

## **ATTACHMENT E: Revenue Requirements for Legal Review**

### **PASADENA WATER AND POWER**

#### Recommended Water Rate Adjustments

#### **INTRODUCTION**

This report documents the results of the internal revenue requirements review and rate sufficiency analysis. It provides a summary of the proposed rate actions and serves as a guide to the analysis performed.

#### **BACKGROUND**

As part of the development of the fiscal year (“FY”) 2022 operating budget, Pasadena Water and Power (“PWP”) conducted a revenue requirements analysis and rate sufficiency review, each of which determined that revenues from existing rates were insufficient to meet projected revenue requirements. This condition is a result of updated five-year water capital investment projections, water conservation assumptions, increasing operational costs including imported water supply costs from Metropolitan Water District (“MWD”) and certain estimates about customer characteristics and water usage. PWP recommends water rate adjustments to improve the balance of revenue requirements with a reasonable impact on customer rates.

#### **RATE STRUCTURE**

PWP’s rate structure is composed of three water service components: the Commodity charge, the Distribution & Customer (“D&C”) charge, and the Capital Improvement Charge (“CIC”). The Commodity charge and CIC are both volumetric charges and the D&C charge is a fixed monthly or bi-monthly charge that varies by meter size. The D&C charge includes the Fire Protection Surcharge (“FPS”).

##### **Commodity Rates**

The Commodity charge covers the extraction cost of local groundwater and the cost to purchase imported water from the MWD. It also recovers the cost of performing water quality testing and treatment to ensure that high quality water is delivered to Pasadena’s customers.

##### **D&C Rates**

The D&C charge recovers the cost of operating and maintaining the infrastructure that treats, stores and reliably delivers water to the City’s customers. This includes distribution mains and service lines connecting to individual homes and businesses, pumping stations that boost water across various elevations in the City and reservoirs where water is stored and treated. The D&C also covers the costs of customer service functions, including the call center, meter reading, billing and collections.

## CIC Rates

The CIC recovers CIC eligible capital improvement projects as well as debt service on bonds issued by PWP.

## FINANCIAL PLAN

In its analysis, staff developed a five-year financial plan as shown in Table 1 below.

**Table 1: Financial Plan FY 2022 - FY 2026**

	FY 2022 Forecast	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected
<b>Retail Sales (Billing Unit)</b>	<b>11,141,066</b>	<b>10,554,694</b>	<b>9,968,322</b>	<b>10,018,164</b>	<b>10,068,255</b>
<b>Revenues:</b>					
Distribution and Customer	\$26,969,181	\$27,969,181	\$28,969,181	\$29,719,181	\$30,719,181
<i>Proposed D&amp;C Rate Increase</i>	<i>\$250,000</i>	<i>\$500,000</i>	<i>\$750,000</i>	<i>\$1,000,000</i>	<i>\$1,250,000</i>
Commodity	\$26,930,076	\$28,248,820	\$28,305,205	\$29,794,783	\$30,926,134
<i>Proposed Commodity Increase</i>	<i>\$750,000</i>	<i>\$900,000</i>	<i>\$750,000</i>	<i>\$1,000,000</i>	<i>\$1,000,000</i>
CIC Revenue	\$11,217,962	\$10,610,410	\$11,209,245	\$12,554,613	\$14,519,241
<i>Proposed CIC Rate Increase</i>	<i>\$0</i>	<i>\$500,000</i>	<i>\$500,000</i>	<i>\$750,000</i>	<i>\$750,000</i>
Fire Protection Surcharge	\$433,649	\$433,649	\$433,649	\$433,649	\$433,649
Fire Protection Service	\$1,025,000	\$1,025,000	\$1,025,000	\$1,025,000	\$1,025,000
Service Connection Fees	\$137,500	\$137,500	\$137,500	\$137,500	\$137,500
Water Leases/Sales to Other Utilities	\$1,011,500	\$1,011,500	\$1,011,500	\$1,011,500	\$1,011,500
<b>Total Operating Revenues</b>	<b>\$68,724,868</b>	<b>\$71,336,060</b>	<b>\$73,091,280</b>	<b>\$77,426,226</b>	<b>\$81,772,205</b>
<b>Operating Expenses:</b>					
Purchased Water	\$21,996,195	\$21,615,268	\$21,215,294	\$22,063,906	\$22,725,823
Purchased Power	\$2,976,098	\$2,940,444	\$2,906,009	\$2,920,539	\$2,935,141
Direct Operating Expenses	\$14,242,800	\$14,670,084	\$15,110,187	\$15,563,492	\$16,030,397
General & Administrative Expenses	\$14,697,534	\$15,138,460	\$15,592,614	\$16,060,393	\$16,542,204
Interest Expense	\$3,150,930	\$3,758,250	\$4,228,186	\$4,068,681	\$3,904,938
Depreciation and Amortization	\$8,730,640	\$8,905,253	\$9,083,358	\$9,265,025	\$9,450,326
<b>Total Operating Expenses</b>	<b>\$65,794,197</b>	<b>\$67,027,758</b>	<b>\$68,135,647</b>	<b>\$69,942,035</b>	<b>\$71,588,829</b>
<b>Operating Income</b>	<b>\$2,930,670</b>	<b>\$4,308,302</b>	<b>\$4,955,633</b>	\$7,484,191	\$10,183,377
Non-Operating Revenue	\$4,330,465	\$4,542,458	\$2,054,217	\$2,057,146	\$2,057,146
<b>Income Before Fund Reimb. from Water Svcs.</b>	<b>\$7,261,135</b>	<b>\$8,850,760</b>	<b>\$7,009,850</b>	<b>\$9,541,337</b>	<b>\$12,240,522</b>
Reimbursement to General Fund	\$1,894,138	\$1,894,138	\$1,894,138	\$1,894,138	\$1,894,138
<b>Net Income</b>	<b>\$5,366,997</b>	<b>\$6,956,622</b>	<b>\$5,115,712</b>	<b>\$7,647,199</b>	<b>\$10,346,384</b>

## REVENUE REQUIREMENT REVIEW

The five-year financial plan illustrates PWP's operations and maintenance ("O&M") costs. Additionally, PWP includes its capital costs when calculating its total revenue requirements. Based on the current rates and forecasted sales, the projected revenues are expected to be insufficient to recover the utility's revenue requirements. Without rate actions, the imbalance will continually grow as costs rise. In order to mitigate the rate insufficiencies, staff developed a two-year rate proposal.

## COST ALLOCATIONS OF REVENUE REQUIREMENTS

The FY 2022 planned O&M expenses are \$67.7 million (comprised of operating expenses of \$65.8 million and reimbursement to the General Fund of \$1.9 million). PWP allocated these costs to the various customer classes in accordance with the 2019 Water Cost of Service Study ("WCOS"). The WCOS functionalized FY 2022 costs by PWP's cost categories. The FY 2022 WCOS categorization results are shown in Table 2.

**Table 2: O&M Cost Summary (\$ millions)**

Cost Type	Amount
Commodity	\$31.0
D&C*	\$33.8
CIC (scheduled interest expense in FY 2022)**	\$2.9
<b>Total FY 2022 O&amp;M Costs</b>	<b>\$67.7</b>

\* Includes interest expense for capital projects not funded by the CIC (approximately \$0.25 million)

\*\* Excludes cash funding for capital expenditures and principal debt service payment

In addition to the O&M review, staff identified capital revenue requirements and determined that PWP should recover \$4.1 million for unfunded capital projects not included in the CIC calculation and \$5.5 million in unfunded CIC projects. The unfunded CIC projects comprise 35% of the amount not collected by the CIC rate. The depreciation cost of \$9 million is excluded in order to capture the cash basis revenue requirement. The \$8.5 million capital revenue requirement is funded by the CIC formula. The CIC formula applies a 35% funding target of the five-year average capital spend. Table 3 summarizes these O&M and Capital cost allocations of revenue requirements.

**Table 3: FY 2022 Revenue Requirement (\$ millions)**

FY 2022 Revenue Requirement	Commodity	D&C	CIC	Total
<b>Operations and Maintenance Total</b>	<b>\$31.0</b>	<b>\$33.8</b>	<b>\$2.9</b>	<b>\$67.7</b>
<b>Capital Revenue Requirement</b>				
Unfunded capital projects*	-	4.1	-	4.1
Unfunded CIC projects	-	5.5	-	5.5
Cash funding from CIC calculation	-	-	8.5	8.5
Debt Service from CIC calculation**	-	-	4.2	4.2
Less Depreciation	-	-9.0	-	-9.0
<b>Capital Revenue Requirement Total</b>	<b>\$0</b>	<b>\$0.6</b>	<b>\$12.7</b>	<b>\$13.3</b>
<b>Total FY 2022 Revenue Requirements</b>	<b>\$31.0</b>	<b>\$34.4</b>	<b>\$15.6</b>	<b>\$81.0</b>

\* Includes principal payment for capital projects not funded by the CIC

\*\* Includes debt service from CIC calculation

**PROPOSED WATER RATE ADJUSTMENTS**

Based on the current rates and forecasted sales, the utility is projected to be short of recovering its revenue requirements. In order to mitigate the rate insufficiencies, staff proposes revenue increases of \$1.0 million in FY 2022 and \$1.9 million in FY 2023. It is important to note, that the proposed revenue increases are not intended to fully recover the annual revenue requirements. The shortfalls are offset by available water fund reserves and the use of bond funds when appropriate. The proposed increases are designed to contribute to the revenue recovery over a multi-year period.

The D&C rates were updated based on forecasted number of customers by meter size. The allocation of proposed D&C rate increases by meter size applies the hydraulic capacity/equivalent meters methodology. The proposed changes to the D&C rate are shown in Table 4.

**Table 4: Distribution and Customer Charge: Current and Proposed (excludes FPS)**

Meter Size	Current	April 1, 2022	January 1, 2023
5/8"–3/4"	\$24.28	\$25.18	\$26.08
1"	\$46.13	\$47.84	\$49.55
1 1/2"	\$94.69	\$98.20	\$101.71
2"	\$218.54	\$226.64	\$234.75
3"	\$534.18	\$553.99	\$573.79
4"	\$820.64	\$851.07	\$881.50
6"	\$1,267.37	\$1,314.37	\$1,361.36
8"	\$2,061.45	\$2,137.88	\$2,214.32
10"	\$2,683.01	\$2,782.49	\$2,881.97

Proposed adjustments to the Commodity Rate are shown in Table 5.

**Table 5: Commodity Rates: Current and Proposed**

Per Billing Unit	Current	April 1, 2022	January 1, 2023
Block 1	\$1.44852	\$1.63649	\$1.76849
Block 2	\$3.07637	\$3.47558	\$3.74827
Block 3	\$3.60615	\$4.07410	\$4.39376
Block 4	\$4.37569	\$4.94350	\$5.33137

Proposed adjustments to the CIC are shown in Table 6.

**Table 6: Capital Improvement Charge: Current and Proposed**

Per Billing Unit	Current	April 1, 2022	January 1, 2023
	\$1.00501	\$1.00501	\$1.12404