



BOARD OF SUPERVISORS  
AGENDA LETTER

Agenda Number:

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

Department Name: PW/Laguna San District  
Department No.: 054  
For Agenda Of: 6/02/09  
Placement: Administrative  
Estimated Time:  
Continued Item: No  
If Yes, date from:  
Vote Required: Majority

0602-17

09-00515

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

**FROM:** Department Scott D. McGolpin, x3010  
Director(s) Public Works Director

JUN 02 2009

Contact Info: Mark A. Schleich, x3600  
Deputy Public Works Director

**SUBJECT:** Authorization to Apply for a Grant from the California Energy Commission to Perform an Energy Audit on the Laguna County Sanitation District Cogeneration System - Fourth Supervisorial District

**County Counsel Concurrence**

As to form: Yes

**Auditor-Controller Concurrence**

As to form: Yes

**Other Concurrence:** N/A

As to form: No

**Recommended Actions:**

Execute the attached resolution authorizing the Public Works Director or his designee to submit a California Energy Commission Technical Assistance Application to perform and energy audit on the Laguna County Sanitation District cogeneration system.

**Summary Text:**

The California Energy Commission (CEC) Energy Partnership Program provides technical assistance to governmental agencies. In this case, the assistance requested is in the form of an energy audit to determine the most efficient means to operate the microturbine cogeneration system. This action authorizes the submittal of an application to the CEC for this work. The result will be instructions on how and when to utilize the natural gas turbines to the benefit of the district in relation to the cost to generate electricity versus the cost to purchase electricity.

**Background:**

In order to reduce electrical costs, the Laguna County Sanitation District installed three 60 kiloWatt (kW) natural gas and two 30 kW digester gas microturbines. The microturbines generate electricity used by the plant to offset electrical needs from PG&E. The cogeneration system has been somewhat successful but soon after commissioning in 2005, the price of natural gas soared such that at low energy use times of the day, it is cheaper to buy electricity from PG&E rather than make it with the natural gas turbines. Natural gas is purchased through the State of California's Department of General Services Natural Gas Services Program (NGS), which provides for bulk rate purchases by pooling purchases statewide.

However, due to commodity market effects, the rate for natural gas can still fluctuate dramatically. The purpose of the proposed energy audit would be to determine the per unit break even point between the natural gas burner tip rate in therms to the electricity rate in kilo Watt hours. Due to the exact efficiencies of the cogeneration system and variable electricity rates throughout the day, actual data is needed to evaluate this break even point between the two units of energy measurement.

In an order to promote energy efficiency, the CEC will provide technical services such as energy audits to public entities through its Energy Partnership Program. This program provides for services in value of up to \$20,000 at no costs to the governmental agency. The proposed energy audit is not anticipated to exceed this amount. The result of will be operational guidelines for running the natural gas system at times and durations when it is cheaper to do so than buying electricity directly from PG&E.

**Performance Measure:**

This action will promote the most efficient means of operating the natural gas turbines.

**Fiscal and Facilities Impacts:**

Budgeted: No

**Fiscal Analysis:**

There are no costs to the district with this action. Funds for the energy audit are through a grant (up to \$20,000) from the California Energy Commission.

**Staffing Impacts:**

**Legal Positions:**

N/A

**FTEs:**

N/A

**Special Instructions:**

Direct the Clerk of the Board to forward one (1) copy of the certified minute order and two (2) certified copies of the executed resolution to the Laguna County Sanitation District in the Public Works Department, attention Martin Wilder; and a certified copy to Mark Schleich in Resource Recovery and Waste Management..

**Attachments:**

Resolution

**Authored by:**

Martin Wilder, Manager, x8755

# California Energy Commission

## Technical Assistance Application

### 1. Applicant Information

Applicant*: Laguna County Sanitation District		County: Santa Barbara	
Mailing Address: 620 West Foster Road (office)		City: Santa Maria	Zip: 93455
Street Address: 3500 Black Road (plant)		City: Santa Maria	Zip: 93455
Contact Person: Martin Wilder	Title: Utilities Manager	Department:	
Phone Number: (805)739-8755	Fax Number: (805)739-8753	Email: mwilder@cosbpw.net	

### 2. Project Description

Type of assistance needed: (Check all that apply)

- ☒ Existing facilities energy audit and recommendations
- ☐ New construction energy efficient design
- ☐ Self generation

Discuss your project(s) and why you require technical assistance.

Evaluate break even cost between using PG&E electricity rates during the day versus cost to generate electricity with natural gas microturbines based on per therm rate from State General Services Dept. Natural Gas Services program.

Describe how you plan to implement the recommendations that we may identify, including funding sources. The data will be used to determine the most efficient microturbine operating time periods, i.e. when is it most cost effective to operate the microturbines?

Describe current contracts or relationships with architects, consultants, energy services companies, utilities or others.

We have a current contract with US Energy and California Power Partners and a purchase arrangement for natural gas through the state from the Southern California Gas Company.

Expected project start date May 2009 Expected project completion date July 2009

Indicate your economic criteria for selecting projects (Check all that apply)

- ☐ Projects must have a payback period < \_\_\_\_\_ years.
- ☐ Projects must have an internal rate of return > \_\_\_\_\_ %.
- ☒ Other, specify Best cost benefit

### 3. Project Team

Title	Name	Phone Number	E-Mail
Project Manager	Martin Wilder	(805) 739-8755	mwilder@cosbpw.net
Business Manager or Financial Officer	Colleen Hankins	(805) 882-3610	chankins@cosbpw.net
Electric and Gas Utility Representative	Steve Spratt	(805) 595-6324	svs3@pge.com

Consultant/Contractor (if known)			
Specify Other			

\*Name of school organization or name of local government, school, college, hospital, special district or public care facility.

**4. Provide the following information.**

Please prioritize from highest to lowest if you are requesting assistance for more than one facility.

Use additional pages if needed.

Facility Name and Address	Year Built (excluding portables)	Estimated Building Size (sq. ft.)
Laguna County Sanitation District Wastewater Reclamation Plant - Microturbine Facility	2005	Skid and pad mounted
Example: Pioneer School 1234 Pioneer Street Capitol, CA 95814	1958	35,200

**5. I have attached the following information:**

- ☐ Governing board resolution
- ☒ Latest 12 months of electric and gas utility bills that show the energy costs and the detailed usage information for each facility account the technical assistance is requested for
- ☐ Any past energy studies for each facility
- ☒ Your site map (e.g., I-As or a fire evacuation map)
- ☐ Annual financial statements (for non-profit organizations only)
- ☐ Schematic drawings (if available, for new construction only)

I certify to the best of my knowledge that the data in this application are correct and complete.

**Authorized Representative\*\***

Name MARTIN WILDER Title UTILITIES MANAGER  
 Signature Martin Wilder Date \_\_\_\_\_

\*\*Authorized Representative is the one designated by the governing body, in your Resolution, to execute documents in the name of the applicant.

Arnold Schwarzenegger  
Governor



**California Energy  
Commission**  
Public Programs Office  
1516 Ninth Street, MS 42  
Sacramento, CA  
95814-5512  
(916) 654-4147

**California Energy  
Commission Chairman**  
*Jackalyne Pfannenstiel*

**Vice Chair**  
*James D. Boyd*

**Commissioners**  
*Arthur H. Rosenfeld*  
*Jeffrey Byron*  
*Karen Douglas*

**Executive  
Director**  
*Melissa Jones*

[www.energy.ca.gov/efficiency/public\\_program](http://www.energy.ca.gov/efficiency/public_program)

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE  
COUNTY OF SANTA BARBARA,  
STATE OF CALIFORNIA  
EX-OFFICIO BOARD OF DIRECTORS OF  
LAGUNA COUNTY SANITATION DISTRICT

IN THE MATTER OF AUTHORIZING AN )  
APPLICATION TO THE CALIFORNIA )  
ENERGY COMMISSION FOR A TECHNICAL )  
ASSISTANCE ENERGY AUDIT FOR THE )  
LAGUNA COUNTY SANITATION DISTRICT )  
COGENERATION SYSTEM )

RESOLUTION NO. \_\_\_\_\_

WHEREAS, the California Energy Commission's Energy Partnership Program provides technical assistance in identifying energy efficiency improvements; and

WHEREAS, the Board of Directors authorizes the Laguna County Sanitation District to apply for technical assistance from the California Energy Commission; and

WHEREAS, the Board of Directors recognizes that the California Energy Commission has limited funds for technical assistance and that primary consideration will be given to those that are committed to implementing the recommended projects identified through the Energy Partnership Program; and

NOW, THEREFORE, BE IT FURTHER RESOLVED, that any of the following officials are authorized and empowered to execute in the name of the Laguna County Sanitation District, all necessary documents to implement and carry out the purposes of this resolution:

the Director, Public Works Department, or

the Deputy Director, or

the Utilities Manager

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**PASSED AND ADOPTED** by the Board of Directors of the Laguna County Sanitation District,  
State of California, this \_\_\_\_\_ day of \_\_\_\_\_, 2009 by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

\_\_\_\_\_  
Joseph Centeno, Chair, Board of Directors  
Laguna County Sanitation District

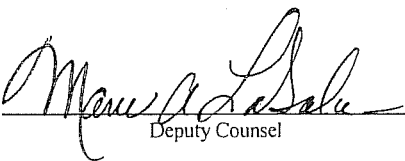
Date: \_\_\_\_\_


ATTEST:  
MICHAEL BROWN  
CLERK OF THE BOARD

By: \_\_\_\_\_  
Deputy

APPROVED AS TO FORM:  
DENNIS A. MARSHALL  
County Counsel

APPROVED AS TO ACCOUNTING FORM:  
ROBERT W. GEIS, CPA  
Auditor-Controller

By:  \_\_\_\_\_  
Deputy Counsel

By:  \_\_\_\_\_  
Deputy