County of Monterey

Board of Supervisors
Chambers
168 W. Alisal St., 1st Floor
Salinas, CA 93901

Legislation Details (With Board Report)

File #:	15-0719	**Name:**	Crazy Horse Canyon Renewable Energy
Type:	General Agenda Item	**Status:**	Passed
File created:	6/22/2015	**In control:**	Board of Supervisors
On agenda:	7/7/2015	**Final action:**	7/7/2015

Title: a. Receive a report on an opportunity to partner with Salinas Valley Solid Waste Authority and Ameresco, Inc. for the development and delivery of renewable energy from waste landfill gas through PG&E's Renewable Energy Self-Generation Bill Credit Program; and
b. Approve Memorandum of Understanding with Salinas Valley Solid Waste Authority and Ameresco, Inc. to perform due diligence and negotiate in good faith concerning project agreements, with a $12,500.00 breakage fee if the County and/or Salinas Valley Solid Waste Authority withdraw from the arrangement prior to the execution of final agreements between all parties by September 30, 2015.
(MOU - REF150041/Crazy Horse Landfill Gas Renewable Energy)

Sponsors:

Indexes:

Code sections:

Attachments: 1. Board Report, 2. Attachment A - Memorandum of Understanding, 3. Attachment B - Agreement Flow Chart, 4. Completed Board Order

Date	Ver.	Action By	Action	Result
7/7/2015	1	Board of Supervisors	approved	Pass

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RECOMMENDATION:

a. It is recommended that the Monterey County Board of Supervisors: a) receive a report on an opportunity to partner with Salinas Valley Solid Waste Authority and Ameresco, Inc. for the development and delivery of renewable energy from waste landfill gas through PG&E's Renewable Energy Self-Generation Bill Credit Program;
b. Approve Memorandum of Understanding with Salinas Valley Solid Waste Authority and Ameresco, Inc. to perform due diligence and negotiate in good faith concerning project agreements, with a $12,500.00 breakage fee if the County and/or Salinas Valley Solid Waste Authority withdraw from the arrangement prior to the execution of final agreements between all parties by September 30, 2015.

SUMMARY:

Salinas Valley Solid Waste Authority (d/b/a Salinas Valley Recycles, "SVR") has initiated discussions with County staff to explore a partnership opportunity to capture waste landfill gas at the Crazy Horse Landfill to produce electricity for County-owned facilities. A Memorandum of Understanding ("MOU") between the County, SVR, and Ameresco, Inc. ("Ameresco") has been proposed to further research the viability of this project prior to commitment. The MOU requires that the County and SVR reimburse Ameresco (not-to-exceed $12,500.00 each) for pre-development expenses if either the County and/or SVR withdraw from the arrangement prior to final agreements being executed.

On April 27, 2015, staff presented the proposed opportunity to the Alternative Energy and Environment (AEE) Committee. The Committee directed staff to explore this opportunity further and authorized staff to bring it forward to the Board of Supervisors.

During initial investigation of this opportunity, staff has compiled the following list of benefits and risks relating to the proposed partnership (see Discussion section below for details):

Benefits:

- Approval of MOU allows the County to apply to PG&E for participation in Renewable Energy Self-Generation Bill Credit (RES-BCT) program while also securing the right to the capacity. Additionally, the MOU allows for further study while the final agreements are negotiated and approved between all parties with very minimal up front financial exposure;
- Helps the County achieve its Green House Gas (GHG) emission reductions goals in the 2010 General Plan and subsequently in the Monterey County Municipal Climate Action Plan (adopted November 5, 2013) through the purchase of renewable electricity generated from waste methane gas released from the Crazy Horse Landfill location;
- County receives renewable energy at a predictable and fixed annual escalation rate proposed at 3.5% for approximately 20 years;
- Electricity generated with biogas can be used as a credit against energy consumption at up to 50 electrical meters at County-owned facilities. Potential savings are an estimated $5.6 million in energy costs to the County over the approximately 20-year life of this project (based on estimated 5% average annual PG&E rate escalation);
- Providing a new source of revenue for SVR through landfill gas production royalties estimated to be approximately $3.5 million dollars over the 20-year project life.

Risks:

- If PG&E rates do not escalate at 5% estimated annual rate, projected savings would be reduced below $5.6 million;
- Approving the MOU potentially exposes County to paying $12,500.00 in sunk development costs to Ameresco for initial engineering, application fees, and permit updates if the final agreements are not executed by September 30, 2015;
- Unknown if current biogas production levels will remain at or above full power plant capacity for 20 years. Reduced biogas production could diminish the renewable energy production and lower potential savings to the County over time.

DISCUSSION:
Landfills generate methane gas (Landfill Gas, "LFG") as a result of waste decomposition. Under California law, this gas must be collected and treated to reduce greenhouse gas release into the atmosphere. In California, LFG is considered a renewal biogas resource and is subject to the various credits and benefits that go along with use of this fuel to produce electricity or other alternative fuels.

Renewable energy projects are promoted and encouraged through various programmatic offerings from the state and its registered utilities. One of PG&E's offerings under its Net Energy Metering Program is called the

"Renewable Energy Self-Generation Bill Credit Program" ("RES-BCT"). The RES-BCT program offering is capped at 105 mW of total capacity and no more than 5 mW per project. This is a first-come first-serve opportunity and currently approximately one-quarter of this cap has been utilized and other government agencies are known to be in various stages of preparing application for the remaining capacity. Through the PG&E net metering program, this project would provide lower cost delivery of 100% renewable energy to the County.

As directed in the 2010 General Plan, this project would help the County further its GHG management goals by reducing emissions not only in Monterey County residential, commercial, industrial, and agricultural settings (Policy OS-10.11), but also by reducing emissions associated with County Operations (Policy OS-10.15). By doing so, this project would also help to satisfy requirements in the subsequent Monterey County Municipal Climate Action Plan (adopted November 5, 2013). In order to comply with the requirements for this program, the County must first have control of the project site, implemented through a 20-year property lease agreement with SVR for approximately one acre of land at the Crazy Horse Landfill to accommodate the power generating facilities. The County would in turn sub-lease the property back to Ameresco to develop the project on its behalf. The County would enter into a Power Purchase Agreement ("PPA") with Ameresco to take the energy produced. Ameresco would pay SVR for the landfill gas used to fuel the plant in the form of a percentage share of gross electricity sales and Renewable Energy Credits created by the project. Attached is a flow chart showing the various agreements that would be required and the relationships between the three parties.

This project is anticipated to provide lower cost delivery of 100% renewable energy to County facilities over a 20 year period. The greater the annual projected increase in electric utility rates, the larger the annual savings the project will produce. While there is no guarantee on the projected increase in PG&E electric rates, market projections and historical rates support that electricity pricing has and will continue to escalate on average between 4% and 5% per year. Based on a proposed fixed 3.5% per year annual escalation rate for cost of electricity generated by this project, the County would save between approximately $1.7 million and $5.6 million dollars in electricity costs as compared to utility provided electricity during the project life. In addition, this partnership would generate a new revenue source for SVR based on landfill gas production royalties from the electrical sales to the County and sale of renewable energy credits.

Entering into a MOU with SVR and Ameresco will allow the County to secure possible access to one of the allocations under the RES-BCT capacity cap, while staff continues to conduct its due diligence and study the viability of this project. With this MOU, Ameresco will expend funds for the RES-BCT application, grid interconnection studies and renewal of air quality permits. These actions are required to formally validate the project and its structure prior to executing the various binding agreements. This MOU affirms the intention that the parties perform due diligence and negotiate in good faith concerning definitive project agreements. The MOU requires that the County and SVR reimburse Ameresco (not-to-exceed $12,500.00 each) for pre-development expenses if either the County and/or SVR withdraw from the arrangement prior to final agreements being executed between all parties. Relative to the potential benefit of this project, the financial liability of the MOU is small and is a normal cost of due diligence for projects of this nature.

County Counsel reviewed the draft MOU and provided suggested edits and clarifications to SVR. These changes were reviewed and adopted by SVR and Ameresco.

As part of the County's preliminary due diligence, Public Works-Facilities staff conducted an independent review of the data provided by Ameresco and SVR. Staff compared the Ameresco data against the County's PG&E and AMBAG data (Portfolio Manager available on select County buildings) and determined that the Ameresco electrical consumption worksheets seem to be consistent with information received from PG&E. Staff offered several observations/questions in particular with respect to dialing in the variables (i.e. facilities to be included, rate assumptions) to have a well informed understanding of the range of cost savings and low level of risk anticipated from the program. This requires additional research to fully understand and inform the terms of this partnership prior to entering into final agreements.

Another key issue staff identified during initial due diligence is the need to gain a clear understanding of the costs-benefits, feasibility and risks associated with different energy plant owner-operator arrangements. There are three owner-operator arrangements possible for this type of project: 1) private owned/operated (as proposed with the MOU); 2) public owned/private operated; or 3) public owned/operated. SVR's decision to support option 1 (private ownership and operations) was based on seeking the lowest risk of public funds and resources by shifting responsibilities to the private sector. SVR was also concerned about the ability to train and retain the specialized staffing required to operate such a facility, which is not typical for solid waste agency personnel.

During the MOU period, staff will work with SVR to evaluate the proposed arrangement with Ameresco (private owned/operated) compared to a partnership arrangement between the County and SVR involving public ownership and possible operation of the energy generation plant. Understanding the different arrangements will help solidify the financial sense of the potential LFG partnership agreement between the County and the other two parties.

Implementation of this LFG partnership program would require the County to install some internal tracking measures coupled with annual or quarterly reviews to ensure the program is performing as anticipated and the County is maximizing savings. The Intergovernmental and Legislative Affairs (IGLA) office is in the process of building the Go Green program capacity to support these activities.

San Joaquin County has been under contract with Ameresco for a little over one year to capture and convert LFG from the operational 800 acre, Foothill Sanitary Landfill. On May 13, 2015, staff spoke with the San Joaquin County Solid Waste (SJCSW) Manager for a reference. SJCSW had only positive things to say about the County's partnership with Ameresco, and added that there have never been any discrepancies with regard to credits or reimbursement for the LFG that was being produced at their site. Unlike the proposed partnership with SVR, San Joaquin County is selling the power to Ameresco and receiving a monthly lump sum check rather than obtaining credits against their PG&E bill.

On June 18, 2015 the SVR Board of Directors voted unanimously to approve the MOU.

Staff feels that the partnership with SVR to capture waste LFG at the Crazy Horse Landfill to produce electricity for County-owned facilities could be a viable project with potential long term financial benefits. There are still factors to be considered as discussed above, but staff is confident that during the period covered in the MOU that the research would be able to definitively answer all questions relating to the feasibility of this project.

OTHER AGENCY INVOLVEMENT:
The proposed renewable energy project is a proposed partnership between the County, SVR, and Ameresco. County Counsel reviewed the MOU. The IGLA (CAO) concurs with recommendations.

FINANCING:
The County will have to reimburse Ameresco $12,500.00 for pre-development expenses if either the County and/or SVR withdraw from the arrangement prior to final agreements being executed between all parties by September 30, 2015. If an agreement is not reached according to the MOU terms, the funding to cover the County's $12,500.00 portion of the breakage fee would come from the Intergovernmental and Legislative Affairs (IGLA) budget, as the Go Green activities for the County are to be housed in IGLA.

Given the necessarily short timeline for the proposed project and limited availability of the RES-BCT allocations, thorough due diligence will utilize staff time and resources over the next few months, necessarily detracting some from other work. Any time spent doing research for this project during the MOU phase would be allocated to the staff-specific departments. Staff will also utilize the MOU period to evaluate if a technical resources consultant would be needed and what the cost would be for assistance with the final agreement, given the complex technical nature of a potential LFG partnership agreement, and importance of comparing the cost-benefits and risk of different owner-operator scenarios.

If the MOU phase results in the project moving forward with an agreement, a CEQA analysis will need to be performed.

Prepared by: Melanie Beretti, Special Programs Manager (X5285) with input from Patrick Mathews, Salinas Valley Recycles and Brandon Swanson, Management Analyst III
Reviewed by: Nick Chiulos, Assistant County Administrative Officer
Approved by: John Guertin, Acting Deputy Director Resource Management Agency

The following attachments are on file with the Clerk of the Board:

Attachment A Memorandum of Understanding
Attachment B Agreement Flow Chart