TO:  HONORABLE CITY COUNCIL
FROM:  CITY MANAGER            DEPARTMENT: UTILITIES
DATE:  JANUARY 18, 2005                                                            CMR:100:05
SUBJECT:  ADOPTION OF A RESOLUTION OF THE COUNCIL OF THE CITY OF PALO ALTO APPROVING LONG-TERM POWER PURCHASE AGREEMENTS (LANDFILL GAS POWER) WITH AMERESCO HALF MOON BAY, 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 $61.8 MILLION

RECOMMENDATION
Staff recommends Council:

• Adopt the attached Resolution and authorize the City Manager to sign a Long-Term Power Purchase Agreement with Ameresco Half Moon Bay, L.L.C. for a 50 percent share of the proposed 13.4 MW (gross) capacity of the Ox Mountain Landfill generating facility located in Half Moon Bay, California, for a term of 20 years, and a total contract amount of $61.8 million.

• Waive 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
On October 21, 2002, the City Council approved the Long-Term Electric Acquisition Plan (LEAP) Guidelines (CMR:398:02). On October 1, 2002, the Finance Committee reviewed the implementation parameters of LEAP Guideline #6: Renewable Portfolio Investments, and recommended renewable energy targets of ten percent of the City’s annual electric load by 2008 and twenty percent by 2015, within the system average rate impact limit of ½ ¢/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 (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 (PPAs) for the near term (2005-2008) to meet the 10 percent renewable investment target by 2008, and (2) exploring new resource development opportunities for the longer term (2009-2015) to meet the twenty percent renewable investment goal by 2015. Resources being pursued for the near term are 20 MW of wind energy from Solano County with deliveries beginning in December 2004 (CMR:425:04); and 3-10 MW of electricity from landfill gas from various locations in and around the Bay Area, with deliveries expected to ramp up from 2006 to 2007. The proposed projects were selected by means of the NCPA Renewable Energy RFP, described in detail in the previous staff reports. On March 15, 2004, (CMR:174:04) Council approved Second Phase and Third Phase Member Agreements with Northern California Power Association to facilitate completing renewable energy supply contracts with three vendors. The proposed contract is the result of those efforts, implementing Tier 1 of the Renewable Energy Supply Implementation Plan.

Staff provided a progress report to Council in August 2004 (CMR: 370:04), which included a UAC Report from July 2004 that describes the basic tenets of the renewable energy contracts. Council approved the first two renewable energy contracts for wind (CMR:424:04) and landfill gas energy (CMR:461:04) on November 8, 2004, together expected to meet approximately seven percent of the City’s annual electric load.

DISCUSSION
Staff is recommending that Council adopt a Resolution approving the Long-Term Power Purchase Agreement with Ameresco Ox Mountain Energy, LLC. for a 50 percent share of the proposed 13.4 MW (gross) capacity of the Ox Mountain landfill generating facility located in Half Moon Bay, California. The term of the agreement is 20 years. The total contact amount is $61.8 million.

The contract was developed in cooperation with NCPA and Alameda Power & Telecom (APT). APT is purchasing the remaining 50 percent 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. Negotiations are being completed for potential additional renewable energy resources, and staff expects to bring the resulting contracts to Council for approval to meet these goals as they are completed.

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 Ox Mountain facility is expected to be operational in August 2007.

• **Quantity:** 50 percent of the output from the facility. The initial design capacity of the Ox Mountain facility is 13.4 MW gross (12.6 MW net), with expected annual generation of 106,650 MWh (51,325 MWh to Palo Alto, approximately five percent of the City’s annual load). The final installed capacity may be lower than the initial design capacity, depending on air permit and electrical interconnection requirements. The final installed capacity may be as low as 5.7 MW gross (5.3 MW net), which would result in annual generation of 43,200 MWh (21,600 to Palo Alto, approximately 2 percent of the City’s annual load). The contract includes a right to purchase the output from additions to the facility at a price to be determined at the time that additions are proposed, and the option for Palo Alto and Alameda to assign one’s share of the contract to the other. Any such amendments would be subject to Council approval.

• **Product:** Electric generation from landfill gas operates around the clock, except for scheduled and unplanned equipment outages. NCPA will serve as scheduling coordinator for the facility.

• **Price:** $52/MWh in the first year, escalating at 1.5 percent per year. The price in year 20 is $69/MWh. The total contract amount is $61,714,563 based on estimated generation at 13.4 MW gross initial capacity, and $25,959,300 based on the 5.7 MW minimum final installed gross capacity.

• **Credit and Performance:** 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 City receives a discount if the generating equipment availability falls below acceptable levels, and the contract includes provisions to allow Palo Alto or Alameda to step in to operate the facility if necessary. The City will monitor Ameresco’s quarterly and annual financial statements throughout the duration of the contract. Staff consequently recommends that Council waive the investment-grade credit rating requirement otherwise applicable to electric power contracts.

• **Off-Ramps:** Either party may terminate the contract if the other party does not meet its obligations under the contract, which include performance, payment, and meeting permitting, construction, and operation date milestones. The contract includes penalty payments to the City for late completion of the project. Should the contract be terminated due to default by the supplier, the supplier is required to cover the City’s net costs of replacing the equivalent LFG energy. Venue for dispute resolution by agreement of the parties is the County of San Francisco instead of Santa Clara County due to the joint purchase with APT.
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 at the proposed design capacity is $2,700,000 in the first year, rising to $3,500,000 in year 20. At the minimum installed capacity the estimated annual costs are $1,100,000 rising to $1,500,000. 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 are expected to be within five percent of the estimated cost.

The 20-year price schedule is $52.00/MWh, escalating at 1.5 percent per year, which is roughly equivalent to the current projected prices for base load electricity, meaning that there is essentially no 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 the 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).

ATTACHMENTS
A: Resolution approving the long term power purchase agreement with Ameresco Half Moon Bay, LLC for the purchase of electricity generated by landfill gas from the Ox Mountain Landfill generating facility.

B: Long-term power purchase agreement (landfill gas electric power) made between the City of Palo Alto, as Purchaser and Ameresco Half Moon Bay LLC. 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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