

Agenda Report

February 24, 2003

To:

City Council

Through Municipal Services Committee

From:

City Manager

Subject:

ADOPT A RESOLUTION INCREASING PASADENA'S SHARE OF THE MAGNOLIA POWER PROJECT, AND, AUTHORIZE THE CITY MANAGER TO ENTER INTO AN ENERGY EXCHANGE AGREEMENT WITH THE CITY OF

BURBANK

RECOMMENDATION:

It is recommended that the City Council:

- (1) Adopt a resolution authorizing the City Manager to enter into the Magnolia Power Project (Project) Power Sales Agreement (PSA) with the Southern California Public Power Authority (SCPPA) for a 6.1307% share of the Project;
- (2) Authorize the City Manager to enter into an Energy Exchange Agreement (EEA) with the City of Burbank that will provide alternative mechanisms to deliver Pasadena's share of the Project output to Pasadena.

The proposed PSA and EEA are both exempt from competitive bidding pursuant to City Charter Section 1002(H), contracts with other governmental entities or their contractors for labor, materials, supplies or services, and the Competitive Bidding and Purchasing Ordinance pursuant to P.M.C. Section 4.08.049(A)(3), Contracts with other governmental entities.

MEETING OF 2/24/2003

AGENDA ITEM NO. 5.D.1.

BACKGROUND:

Magnolia Project Power Purchase Agreement Authorization

On April 8, 2002, the City Council adopted both a Resolution and an Ordinance approving Pasadena's participation in the PSA. A copy of the Agenda Report is attached. The resolution authorized a maximum Project share of 4.25%. This process provided Pasadena the flexibility to increase its Project share by adopting a new Resolution.

In November 2002, Pasadena elected to participate in a 4.1322 percent share of the Project's 242 MW base capacity, or approximately 10 MW. At that time, the project was fully subscribed.

On December 17, 2002, Project participants were notified additional capacity was available due to the Cities of San Marcos and Cerritos reducing their shares. The Project participants, including Pasadena, subsequently elected to increase their Project shares (contingent upon City Council authorization) as shown in the following table:

Participant	Initial Election (%)	Revised Election* (%)	Base Capacity (MW)	Peaking Capacity (MW)
Anaheim	30.99%	38.02%	92.0	117.9
Burbank	30.99%	30.99%	75.0	96.1
Cerritos	13.22%	4.20%	10.2	13.0
Colton	4.13%	4.13%	10.0	12.8
Glendale	8.26%	16.53%	40.0	51.2
Pasadena	4.13%	6.13%	14.8	19.0
San Marcos	8.26%	0.00%	0.0	0.0
Total	100.00%	100.00%	242.0	310.0

^{*}Revised election shares and MW as of February 5, 2003

Pasadena's increase is contingent upon the approval by the City Council. If the increase is approved, Pasadena's total share of the Project would increase to 6.1307 percent, or approximately 14.8 MW of the Project's 242 MW base capacity. If City Council approval is not received, the Pasadena's share will remain at 4.1322 percent.

Increase Consistent with Power Resource Plan

The City Council approved Power System Strategic Resource Plan (Plan) calls for the procurement of up to 25 MW in additional low-cost external resources, including at least 10 MW of the Magnolia project. Such external resources serve to provide cost-effective base load energy, provide resource diversity, and reduce emissions from PWP's local generation.

At the time the Plan was developed, a significant number of coal- and gas-fired projects were in early development stages throughout the West. These projects were being developed primarily by merchant generators, unregulated affiliates of investor-owned utilities, and some municipal utilities. The Plan contemplated participation in up to 15 MW of such a project to supplement Magnolia in meeting PWP's base load resource need. At this time, most of these projects have been cancelled, and PWP believes it would not be prudent to partner with private generation developers due to credit and market risk concerns. On the other hand, increasing participation in Magnolia is a prudent means to fulfill some of the desired base resource need.

Magnolia Project Progress, Budget, and Economics

The Magnolia Project has progressed to the point where development risk is relatively low. The California Energy Commission is expected to issue permits on March 5, 2003, and other permits should be secured shortly thereafter. Contracts are in place for major equipment and construction, and bond documents are being drafted for an anticipated April issuance. The Project is expected to be commercially operational by May 2005 and the Project Agreements stipulate milestones that make the schedule reasonable.

As of this date, the Project is projected to remain within budget. Although some additional costs will be necessary to meet the zero liquid discharge permit requirements, cost savings have been realized and are being negotiated for major equipment contracts.

As shown in the table on the following page, the Project's energy cost would range from about 2.7ϕ /kwh to 5.5ϕ /kwh, depending upon fuel and transmission costs. Current market forecasts project that gas prices should settle in a range from \$2.50/mmbtu to \$3.50/mmbtu, which results in a competitive "bus-bar" (at the generator location) energy cost of 3.0ϕ /kwh to 3.7ϕ /kwh, or a delivered costs of 3.8ϕ /kwh to 4.5ϕ /kwh (assuming the highest transmission cost impact). These prices are less than projected market prices (for corresponding gas prices), and

therefore will not increase PWP's stranded costs. They are also lower than PWP's current total cost for local generation, IPP, or Palo Verde and would thus help lower PWP's retail rates. Furthermore, at gas prices in excess of about \$3.60/mmbtu, the fuel cost savings of Magnolia (versus PWP's local generation resources) would pay the entire fixed costs associated with Magnolia.

Magnolia Project	Fuel Cost Sensitivity				
Energy Costs	\$2.00/mmBtu	\$2.50/mmBtu	\$3.50/mmBtu	\$5.00/mmBtu	
Fuel Cost (¢/kWh)	1.361	1.701	2.381	3.402	
Variable non-fuel O&M	0.213	0.213	0.213	0.213	
Net Debt Service (\$17.65 million/yr)	0.976	0.976	0.976	0.976	
Fixed non-fuel O&M (\$1.903 million/yr)	0.105	0.105	0.105	0.105	
Site Lease (\$329,000/yr)	0.018	0.018	0.018	0.018	
Busbar Cost (¢/kWh)	2.674	3.014	3,694	4.715	
Transmission (0.81¢/kwh)	0.810	0.810	0.810	0.810	
Delivered Cost (¢/kWh)	3.484	3.824	4,504	5.525	

Transmission Issues

Project participants plan to secure necessary transmission through a SCPPA contract with LADWP, and negotiations are underway regarding cost. Thus far, LADWP has not offered a discount to their full open access tariff rate (OAT), which would increase PWP's fixed costs by about \$895,000 per year (0.81¢/kwh). A number of other options are currently being studied that could significantly lower transmission costs, including the feasibility of building alternative transmission lines. Pasadena is negotiating terms for an energy exchange agreement with Burbank that could reduce or eliminate the need to procure transmission from LADWP and associated fixed costs. This agreement, which is further described in subsequent sections, may effectively eliminate transmission costs for delivery of Magnolia. At worst case, incremental transmission losses may cost Pasadena up to about 0.15¢/kwh.

Energy Exchange Agreement

Pasadena and Burbank have signed a letter of intent and are negotiating terms for an energy exchange agreement (EEA) that would reduce or eliminate the need to procure transmission from LADWP and the associated fixed costs. Under the terms of the EEA, Pasadena would deliver its share of Project output directly to Burbank at the Magnolia bus bar, and Burbank would deliver a like quantity of energy from another resource at a location where Pasadena has existing transmission rights. The EEA is structured such that neither party would incur additional costs and would ideally result in reduced transmission losses and associated costs for both parties.

Under the EEA, PWP's only transmission costs for Magnolia will be losses incurred between the point Burbank delivers exchange energy and Pasadena. In some cases, these losses may be less than those that would have been incurred if Pasadena took delivery at the Magnolia bus. If, however, PWP receives the power at one of the more remote locations to which it has transmission rights, there could be higher transmission losses. The worst case incremental transmission losses would be about 3%, yielding an effective variable cost increment of about 0.15¢/kwh.

RISKS

Prior to execution of the PSA by all parties, there is a potential risk of undersubscription for the Project. This would result in delaying financing until the project is fully subscribed, and could potentially add costs if payment schedules are not met for major equipment. If one of more of the current participants with large shares opts out of the Project, it would be in danger of not being completed.

Once the PSA is fully executed, there are step-up provisions that require participants to take on a pro-rata share of any under-subscribed Project capacity as a result of payment defaults by other participants.

Once executed, the PSA commits all parties to a take-or-pay type contract with terms similar in form to the Intermountain Power Project and Palo Verde Nuclear Generation Station power purchase agreements, except that each participant will retain an undivided ownership in the project upon expiration of the project bonds. Such contracts have certain benefits and risks with respect to project performance, market conditions, regulatory changes, and the performance of other Project participants with respect to their obligations.

The economics of the Project could be adversely impacted by increases in local natural gas prices vis-à-vis the power market in general. It is anticipated that a significant portion of the gas price market risk will be hedged by the Project using forward supply contracts or other market instruments. Even if the Project does not hedge fuel costs, PWP could opt to do so internally for its share of the Project as part of the overall portfolio risk management plan.

As with any generation resource, there are risks associated with environmental and regulatory uncertainty. Future changes in regulatory requirements could impact the operations and cost effectiveness of the Project. Given that the Project will implement state of the art technologies, these risks are relatively minimal.

FISCAL IMPACT

Pasadena Water and Power will participate in the issuance of one or more series of SCPPA bonds designated as Magnolia Power Project "Series A" bonds secured by the five Members' Magnolia Power Sales Agreements, much like other SCPPA project debt. The total annual debt service for all participants is estimated to be \$17.65 million over a 30-year borrowing period, based upon an assumed true interest cost of 5.04 percent. Current financing rates may yield lower debt service.

Assuming a 6.1307% share of the Project, PWP will incur approximately \$1,219,416 per year in fixed costs for debt service <u>and</u> other fixed operating costs for the life of the project bonds. In addition, PWP will be required to pay its share of variable operating costs based on PWP's share of the Project's energy production.

All costs associated with this contract will be recovered through the Energy Charge, and thus will have no net impact on the Light and Power Fund budget. It is anticipated that the average cost of energy will be between 3.0¢/kwh and 4.5¢/kwh, depending upon the cost of transmission and natural gas. This new resource will help lower Pasadena's average cost for base load energy.

Respectfully submitted,

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