TO: HONORABLE CITY COUNCIL
FROM: CITY MANAGER DEPARTMENT: UTILITIES
DATE: NOVEMBER 8, 2004 CMR:424:04

SUBJECT: ADOPTION OF A RESOLUTION OF THE COUNCIL OF THE CITY OF PALO ALTO APPROVING THE LONG-TERM POWER PURCHASE AGREEMENT (WIND POWER) WITH PPM ENERGY, INC. FOR THE PURCHASE OF ELECTRICITY GENERATED BY A WIND ELECTRIC GENERATING FACILITY FOR A TERM OF 23 YEARS AND SEVEN MONTHS AND A CONTRACT AMOUNT OF $78.4 MILLION.

RECOMMENDATION

Staff recommends Council adopt the attached Resolution approving a Long-Term Power Purchase Agreement (“contract”) with PPM Energy, Inc. (“PPM”) for a 20 MW share of the 162 MW rated capacity of the High Winds wind generating facility located in Solano County, California for a term of 23 years, 7 months, and an estimated total cost of $78.4 million ($3.33 million per year). The Resolution authorizes the City Manager to sign the contract on behalf of the City.

BACKGROUND

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, and 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 (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 (PPAs) 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. Resources being pursued for the near term are 15-30 MW of wind energy from Solano County with deliveries beginning in 2005, 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 late 2005 to 2007. The proposed projects were selected by means of the NCPA Renewable Energy RFP, described in detail in the previous staff reports.

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.

**DISCUSSION**

Staff is recommending that Council adopt a Resolution authorizing the Mayor to execute the contract with PPM for a 20 MW share of the 162 MW rated capacity of the High Winds wind generating facility located in Solano County, California for a term of 23 years and 7 months, at an estimated total cost of $78.4 million ($3.33 million per year).

On March 15, 2004, (CMR:174:04) Council approved Second Phase and Third Phase Member Agreements with NCPA to facilitate completing renewable energy supply contracts with three vendors. The contract is the result of those efforts, representing the first step in implementing Tier 1 of the Renewable Energy Supply Implementation Plan.

The contract was developed in cooperation with NCPA and Alameda Power & Telecom (“APT”). APT is also purchasing a share of the High Winds energy (a 10 MW share). 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 additional renewable energy resources, and staff expects to bring the resulting contracts to Council for approval 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:** 23 years, 7 months, with deliveries beginning December 2004 and continuing through June 2028.
- **Quantity:** 20 MW share of the 162 MW rated capacity of the High Winds facility. (12.35%). CPAU’s share of the expected annual output is 58,000 MWh, or approximately 6% of Palo Alto’s annual electric retail load. The contract includes a right to purchase the output from additions to the facility at a price set at the time, subject to Council approval.
- **Product:** Day-ahead hourly firm, which means that PPM will guarantee each day the hourly output for the following day. This day-ahead firming provides the ability to allocate other supply resources cost-effectively. The contract includes an option to change to a product that is only guaranteed one hour ahead (hour-ahead firm), which CPAU may choose to use if other resources such as Calaveras could be used as a firming resource instead, with a price reduction of $2/MWh.
- **Price:** $57.60/MWh, for a total contract amount of $78.4 million ($3.3 million per year) based on estimated generation.
- **Credit:** PPM is backed by Pacificorp Holdings, Inc. (PHI), who is providing a corporate guarantee. PHI is currently rated A- (stable outlook) by Standard and Poor’s, and is owned by Scottish Power. The contract includes provisions to provide collateral if needed in order to maintain adequate credit status during the course of the contract term.
- **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 adequate credit status. Should the contract be terminated due to default, any damages, that may be incurred such as wind energy replacement cost are only due to the non-defaulting party.

Other customers of the High Winds facility include the Sacramento Municipal Utility District, the cities of Pasadena, Colton, Glendale, Anaheim, Azusa, and the Modesto Irrigation District.
RESOURCE IMPACT

The estimated $3.33 million annual cost is included in the current year’s budget, and will be included in future budget year proposals. Annual costs may fluctuate due to unpredictable nature of wind availability, but are expected to be within 5% of the estimated cost.

The 23.6-year fixed price of $57.60/MWh is about $5/MWh above the current forward price for base load electricity for the next four years, meaning that there could be a fairly modest short-term rate premium of approximately 0.03¢/kWh. Electricity prices more than ten years in the future range from $65-75/MWh: at a market price of $70/MWh, long-term rates would be lower by approximately 0.07¢/kWh relative to buying the same quantity of energy from the electric market. The levelized long-term rate impact is negligible, approximately 0.008 ¢/kWh favorable, based on a first year market price of $48.00/MWh increasing at 2.5% per year. The contract facilitates meeting the Renewable Energy Supply Implementation Plan goals with a rate impact well below the ½¢/kWh limit recommended by the Finance Committee and approved by Council.

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 10% of the expected portfolio load by 2008 and move to a 20% 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).

**ATTACHMENTS**

A: Resolution approving the long-term power purchase agreement (wind power) with PPM Energy, Inc. for the purchase of electrical power.

B: Long-term power purchase agreement (wind power) made between PPM Energy, Inc., as Seller and the City of Palo Alto, as Purchaser. 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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