

**SANTA BARBARA COUNTY  
BOARD AGENDA LETTER**



Clerk of the Board of Supervisors  
105 E. Anapamu Street, Suite 407  
Santa Barbara, CA 93101  
(805) 568-2240

**Agenda Number:**

**Prepared on:** 11/13/03  
**Department Name:** PW/Laguna Sanitation District  
**Department No.:** 054  
**Agenda Date:** 01/06/2004  
**Placement:** Administrative  
**Estimate Time:**  
**Continued Item:** NO  
**If Yes, date from:**  
**Document File Name:**

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**TO:** Board of Directors  
Laguna County Sanitation District

**FROM:** Phillip M. Demery  
Director, Public Works Department

**STAFF CONTACT:** Mark A. Schelich, Deputy Director  
Martin J. Wilder, District Manager, x8750

**SUBJECT:** Micro Turbine Cogeneration Project - Fourth Supervisorial District

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**Recommendation(s):**

That the Board of Directors:

- A. Approve the project and Notice of Exemption pursuant to the County's California Environmental Quality Act (CEQA) guidelines for the Micro Turbine Cogeneration project; and
- B. Authorize the Public Works Director to negotiate an energy services contract with U.S. Energy Services, Inc. pursuant to Section 4217.10 et. seq. of the California Government Code for the installation of a micro turbine cogeneration system; and

**Alignment with Board Strategic Plan:**

The recommendation(s) are primarily aligned with Goal No. 1, "An Efficient Government Able to Anticipate and Respond Effectively to the Needs of the Community," and Goal No. 2, "A Safe and Healthy Community in Which to Live, Work, and Visit."

**Executive Summary and Discussion:**

The Laguna County Sanitation District wastewater reclamation plant utilizes an anaerobic digester to stabilize sludge by decomposing matter. Methane gas is a product of this process. A small amount of methane is used to burn the boiler (to heat the digester) while the rest is flared. The plant has recently increased its power needs with improvements needed to comply with Regional Water Quality Control Board permit requirements.

In order to more effectively address the increased power needs, the District met with U.S. Energy representatives to investigate the possibility of using the methane gas produced to generate electricity with micro turbines. Their recommendation is utilize two (2) 30kW methane fueled and three (3) 60kW natural gas fueled microturbines to provide approximately 35% of the plant power needs. This equates to an approximate power cost savings of \$187,431 annually. The heat generated from the micro turbines would be used to heat the digester while the existing boiler and flare would be used as a backup heating and gas wasting system. The combination of methane and natural gas microturbines would also provide a failsafe power source during power outages thereby keeping essential facilities in use and would maximize the energy rebate available through the California Public Utilities Commission's (CPUC) Self Generation Incentives Program.

The project cost is estimated at \$795,696 and includes a \$270,000 rebate. The project was presented to the Debt Advisory Committee (DAC) on November 5, 2003. Based on the proposed payback period of less than five (5) years, the DAC recommended financing the project from existing certificates of participation (COPs) at a rate of approximately 2.7% as preferred to outside financing of 3.75%. If COP financing does not come to fruition then the outside financing will be used. The revenue to finance the debt service would come from the savings in electricity costs. U.S. Energy, Inc. further guarantees that the energy savings will cover the total project cost. Upon payment of debt, the savings will help reduce the pressure to increase rates in the future.

**Mandates and Service Levels:**

There are no changes to service levels with this action.

**Fiscal and Facilities Impacts:**

Funding is available through a COP. Budget revision will be prepared when COP proceeds are known. Debt service will be made with existing revenues being redirected from power cost savings.

**Special Instructions:**

Please forward a certified copy of the minute order to the Solid Waste & Utilities Division, attention Sheila Engellenner in Santa Maria, extension 8750.

**Concurrence:**

Debt Advisory Committee (with respect to project financing)  
County Counsel  
Auditor-Controller