Agenda Report

May 12, 2003

To: City Council
Through Municipal Services Committee

From: City Manager

Subject: **AUTHORIZATION TO ENTER INTO CONTRACTS WITH PPM ENERGY, INC., FOR THE PURCHASE OF SIX MEGAWATTS OF WIND POWERED ELECTRICAL ENERGY**

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to enter into the following contracts:

1) A Long-Term Power Purchase Agreement with PPM Energy, Inc. ("PPM"), for the purchase of wind powered electrical energy associated with a 6 MW share of the 145.6 MW High Winds wind generation facility currently under construction in Solano County, California ("Contract"); and,

2) A Guarantee Agreement with Pacificorp Holdings, Inc., the corporate parent of PPM, related to the Contract.

These contracts are exempt from competitive bidding pursuant to City Charter Section 1002(C) contracts for labor, materials, supplies or services available from only one vendor.

BACKGROUND:

The Pasadena Water and Power Strategic Resource Plan adopted by the City Council on November 19, 2001, calls for the addition of renewable resources to meet a portion of Pasadena's electric energy needs.

Renewable Portfolio Standard

Senate Bill 1078, which became law January 1, 2003, requires local publicly owned utilities to establish and implement a renewable portfolio standard ("RPS") that "recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect on rates, reliability, financial resources, and the goal of environmental improvement." The law also requires that each local publicly owned utility report to its customers, on an annual basis, the fuel mix used to serve its customers and the expenditure of public goods funds for renewable resources. The Pasadena Utility Advisory Commission is working with Water and Power staff to develop a RPS for the City Council's consideration in the near future.

The proposed Contract is in compliance with SB 1078 and the RPS being developed for Pasadena. It was reviewed by the Utility Advisory Commission at its meeting on April 9, 2003. It will increase the amount of renewable energy in Pasadena's energy portfolio by approximately 17.5 GWh per year, representing 1.5% of retail energy sales in FY2004.

In addition to the proposed wind energy Contract, Pasadena currently receives 3 to 10 GWh of certified renewable energy from its Azusa hydroelectric facility and approximately 66 GWh of hydroelectric energy from Hoover each year.

Project Selection Process

In February 2002 the Southern California Public Power Authority (SCPPA) issued a request for proposals (RFP) for renewable energy projects on behalf of its members, including Pasadena. SCPPA received a total of 44 proposals for various types of renewable energy projects including wind, solar, geothermal, biomass, and landfill gas. The proposals were reviewed by the SCPPA Resource Planning Committee, which recommended retaining 20 proposals for further consideration.

The wind generation proposals were identified as the lowest cost renewable resources, when compared to the solar, geothermal, and biomass proposals. However, the intermittent nature of the wind resources, i.e. energy production based on weather patterns, and associated scheduling burdens and price risk make many wind proposals less attractive for power system operations than other resources with more predictable outputs. Many SCPPA members do not have sufficient scheduling resources to implement complex hourly wind prediction, load balancing, and scheduling procedures.

A proposal from PPM, a wholly owned subsidiary of PacifiCorp Holdings, Inc., and Scottish Power, attracted several SCPPA members and was able to achieve the necessary minimum subscription to go forward. PPM's proposal created more value than its other wind competitors by providing a redelivery service, providing firm energy from a wind project on a continuous basis, independent of wind patterns. This energy can be relied upon during summer months and scheduled on a firm basis thus reducing hourly scheduling burden and price risk associated with deviations between amounts actually generated versus those scheduled.

Long-Term Power Purchase Agreement Summary

Source: Initially, 145.6 MW High Winds Project, owned & operated by FPL energy, in Solano County, California ("Project").

Alternate: Beginning January 1, 2007 PPM has option to designate up to two alternative sources for the wind energy. Minimum of 70% must be generated in California. If State law requires, 100% must be generated in California.

Quantity: Actual metered output from 6 MW of the Project (or alternate source), or approximately 17,500 MWh per year

Delivery: Delivered firm in Southern California (Cal ISO SP-15), seven days per week and 24 hrs/day (7x24) at 2 MWh/hour, except during true-up.

Term: 25 years, with each Party having a unilateral right to cancel after 20 years upon one-year written notice to the other party.

Price: Fixed price of $53.50/MWh, with no escalation over the term.

Note that PPM requires a minimum subscription of 30 MW from all participating SCPPA members combined in order to make this project viable. The contract will not be executed by PPM without this minimum subscription.

Guaranty Agreement Summary

Pacificorp Holdings, Inc., the corporate parent of PPM, will provide a guarantee to achieve performance of PPM's payment obligations and shall indemnify Pasadena against any and all losses, damages, claims, costs, charges, and expenses arising from the failure of PPM's payment obligations under the Contract.

Firmed Wind Concept

PPM will be responsible for scheduling the wind energy as it is produced at the Project into the California ISO. Each month, PPM will meter the actual output of the Project and provide Pasadena with its pro-rata share (6/X, where "X" is the total rated capacity of the Project, currently estimated at 145.6 MW) of the "renewable energy environmental attributes." PPM will re-deliver the associated energy on a firm basis to a delivery point in Southern California, providing Pasadena with a constant, reliable source of energy.

The base energy schedule associated with Pasadena's 6 MW share of the Project output would be 2 MW of firm energy received on all hours except for the true-up period, which occurs during the month of February each year. This 2 MW base schedule would be considered "firm" pursuant to the Western Systems Coordinating Council's (WECC) and Minimum Operating Reserve Criteria and avoid the need for additional capacity.

Energy deliveries will be "trued-up" each year starting on February 1st to reconcile actual metered plant output to match energy scheduled and delivered on a firm basis. The actual metered output associated with Pasadena's 6 MW share of the Project will be compared to the amount of firm energy received by Pasadena during the previous contract year. If Pasadena received more than its entitlement, then its schedule will be cut to zero until the imbalance account is satisfied. Likewise, if Pasadena received less than its entitlement, then Pasadena's base schedule will be doubled until the imbalance account is satisfied. The true-up period is scheduled during a winter month with sufficient time to satisfy the imbalance prior to the summer months when the energy is most valuable.

Project Economics

The firmed wind energy product, including all environmental attributes, is delivered at a fixed price of $53.50/MWh or 5.35¢/kWh, without escalation over the term. Although this price is somewhat higher than proposals for non-firm wind energy, which ranged from $46/MWh to $49/MWh when levelized for no escalation, it is a superior product without delivery and price risk that is more comparable to predictable resources such as geothermal or biomass, which were offered to SCPPA at $60/MWh and up, excluding the cost of transmission.
Pasadena's annual cost for the expected average output of 17,520 MWh is $937,320. Based on current market forecasts provided by Henwood Energy Services, Inc. that Pasadena uses for stranded investment calculations, the Project cost is expected to be from $79,728 to $346,357 per year higher than non-renewable local spot market energy sources, resulting in a system-wide energy rate impact of approximately 0.01 to 0.027¢/kwh over the life of the agreement. This is commonly known as the "premium" paid for the renewable resource. PWP will determine the premium cost for this resource each year in a manner similar to that used to determine annual stranded costs, that is, by comparing to the market cost each year for a similar product. The premium costs will be accounted separately from the non-premium costs, or market value, of the Contract.

Due to the firm and predictable nature of the proposed "firmed" wind energy, there will be no additional hidden costs associated with scheduling burden, buying replacement energy at a higher price, or deviation penalties if the anticipated wind energy is not available. Also, there will not be the hourly scheduling burdens to accommodate changes in wind patterns.

Renewable energy is an authorized use of public goods charge collected from all customers pursuant to 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. Additionally, Pasadena may offset cost premiums associated with the Project by applying premium revenues collected from any customers that participate in Pasadena's green-rate program.

Other SCPPA Contracts Required

PPM Energy, Inc., has offered the proposed terms for a minimum subscription level of 30 MW because of the risks associated with firming the energy. Six other SCPPA member utilities, Glendale, Anaheim, Vernon, Azusa, Banning, and Colton, are recommending identical agreements to their City Councils with the exception of the contract quantity. The combined agreements will total 45 MW, including Pasadena's 6 MW, if they are all approved. SCPPA coordinated the RFP and the development of the agreements, but the agreements will be between the cities and PPM Energy, Inc., and SCPPA will not be a party to the agreements.

FISCAL IMPACT:

This firmed wind energy agreement is expected to cost between $79,728 and $346,357 per year more than generic non-renewable power, resulting in a rate premium of approximately 0.01-0.027¢/kwh over the life of the agreement. There are sufficient funds budgeted in the FY 2004 Power Fund Budget for generic (non-renewable) spot market purchased power that will be used to fund the purchase of energy associated with this contract.

Respectfully Submitted,

Cynthia J. Kurtz
Cynthia J. Kurtz
City Manager

Prepared by:

Jay Panzica / for E.K.
Eric R. Klinkner
Business Unit Director Power
Supply Business Unit

Approved by:

Phyllis E. Currie
Phyllis E. Currie
General Manager
Pasadena Water and Power