding(s) related to firm capacity purchases and/or sale of an existing power plant(s) emanating from this solicitation. Respondents shall be responsible for all of Respondent's costs to participate in the necessary regulatory proceedings.

### **C. General Instructions for Respondent**

#### **1. Proposal Confidentiality**

TEC will take reasonable precautions and use reasonable efforts to protect proprietary and confidential information contained in a proposal, provided that such information is clearly identified by the Respondent as Proprietary and Confidential on the page(s) on which the information appears.

To clearly identify confidential information, the Respondent must (1) stamp each such page with "Confidential Information" and (2) highlight/shade the confidential information on the pages stamped "Confidential Information." (A blanket statement that an entire page or proposal is proprietary and confidential will not be considered identification.)

Notwithstanding the foregoing, TEC shall disclose Confidential Information in the event that it determines, at its sole discretion, that disclosure is necessary in order to comply with any applicable law, order, regulation, ruling, subpoena, stock exchange rule or order of the Florida Public Service Commission ("FPSC"), Stock Exchange or other governmental authority or tribunal with competent jurisdiction. Such disclosure may include, but is not limited to, production of Confidential Information to the FPSC and to parties in legal and regulatory proceedings conducted to consider and approve the project which is the subject of this RFP.



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In the event that TEC is requested or required to disclose any Confidential Information, TEC will provide prior notice to the entity whose Confidential Information has been requested so that such entity may, if it chooses, seek an appropriate protective order subject to protections available under the Florida Statutes, Florida Administrative Code and Florida Rules of Civil Procedure.

With respect to any disclosure made by TEC pursuant to the foregoing paragraphs, TEC will furnish only that portion of the Confidential Information that TEC determines at its discretion to be consistent with the scope of the subpoena, demand, or request and will seek reasonable assurances that confidential treatment will be accorded such Confidential Information.

### **2. Respondent Exceptions**

TEC will consider proposals that contain exceptions to the general terms and conditions of the RFP. No exceptions to the General Minimum Requirements of Proposals/Bids (Section II.D.) or Specific Minimum Requirements of Proposals/Bids (Section II.E.) will be accepted, except as provided therein. If a Respondent identifies exceptions, the exceptions must be explained in writing as part of the proposal using the attached forms. See Appendix C. For each exception, the Respondent must fully explain in writing the condition, requirement, or facet of the RFP to which the Respondent takes exception and provide the replacement language proposed.

Inclusion of exception information with a proposal will be used to compare proposals to one another and will facilitate negotiations by allowing TEC to evaluate the specific core issues of the exceptions, rather than addressing generic or conceptual comments. TEC reserves the right to request from a Respondent whether, or to what extent, the contemplated rejection of a particular exception would affect the pricing of the proposal.

If a Respondent fails to state exceptions and pose alternative language to the material terms set forth in the RFP, TEC shall assume that a Respondent has no specific objection to such terms and conditions.

### **3. Respondent Questions and Communication**

Respondents are to follow all instructions contained in this RFP and provide all information requested in the RFP and on the forms presented and discussed in Appendix C of this document. Respondents also are expected to provide





## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

supporting documentation, and answer any follow-up questions from TEC, as requested.

Respondents are encouraged to contact the Contact Person designated by TEC with questions to ensure complete and accurate proposals. Following the RFP release date, questions will be recorded. TEC will post questions and answers on a web site, [www.tampaelectric.com/2013rfp](http://www.tampaelectric.com/2013rfp). Questions posed to TEC and the answers to these questions, will be posted for the benefit of all Respondents.

### **D. General Minimum Requirements of Proposals/Bids**

#### **1. Minimum Requirements**

All proposals must satisfy each of the General Minimum Requirements listed below and the Specific Minimum Requirements (Section II. E.) of this RFP. Failure of a proposal to satisfy one or more General or Specific Minimum Requirements will be grounds for determining a proposal ineligible. However, TEC reserves the right to waive non-compliant terms of proposals with the Minimum Requirements.

At a minimum, all Respondents acknowledge and agree to abide by the following General Minimum Requirements:

- a. Respondent must document ownership or contractual rights to the unit, plant or system capacity.
- b. If the Respondent is an entity proposing a capacity sale from existing resources, the Respondent must provide sufficient documentation to demonstrate that, over the term of service, the source utility or entity will have sufficient capacity to sell to TEC as well as to serve its own load and other commitments, if applicable.
- c. The proposal must be for "Firm Capacity and Associated Firm Energy" as defined in Section II.A.3 (above) of this RFP.
- d. All proposals must remain in effect until the purchase is finalized pending all necessary Respondent and TEC transmission service requests.
- e. All generating units providing the proposed capacity must be in commercial operation prior to the commencement date of the proposed term of service. TEC will consider alternatives beyond January 1, 2013, but Respondent must provide proposals as to how Respondent will bridge TEC's need for Firm Capacity and Associated Firm Energy beginning January 1, 2013.



## Tampa Electric Company 2013 Base Load Generation Capacity RFP

- f. Respondent acknowledges that all proposed power supply resource(s) located outside TEC's transmission system must be delivered directly to TEC's transmission system utilizing firm, third-party transmission service(s).
- g. Respondent acknowledges that TEC must be able to request and obtain network resource designation(s) from TEC's transmission function for all proposed power supply resource(s) that are internal to TEC's transmission system.

### 2. Proposal Submission Requirements

All proposals and variations to proposals must be received by May 8, 2007 at 12:00 Noon (ET). Respondents must submit six (6) bound, hard copies, plus an electronic copy of the completed forms on a CD by the Proposal Due Date and Time. The RFP Evaluation Fees must accompany the proposal(s) and any variations. Any proposals or variations to proposals received after the Proposed Due Date will not be evaluated and will be returned to the respondent.

**Forms:** All required forms and the information requested on these forms must be submitted. TEC may choose to contact a Respondent to request that omitted or incomplete information be provided, but is under no obligation to do so. Any attempt by a Respondent to disclaim generally the terms and conditions of this RFP without stating specific exceptions and alternative language will be grounds for determining a proposal to be incomplete, and therefore ineligible.

**Proposed PPA Term Sheet:** Respondents must provide any exceptions to the Proposed PPA term sheet identified in Appendix B.

**Publication Notice:** Respondents must publish a notice in a newspaper of general circulation in each county in which the participant proposes to build an electrical power plant. The notice shall be at least one quarter of a page and shall be published no later than 10 days after the Proposal Due Date. The notice shall state that the participant has submitted a proposal to build an electrical power plant, and shall include the name and address of the participant submitting the proposal, the name and address of the public utility that solicited the proposals, and a general description of the proposed power plant and its location. A copy of the notice, including an affidavit confirming publication, must be submitted to TEC within ten (10) days of publication.



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### **3. Term of the Proposal(s)**

The Firm Capacity and Associated Firm Energy offered by a proposal must commence within the time frame identified in the RFP. The acceptable term lengths for proposals are established recognizing factors that are specific to the source of the proposals.

- a. The minimum term length of any proposal type is ten (10) years; and
- b. The maximum term length of any proposal type is the life of the asset.

### **4. Firm Nature of Proposal(s)**

- a. Proposals must offer year-round Firm Capacity and Associated Firm Energy;
- b. Proposals not consisting of a system sale must be fully dispatchable under the operational control of TEC, subject only to the operating capabilities of the facility;
- c. Proposals not consisting of a system sale must be supported by identifiable units and must commit all of the output of the unit(s), including any ancillary service(s) products; and
- d. The delivery of Firm Capacity and Associated Firm Energy must commence within the required time frame of the RFP and remain as Firm Capacity and Associated Firm Energy throughout the term of the proposed offer.
- e. If the source is external to TEC's transmission system, firm third party transmission must be secured for the duration of the term and TEC must obtain network resource designation from TEC's transmission function.
- f. If the source is internal to TEC's transmission system, TEC must obtain network resource designation from TEC's transmission function.

### **5. Permit and Authorization Feasibility**

The Respondent must demonstrate that there are no significant barriers to obtaining the necessary regulatory and governmental permits and authorizations to execute, implement or operate the proposed project on a schedule that meets the CDD. All proposed projects will be subject to the approval of the appropriate Regulatory Authorities.

### **6. Binding Nature of Proposal(s)**

Proposals must be certified by an authorized Officer of the proposing entity. Proposal(s) must remain as valid and binding offers for one-hundred eighty (180) days from the submittal date and cannot be modified, except to be withdrawn in



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

full, modified in response to a modification of TEC information describing the TEC PBLU, or in response to a request for a Best and Final Offer (“BAFO”) from TEC. Clarifications requested by TEC are not considered modifications. Indicative bids are not eligible.

If a proposal is selected for the Short List, the selected Respondent will be asked to provide a BAFO at that point. Such BAFO must be valid and binding for one-hundred eighty (180) days from the date of Short List notification.

### **7. Identifiable Capacity Resource**

The proposal’s Firm Capacity and Associated Firm Energy must be from one or more specific power plant(s) that is/are clearly identified in the proposal. Exceptions to this requirement will be made for system sales from electric systems that are accountable to the FPSC or similar public authority, have direct control of generation and transmission assets and are members in good standing of the FRCC or all other applicable NERC reliability coordinating council(s). System sales must include a clear explanation of how the capacity is to be obtained and delivered. Proposals for system sales must include the fuel mix of the units that will serve those sales. The proposal must also explain how commitment of such system capacity to TEC will affect the Respondent’s ability to meet the FPSC reserve margin requirements (or the requirements of other state agencies as appropriate).

### **8. Site Development**

For newly built generation, the Respondent shall be responsible for the location, development and permitting of the Respondent’s site for the proposed facility. TEC’s Polk Power Station site is not available for site development by Respondents.

### **9. Minimum Operating Characteristics**

The facility must be able to achieve and sustain generation at the proposed capacity and heat rate while maintaining compliance with all permits and authorizations.



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

### 10. Regulatory Modifications

Respondent must agree that should TEC, at any time during the term of a contract between TEC and the Respondent entered into as a result of this RFP, fail to obtain or is denied the authorization of the FPSC, or the authorization of any other legislative, administrative, judicial or regulatory body which now has, or in the future may have, jurisdiction over TEC's rates and charges, to recover from its customers through the utility's capacity, fuel and purchased power cost recovery clauses absent evidence of fraud, perjury or intentional withholding of key information sufficient to disturb the finality of the approval under governing law all of the payments required to be made to the Respondent, now Seller, under the terms of such a contract or any subsequent amendment hereto, TEC may, at its sole option, adjust the payments made under such contract to the amount(s) which TEC is authorized to recover from its customers. In the event that TEC so adjusts the payments to which the Respondent, now Seller, is entitled under such a contract, then the Respondent, now Seller, may, at its sole option, terminate such a contract upon one hundred eighty (180) days notice to TEC. If such determination of disallowance is ultimately reversed and such payments previously disallowed are found to be recoverable, TEC shall pay all withheld payments. The Respondent, now Seller, acknowledges that any amounts initially received by TEC from its customers, but for which recovery is subsequently disallowed and charged back to TEC, may be offset or credited, against subsequent payments to be made by TEC to the Respondent, now Seller, under such a contract. If, at any time, TEC receives notice that the FPSC or any other legislative, administrative, judicial or regulatory body seeks or will seek to prevent full recovery by TEC from its customers of all payments required to be made under the terms of such a contract or any subsequent amendments to such a contract, then TEC shall, within thirty (30) days of such action, give notice thereof to the Respondent now Seller. TEC shall use reasonable efforts to defend and uphold the validity of such a contract and its right to recover from its customers all payments required to be made by TEC, and will cooperate in any effort by the Respondent, now Seller, to intervene in any proceeding challenging, or to otherwise defend, the validity of such a contract and the right of TEC to recover from its customers all payments to be made by it.

### 11. Regulatory Approvals

A definitive agreement is conditional upon the approval and acceptable purchased power treatment by the FPSC, the Federal Energy Regulatory Commission or any other applicable legislative, administrative, judicial or regulatory body which has jurisdiction. If a power purchase agreement results from this RFP process, such agreement shall not become effective until: (1) the FPSC acknowledges that the



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

purchase described in the power purchase agreement is applicable to the TEC's commitment to maintain the required installed reserve margin; (2) the FPSC grants acceptable clause recovery treatment of the charges to be paid by TEC for such a purchase; and (3) the Parties shall have delivered collateral that meets the requirements of the Security section of this RFP. If the conditions precedent and approvals described in items 1 through 3 above are not achieved and obtained by June 30, 2008, each Party has the right, but not the obligation, to immediately terminate the power purchase agreement upon written notice to the other Party.

### **12. FIN 46(R) Compliance**

Certain accounting rules now in effect, or as they might be amended or interpreted in the future, may require that the Seller be consolidated into the financial statements of TEC. Respondents must submit an analysis, with supporting information as required in Appendix C, evaluating whether or not TEC would be required to consolidate the Seller under the provisions of Financial Accounting Standards Board Interpretation No. 46, (FIN 46(R) revised December 2003). A Respondent who enters into a contract with TEC under this RFP must agree to comply with FIN 46(R).

### **E. Specific Minimum Requirements of Proposals/Bids**

#### **1. Resource Block Size (MW) and RFP Capacity Range**

The minimum resource block size that TEC will consider in a proposal is 75 MW. Exceptions to this minimum requirement will be made for proposals based on Qualifying Facilities.

#### **2. Financial Viability and Security Requirements**

- a. For proposals supported by newly built generation (greenfield, brownfield, turnkey) a Respondent agrees to provide Completion Security and Performance Security as specifically defined in this RFP.
- b. For proposals supported by existing facilities, Respondent must agree to provide the Performance Security as specifically defined in this RFP.
- c. Respondent must certify that there are no pending legal or civil actions that would affect the ability of the Respondent and/or its guarantor to maintain the criteria identified in this RFP.



## Tampa Electric Company 2013 Base Load Generation Capacity RFP

### 3. Proposal/Bid Pricing and Fuel Requirements

A proposal's prices must include any and all costs that TEC will be expected to pay to the Respondent for delivered capacity and energy. This includes without limitation:

- a. The costs of all equipment, development, design, construction, commissioning and all costs of meeting and maintaining compliance with environmental regulations that are in effect as of the CDD, or are known as of the CDD to be in effect.
- b. All required capital and O&M costs that would be incurred to transport fuel from the Fuel Delivery Point to the facility burner-tip for all proposals. This requirement applies to PPAs and asset sales.
- c. If a Respondent offers to provide its own fuel supply, the proposal must also include all costs for the required amount of firm fuel transportation and commodity, meeting the requirements as described in this RFP. The Respondent must also provide evidence of feasibility documenting arrangements that support the aforementioned costs. The proposal must also guarantee such costs and demonstrate credit support for the guarantee that is satisfactory to TEC.
- d. If the proposal is for a plant, the proposal price must include the capital and O&M cost of fuel transportation, delivery and inventory.
- e. Prices for Firm Capacity and Associated Firm Energy purchases, or for projects that initially offer Firm Capacity and Associated Firm Energy purchases prior to sale of a new or an existing power plant to TEC, or for the sale of a new or an existing power plant must be provided on the pricing forms in Appendix C.
- f. The proposal must specify the availability of firm fuel and the availability of firm transportation for such fuel and the transportation provider(s). The proposal must specify if backup fuel is available and describe the logistics requirements for use of backup fuel, if applicable. If the backup fuel is natural gas, the proposal must specify the availability of firm fuel and the availability of firm transportation for such fuel and the transportation provider(s), the pipeline receipt points and any fuel nomination requirements. The proposal must specify any interest in utilizing a portion of TEC's pipeline capacity, if available. The proposal must specify any interest in allowing TEC the ability to toll natural gas or oil to the generating unit(s).

### 4. Proposal/Bid Transmission Requirements

All power proposed to be supplied in response to this RFP is to be delivered directly to TEC's transmission system using firm transmission service. Proposals should include the costs of third-party transmission service(s), ancillary services,



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

and losses to effect delivery of all power to TEC's transmission system. Proposals must also include any costs associated with designating the resource as a network resource for Tampa Electric load. Proposals/bids must include any supplemental, applicable publicly-available transmission data that should be considered in TEC's evaluation of the bid including available transmission capability, the results of transmission studies or independent transmission analyses.

If a proposal/bid is expected to utilize existing transmission capability, the proposal must contain all the background information concerning such transmission capability. See Appendix C for the appropriate forms.

- a. For proposals with generation located outside of the TEC system, TEC will not accept any proposal that requires TEC to secure firm transmission service and any associated rights, as this shall be a responsibility of the Respondent. Proposed prices must include all costs of delivering capacity and energy to the Respondent's designated TEC system receipt point.
- b. For proposals with generation located inside the TEC system (directly connecting to a TEC system receipt point), TEC will coordinate and cooperate with the generation owner, if selected, to obtain the required TEC interconnection and integration/transmission service needed for the transaction, including any associated rights and the reactive capability of the resource.
- c. Transmission interconnection costs to connect the proposed units to the TEC system, or a third party system and the integration costs to deliver the energy to the TEC system receipt point and designate the resource as a network resource, must be included in the proposal price and separately identified in Appendix C.
- d. The costs of energy and capacity losses within TEC's system will be developed by TEC during the economic analysis of candidate portfolios and should not be included in the proposal price.

### **5. Minimum Experience of Respondent**

Any Respondent whose proposal is supported by new construction must have successfully executed the development, permitting, design, procurement, construction, and commissioning of a project similar to that proposed. The operating entity of a proposed facility must have over five years of demonstrated experience in the successful and reliable operation of facilities employing the technology similar to that proposed. The success and reliability of operations may be demonstrated through operational records as requested in Appendix C.





## Tampa Electric Company 2013 Base Load Generation Capacity RFP

### Section III – Evaluation Process

#### A. Evaluation Process

The objective of the RFP is to solicit proposals that allow TEC to assess the best generating alternatives that cost-effectively meet its base load capacity requirement. It is anticipated that TEC will receive a variety of proposals that may vary in length of term, capacity, source, price, fuel and other pertinent characteristics. In addition to the variations that may be presented within individual proposals, there may be a need to combine multiple proposals to develop portfolios that meet the base load capacity requirements. TEC will employ an evaluation methodology that will anticipate responses that offer a wide range of individual characteristics and can evaluate the costs and benefits offered by combining various proposals into unique portfolios of generating alternatives. Therefore, eligible proposals that pass initial screening and individual economic ranking, but do not individually meet the capacity requirement for a given year, will be evaluated in portfolios that match them with other resources to meet the capacity need and the sequence of annual need identified in this solicitation. Ultimately, TEC will identify the best portfolio that cost-effectively meets the RFP capacity requirement. TEC's evaluation methodology, including a detailed description of the criteria to be used to evaluate price and non-price attributes, is described in the following paragraphs

##### 1. Initial Screening

Proposals will be reviewed for compliance with the General and Specific Minimum Requirements set forth in this RFP. Those proposals determined to be eligible will advance in the evaluation. Proposals determined to be ineligible will not be evaluated further.

##### 2. Economic Evaluation of Individual Proposals/Bids

Proposals determined to be eligible will first be ranked by their individual economic impact on the TEC system over the length of the study period. If there are a large number of eligible proposals and a significant difference in economic impact on the TEC system is noted, this analysis may be used to eliminate a portion of the lowest ranked proposals from further evaluation.

##### 3. Creation and Economic Screen of Proposals/Bids

It is anticipated that some of the proposals may need to be combined with other proposals to present portfolios that fully meet the RFP capacity needs. TEC will,



## **Tampa Electric Company 2013 Base Load Generation Capacity RFP**

therefore conduct a portfolio analysis. Load growth will be modeled using the TEC Load Forecast and additional generation will be added to complete the generation plan maintaining the required reserve margin into the future. An estimated system economic cost (presented as the Cumulative Present Value of Revenue Requirements - CPVRR) for each portfolio and associated generation plan will be developed during the portfolio analysis step. This estimated cost will provide a basis for further screening of noncompetitive proposals, if necessary.

### **4. Final Evaluation of Total System Costs**

The top ranking proposals or portfolios emerging from the creation and screening step will undergo a detailed economic evaluation, including estimates developed for system costs specific to each proposal or portfolio and associated generation plan.

The system costs include variable and fixed costs of production for all units, transmission-related costs, fuel-related costs and a net equity adjustment for purchase obligations. The transmission-related costs include transmission interconnection costs, transmission integration costs, TEC transmission reactive requirements and the costs of system energy and capacity losses. The fuel-related costs include all infrastructure upgrades and firm transportation costs necessary to deliver the fuel requirements of the proposal or portfolio. The fixed and variable costs developed for each specific proposal or portfolio and associated generation plan will be combined to represent the full economic evaluation. The results will be compared to the results of other proposal or portfolio and generation plan options.

### **5. Non-Economic Evaluation**

In addition to the economic evaluation, the proposals or portfolios will be evaluated for non-economic factors. In the non-economic evaluation, the proposals will be evaluated individually and in the context of the other proposals in the portfolio as to the environmental, technical/operational, and project execution, non-economic factors. The objective of the evaluation is to develop an understanding of the proposal and identify areas that may warrant further review.

The result of the non-economic evaluation will be a summary report on the risk areas that may be used in conjunction with the results of the economic evaluation to select Finalists.



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### **6. Best and Final Offer Evaluation**

TEC will apply the process above to develop a Short List of proposals that will be the Finalists. TEC will request from the Finalists a BAFO. TEC will evaluate these BAFOs to develop the final economic and non-economic evaluations.

### **7. Final Selection**

The economic and non-economic factors will be presented to a TEC Management Review Team. The Management Review Team will then make a selection based on sound business practices and the best interests of TEC customers.

## **B. Other Respondent Information**

### **1. RFP Evaluation Fee(s)**

In order for a proposal to be evaluated, the complete proposal accompanied by a non-refundable check of \$5,000 made out to "Tampa Electric Company" must be submitted to the RFP Contact Person designated by TEC on or before 12:00 Noon ET on May 8, 2007. If more than one proposal is submitted by a specific Respondent, then a separate, non-refundable \$5,000 fee must accompany each proposal. One proposal consists of a specific combination of a site, technology, fuel source, total capacity level, CDD, term (e.g., 10 years) and pricing submittal. A Respondent may submit one variation of term and/or price related to a specific proposal (a single variation is defined as a change in one or both term and/or price) at no additional cost. A fee of \$5,000 per variation will be required for any further price/term variations. There are no limitations to the number of variations submitted, as long as each additional variation is accompanied by a \$5,000 fee. Changes in site, technology, fuel source, capacity level, or CDD will constitute a separate proposal and require a full evaluation fee. The RFP base evaluation fee and the incremental variation fee are based on the costs expected to be incurred to evaluate the type of proposals solicited in the RFP.

### **2. Power Purchase Agreement**

For each selected power purchase proposal, TEC expects to enter into a pay-for-performance type power purchase agreement. Such power purchase agreement shall be established as a dedicated, stand-alone contract. TEC's requirements under such a contract are included in Appendix B. Respondents must specify any exceptions to this proposed contract.



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### 3. Performance Security Requirements

Tampa Electric will require that the successful Respondent post performance security for assurance that the capacity and energy delivery obligations will be met over the full term of the PPA. The amount of the performance security will be equal to (a) TEC's market exposure, in dollars, if the Respondent defaults under the PPA, as estimated from time to time, less (b) the Respondent's Credit Limit, as set forth in subsection 3.b, which may be revised from time to time. The performance security must be posted upon execution of the PPA.

#### a. TEC's Market Exposure

If the successful Respondent were to default on capacity and energy delivery obligations under the PPA and the PPA is terminated, TEC would need to cover, that is to purchase replacement capacity and energy in the wholesale electric power market over the remaining term of the PPA. Such a default and termination could occur after achievement of the CDD and commencement of deliveries. In addition after new construction, the PPA will establish a series of project milestones, the non-achievement of which would entitle TEC to terminate the PPA earlier in anticipation of failure of timely commencement of deliveries and therefore replacement purchases will need to be obtained. In either case, the positive difference, in dollars, between the costs of cover over the remaining term and the PPA price for capacity and energy over the remaining term represents TEC's market exposure in the event of such a default. This difference would vary over time with changes in the market price for replacement power, and changes in the remaining requirement for replacement capacity and energy. Under the PPA, TEC will estimate from time to time, in good faith, its market exposure in dollars and then subtract the amount of then-estimated Credit Limit of the successful Respondent. If the difference is positive, TEC will require (or revise its requirement of) performance security either in the form of cash collateral or a letter of credit from a qualified issuer, or some combination of the two. In the event of a claim based on non-delivery of Capacity or Energy, the performance security amount would be applied to the claim amount.

Currently TEC does not have forward curve estimates for replacement power costs for the ten-year minimum PPA term, to commence in January 2013. However, based upon available reserve capacity of generating equipment projected to be available in peninsular Florida during the years 2013 and 2014, TEC estimates that the cost of replacement power may be \$175 million per year for full replacement of proposed capacity and energy of under the PPA during just those years. In the case of a default and termination, Tampa Electric would consider building its own base load generation project under



## Tampa Electric Company 2013 Base Load Generation Capacity RFP

certain circumstances as well as making cover power purchases in mitigation of its damages.

### b. Credit Limit

A Credit Limit will be calculated for each Short List Respondent, or Guarantor (an entity which guarantees the obligations of another entity) of Respondent utilizing a credit scoring model. The credit scoring methodology utilized for evaluating a Respondent or its Guarantor at TEC places a heavy emphasis on financial performance. The credit score is comprised of ten qualitative and quantitative factors.

To qualify for a Credit Limit, Respondent or its Guarantor must also demonstrate that it has a Credit Rating (excluding any implied credit rating) of at least Baa3 from Moody's Investors Service ("Moody's") and BBB- from Standard and Poor's ("S&P").

If the Credit Limit has been based upon a Guarantor's credit worthiness, a guaranty for the benefit of TEC will be executed in the form described in the PPA. Performance Security in excess of the Credit Limit must be posted in the form of (1) a Letter of Credit for the benefit of TEC in the form described in the PPA, or (2) Cash in U.S. Dollars deposited with TEC with interest to be paid monthly at the Federal Funds rate.

The Credit Limit may be recalculated and the amount of Performance Security adjusted quarterly based on the Respondent's, or its Guarantor's, most recent financial statements and within five (5) business days of Respondent or Seller becoming aware of any change in the Respondent's, or its Guarantor's, unsecured debt ratings.

If the Respondent, now Seller, desires to replace the Performance Assurance held by TEC with different Performance Assurance of another type that meets the criteria described above (the "Replacement Performance Assurance"), the Respondent, now Seller, shall give reasonable prior written notice to TEC of such desire. Once the Parties determine that the Replacement Performance Assurance meets the criteria described above, the Respondent, now Seller, shall deliver or issue, or cause to be delivered or issued, the Replacement Performance Assurance. Such Replacement Performance Assurance shall satisfy the Respondent's, now Seller's, obligation to provide Performance Assurance and upon the receipt of such Replacement Performance Assurance, TEC shall promptly return or release, or cause the return or release of the Performance Assurance being replaced by the Replacement Performance Assurance.



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### **Section IV – Detailed Technical Description of TEC's PBLU**

#### **A. Background and Specific Need**

Appendix A of this RFP, “Tampa Electric’s Ten-Year Site Plan for Electrical Generating Facilities and Associated Transmission Lines for January 2006 to December 2015” describes the process followed by TEC to determine its need for solid fuel-fired base load generation starting in 2013.

To support this need, TEC desires to add low cost, reliable, base load generating capacity to its system that offers fuel diversity, produces low emissions and is capable of dealing with the potential regulation of greenhouse gases. TEC has experience with a broad range of generating technologies and fuel sources. Our internal analysis indicates that a 630 MW IGCC base load generating unit fueled by bituminous coal and/or pet coke provides the most prudent and cost effective alternative of generation capacity additions on our system. IGCC has the capability of using reliable, low cost solid fuel such as coal and pet coke efficiently and with low emissions. An IGCC unit can also be operated with a back-up fuel, natural gas, which provides additional fuel diversity. Through the RFP process, TEC is willing to consider proposals that can offer the same low cost, reliable and environmentally sensitive generation for the benefit of our customers.

TEC has been selected to receive tax credits under Section 1307 of the EPAct. The EPAct is part of a comprehensive strategy to further promote the development, demonstration and deployment of emissions-free energy for the nation and, eventually, the world. TEC was awarded tax credits of \$133,500,000 for the Polk Unit 6 IGCC project (PBLU). TEC is in the process of finalizing the closing agreement with the Department of Treasury – Internal Revenue Service that defines the terms and conditions under which the tax credits will be granted.

#### **B. Description of the PBLU and its proposed location**

TEC plans to make use of its extensive experience in IGCC technology to construct the PBLU, a second IGCC power plant at Polk Power Station, the site of TEC’s existing IGCC facility. Polk Power Station occupies over 2,800 acres on State Road 37 in Polk County, Florida, approximately 40 miles southeast of Tampa and about 60 miles southwest of Orlando. The PBLU’s feedstock will be bituminous coal with the capability of gasifying up to 80% pet coke. The design will also accommodate up to 5% biomass as part of the feedstock.

TEC will use technology for the PBLU that builds on TEC's experiences with Polk IGCC Unit #1. TEC expects to utilize GE’s gasification and power generation



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<b>Capital Structure</b>	<b>Rate</b>	<b>%</b>
Common Equity	11.75%	48.00%
Debt	7.00%	52.00%
WACC	7.876%	

### **General Assumptions**

Base Year for ESC	2007
Tax Rate	38.575%
Property Tax Rate	2.300%
Esc Rate for Cap Ex	2.5%
Esc Rate for Fixed O&M	3.0%
Esc Rate for Var O&M	3.0%
AFUDC	7.79%
Fuel Esc	Varies
Plant Book Life (yrs)	26
Plant Tax Life (yrs)	15

#### H. Estimate of the annual revenue requirements

The estimated annual Levelized Capital Revenue Requirement, including AFUDC, is \$349,640,000 over 26 years. Note that these values do not include fixed O&M, variable O&M or the benefit of tax credits.

#### I. Estimate of the Annual Economic Value of Deferring Construction

The estimated value of deferral of this unit, in 2007 dollars, is \$145.96/kW-yr.

#### J. Estimate of the Fixed and Variable Operation and Maintenance Expense

See table below:



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### Projected O&M Expenditures

Year	Variable \$/MWH	Fixed \$/kW-yr
2013	0.87	40.87
2014	0.90	42.10
2015	0.92	43.36
2016	0.95	44.66
2017	0.98	46.00
2018	1.01	47.38
2019	1.04	48.80
2020	1.07	50.27
2021	1.10	51.78
2022	1.13	53.33
2023	1.17	54.93
2024	1.20	56.58
2025	1.24	58.27
2026	1.28	60.02
2027	1.31	61.82
2028	1.35	63.68
2029	1.39	65.59
2030	1.44	67.56
2031	1.48	69.58
2032	1.52	71.67
2033	1.57	73.82
2034	1.62	76.03
2035	1.67	78.32
2036	1.71	80.67
2037	1.77	83.09

#### K. Fuel Price Forecast

Tampa Electric has forecasted the price of fuels through 2036.

Natural gas is forecasted for the Henry Hub with adjustments for supply into Florida Gas Transmission, Zone 3 and pipeline transportation costs (fuel, usage and as-available capacity) to arrive at the delivered cost.

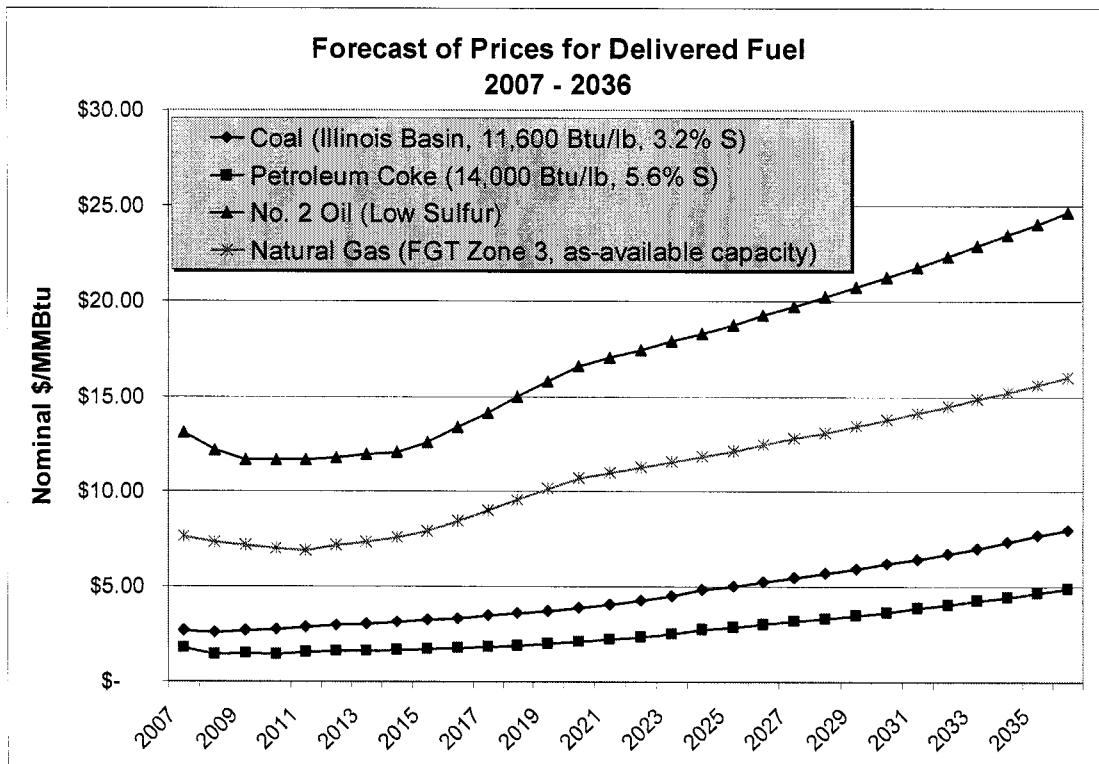




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The coal price forecast shown is for high sulfur coals from the Illinois Basin. Prices are adjusted to account for transportation from the mine location to the final plant location.

Pet coke is forecasted for Gulf Coast supply with transportation adders. The forecast includes current market conditions and long term price expectations.





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	Nominal \$/MMBtu for Fuel Delivered to Tampa Electric			
	Coal	Pet. Coke	No. 2 Oil	NG
<b>2007</b>	\$ 2.66	\$ 1.78	\$ 13.08	\$ 7.63
<b>2008</b>	\$ 2.57	\$ 1.41	\$ 12.16	\$ 7.37
<b>2009</b>	\$ 2.65	\$ 1.47	\$ 11.67	\$ 7.16
<b>2010</b>	\$ 2.72	\$ 1.43	\$ 11.65	\$ 7.00
<b>2011</b>	\$ 2.86	\$ 1.53	\$ 11.67	\$ 6.88
<b>2012</b>	\$ 2.94	\$ 1.57	\$ 11.78	\$ 7.17
<b>2013</b>	\$ 3.01	\$ 1.60	\$ 11.94	\$ 7.36
<b>2014</b>	\$ 3.12	\$ 1.66	\$ 12.06	\$ 7.57
<b>2015</b>	\$ 3.22	\$ 1.71	\$ 12.58	\$ 7.93
<b>2016</b>	\$ 3.33	\$ 1.76	\$ 13.36	\$ 8.40
<b>2017</b>	\$ 3.45	\$ 1.83	\$ 14.15	\$ 8.98
<b>2018</b>	\$ 3.59	\$ 1.91	\$ 14.95	\$ 9.54
<b>2019</b>	\$ 3.73	\$ 1.98	\$ 15.77	\$ 10.13
<b>2020</b>	\$ 3.89	\$ 2.08	\$ 16.59	\$ 10.71
<b>2021</b>	\$ 4.07	\$ 2.20	\$ 17.00	\$ 10.99
<b>2022</b>	\$ 4.27	\$ 2.34	\$ 17.42	\$ 11.27
<b>2023</b>	\$ 4.51	\$ 2.51	\$ 17.86	\$ 11.56
<b>2024</b>	\$ 4.81	\$ 2.75	\$ 18.30	\$ 11.85
<b>2025</b>	\$ 5.00	\$ 2.87	\$ 18.76	\$ 12.15
<b>2026</b>	\$ 5.22	\$ 3.01	\$ 19.23	\$ 12.46
<b>2027</b>	\$ 5.44	\$ 3.17	\$ 19.71	\$ 12.78
<b>2028</b>	\$ 5.68	\$ 3.33	\$ 20.21	\$ 13.10
<b>2029</b>	\$ 5.93	\$ 3.49	\$ 20.71	\$ 13.43
<b>2030</b>	\$ 6.19	\$ 3.67	\$ 21.23	\$ 13.77
<b>2031</b>	\$ 6.46	\$ 3.85	\$ 21.76	\$ 14.12
<b>2032</b>	\$ 6.74	\$ 4.04	\$ 22.31	\$ 14.47
<b>2033</b>	\$ 7.03	\$ 4.24	\$ 22.87	\$ 14.83
<b>2034</b>	\$ 7.34	\$ 4.45	\$ 23.44	\$ 15.21
<b>2035</b>	\$ 7.66	\$ 4.67	\$ 24.04	\$ 15.59
<b>2036</b>	\$ 7.99	\$ 4.90	\$ 24.64	\$ 15.98
<b>AAGR</b>	3.83%	3.60%	1.98%	2.24%

L. Estimate of the Outage Rates, Heat Rate, Minimum Load and Ramp Rates

Planned Outage Hours: See table below;  
 Forced Outage Hours: See table below;  
 Heat Rate at Max Capacity: 9,300 Btu/kWh;  
 Minimum Load: 170 MW;  
 Ramp Rate: 3 MW/min



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### Projected Annual Outages

Year	Planned Hours	Forced Outage Hours
2013	312	220
2014	312	220
2015	816	207
2016	312	220
2017	312	220
2018	816	207
2019	312	220
2020	312	220
2021	816	207
2022	312	220
2023	312	220
2024	816	207
2025	312	220
2026	312	220
2027	816	207
2028	312	220
2029	312	220
2030	816	207
2031	312	220
2032	312	220
2033	816	207
2034	312	220
2035	312	220
2036	816	207
2037	312	220

#### M. Description of the Estimate of the Costs Required for Associated Facilities

- a. Additional Gas Infrastructure: Estimated at \$300,000
- b. Transmission Interconnection and Integration: Estimated at \$100 million.

#### N. Actions to Comply With Environmental Requirements

The following environmental permitting activities are currently in process by TEC for the PBLU.



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Permit	Review/ Approval Agencies	Status/Comments
<ul style="list-style-type: none"> <li>• Florida Electrical Power Plant Siting Act (PPSA)</li> </ul>	FDEP/Affected Agencies/Siting Board	Supplemental site certification application submitted and approved prior to commencing construction of proposed electrical generation and associated facilities.
<ul style="list-style-type: none"> <li>○ PSD air construction permit</li> </ul>	FDEP	The PSD permit application will be reviewed concurrently with the supplemental site certification application process. Separate PSD permit issued 30 to 45 days after issuance of certification by Siting Board (new procedures could modify this step).
<ul style="list-style-type: none"> <li>○ NPDES industrial wastewater treatment permit</li> </ul>	FDEP	The existing NPDES permit will be reviewed concurrently with the supplemental site certification application process. Separate NPDES permit issued 30 to 40 days after issuance of certification by Siting Board (new procedures could modify this step).
<ul style="list-style-type: none"> <li>• Ground water discharge permit</li> </ul>	FDEP	The existing permit will be reviewed and any modifications approved as part of the supplemental site certification application process.
<ul style="list-style-type: none"> <li>• Consumptive water use permit</li> </ul>	SWFWMD	The existing permit will be reviewed and any modifications approved as part of the supplemental site certification application process.
<ul style="list-style-type: none"> <li>○ Section 404 dredge-and-fill permit</li> </ul>	USACE/ FDEP	Will be reviewed concurrently with the supplemental site certification application process. Separate permit issued 30 to 45 days after issuance of certification.
<ul style="list-style-type: none"> <li>○ Section 10 permit</li> </ul>	USACE	Will be reviewed concurrently with the supplemental site certification application process. Separate permit issued 30 to 45 days after issuance of certification.
<ul style="list-style-type: none"> <li>○ Endangered/threatened species review</li> </ul>	USFWS/ FFWCC	Will be reviewed and approved as part of the supplemental site certification application and Section 404 processes.
<ul style="list-style-type: none"> <li>• Section 401 water quality certification</li> </ul>	FDEP	Will be reviewed and approved as part of the supplemental site certification application process.



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Permit	Review/ Approval Agencies	Status/Comments
• Environmental resource permit/storm water management	FDEP	Will be reviewed and approved as part of the supplemental site certification application process.
• Water well construction permit	FDEP	Will be reviewed and approved as part of the supplemental site certification application process.
• Non-transient, non-community water system permit	FDEP	The existing permit will be will be reviewed and any modifications approved as part of the supplemental site certification application process.
• Domestic septic system permit	Polk County	The existing permit will be will be reviewed and any modifications approved as part of the supplemental site certification application process.
• NPDES storm water permit NOI associated with industrial activity	FDEP	The existing permit will be will be reviewed and any modifications approved as part of the supplemental site certification application process.
• Solid waste management facilities permit	FDEP	Will be reviewed and approved as part of the supplemental site certification application process.
Determination of need	FPSC	Needed for new electrical generating facilities subject to PPSA. Required within 150 days after site certification application filed.
○ NPDES general permit NOI for storm water for construction sites	EPA	Will be submitted prior to start of construction
✦ Phase II Title IV acid rain permit	FDEP/EPA	The existing permit will be modified to add the Project. Application required 24 months prior to start of operations.
✦ Title V air emissions operation permit	FDEP	The existing permit will be modified to add the Project. Application required 24 months prior to start of operations.
• Construction dewatering permit	SWFWMD	Required for temporary dewatering activities for construction
✦ Hazardous waste generator registration	EPA/ FDEP	Existing registration, no additional approvals necessary



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Permit	Review/ Approval Agencies	Status/Comments
Notice of construction in navigable aerospace	FAA	Construction of tall exhaust stacks.
✦ Aboveground storage tank (AST) registration	FDEP	Needed for ASTs for petroleum products.
✦ Spill prevention, control, and countermeasure plan	EPA	Existing SPCC plan will be modified as needed.
✦ Facility response plan	EPA/FDEP	Existing FRP will be modified as needed.
• Zoning/local comprehensive plan	Polk County	Already consistent with zoning for Power Plant use.

- Reviewed and approved as part of the PPSA process; required prior to start of construction.
- Reviewed concurrently with the PPSA process with separate permit issued 30 to 45 days after issuance of certification by Siting Board; required prior to start of construction.
- ✦ Not required prior to start of construction.

Note: EPA = U.S. Environmental Protection Agency.  
 FAA = Federal Aviation Administration.  
 FDEP = Florida Department of Environmental Protection.  
 FFWCC = Florida Fish and Wildlife Conservation Commission.  
 FPSC = Florida Public Service Commission.  
 USACE = U.S. Army Corps of Engineers  
 SWFWMD = Southwest Florida Water Management District.



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technologies. For additional technical information on TEC's PBLU refer to Appendix D, "Technical Description of the Planned IGCC Unit".

### **C. Unit Rating**

The PBLU will have a total net name plate generating capacity of 630 MW/489 MVAR. The overall ratings are: 789 MW gross generation, 630 MW net generation at 59 Deg F, 62% RH, 14.7 psia, sea level.

### **D. Estimated in-service date**

The in-service date for the PBLU is planned for January 1, 2013.

### **E. Primary and secondary fuel type**

Primary: Bituminous coal with the capability of gasifying up to 80% pet coke.  
Secondary: Natural gas (Back-up fuel)

### **F. Estimate of the total direct cost**

The total estimated direct cost, in 2007 dollars, is \$1.610 billion. This value is for EPC only and does not include owner's costs, contingencies, benefits of tax credits, and transmission interconnection and integration costs.

### **G. Major Financial Assumptions**

The major financial assumptions used for TEC's evaluation are summarized in the table below: