

OFFICE OF THE CITY MANAGER

May 8, 2006

To: City Council

From: City Manager

Subject: Addendum to Agenda Report - Proposed Power Revenue Increase

to Fund Power Distribution System Master Plan

The recommended power rate adjustment in the attached agenda report was presented to the Municipal Services Committee on April 19th. This addendum includes additional information that was requested at the conclusion of the presentation.

1. Uses of Funds:

The proposed July 2006 and October 2007 rate adjustments will result in a total increase of \$11.4 million of power operating revenue by the first complete year of implementation in fiscal year 2009. This additional revenue will be used to meet the annual operating and capital requirements of the first six years of the Power Distribution System Master Plan as follows:

	FY 2007	FY 2008	FY 2009
Source of Funds	·····		<u> </u>
Proposed Rate Adjustments	\$6.3	\$9.8	\$11.4
Total Sources of Funds	\$6.3	\$9.8	\$11.4
Use of Funds			
Capital Requirement - Master Plan:			
Debt Service	0.0	2.5	3.8
Operating Requirement – Master Plan:			
Increased Direct Personnel Costs (FTEs by 25 in 06)	3.9	4.0	4.2
Increased Direct Operating Costs (materials and supplies, contract services, and related expenses)	1.9	2.5	2.5
Incremental General Fund Transfer	0.5	0.8	0.9
Total Uses of Funds	\$6.3	\$9.8	\$11.4

Note: \$ shown in Millions

2. Proposed Establishment of/Changes to Reserve Policies:

During the past few years the Department has, in practice, had cash balances that exceeded 30 days of operating expenses on hand and is proposing to formalize the practice as policy. These funds represent monies required for operational expenses, well approved unanticipated as as expenditures, unexpended public benefit fund monies and reserves for energy and transmission cost increases. As outlined in Attachment 3 of the agenda report, the recommended policy would provide clarity as to the purposes as well as the amounts of cash on hand, ensure the availability of funds which have been collected for approved capital projects and ensure rate stability. Strong reserve polices and adequate balances are especially important as the financial condition of the power system will be evaluated when the utility returns to the bond market to finance portions of the Distribution Master Plan activities.

Operating Reserve: Currently, the Power Fund working capital and cash reserve policy provides for 30 days of operations and maintenance expenses or about \$10 to \$12 million in operating reserves. This amount of operating reserve, however, is not adequate to mitigate operational risks due to variability in sales and/or revenue shortfalls that could impact the utility's ability to pay debt service if sufficient monies are unavailable. In addition, the current reserve does not adequately address the 60-day billing and collection cycle of the system if no revenues were collected at all for one full cycle. The proposal will increase actual reserves to a level equal to 60 days of operations and maintenance expenses, approximately \$20 to \$24 million. It will enhance liquidity, provide for short-term rate stability, and preserve the utility's financial health. This amount is comparable to other similar municipal power utilities and is within the reserve level preferred by the rating agencies for maintaining the utility's current credit rating. A reduction in the current credit rating would result in increased borrowing cost.

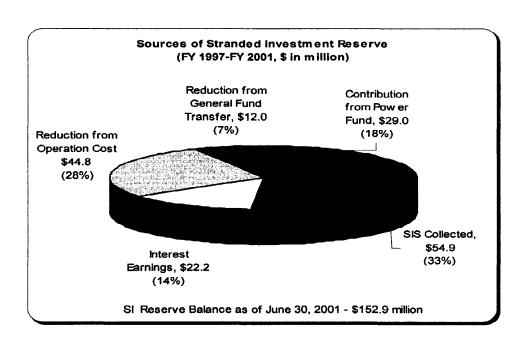
Energy Reserve: Consistent with the Department's Energy Risk Policy adopted by the City Council in 1999, an energy reserve account is required to mitigate energy cost volatility and unexpected plant outages, which have to be covered by power purchased in the energy markets. Prior to deregulation in 1998, the Department maintained a rate stabilization fund named the Energy Cost Adjustment Charge Reserve account. This account was one of the sources for the seed money deposited in the Stranded Investment Reserve Account and was discontinued in 2002 when rates were restructured. Since then, the Department has made provisions for energy

reserves in its operating reserves category. A separate energy reserve category is being recommended to formalize this practice. The proposed reserve amount is driven mainly by a periodic assessment of Pasadena's load forecast, the amount of power required to be purchased in the energy markets to supplement power already secured through long-term commitments and past purchases, and the estimated near-term forecast of natural gas and power costs. The proposed energy reserve will be used as a rate stabilization fund to minimize the impact of increased energy costs on customers. For example, since the beginning of the current fiscal year, the Department has withdrawn about \$10 million from the energy reserve portion of its current cash balance to offset increased energy costs.

<u>Capital Reserve</u>: This reserve account is designated to fund the design and construction costs of near-term committed CIP.

3. Stranded Investment Reserve:

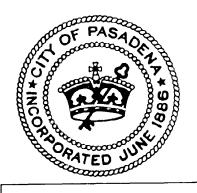
Although this proposal does not address the Stranded Investment Reserve, the Department is providing the analysis below in response to inquiries during the May 1, 2006 City Council presentation of the proposed power revenue increase. From FY 1997 to FY 2001, the Department funded the Stranded Investment Reserve from a variety of sources as shown below:



As of June 30, 2001, the Stranded Investment Reserve balance was \$152.9 million, after accounting for withdrawals of about \$10 million to defease debt associated with Palo Verde Nuclear Plant. In 2002, the Stranded Investment Surcharge was discontinued and the surcharges collected from customers during that fiscal year were refunded. Since then, \$35.5 million has been withdrawn from the reserve to offset energy costs and about \$26.8 million has been earned in interest, leaving a balance of \$144.2 million in the reserve as of June 2005.

CYNTHIA J. KURTZ

City Manager



Agenda Report

May 8, 2006

TO:

City Council

THROUGH: Municipal Services Committee

FROM:

City Manager

SUBJECT: Power Revenue Increase to Fund the Power Distribution System

Master Plan

RECOMMENDATION

It is recommended that the City Council:

- 1) Direct the City Attorney to prepare an amendment to the Light and Power Rate Ordinance, Chapter 13.04 of the Pasadena Municipal Code to fund the first six years of the Power Distribution System Master Plan as follows:
 - i) Effective July 2006, implement a 5% (0.54¢/kwh) overall power operating revenue increase, providing \$6.3 million net annual power operating revenue as follows:
 - Increase the power distribution rates for all customer groups by approximately 32%, thereby increasing power distribution revenue by \$10.8 million annually; and
 - Reduce the retail transmission rates for all customer groups by approximately 31.8%, thereby reducing retail transmission revenue by about \$4.5 million annually.
 - ii) Effective October 2007, implement a 4% (0.45¢/kwh) overall power operating revenue increase, providing about \$5.1 million net annual power operating revenue, as follows:
 - Increase the power distribution rates across the board for all customer groups by an additional 11%, thereby increasing the power distribution revenue by \$5.1 million annually.
- 2) Approve changes to the Water and Power Department working capital and cash reserve policy as described herein.

Proposed Power Revenue Increase May 8, 2006 Page 2

UTILITY ADVISORY COMMISSION RECOMMENDATION

The Utility Advisory Commission concurred with the recommended changes at its monthly meeting on February 8, 2006.

BACKGROUND

In March 2005, the City Council adopted the Master Plan which identified the critical infrastructure challenges of the power distribution system and recommended system improvements over a 20-year planning period (2005 - 2025). Following the adoption of the Master Plan, the department engaged R.W. Beck to develop a detailed capital improvement project implementation and spending plan for the first six years of the Master Plan. This implementation and spending plan was completed in July 2005 and was subsequently presented to both the Municipal Services Committee and the Utility Advisory Commission in summer 2005.

The implementation and spending plan recommends that the department make a capital investment of about \$121.9 million in its power distribution system over the next six years. This capital investment is in addition to other planned capital projects of about \$74.4 million over the same period and does not include any new investments for energy supply. Specifically, the implementation and spending plan requires the department to augment the power distribution system capacity, install additional equipment and replace aging infrastructure. Over 17 specific projects were identified for the first six years of the Master Plan as well as associated resource requirements and costs. A complete list of these projects is provided in Attachment 1.

DISTRIBUTION OPERATIONS AND COSTS

Consistent with the Master Plan, the department has been increasing its operation and maintenance activities to bolster the safety and reliability of the power distribution system, increase electrical efficiency, and better serve current and new customers. The department has hired additional personnel as approved by Council, retained engineering firms, and contracted with two firms for field crews in order to implement the Master Plan and handle increased workload. This approach allows for core activities to be accomplished with department personnel and specialized work and projects of limited duration to be handled using contract resources.

As a result of the department's increased efforts, distribution operating costs are projected to exceed distribution operating revenues collected from customers, if the distribution rates are not amended accordingly. See Table 1.

Table 1
Power Distribution Operating Revenues and Expenses (\$, millions)

	Actual		Projected	
	FY 2004	FY 2005	FY 2006	FY 2007
Power Distribution Operating Revenues	\$33.6	\$34.6	\$34.1	\$34.1
Power Distribution Operating Costs	\$31.4	\$33.0	\$38.6	\$42.0
Surplus / (Shortfall)	\$2.2	\$1.6	(\$4.5)	(\$7.9)

Note: Projected distribution revenues are based on current distribution rates in the Light and Power Rate Ordinance.

The department's electric rate structure was unbundled into distribution, energy and transmission in July 2002, and it includes variable components, which recover from customers cost increases associated with energy and transmission. Increases in the distribution component of the rate structure require City Council approval.

MASTER PLAN FUNDING PLAN

In conjunction with Public Resources Advisory Group (PRAG), a financial advisory firm retained by the department in mid 2005, staff developed a comprehensive plan to fund the first six years of the Master Plan and support ongoing operations. The overall objective of this funding plan was to finance the operating and capital requirements of the power system in a manner that minimizes rate increases and borrowing cost, matches the department's risk profile and promotes prudent borrowing to maintain the utility's financial health. In addition, staff created a financial model to assist in determining the optimal financial structure over the planning horizon and evaluated an array of issues to mitigate the impact of projected rate increases on electric customers.

From the results of the analyses and the evaluations performed, it is proposed to use revenues from current year rates to meet the operating requirements of the Master Plan, and to use a mix of revenue bond financing and cash (on a 65:35 basis) to meet the ongoing capital requirements of the Master Plan. It is further proposed to issue revenue bonds in the aggregate of approximately \$113 million over the next ten years to finance the significantly higher levels of capital investment. The timing and sizing of the proposed bond issues will be based on market conditions at the time of financing and any updates to the Master Plan and the implementation and spending plan. A summary of the Funding Plan is provided in Attachment 2.

Under the proposed funding scenario, the distribution charge will increase by 0.93 cents/kWh from about 2.91 cents/kWh to 3.84 cents/kWh, and the transmission charge will be reduced by 0.39 cents/kWh from about 1.21 cents/kWh to 0.82

cents/kWh to reflect the reduced cost of transmission as a result of the department becoming a Participating Transmission Owner (PTO) with the California Independent System Operator (CAISO). The net system average electric rate will increase by 0.54 cents/kWh, from 11.28 cents/kWh to 11.82 cents/kWh after the first proposed power distribution rate increase. After the second proposed power distribution rate increase, the distribution charge will increase by additional 0.45 cents/kWh from 3.84 cents/kWh to 4.29 cents/kWh, and the system average electric rate will increase by 0.45 cents, from 11.82 cents/kWh to 12.27 cents/kWh.

The graphical illustrations of the changes in the composition of the electric charge before and after the proposed rate increases are shown in Table 2 below.

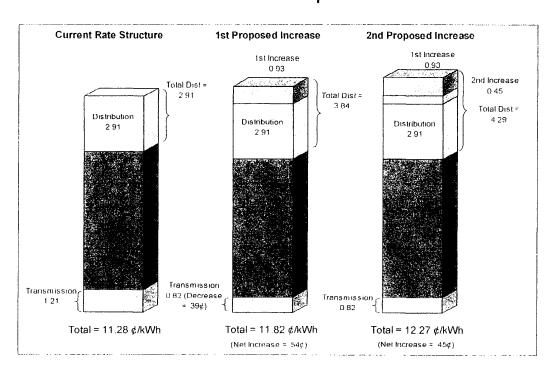


Table 2
Electric Rate Composition

It is also recommended that the City Council:

 Revise the formula for determining the retail transmission rate to reflect the department's PTO transactions and CAISO credits and charges, and pass through to electric customers the savings of approximately \$4.5 million per year that is now generated since the department became a PTO in January 2005.

These savings result mainly from the difference between the Federal Energy Regulatory Commission (ERC) approved transmission revenue requirement

that the department receives from CAISO and the transmission access charge and other related charges that it pays to CAISO. It also results from the treatment of all department high voltage transmission facilities as network facilities by FERC. Previously, the department could not count on these savings to reduce retail transmission rates due to the uncertainty of the network status of both the Northern Transmission System and the Southern Transmission System facilities, which transport Intermountain Power Agency power to Pasadena. However, based on a recent FERC ruling affirming a prior decision that these transmission facilities can be considered network facilities, the pass through of these savings is appropriate.

• Revise the utility's working capital and cash reserve policy to mitigate operational risks, enhance liquidity, and preserve the utility's financial health. This involves restricting some funds and designating some funds for particular purposes, creating key reserve accounts such as operating, energy and capital reserves, and maintaining operating reserve levels at a minimum of 60 days of operations and maintenance expenses instead of the current 30 days of operations and maintenance expenses. A summary of the proposed Power Fund Working Capital and Cash Reserve Policy is provided in Attachment 3.

CUSTOMER BILL IMPACT

The combination of the first proposed increase in distribution rates and the proposed decrease in transmission rates will result in an approximate 5% increase in the power operating revenue, and the second proposed increase in distribution rate will result in approximately 4% additional increase in the overall power operating revenue.

Under the proposed July 2006 rate adjustments, the monthly bill (including taxes) for an average residential customer using 500 kWh per month would increase by \$5.96 per month under both winter and summer rates, for an annual increase of \$71.52. Other approximate impacts on average monthly bills of selected customer types are provided in Table 4.

Table 4 Proposed Rate Adjustments Average Monthly Bill Impact (Taxes Inclusive)

		July 2006 Proposed Rate Adjustments		Sept. 2007 Proposed Rate Adjustments		
Selected Customer Type	Current Bill	Proposed Annual Bill	Change (\$)	Proposed Annual Bill	Change (\$)	
Residential Customer, 500 kWh per month	\$72.78	\$78.74	\$5.96	\$82.52	\$3.79	
Residential Customer, 1000 kWh per month	\$142.40	\$153.32	\$10.92	\$160.43	\$7.11	
Small Commercial & Industrial Customer, 2000 kWh per month	\$267.69	\$282.88	\$15.19	\$294.14	\$11.26	
Small Commercial & Industrial Customer, 4000 kWh per month	\$532.40	\$559.67	\$27.27	\$580.87	\$21.20	
Medium Commercial & Industrial Customer; 100 KW;		·				
35,000kWh / month Medium Commercial & Industrial Customer, 250 KW; 35,000 kWh /	\$4,417.65	\$4,531.85	\$114.20	\$4,660.03	\$128.18	
month Large Commercial & Industrial	\$5,534.49	\$6,028.09	\$493.60	\$6,328.70	\$300.61	
Customer, 500 KW; 200,000 kWh/month	\$24,010.94	\$24,427.84	\$416.90	\$25,046.31	\$618.47	
Large Commercial & Industrial Customer, 1,000 KW; 450,000 kWh	\$51,574.01	\$52,112.86	\$538.85	\$53,274.17	\$1,161.32	

Under this proposal, the department electric rates will remain competitive with those of the neighboring utilities. Attachment 4 provides a comparison between the department's rates and those of selected neighboring utilities.

A series of presentations have been held at various public forums to offer ratepayers information regarding the proposed increases and encourage feedback. Information regarding the use of increased revenues and the impact on average customer bills was included in the presentations. To date, the presentations included a forum at Villa Park on March 23, participation in a District 4 community meeting on March 30, and a presentation in District 1 on April 6, 2006. Additional meetings may be held as requested by City Council members or the community.

FISCAL IMPACT

Under this proposal, the overall power operating revenue will increase by \$6.3 million in fiscal year (FY) 2007 after the proposed rate adjustments in July 2006. After the proposed rate adjustments in October 2007, the overall power operating revenue will increase by about an additional \$5.1 million in FY 2008. Combined, the two proposed rate adjustments will result in an annual increase of \$11.4 million in the power operating revenue starting from FY 2009.

The proposed rate adjustments will increase the General Fund Transfer and generate about \$526,050 and \$757,500 for the General Fund in FY 2007 and FY 2008, respectively. Effective FY 2009 and thereafter, the proposed rate adjustments will generate about \$855,000 annually for the General Fund.

In addition, the proposed rate adjustments will increase the Utility's Users Tax Fund by about \$483,210 and \$774,670 in FY 2007 and FY 2008, respectively, and by \$874,380 annually starting from FY 2009. The proposed rate adjustments will also increase the Underground Surtax Fund by about \$119,700 and \$191,900 in FY 2007 and FY 2008, respectively, and by \$216,600 annually starting from FY 2009.

Respectfully submitted,

Æynthia J. Kvirtz City Manager

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Water and Power Department

Financial Planning and Analysis Manager

Approved by:

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Water and Power Department

ATTACHMENTS

Attachment 1. Master Plan – Spending and Implementation Budget for FY 2006 – FY 2011

Attachment 2. Master Plan Implementation Funding Plan Summary

Attachment 3. Proposed Working Capital and Cash Reserve Policy Summary

Attachment 4. Rate Comparison with Selected Neighboring Utilities after the First Rate Adjustment.

Power Water and Power Power Fund Planned Capital Budget FY2006 - FY2011 (\$000)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total FY 06-11
Master Plan Driven Projects		-					
3161 Capacity and Reliability Sustaining Program	\$2,310	\$3,083	\$3,936	\$4,562	\$4,903	\$5,243	\$24,037
3185 Replacement and Upgrade of Electrical Equipment and Facilities	\$2,200	\$1,852	\$2,778	\$2,778	\$2,778	\$2,778	\$15,163
3090 Switchgear Upgrades for Power System Facilities	\$4,502	\$2,568	\$2,457	\$2,389	\$4,221	\$694	\$16,832
3128 Oil Containment Facilities	\$2,000	\$897	\$285	\$190	\$0	\$0	\$3,372
3012 Distribution System Capacitor Bank Additions	\$0	\$100	\$100	\$100	\$100	\$100	\$500
3013 Facility Security Systems	\$0	\$10	\$0	\$0	\$0	\$0	\$10
3015 Substation Capacitor Bank Additions	\$1,100	\$0	\$0	\$0	\$1,100	\$0	\$2,201
3033 New Feeders and Communication Circuits	\$250	\$550	\$300	\$300	\$300	\$300	\$2,000
3035 Distribution System Fault Indicators / Recorders	\$300	\$150	\$150	\$150	\$150	\$150	\$1,050
3117 Wood Utility Pole Replacement / Reinforcing Program	\$1,600	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$9,100
3137 Cable Replacement and Testing	\$500	\$1,752	\$2,102	\$2,453	\$2,453	\$2,453	\$11,713
3028 Records and Drawing Automation	\$800	\$290	\$290	\$290	\$290	\$290	\$2,250
3140 Project and Work Management System	\$500	\$1,284	\$86	\$86	\$86	\$86	\$2,128
3142 Time of Use Metering Infrastructure	\$150	\$150	\$150	\$150	\$150	\$150	\$900
3173 Power Meter Installation and Replacement Program	\$500	\$750	\$1,000	\$1,000	\$1,000	\$500	\$4,750
3191 - 4-kV Distribution Conversion Projects	\$0	\$1,510	\$4,529	\$6,039	\$6,039	\$6,039	\$24,155
3192 Distribution System Automation	\$0	\$0	\$250	\$500	\$500	\$500	\$1,750
Sub-Total Master Plan Annual Capital Costs	\$16,712	\$16, 44 6	\$19,913	\$22,486	\$25,569	\$20,782	\$121,908
Ongoing Power Capital	\$6,730	\$7,380	\$7,380	\$7,380	\$7,380	\$7,380	\$43,630
Ongoing Finance/Customer Care/ Misc. Capital	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$12,000
Warehouse Modernization & Management System	\$3,000	\$8,000	\$4,000	\$0	\$0	\$0	\$15,000
Geographical Information System	\$1,000	\$2,000	\$1,000	\$0	\$0	\$0	\$4,000
Sub-Total Non-Master Plan Power Capital Costs	\$12,730	\$19,380	\$14,380	\$9,380	\$9,380	\$9,380	\$74,630
Total Power Capital Cost	\$29,442	\$35,826	\$34,293	\$31,866	\$34,949	\$30,162	\$196,538

Master Plan Implementation Funding Plan Summary (\$, Millions except where noted)

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	Projected	Projected	Projected	Projected	Projected	Projected
Total Revenues	146.3	152.4	157.7	157.6	157.6	162.5
Total Expenses	133.7	140.3	146.3	146.9	149.4	151.0
Earnings from Operations	12.6	12.1	11.4	10.7	8.3	11.4
Total Non-Operating Income	12.7	12.8	13.8	13.5	14.1	14.2
Net Income	26.3	25.9	25.2	24.2	22.4	25.6
Debt Service - Direct	13.0	12.9	15.5	14.0	15.3	15.9
						24
Capital Expenditures						
Master Plan	\$16.7	\$16.4	\$19.9	\$22.4	\$25.6	\$20.8
Non Master Plan	\$12.7	\$19.4	\$14.4	\$ 9.4	\$ 9.3	\$ 9.3
Total Capital Expenditures	\$29.4	\$35.8	\$34.3	\$31.8	\$34.9	\$30.1
Overall Electric Rate Increase, %	0	5.0	4.0	0.0	0.0	3.8
Total Retail Rate, cents/kWh	11.28	11.82	12.27	12.27	12.27	12.72
Debt Financing	\$0.0	\$36.0	\$0.0	\$17.2	\$0.0	\$0.0
Net Revenue from Rate Changes	\$0.0	\$6.3	\$10.1	\$11.4	\$11.4	\$11.4
		12.5				
Ending Working Cash Balance	\$61.1	\$79.9	\$66.7	\$74.6	\$66.5	\$69.5
Debt Service Coverage						
Direct Debt , #	3.04 x	3.05 x	2.85 x	3.13 x	3.05 x	3.17 x
Aggregate Debt, #	1.68 x	1.64 x	1.66 x	1.71 x	1.71 x	1.76 x
Ballia E a Ballia	0.00	0.00	0.00			
Debt-to-Equity Ratio, #	0.33	0.39	0.36	0.38	0.35	0.33

PASADENA WATER AND POWER

PROPOSED POWER FUND WORKING CAPITAL / CASH RESERVE POLICY

			Recommended Reserve
Reserve Category	Designation	Methodology / Purpose	Level for Current Year
Reserve Categories			
		60 days of projected expenses less	
Operating Reserve	Unrestricted	depreciation	\$20 million
		The greater of 1/12 th of the next 12-	
		month total projected energy costs per	
Energy Reserve	Unrestricted	PCA or the Energy Portfolio Risk	\$15 million
		Reserve Requirement	
		Based on the proposed Transmission	
Transmission Reserve	Unrestricted	Services Charge reserve requirement	\$4.5 million
Contingency & Equipment			
Replacement Reserve	Unrestricted	Emergency	\$0.5 million
Subtotal - Unrestricted Reserve			\$40 million
Unexpended Bond Proceeds	Restricted	CIP	\$4.2 million
PBC Reserve	Restricted	PBC Fund balance	\$2.0 million
Capital Reserve	Restricted	Near-Term Committed CIP	\$29.7 million
Subtotal - Restricted Reserve			\$35.9 million
Total Reserve			\$75.9 million

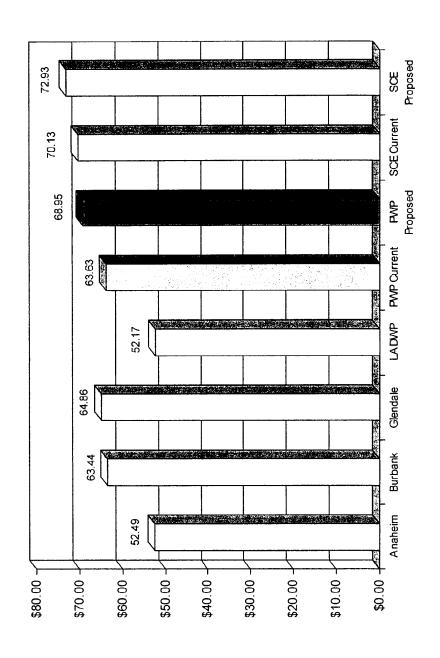
Notes:

- 1. The Power Fund net working capital and cash reserve was \$83.5 million as of June 2005
- 2. Net working capital is defined as the difference between current assets and current liabilities after adjusting current assets for items such as Hoover power plant up-rating, deferred losses and prepayments for the early retirement of debt.
- 3. Both the Stranded Investment reserve & reserve with fiscal agents have been excluded from cash reserve requirements on the recommendation of the City's external Auditor since they do not meet the three-month liquidity factor requirement
- 4. Operating reserve is required for mitigating operational risks due to variability in sales, changes in consumption pattern and/or revenue shortfalls among other factors and it is available to pay debt service if there are insufficient monies in the Power Fund.
- 5. Energy Reserve is required for providing short term rate stability under volatile market conditions and is available to smooth out and/or mitigate energy cost increases, variability in future fuel and purchased power supply costs.
- 6. Capital Reserve is required to fund the design and construction costs of near-term committed.

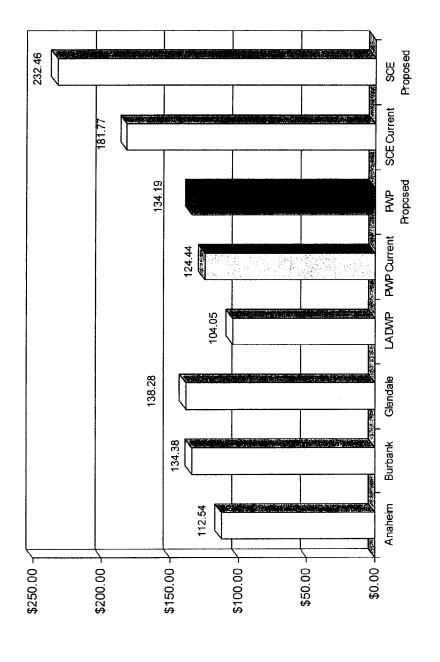
Attachment 4

Rate Comparisons with Selected Neighboring Utilities Average Monthly Utility Bill (Without Taxes)

Residential Monthly Bill - 500 KWH (Annualized, Excluding Taxes)



Residential Monthly Bill - 1,000 KWH (Annualized, Excluding Taxes)



Notes:
* As filed by SCE with CPUC on September 6, 2005.