

TAB 10



City of Palmetto Agenda Item

Meeting Date

8/15/11

Presenter: Allen R. Tusing

Department: Public Works

Title:

Wastewater Treatment Plant upgrades for the Energy Grant

As part of the Energy Grant received by the city we went to RFP to provide upgrades with VFD's and sensor's to help the WWTF operate more effiently and to reduce power consumption. These improvements will reduce the amount of power that the WWTF currently uses thefore reducing operating costs in future years.

We received two proposals which were reviewed by a 5 member committee. The proposals were from Bay Area Electric in the amount of \$343,555.00 and Veolia Water in the amount of \$167,315.00. Both firms could have fulfilled the task; however, Veolia's proposal was far superior and gave examples of similar projects that they had performed. The committee voted unanimously to recommend Veolia Water to the City Commission.

The project will be funded through the Energy Grant in the amount of \$128,007 and the balance from CIP for the WWTF

Budgeted Amount: \$167,315.00 **Budget Page No(s):** **Available Amount:** \$0.00 **Expenditure Amount:** \$167,315

Additional Budgetary Information:

Funding Source(s): **Sufficient Funds Available:** Yes No **Budget Amendment Required:** Yes No **Source:**

City Attorney Reviewed: Yes No N/A **Advisory Board Recommendation:** For Against N/A **Consistent With:** Yes No N/A

Potential Motion/ Direction Requested: Motion to accept the proposal for the Wastewater Treatment Plant Energy Improvements, Project #11-630, to Veolia Water, in an amount not to exceed \$167,315.00 and to authorize the Mayor to execute the construction agreement upon review and approval of the city attorney

Staff Contact: Allen Tusing

Attachments: Request for Proposals Summary Form

ATTACHMENT A GRANT WORK PLAN

competitive bid. The local power utility, Florida Power and Light, projects savings of 20% of the current total building lighting power usage.

D. PROJECT OBJECTIVES:

- **Objective 1:** To reduce power consumption by procuring and installing energy efficient equipment upgrades at the City-owned wastewater collection and treatment facility.
- **Objective 2:** To reduce fossil fuel emissions in transportation, building, and other applicable public and private sectors by developing and implementing an Energy Efficiency and Conservation Strategy.
- **Objective 3:** To reduce power consumption by procuring and installing energy efficient IT server hardware and software.
- **Objective 4:** To reduce power consumption by implementing energy efficiency measures to include retrofits of interior lighting, installation of programmable thermostats and the retrofit of exit signs.

E. **PROJECT DESCRIPTION:** The following tasks will be performed in order to meet the project objective outlined above.

- **Task 1:** Install Variable Frequency Drives (VFD) for Wastewater Treatment Plant (WWTP) Carousel Aeration System, Transfer Pumping, Bardenpho blowers and Lift Station #5

Task 1a: Identify required component characteristics through selected vendor design

Task 1b: Purchase components

Task 1c: Identify and implement continuity and workaround activities required to sustain required level of service during installation outage

Task 1d: Install and test VFD (by vendor)

Task 1e: Acceptance testing and placement into regular service (by City)

- **Task 2:** Development of City-Wide Energy Efficiency and Conservation Strategy (EECS)
 - Task 2a:** Select vendor following the procurement procedures outlined in 10 CFR 600
 - Task 2b:** Consultant will prepare EECS in coordination with City staff
 - Task 2c:** The Grantee will approve EECS
 - Task 2d:** The Grantee implements study with 5-year plan
- **Task 3:** Replacement of IT server hardware and software for energy conservation
 - Task 3a:** Establish server-consolidation requirements for VM system
 - Task 3b:** Select vendor following the procurement procedures outlined in 10 CFR 600
 - Task 3c:** Identify and implement continuity and workaround activities required to sustain required level of service during installation outage
 - Task 3d:** Vendor installation and test validations
 - Task 3e:** Grantee acceptance and entry of system into regular service
- **Task 4:** Retrofit of interior lighting, programmable thermostats and exit signs in primary City-owned buildings
 - Task 4a:** Implementation plans developed based on audit recommendations
 - Task 4b:** Lighting retrofit / fluorescent bulb removal; replacement of existing ballasts and tubes with new ballasts and T8 low-mercury bulbs, Select vendor following the procurement procedures outlined in 10 CFR 600
 - Task 4c:** Exit sign retrofit to LED fixtures: contractor(s) selected by competitive RFP process
 - Task 4d:** Installation of new programmable thermostats: contractor(s) selected by competitive RFP process
 - Task 4e:** Installation completed and tested by contractors under supervision by City

Grant
Scope of
Work →

