

Agenda Report

October 13, 2008

TO: CITY COUNCIL

FROM: CITY MANAGER

SUBJECT: AUTHORIZATION TO ENTER INTO A CONTRACT WITH AMERESCO, INC. FOR THE PURCHASE OF ENERGY OUTPUT OF THE SKUNK CREEK LANDFILL GAS TO ENERGY PROJECT LOCATED IN PHOENIX, ARIZONA AND ENTER INTO A LONG TERM TRANSMISSION SERVICE AGREEMENT WITH ARIZONA PUBLIC SERVICE CO.

RECOMMENDATION:

It is recommended that the City Council find that the 20-year power purchase agreement (Agreement) with Ameresco, Inc. (Ameresco) is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines Section 15277 (Projects located outside of California).

It is further recommended that the City Council authorize the City Manager to:

1. Enter into a 20-year Power Purchase Agreement with Ameresco for the energy output of the Skunk Creek Landfill Gas Project (Project); and
2. Enter into a Long Term Transmission Service Agreement with the Arizona Public Service Company (APS) for the delivery of the power to Pasadena.

These Contracts are exempt from competitive bidding pursuant to City Charter Section 1002(f), contracts for professional or unique services.

BACKGROUND:

The proposed Agreement is consistent with the City's Urban Environmental Accords and renewable portfolio standard (RPS) goals, and will help Pasadena Water and Power (PWP) reduce its greenhouse gas (GHG) emissions consistent with Assembly Bill 32 and Senate Bill 1368. Preliminary screening results being

conducted for the 2008 Integrated Resource Plan clearly indicate that landfill gas and geothermal resources are the most cost effective generation resources to meet RPS goals and reduce GHG emissions.

The Project will generate an estimated 30,000 MWh per year of renewable energy, representing approximately 2.4% of PWP's forecast FY2011 retail sales, and reduce PWP's annual GHG emissions by approximately 16,500 tons per year.

The following table shows Pasadena's projected RPS progress:

Table 1: Renewable Energy Portfolio Summary (GWh)

FISCAL YEAR	2008	2009	2010	2011
Hoover Hydro	52.7	52.6	55.0	55.0
Azusa Hydro	0.0	5.0	5.0	5.0
Iberdrola (PPM) Wind	16.7	16.6	16.6	16.6
ORMAT Geothermal	13.8	17.5	17.5	17.5
Minnesota Methane Landfill Gas	75.1	74.9	74.9	74.9
Ameresco Landfill Gas – Chiquita Canyon		13.1	52.6	52.6
UPC First Wind		6.4	6.4	6.4
Ameresco Landfill Gas – Skunk Creek ¹				30.0
Short term purchases	10.4	5.7	n/a	n/a
Total Renewable	168.7	191.8	227.9	257.9
Retail Sales	1,219	1,231	1,243	1,256
% Renewable	13.8%	15.6%	18.3%	20.5%
% Renewable w/o Hoover²	9.5%	11.3%	13.9%	16.2%

1) Assumes 7/1/2010 startup date. Actual startup may be later.

2) While not excluded from Pasadena's RPS, large hydro resources such as Hoover do not qualify under California Energy Commission RPS guidelines.

POWER PURCHASE AGREEMENT SUMMARY:

Source: Landfill Gas electric generating facility, to be located at the Skunk Creek Canyon Landfill in Phoenix, Arizona and developed, owned and operated by Ameresco Skunk Creek LLC;

Price: \$78/MWh, escalating at 1% annually for 20 years;

Operation date: On or before December 31, 2010;

Quantity: Approximately 30,000 MWh per year;

Delivery: Delivered unit contingent firm to high side of step up transformers that

interconnect with the APS's Adobe Substation at 12kV. PWP will be required to have an agreement with APS to deliver this to the Westwing Substation from which the power will be transmitted to the CAISO SP15 over PWP's existing transmission entitlements. PWP intends to enter in such agreement with APS prior to the commissioning of the Ameresco project.

CALIFORNIA GREENHOUSE GASES EMISSION PERFORMANCE STANDARDS:

Under Senate Bill 1368, California Energy Commission (CEC) established greenhouse gases Emission Performance Standards (EPS) applicable to publicly-owned utilities entering into five or more years energy purchase contracts with baseload generation plants. The proposed power purchase agreement between PWP and Ameresco has been determined compliant with EPS and is exempt from compliance filing with CEC per Article 1, Chapter 11 of the California Code of Regulation Section 2903 (b) (2) for use of biomass fuel (landfill gas) and Section 2900 as the project is less than 10 MW threshold.

PROJECT SELECTION PROCESS:

PWP has been working jointly with the Southern California Public Power (SCPPA) to acquire long term renewable energy resources since 2002. Thus far, SCPPA has issued four requests for proposals (RFP) for renewable resources. While PWP continues to evaluate a number of project offers pursuant to the last RFP of November 2007, PWP has sought independent bids and negotiated project offers outside of the SCPPA RFP process as well.

In late July, 2008, PWP staff approached some renewable energy companies including Ameresco who had not bid for last SCPPA RFP to seek potential renewable projects suitable for PWP. Ameresco indicated interest in selling energy from the proposed Project. Staff has negotiated power purchase agreement terms and conditions that are competitive with those under consideration in the SCPPA RFP, and therefore recommended entering into the proposed contract.

PROJECT RISKS AND ECONOMICS:

This Project is appropriately sized to meet Pasadena needs and technically feasible (proven technology, transmission availability). To date, PWP has had good experience with the reliability of contracted landfill gas resources. Pasadena will only pay for the energy actually received from the Project, and therefore is not subject to stranded capital investment risk.

There are a few outstanding price/cost risks associated with the Project. Prior to commissioning of the Skunk Creek project, PWP will apply and obtain agreement with APS to transmit the power from this project to Westwing Substation. PWP will be required to pay for capacity and system losses to APS for delivering power at Westwing substation based on their current tariff, the terms of which are not fully known at this time. Finally, as members of the CAISO, PWP would pay for normal settlement charges and fees expected to be less than \$2/MWh. PWP estimates that the delivered cost of energy, including transmission losses and fees, will be less than \$100/MWh.

While competitively priced for a renewable resource, such resources currently command a strong premium to non-renewable market energy sources. Compared to long-term market price forecasts provided by Ventyx Energy LLC (formerly Henwood Energy Services) that Pasadena uses for stranded investment calculations, the Project's delivered energy cost is expected to cost approximately \$550,000 per year more than non-renewable market energy sources, resulting in a system-wide energy rate impact of approximately 0.04 ¢/kwh (4 hundredths of one penny per kWh) during the life of the agreement. This is commonly known as the "premium" paid for the renewable resource.

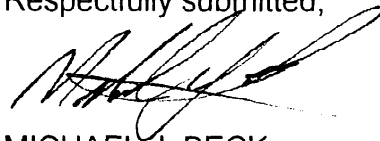
Although the project's price is somewhat higher than forecast energy market prices, its fixed price and low escalation along with environmental benefits will contribute to PWP's rate stability objectives without significant near-term rate impacts.

Renewable energy is an authorized use of Public Benefits Charge (PBC) revenues collected from all customers pursuant to Pasadena's RPS and Assembly Bill 1890 as described in Public Utilities Code Section 385. To the extent such funds become available in the future, Pasadena may opt to offset some or all of the cost premium for this resource by applying revenues from PBC charges.

FISCAL IMPACT:

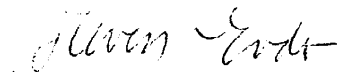
This renewable resource Power Purchase Agreement is expected to cost on average \$550,000 per year more than generic non-renewable spot market power purchases, resulting in a rate premium (spread across all Pasadena customers) of approximately 0.04¢/kwh during the life of the agreement. All costs associated with this Contract will be recovered in the Energy Charge component of Pasadena's electric energy rates.

Respectfully submitted,



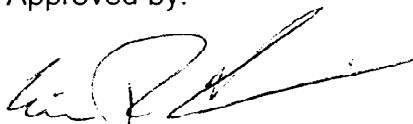
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