TO:       CITY MANAGER
FROM:     DEPARTMENT: UTILITIES
DATE:     AUGUST 8, 2005
SUBJECT:  ADOPTION OF A RESOLUTION OF THE COUNCIL OF THE CITY OF
Palo Alto Approving The Long-Term Power Purchase Agreement (Landfill Gas Power) With Ameresco Keller Canyon, L.L.C. For The Purchase Of Electricity Generated By Landfill Gas Electric Generating Facilities For A Term Of 20 Years And Contract Amount Of $22.8 Million

RECOMMENDATION
Staff recommends Council adopt the attached resolution approving a long-term power purchase agreement with Ameresco Keller Canyon, L.L.C. for a 50% share of the 2.8 to 4.1 MW (gross) capacity of the Keller Canyon landfill generating facility located in Pittsburg, California, which includes the following key elements:
  • Term of the agreement of 20 years.
  • Total contract amount of $22.8 million.
  • The City Manager is authorized to sign the agreement on behalf of the City.
  • Council waives the choice of venue and creditworthiness terms and conditions requirements of Palo Alto Municipal Code Section 2.30.340(c) as they may apply to the award of contract to Ameresco.

BACKGROUND
Investor-owned utilities have a legislated goal, referred to as the “RPS” for “Renewable Portfolio Standard”, of achieving 10% renewables by 2010 and 20% renewables by 2017, with “outs” if the cost is too high. The California Energy Commission and California Public Utilities Commission have adopted a more aggressive goal of 20% by 2010 and 33% by 2020, and the state legislature has made several attempts to adopt these same goals and make them apply to municipal utilities as well as investor-owned utilities. Although large hydroelectric generation is a renewable resource, it is not considered “eligible renewable” for the purposes of the state RPS or for CPAU’s LEAP Guideline #6.
On October 21, 2002, the City Council approved the Long-Term Electric Acquisition Plan (LEAP) Guidelines (CMR:398:02). The Finance Committee reviewed the implementation parameters of LEAP Guideline #6: Renewable Portfolio Investments on October 1, 2002, recommending renewable energy targets of 10% of the City’s annual electric load by 2008 and 20% by 2015, within the system average rate impact limit of \( \frac{1}{2} \) ¢/kWh. The Finance Committee recommendation was approved by Council as part of the overall LEAP Guidelines. On August 4, 2003, Council approved the LEAP Implementation Plan (CMR:354:03), Task #1 of which is to acquire renewable energy resources to meet LEAP Guideline #6.

On January 14, 2004, staff presented the Utilities Renewable Energy Supply Implementation Plan (the Plan) to the Utilities Advisory Commission (UAC). The UAC report, presentation and surrounding discussion summary were provided to Council as information on March 1, 2004 (CMR:168:04). The Plan has two tiers: (1) power purchase agreements for the near term (2005-2008) to meet the 10% renewable investment target by 2008, and (2) exploring new resource development opportunities for the longer term (2009-2015) to meet the 20% renewable investment goal by 2015.

On November 8, 2004, Council approved power purchase agreements for a 20 MW share of wind energy from the PPM High Winds Project in Solano County (CMR:424:04) and a 50% share of the output from a 3.2 MW Ameresco Santa Cruz landfill gas-to-energy project in Watsonville (CMR:461:04). On January 18, 2005, Council approved a contract for 50% of the output from a 6-13 MW Ameresco Half Moon Bay landfill gas-to-energy project (CMR:100:05). Wind energy deliveries began in December 2004. The Santa Cruz landfill project is on schedule to begin operation in December 2005, and the Half Moon Bay project is expected to begin operation by the end of 2006. Together, these three projects, when operational, are expected to meet 9 to 12 percent of Palo Alto’s annual electric energy supply. Palo Alto also receives one percent eligible renewable resources from the small hydroelectric portions of the Calaveras hydroelectric facility and the Western Central Valley Project.

**DISCUSSION**

Staff is recommending that Council adopt a resolution approving the Long-Term Power Purchase Agreement with Ameresco Keller Canyon, LLC. Approval of this agreement will accelerate achieving the renewable investment targets of 20% in 2015 closer to 2010 by bringing the projected total long-term renewable energy supply content to 8-14% by 2007 with an estimated overall retail rate impact between –0.1 and +0.2 ¢/kWh.

The contract was developed in cooperation with NCPA and Alameda Power & Telecom (APT). APT is purchasing the remaining 50% share of the output from the facility. NCPA will serve as the scheduling coordinator, managing the day-to-day balancing activities within the NCPA pool, verifying deliveries, monitoring supplier compliance with contractual obligations, and managing invoicing and payment.
A copy of the contract is attached for Council and available to the public on file with the City Clerk. The key terms of the contract are as follows:

- **Term**: 20 years, with deliveries commencing when construction is completed and the facility is operational. The Keller Canyon facility is expected to be operational by December 2007.

- **Quantity**: 50% of the output from the facility. Keller Canyon will have a gross capacity of 2.8 to 4.1 MW, (2.6 to 3.8 MW net), with expected annual generation of 20,600 to 30,200 MWh (10,300 – 15,100 MWh to Palo Alto, approximately one percent of the City’s annual load). The contract includes the right to purchase the output from additions to the facility at a price determined at the time that additions are proposed, and the option for Palo Alto and Alameda to assign each other their respective shares of the contract. Any such amendments would be subject to Council approval.

- **Product**: Electric generation from landfill gas (LFG) operates around the clock, except for scheduled and unplanned equipment outages.

- **Price**: $59.00/MWh in the first year, escalating at 1.5% per year, for a total contract amount of $22,800,000, based on estimated generation. The price in year 20 is $78.29/MWh.

- **Credit**: Ameresco, Inc. is a small company relative to the large investment-grade energy companies and does not have a credit rating from Moody’s or Standard and Poor’s. Energy deliveries are tied to a specific generator and specific location, as opposed to market contracts whose deliveries are often backed by a company’s financial strength or collateral rather than a physical asset. The contract includes minimum equipment availability requirements and provisions to allow Palo Alto or APT to operate the facility should the facility stop operating. Staff recommends that Council waive the investment-grade credit rating requirement otherwise applicable to electric power contracts.

- **Off-Ramps**: One party may terminate the contract if the other party does not meet its obligations under the contract, which include meeting performance, payment, permitting, construction, and operation date milestones. The contract includes penalty payments for late completion of the project. Should the contract be terminated due to default, any damages that may be incurred, such as landfill gas energy replacement cost, are only due to the non-defaulting party.

Other customers of Ameresco, Inc. include BMW (South Carolina), Chicopee Electric Light (Massachusetts), and the Southern California Public Power Association (SCPPA).

**RESOURCE IMPACT**
The estimated annual cost is $985,000 in the first year, rising to $1,308,000 in year 20. These costs have been factored into long-term budget projections, and will be included in future budget year proposals. Annual costs may fluctuate slightly due to the as-delivered nature of a generator-specific purchase, but is expected to be within 5% of the estimated cost. The 20-year price
schedule is $59/MWh escalating at 1.5% per year, which is roughly equivalent to the current projected prices for base load electricity, meaning that there is essentially no significant rate premium above market prices.

**POLICY IMPLICATIONS**
The proposed contract is a key element of the Utilities Renewable Energy Supply Implementation Plan (CMR:168:04), and supports the Council-approved Utilities Strategic Plan (CMR 432:02) and Utilities Strategic Implementation Plan (CMR:223:01).

Renewable energy supplies are required to meet the targets established by Council in LEAP Guideline #6 (Renewable Portfolio Investments) and also support LEAP Guideline #2 (Hydro Risk Management) and #3 (Market Risk Management) by diversifying Palo Alto’s resources.

- **LEAP Guideline #6: Renewable Portfolio Investments:** The City shall continue to offer a renewable resource-based retail rate for all customers who want to voluntarily select an increased content of renewable energy. In addition to the voluntary program, the City shall invest in new renewable resources to meet the City’s sustainability goals while ensuring that the retail rate impact does not exceed 0.5¢/kWh on average. Pursue a target level of new renewable purchases of ten percent of the expected portfolio load by 2008 and move to a twenty percent target by 2015, contingent on economic viability. The contracts for investment in renewable resources are not to exceed 30 years in term.

Implementing LEAP Renewable Portfolio Investments also supports City’s Sustainability Policy Statement, adopted April 2, 2001 (CMR 175:01), the Green Government Pledge, adopted July 19, 1999 (CMR 284:99) and elements of the Comprehensive Plan, specifically:

1. **GOAL N-9:** A clean, efficient, competitively-priced energy supply that makes use of cost-effective renewable resources, and Policies
2. **POLICY N-44:** Maintain Palo Alto’s long-term supply of electricity and natural gas while addressing environmental and economic concerns.
3. **POLICY N-48:** Encourage the appropriate use of alternative energy technologies.

**ENVIRONMENTAL REVIEW**
Execution of the Agreement does not constitute a project for the purposes of the California Environmental Quality Act (CEQA). Contra Costa County is the lead agency for the Keller Canyon facility, but the City is not a responsible agency, because it currently lacks any responsibility for carrying out or approving the construction of the facility.

**ATTACHMENTS**

A: Resolution approving a contract with Ameresco Keller Canyon, L.L.C. to purchase electricity generated by landfill gas from the Keller Canyon Landfill generating facility.
B: Long-term power purchase agreement (landfill gas electric power) made between the City of Palo Alto, as Purchaser and Ameresco Keller Canyon, L.L.C. Attachment B is included as an attachment in Council member packets and available for review by the public in the City Clerk’s Office.

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