




City of Carson

Report to Mayor and City Council

July 1, 2014
New Business Consent

SUBJECT: CONSIDER SUPPORTING THE SOUTH BAY CITIES COUNCIL OF GOVERNMENTS APPLICATION FOR A GRANT FROM THE CALIFORNIA ENERGY COMMISSION THROUGH THEIR GEOTHERMAL RESOURCES DEVELOPMENT ACCOUNT


Submitted by Nelson Hernandez
City Manager


Approved by Nelson Hernandez
City Manager

I. SUMMARY

The South Bay Cities Council of Governments (SBCCOG), in conjunction with the UC Davis Geothermal Institute, is applying for a grant. The purpose of the grant is to explore the feasibility of producing geothermal energy in the South Bay. SBCCOG seeks letters of support from its members including the City of Carson. Tonight the City Council is requested to review and consider endorsing the draft letter provided by the SBCCOG as Exhibit No. 1.

II. RECOMMENDATION

REQUEST the City Manager direct staff to prepare the letter attached as Exhibit No. 1 for the City Council's signatures.

III. ALTERNATIVES

TAKE another action the City Council deems appropriate.

IV. BACKGROUND

The SBCCOG is focused on improving the environment and promoting sustainable resources in the South Bay. Since 2004, the SBCCOG has operated the South Bay Environmental Services Center promoting energy efficiency and water conservation to their residents, businesses and public agencies.

For that reason, the SBCCOG in partnership with the UC David Geothermal Institue are applying for a grant from the California Energy Commission through their Geothermal Resources Development Account. The purpose of the grant application is to assess the geothermal energy potential in the South Bay. Geothermal energy is thermal energy generated and stored in the Earth. This grant directly aligns with the SBCCOG's mission to work collaboratively in the pursuit of programs and studies directed at improving the environment and preserving natural resources. A fact sheet with more information is attached as Exhibit No. 2.

V. FISCAL IMPACT

None.

VI. EXHIBITS

1. Draft letter of support. (pg. 3)
2. Overview of the Geothermal Grant Opportunity. (pg. 4)

Prepared by: Lisa Berglund, Principal Administrative Analyst

Document 10

TC: Rev05-13-2014

Reviewed by:

City Clerk	City Treasurer
Administrative Services	Public Works
Community Development	Community Services

Action taken by City Council

Date _____ Action _____

June 18, 2014

Jacki Bacharach, Executive Director
South Bay Cities Council of Governments
20285 Western Avenue, Suite 100
Torrance, California 90501

Re: Letter of Support for the Application to the California Energy Commission's Geothermal Resources Development Account (GRDA) for an Assessment of the Geothermal Energy Potential in the South Bay Region (Los Angeles Basin)

Dear Executive Director Bacharach,

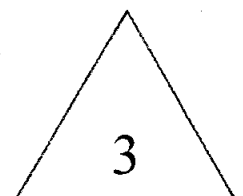
The City of Carson would like to offer our enthusiastic support for the South Bay Cities Council of Governments (SBCCOG) application to the California Energy Commission for a GRDA grant for an Assessment of the Geothermal Energy Potential in the South Bay.

The SBCCOG is focused on improving the environment and promoting sustainable resources in the South Bay and they have a proven track record of success. Since 2004, the SBCCOG has operated the South Bay Environmental Services Center promoting energy efficiency and water conservation to their residents, businesses and public agencies. This GRDA grant will help them determine what role geothermal energy might be able to have in the renewable energy portfolio that they also promote. Through the efforts of the SBCCOG and its Environmental Services Center, public agencies in the South Bay are leading by example in their facilities to make them as sustainable as possible.

This project directly aligns with their mission to work collaboratively in the pursuit of programs and studies directed at improving the environment and preserving natural resources, and we are pleased to submit this letter of support.

Sincerely,

EXHIBIT NO. 1



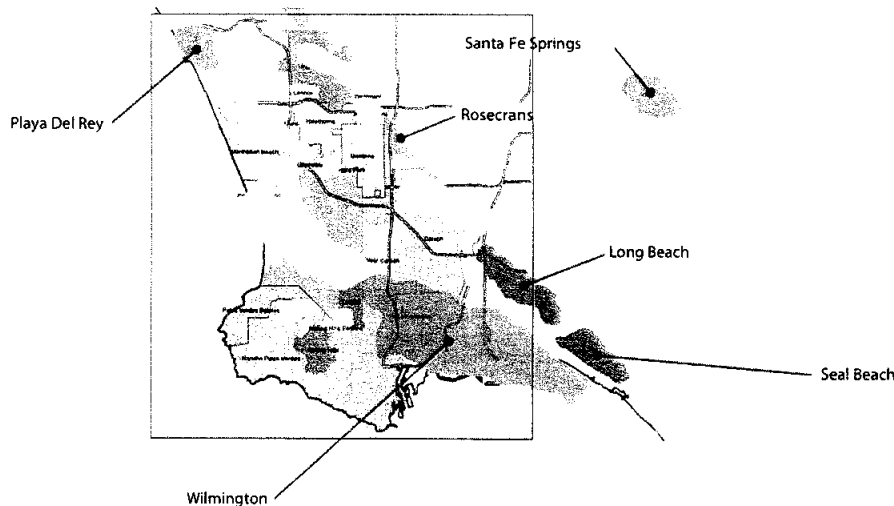
Overview of the Geothermal Grant Opportunity through a Partnership with the South Bay Cities Council of Governments (SBCCOG) and University of California-Davis' California Geothermal Energy Collaborative (CGEC)

The CGEC proposes to collaborate with the SBCCOG to develop a Geothermal¹ Resources Development Account (GRDA) proposal for conducting a geothermal resource assessment and constructing a preliminary use plan for the region. This proposal would leverage the work completed by the CGEC.

The CEC recently released this funding opportunity announcement for GRDA. Proposals are due by July 15, 2014. GRDA funds support grants related to, among other things, assessing geothermal resource potential and development of plans for implementing geothermal uses. Total funding requested would be between \$500,000 and \$1,000,000, which would require a match share of \$100,000 to \$200,000. The match share could be readily obtained via in-kind support through a variety of sources, such as SBCCOG volunteers, graduate student work, and city staff interns.

The California Geothermal Energy Collaborative (CGEC)² has undertaken an assessment of geothermal opportunities within the Greater Los Angeles Basin. This effort, funded by the California Energy Commission (CEC), is focusing on evaluating the energy content of oil fields in this area. Geothermal energy is virtually a zero emissions, renewable energy technology, with its development and use in the South Bay Cities region directly supporting efforts to satisfy the requirements of AB 32³. In addition, the California Loading Order stipulates geothermal energy as one of the renewable energy options of choice for power generation development.

The map below shows the locations of oil fields that were evaluated, superimposed on a map of the South Bay Cities region. Fields in light green have sufficient thermal energy to support direct-use applications (such as district heating systems or industrial applications requiring temperatures up to about 200°F, such as biomass digesters, food processing, aqua culture, drying, etc.). The fields in red and blue contain sufficiently high temperatures to support power generation. Preliminary results of the assessment suggest that the power generation potential is significant, perhaps exceeding hundreds of megawatts (MW).



Additionally, development and use of geothermal energy for direct-use applications has the benefit of displacing natural gas and oil as a fuel for heating applications and space conditioning. Additional benefits of this effort would include student experience and education at high school and college/university levels, and identification of business opportunities that are not currently evident.

¹ Geothermal energy is heat from the Earth, with California producing the vast majority of geothermal energy.

² The CGEC is part of the University of California-Davis' Energy Institute and funded by the Public Interest Energy Research (PIER) program through the California Energy Commission.

³ AB 32 is the California law to reduce greenhouse gas emissions (GHG). Local governments are encouraged to reduce greenhouse gas emissions by 15 percent from current levels by 2020.