

ST. PETERSBURG CITY COUNCIL

Consent Agenda

Meeting of February 5, 2009

TO: The Honorable Jeff Danner, Chair, and Members of City Council

SUBJECT: Authorizing the Mayor or his designee to negotiate and execute an agreement between the City of St. Petersburg and Saint Pete Environmental Research Center for the Energy Conversion Project at the City's Southwest Water Reclamation Facility. Authorizing the Mayor or his designee to negotiate and execute an agreement, if necessary, with Progress Energy Florida, Inc. to facilitate the operation of the Energy Conversion Project at the City's Southwest Water Reclamation Facility.

EXPLANATION: This project consists of the design, permitting, construction and operation of a system to utilize waste methane gas from the anaerobic digesters to produce electricity. An anaerobic digestion process is used to stabilize the organic content of the biosolids that are generated in the treatment of wastewater at the Southwest Water Reclamation Facility (SWWRF). A byproduct of the digestion process is a waste gas stream which has a high concentration of methane. The proposed system will use this methane as a fuel source to power microturbines which will produce electricity. Prior to being introduced into the microturbines, the waste gas stream will be scrubbed to remove moisture, hydrogen sulfide and other contaminants which would have a detrimental impact on the microturbines. A portion of the waste heat from the microturbines will be used to heat the digesters to their optimum operating temperature.

On September 18, 2008 a Request for Proposals (RFP) was issued by the Engineering and Capital Improvements Department for qualified firms or individuals interested in designing, permitting, building, owning and operating on a continued basis an Energy Conversion Project at the City's Southwest Water Reclamation Facility. Two firms submitted proposals; SPERC, and Ameresco, Inc. The proposal from Ameresco was subsequently withdrawn by the firm, since their proposal contained confidential process and financial information. On December 08, 2008 the RFP review committee recommended that the City begin contract negotiations with SPERC. Those contract negotiations have begun but are still in the process of being finalized.

The proposed agreements will provide that the Saint Pete Environmental Research Center (SPERC) will design, permit, construct, own, operate, maintain, and finance the system. The City will provide the waste digester gas and a designated site for their equipment to SPERC at no cost. The City will agree to purchase all of the electricity generated from SPERC at a cost of eighty five percent (85%) of the cost of power purchased from Progress Energy Florida, Inc. It is anticipated that the amount of power produced will not be sufficient to meet all of the plant's needs so some electricity will still need to be purchased from Progress Energy Florida, Inc.

The proposed agreement will be for ten (10) years with a ten (10) year renewal option. The equipment is to be located at the SWWRF within an area approximately 80 feet wide by 100 feet long. SPERC, at no cost to the City, will design, permit, construct, own, operate, maintain, and finance all of the facilities necessary to clean the digester gas and convert it to electricity. They will also be responsible for interconnecting into the SWWRF's digester gas piping and electrical systems. Their system will also include the necessary interlocks and safety features to protect the City's facilities as well as Progress Energy Florida, Inc.'s facilities. SPERC will be responsible for compliance with all Federal, State, and local regulations for permitting and operating the renewable energy generation systems.

It is estimated that the City will save approximately \$50,000 to \$60,000 per year in electrical costs. The City will also save approximately \$40,000 per year in reduced natural gas purchases which is currently used to heat the anaerobic digesters. Ownership of energy credits such as renewable energy credits or carbon credits that are developed from the project will be negotiated and addressed in the agreement.

In addition to reducing electrical energy expenses, the project will recover energy that is currently wasted through a gas flare making this a significant "green project". This project supports the energy conservation goals of the Mayor's Green City executive order, by utilizing a locally produced renewable energy source.

Upon final execution of the agreement, SPERC will commence final design and permitting activities. Once design and permitting are complete, they will proceed immediately into construction. The proposed schedule calls for final start-up and testing within four months of the Notice to Proceed. SPERC will provide a Program Manager to manage, monitor, and ensure the success of the project. If at any time the project adversely impacts the operation of the SWWRF, the City may terminate the agreement, and SPERC will remove all of their equipment and restore the site to its original condition. SPERC will be solely responsible for the performance of the system, and the City will not incur any additional risk as a result of the execution of this agreement. SPERC will be required to provide a bond and insurance and to indemnify the City in a form acceptable to the City Attorney.

The Saint Pete Environmental Research Center, Inc. is a relatively new local company. However, the SPERC team has constructed similar projects at the cities of Albert Lea, Minnesota and Sheboygan, Wisconsin. The sole owner of SPERC is Doyle McClendon.

Administration recommends authorizing the negotiation and the execution of an agreement with the Saint Pete Environmental Research Center for the Energy Conversion Project at the Southwest Water Reclamation Facility provided such agreement is consistent with, or has better terms for the City, than those outlined in this memorandum. Administration further recommends authorizing of the negotiating and executing of an agreement, if necessary, with Progress Energy Florida, Inc. to facilitate the operation of the Energy Conversion Project at the City's Southwest Water Reclamation Facility including such indemnification provisions as may be required by Progress Energy Florida, Inc.

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING THE MAYOR OR HIS DESIGNEE TO NEGOTIATE AND EXECUTE AN AGREEMENT BETWEEN THE CITY OF ST. PETERSBURG AND SAINT PETE ENVIRONMENTAL RESEARCH CENTER, INC. FOR THE ENERGY CONVERSION PROJECT AT THE CITY'S SOUTHWEST WATER RECLAMATION FACILITY SUBJECT TO CERTAIN CONDITIONS; AUTHORIZING THE MAYOR OR HIS DESIGNEE TO NEGOTIATE AND EXECUTE AN AGREEMENT, IF NECESSARY, BETWEEN THE CITY OF ST. PETERSBURG AND PROGRESS ENERGY FLORIDA, INC.; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Energy Conservation Project at the Southwest Water Reclamation Facility consists of the design, permitting, construction and operation of a system to utilize waste methane gas from the anaerobic digesters to produce electricity (the "Project"); and

WHEREAS, on September 18, 2008 a Request for Proposals ("RFP") was issued by the Engineering and Capital Improvements Department for qualified firms or individuals interested in designing, permitting, building, owning and operating on a continued basis an Energy Conversion Project at the City's Southwest Water Reclamation Facility. Two firms submitted proposals; St. Pete Environmental Research Center, Inc. ("SPERC"), and Ameresco, Inc. The proposal from Ameresco was subsequently withdrawn by the firm, since their proposal contained confidential process and financial information. On December 08, 2008, the RFP review committee recommended that the City begin contract negotiations with SPERC; and

WHEREAS, the proposed agreement provides that SPERC will design, permit, construct, own, operate, maintain, and finance the Project. The City will provide the waste digester gas and a designated site for their equipment to SPERC at no cost. The City will purchase all of the electricity generated from SPERC at a cost of eighty-five percent (85%) of the cost of power purchased from Progress Energy Florida, Inc.. It is anticipated that the amount of power produced will not be sufficient to meet all of the plant's needs so some electricity will still need to be purchased from Progress Energy Florida, Inc.; and

WHEREAS, the proposed agreement is for ten (10) years with a ten (10) year renewal option; and

WHEREAS, it is estimated that the City will save approximately \$50,000 to \$60,000 per year in electrical costs; and

WHEREAS, this Project supports the energy conservation goals of the Mayor's Green City Executive Order, by utilizing a locally produced renewable energy source; and

WHEREAS, if at any time the Project adversely impacts the operation of the SWWRF, the City may terminate the agreement, and SPERC will remove all of their equipment and restore the site to its original condition; and

WHEREAS, SPERC will be solely responsible for the performance of the Project, and the City will not incur any additional risk as a result of the execution of this agreement; and

WHEREAS, City Council was presented with a memorandum for the City Council meeting of February 5, 2009, outlining the basis for this agreement ("Memorandum").

NOW, THEREFORE, BE IT RESOLVED By the City Council of the City of St. Petersburg, Florida, that the Mayor or his designee is authorized to negotiate and execute an agreement between the City of St. Petersburg and Saint Pete Environmental Research Center, Inc. for the energy conversion project at the City's Southwest Water Reclamation Facility provided such agreement is consistent with, or has better terms for the City, than those outlined in the Memorandum presented to City Council; and

BE IT FURTHER RESOLVED, that the Mayor or his designee is authorized to negotiate and execute an agreement, if necessary, between the City of St. Petersburg and Progress Energy Florida, Inc..

This resolution shall become effective immediately upon its adoption.

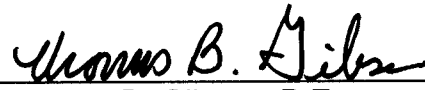
Approved by:



Legal Department

By: (City Attorney or Designee)

Approved by:



Thomas B. Gibson, P.E.

Engineering Director