

# Agenda Report

April 8, 2002

**To:** City Council  
Through Municipal Services Committee

**From:** City Manager

**Subject:** **Adopt resolution and ordinance approving the Magnolia Power Project Power Sales Agreement and authorizing the City Manager to enter into this Agreement with the Southern California Public Power Authority for up to 4.25% of the Project.**

## **RECOMMENDATION:**

It is recommended that the City Council adopt a resolution and ordinance approving the Magnolia Power Project (Project) Power Sales Agreement (PSA) and authorizing the City Manager to enter into the PSA with the Southern California Public Power Authority (SCPPA) for up to 4.25% share of the Project. The proposed PSA is 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.

Each City Council is being asked to adopt both a Resolution and an Ordinance with respect to the PSA to which it will be a party. By doing so, should a City decide to increase its Project share after the adoption of its Resolution but before executing the PSA (due to, for example, a Project Participant taking a lesser entitlement share than is now contemplated), the City would have the flexibility of doing so by merely adopting a new Resolution. On the other hand, if a new Ordinance had to be adopted and republished, the republication would mean that the new Ordinance could not become effective for another 30 days, potentially delaying the financing of the Project.

## **BACKGROUND:**

### **Power Resource Plan**

The City Council unanimously adopted the Pasadena Water and Power (PWP)

Power System Strategic Resource Plan (Plan) on November 19, 2001. The plan was developed in response to recent regional power shortages, energy price volatility, and stricter emissions control requirements adopted by the South Coast Air Quality Management District (SCAQMD). It serves as a guide for developing PWP's portfolio of power supply and transmission resources (Portfolio) to meet PWP's goals of reliable service, stable rates, competitive energy pricing, and environmental stewardship.

The 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. The following table summarizes PWP's current and future resource mix (with the addition of Magnolia and Gas Turbine 3 and 4) by fuel type:

	Current Portfolio				With Magnolia and New Local GTs			
	Capacity (MW)		Energy (MWh/year)		Capacity (MW)		Energy (MWh/year)	
<b>Base Load Supply</b>								
Gas	10	9%	87,600	9%	15	13%	131,400	13%
Coal	95	83%	795,842	83%	95	80%	795,842	79%
Nuclear	9	8%	79,029	8%	9	8%	79,029	8%
<b>Total Base Load</b>	<b>114</b>	<b>100%</b>	<b>962,471</b>	<b>100%</b>	<b>119</b>	<b>100%</b>	<b>1,006,271</b>	<b>100%</b>
<b>Total Portfolio</b>								
Gas	183	52%	273,482	16%	201	55%	377,300	23%
Coal	95	27%	795,842	48%	95	26%	795,842	48%
Nuclear	9	3%	79,029	5%	9	2%	79,029	5%
Hydro	35	10%	66,457	4%	35	10%	66,457	4%
Other Contracts	27	8%	41,886	3%	27	7%	41,886	3%
Spot Market	0	0%	402,569	24%	0	0%	298,751	18%
<b>Total Portfolio</b>	<b>349</b>	<b>100%</b>	<b>1,659,265</b>	<b>100%</b>	<b>367</b>	<b>100%</b>	<b>1,659,265</b>	<b>100%</b>

### Magnolia Power Project Agreements

On March 12, 2001, the City Council authorized the Pasadena Water and Power (PWP) General Manager to execute a planning agreement with the Southern California Public Power Authority (SCPPA) for up to an 8% share of the Magnolia Power Project (Project), and further authorized expenditures of up to \$400,000 for Pasadena's pro-rata share of the planning and permitting costs for the Project. On May 21, 2001, the City Council extended this authority to increase PWP's

participation in the Magnolia Power Project Planning Agreement to a maximum level of 25 MW, and further authorized expenditures of up to \$497,421 for planning related costs, and up to \$1,405,323 for pre-construction costs for the Magnolia Project. PWP committed to a 4.1322% share of the Project in the Planning Agreement, and has incurred approximately \$400,000 in planning costs for that pro-rata share of planning costs incurred by the Project to date.

This agenda report seeks authority for the City Manager to execute the PSA for a project share of up to 4.25%. This would commit the City to the following:

- Purchase from SCPA a maximum 4.25% share of the Project;
- Pay a pro-rata share of the Project's fixed costs, including debt service and other fixed operating costs;
- Take delivery of energy associated with PWP's share of the Project and pay the associated variable costs;
- Increase PWP's project share beyond the planned 4.1322% on a pro-rata basis if certain Project participants default on their obligations and there are no voluntary subscribers for the associated capacity.

#### **Description of the Magnolia Power Project**

The Generation Station includes a nominally rated 250 MW, natural gas combined-cycle fired combustion turbine generator, a heat recovery steam generator with supplemental duct firing, a selective catalytic reduction pollution control system, a steam turbine generator, a service/control building, wet mechanical-draft cooling towers, recirculating water system and auxiliary cooling water heat exchangers. Through use of supplemental duct firing and steam injection, an additional 52-65 MW of peaking power output will be achieved with a relatively modest additional capital investment, providing a maximum output of 315 MW. The plant uses proven, reliable technology and utilizes the best available emissions control technology. Construction will commence in mid-2002, after the CEC has certified the Project's Application for Certification, and will last approximately 24 months. Commercial operation is scheduled to commence between mid-2004 and early 2005.

Interconnection facilities include two 69 kV underground transmission lines from the generation station to the City of Burbank's Olive Switching Station, including step-up transformers. Olive Switching Station is located approximately 400 yards from the generating station.

The Project will utilize existing transmission facilities owned and/or operated by the City of Burbank, the Los Angeles Department of Water and Power (LADWP) and the Independent System Operator (ISO). The delivery point for Project output for

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the City will be either the Olive Switching Station or LADWP's Receiving Station RS-E (RS-E), which is approximately four miles from the generating station and the power will be transmitted to RS-E at 69 kv. At RS-E, the power is transformed into a higher voltage, 230 kv, and transmitted to one of several interconnections between the LADWP and the ISO, then ultimately delivered to the City's customers through its electric system.

### Magnolia Power Project Participants

The Magnolia Project participants include the following SCPPA member cities:

<b>Participant</b>	<b>Project Share</b>	<b>Nominal Capacity (MW)</b>	<b>Peaking Capacity (MW)</b>
Anaheim	30.99%	77.5	97.7
Burbank	30.99%	77.5	97.7
Cerritos	13.22%	33.1	41.6
Colton	4.13%	10.3	13.0
Glendale	8.26%	20.7	26.0
<b>Pasadena</b>	<b>4.1322%</b>	<b>10.3</b>	<b>13.0</b>
San Marcos	8.26%	20.7	26.0
<b>Total</b>	<b>100.00%</b>	<b>250.0</b>	<b>315.0</b>

Joint participation in the Magnolia Power Project enables PWP to achieve economies of scale that would not be possible on an individual basis. The cost advantages of sharing a single plant of this size include lower fixed capital and operating costs on a per kilowatt basis, and lower variable costs due to the high efficiency of the plant's operations. These economies of scale will help lower PWP's costs for base load energy, thereby lowering the Energy Charge rate.

### Project Cost and Financing

The total capital cost of Magnolia Power Project is estimated at \$233.6 million, which includes \$214.5 million for construction costs and recovery of planning costs already incurred, plus an additional \$19.1 million for prepaid "life of project" emission credits. Due to the addition of duct firing and steam injection equipment for increased peaking capacity, the capital cost has increased by about \$20 million as compared to earlier estimates, however, the cost per kilowatt installed has been reduced by over 12% to about \$680 per kilowatt as a result of the added capacity.

SCPPA will finance approximately \$294 million to complete the project through a number of bond issuances. The total amount financed includes the recovery of planning costs already incurred by the participants, construction costs, interest during construction, funding of necessary bondholder and project reserves, and costs of issuance through the sale of SCPPA revenue bonds as follows:

<b>Item to be Financed</b>	<b>Amount</b>
Construction Deposit	\$225,460,000
Debt Service Reserve Fund	19,050,000
Capitalized Interest Fund	37,221,000
Operating Reserve Fund	5,000,000
Bond Insurance	3,103,000
Cost of Issuance	3,949,000
<b>Total Amount to be Financed</b>	<b>\$293,783,000</b>

Note that the Construction Deposit, \$225.5 million, reflects the construction cost (\$214.5 million) and the prepaid cost of emission credits (\$19.1 million), less interest earnings on the funds until they are withdrawn to pay for equipment or contractors.

Annual debt service is estimated at \$17.65 million over a 30-year borrowing period, based upon an assumed true interest cost of 5.04 percent, and other annual fixed costs are estimated at \$2.23 million per year. PWP's 4.1322% share of these costs will be approximately \$729,333 and \$92,231 per year, respectively, for a total estimated fixed cost of **\$821,564** per year.

The five members with existing electrical utilities (the Cities of Anaheim, Burbank, Colton, and Glendale) will finance their share of Magnolia costs through the sale of one or more series of bonds designated as "Series A" bonds secured by the five Members' Magnolia Power Sales Agreements, much like other SCPPA project debt which has been sold since the early 1980s.

The City of Cerritos is expected to finance its share of the costs of construction of Magnolia through the sale of SCPPA Magnolia Series B bonds, secured by the revenues which shall be paid by Cerritos' General Fund pursuant to a lease and leaseback agreement of their City Hall in addition to the net revenues of that City's electric enterprise fund, which is expected to be created at the time of adoption of its Magnolia Power Sales Agreement.

The City of San Marcos is expected to finance its share of the costs of construction

of Magnolia through the sale of SCPPA Magnolia Series C bonds, secured by the net revenues from the sale of power from its share of Magnolia and any other net revenues of its electric enterprise fund, which is expected to be created in connection with its adoption of its Magnolia Power Sales Agreement. The Series C Bonds will be additionally secured pursuant to an agreement between SCPPA, San Marcos and the City of Burbank. This agreement will provide that in the event that San Marcos is unable to make timely payment of all amounts owed under its Magnolia Power Sales Agreement, the City of Burbank shall pay all such defaulted payment amounts.

It is expected that all three Series of bonds will obtain standalone bond ratings in the "A" category, and will qualify for bond insurance, which will be utilized if it is cost-effective. Amortization of all three Series will likely commence on July 1, 2005, approximately one year after expected commercial operation of Magnolia, and end between 2030 and 2035, depending upon the respective preferences of the Series A, Series B, and Series C Magnolia Participants.

**Average Cost of Power**

Due to the plant's high efficiency, Magnolia is expected to be very competitive and have a high generation capacity factor. For a nominal \$2.50/mmBtu total fuel cost, the variable dispatch cost and total average cost of energy at the bus bar (prior to transmission costs and losses) will be approximately 1.924¢/kWh and 3.014¢/kWh, respectively. The following table shows the Project's energy cost components for a number of fuel price scenarios, assuming 1,807,702 MWh annual energy production (65.5% weighted average capacity factor using 315 MW total capacity):

Busbar Energy Costs	Fuel Cost Sensitivity			
	\$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 (\$2.13/MWh)	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
<b>Total Cost (¢/kWh)</b>	<b>2.674</b>	<b>3.014</b>	<b>3.694</b>	<b>4.715</b>

## **RISKS**

The PSA commits PWP 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 Pasadena 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.

Prior to execution of the PSA by all parties, there is a potential risk of under-subscription for the Project. If one or more of the current participants opt not to execute the PSA, and there are no other voluntary subscribers to the Project, the Project may not be completed unless PWP and others take an additional capacity. In this event, PWP will request authority for additional capacity. Once the PSA is fully executed, however, 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.

Transmission issues are still being negotiated. While ample transmission exists to deliver the energy to PWP, the cost and terms of service are still being negotiated. If forced to pay full tariff for this transmission, the economics of the Project would be affected. Even under the worst terms, however, the delivered cost of energy would still be lower than currently available alternatives.

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.

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### **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.

Assuming PWP does not change its 4.1322% share of the Project, PWP will incur approximately \$821,564 per year in fixed costs for debt service and 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 (primarily fuel) for energy produced at the plant for PWP's use.

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 3.7¢/kwh, depending upon the cost of natural gas. Under the expected cost of gas, the energy from this new resource will help lower Pasadena's average cost for baseload energy.

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Respectfully submitted,



CYNTHIA J. KURTZ  
City Manager

Prepared by:

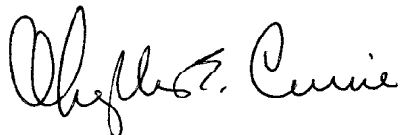


ERIC R. KLINKNER  
Director, Power Supply

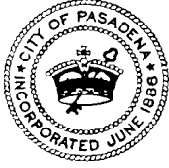


JAY PANZICA  
Director, Finance Business Unit

Approved by:



PHYLLIS E. CURRIE  
General Manager



# Ordinance Fact Sheet

TO: CITY COUNCIL DATE: April 8, 2002  
FROM: CITY MANAGER  
SUBJECT: AN UNCODIFIED ORDINANCE OF THE CITY OF PASADENA  
APPROVING THE MAGNOLIA POWER PROJECT SALES AGREEMENT

TITLE OF PROPOSED ORDINANCE: AN UNCODIFIED ORDINANCE OF THE CITY OF PASADENA APPROVING THE MAGNOLIA POWER PROJECT POWER POWER SALES AGREEMENT

## PURPOSE OF ORDINANCE:

The purpose of this ordinance is to authorize the City Manager to enter into a Power Sales Agreement with the Southern California Public Power Authority ("SCPPA"), a joint powers agency composed of municipal electric utilities including Pasadena as well as the Cities of Cerritos and San Marcos. The Power Sales Agreement enables the City to purchase electrical energy and capacity from the Magnolia Power Project which SCPPA proposes to build and finance. The Magnolia Power Project, and the City's rights and obligations under the Power Sales Agreement, are more fully described in the accompanying Agenda Report.

## REASONS WHY LEGISLATION IS NEEDED:

SCPPA will own the Magnolia Power Project and finance its construction through the sale of project bonds. Project bonds will, for the most part, be repaid by revenues received by SCPPA from sales of project energy and capacity to individual participating SCPPA members through their Power Sales Agreements. Such sales are on a 'take or pay' basis.

Government Code Section 54241 provides in substance that certain types of facilities agreements between a city and a "public leaseback corporation" which require payments by the city to be used by the corporation to pay principal and/or interest on construction financing bonds must be adopted by ordinance. This statute may apply to the Power Sales Agreement and, accordingly, it is prudent to approve the Power Sales Agreement by ordinance, as provided by this statute.

63783.1

MEETING OF 4/8/2002  
AGENDA ITEM NO. 5.D.1. & 9.A.2.

PROGRAMS, DEPARTMENTS OR GROUPS AFFECTED:

Pasadena electric ratepayers will receive electrical energy and capacity from the project, funding the City's payment obligations under the Power Sales Agreement through their electricity rates. The City's benefits and obligations associated with the Magnolia Power Project are more fully described in the accompanying Agenda Report.

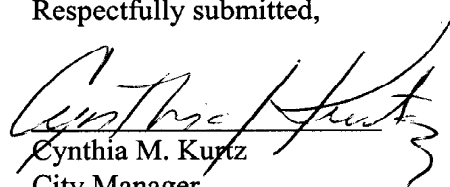
FISCAL IMPLICATIONS:

The fiscal implications associated with the Power Sales Agreement are fully described in the accompanying Agenda Report.

POLICY CHANGES:

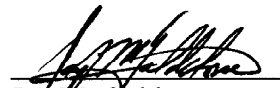
This ordinance furthers existing City policies of procuring electrical power at reasonable rates and providing Pasadena electrical customers with a reliable sources of electricity supplies. Accordingly, no policy changes are implicated by the proposed ordinance.

Respectfully submitted,



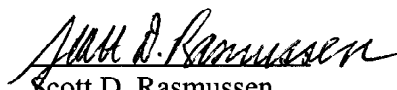
Cynthia M. Kurtz  
City Manager

Reviewed by:



Jay M. Goldstone  
Director of Finance

Prepared by:



Scott D. Rasmussen  
Assistant City Attorney

Introduced by Councilmember \_\_\_\_\_

ORDINANCE NO.

AN UNCODIFIED ORDINANCE OF THE CITY OF PASADENA  
APPROVING THE MAGNOLIA POWER PROJECT POWER SALES  
AGREEMENT

WHEREAS, pursuant to the provisions relating to the joint exercise of powers found in Chapter 5 of Division 7 of Title 1 of the Government Code of the State of California, as amended (the "Joint Powers Act"), the City of Pasadena (the "City") and certain other public entities (collectively, the "Members"), have entered into a Joint Powers Agreement, as amended (the "Agreement"), creating the Southern California Public Power Authority (the "Authority"), a public entity separate and apart from the Members; and

WHEREAS, the Authority proposes to enter into the Magnolia Power Project Construction, Management and Operating Agreement with the City of Burbank to provide for the construction and operation of the Magnolia Power Project, a natural gas fired generating facility and associated facilities to be owned by the Authority and to be located in the City of Burbank, which is one of the Members (the "Magnolia Power Project"); and

WHEREAS, the City Council of the City of Pasadena finds and determines that it is in the best interests of the City and its residents to purchase capacity and energy from the Magnolia Power Project pursuant to the Magnolia Power Project Power Sales Agreement (the "Power Sales Agreement"); and

WHEREAS, in accordance with the Agreement and the Joint Powers Act, the Authority has the power to enter into the Power Sales Agreement to sell capacity and

energy of the Magnolia Power Project to the City; and

WHEREAS, payments by the City pursuant to the Power Sales Agreement will be used in part for payment of the principle of, premium, if any, and interest on bonds, notes or other indebtedness issued by the Authority to finance the construction and acquisition of the Magnolia Power Project.

NOW, THEREFORE, the People of the City of Pasadena ordain as follows:

SECTION 1. The Council hereby approves the Power Sales Agreement.

SECTION 2. Pursuant to Section 54241 of the Government Code of the State of California, this ordinance is subject to the provisions for referendum applicable to the City.

SECTION 3. The City Clerk shall certify the adoption of this ordinance and shall cause this ordinance to be published in full text.

SECTION 4. This ordinance shall take effect upon the expiration of thirty (30) days from its publication.

Signed and approved this day of \_\_\_\_\_, 2002.

\_\_\_\_\_  
William Bogaard  
Mayor the City of Pasadena

I HEREBY CERTIFY that the foregoing ordinance was adopted by the City Council of the City of Pasadena at its meeting held \_\_\_\_\_, 2002, by the following vote:

AYES:

NOES:


ABSENT:

ABSTAIN:

Published:

\_\_\_\_\_  
Jane L. Rodriguez, CMC  
City Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Scott D. Rasmussen  
Assistant City Attorney