ELECTRIC AND WATER RATE STRUCTURES

Finance/Rates Division

Customer Relations/Finance Committee
May 16, 2022

RATEMAKING PRINCIPLES DRIVE RATE DESIGN

City Council Approved July 26, 2016

- Achieve full recovery of costs.
- Equitably allocate costs across and within customer classes.
- Encourage efficient use of water and electricity.
- Provide rate stability.
- Offer flexibility and options.
- Maintain rate competitiveness in region.
- Be simple and easy to understand.

RPU CURRENT RATES

Rate Type	Electric		Water	
	Residential	Other	Residential	Other
Residential / Domestic	X		X	
Domestic Time of Use / Electric Vehicle (EV)	X			
Commercial / Industrial		X		X
Economic Development		X		
Net Energy Metering	X	X		
Feed-In Tariff		X		
Stand-By-Service		X		
Agricultural & Pumping / Wind Machines		X		
Street / Outdoor Lighting		X		
Traffic Control Service		X		
Agricultural Service			X	X
Riverside Water Company Irrigators			X	X
Landscape / Interruptible Irrigation / Greenbelt Irrigation				X
Fire Protection / Fire Hydrants / Temporary Service				X
Recycled Water				X

PROPOSITION 218

1. Approved by voters in 1996
2. Amended California Constitution
3. Requires voter approval prior to imposition or increase of general taxes, assessments, and certain user fees
4. Utility rates may not exceed the cost of providing the service
5. Any excess subject to voter approval
6. Applies to water, sewer and refuse rates
7. Does not apply to electric rates

PROPOSITION 218: PROCESS APPROVAL OF RATES

1. 45 days' mailed notice of the proposed increase
2. Majority protest public hearing (50% plus 1)
3. Applies to water, refuse, sewer rates
4. Does not apply to electric rate

PROPOSITION 26

1. Approved by voters in 2010
2. Amended California Constitution
3. Reaction to *Sinclair Paint Co. v. State Board of Equalization*
   a. 1997 California Supreme Court case
   b. Upheld state fees imposed on business that made products containing lead
   c. Fee funded health services to children and to mitigate lead contamination
   d. Court upheld the fee as a regulatory fee

PROPOSITION 26

1. Requires voter approval of certain fees, levies, charges and tax revenue allocations
2. Seven exemptions
3. Overall effect: charges that exceed the cost of service must be approved by voters because they are now "taxes" unless exempt
4. Applies to electric rates
   a. Electric rates may not exceed the cost of providing the service
   b. Any excess requires voter approval

ELECTRIC RATES



ELECTRIC RATE TERMINOLOGY



Customer Charge:

- Monthly fixed charge that applies independent of consumption
- Also called a Basic Charge or Meter Charge



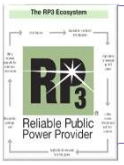
Energy Charge:

- Price per kWh
- May be more than one block (tier)
- May be seasonal, or time-varying



Demand Charge:

- Monthly charge based on the highest instantaneous usage rate (usually highest hour) during the month or year



Reliability Charge:

- Monthly charge based on panel size or monthly usage or demand depending on customer class



Network Access Charge:

- Monthly charge based on monthly usage or demand depending on customer class

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ELECTRIC DEFINITIONS – RATE COMPONENTS

Rate Component	Definition	Fixed	Variable
Customer Charge	Recovers costs incurred in direct support of the customer including costs associated with labor, equipment, and investments for customer accounting, billing, and customer assistance.	X	
Energy Charge	Recovers costs that change with the changes in electric load. The primary example of energy-rated costs are fuel and purchased power costs.		X
Demand Charge	Recovers costs that are related to the existing and future investments made to produce, transmit, and deliver power from the generation resources to customers.	X	
Network Access Charge	Recovers the demand-related costs to maintain the distribution system to provide power and energy to service customers.	X	
Reliability Charge	Recovers costs to improve the reliability of Riverside's internal transmission system and provide internal generation of power and energy to service customers.	X	

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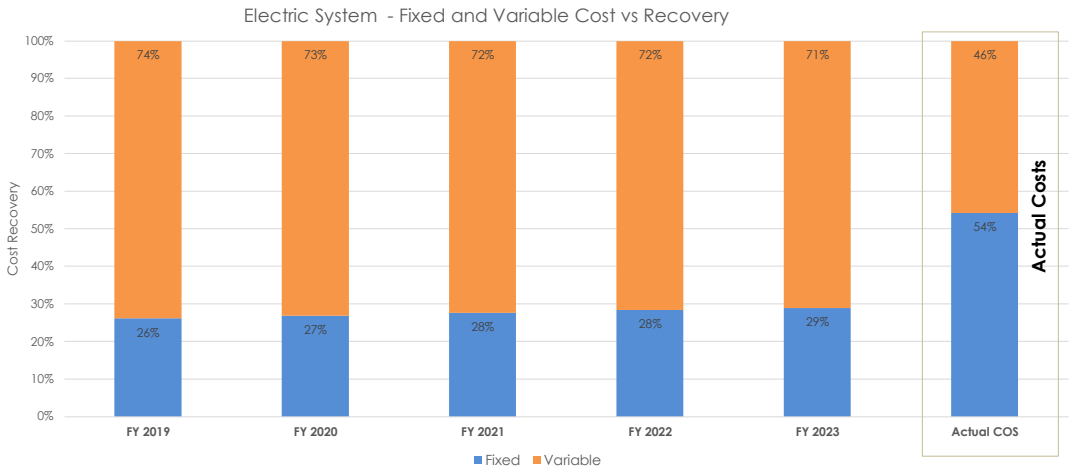
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ELECTRIC ENERGY RATE TYPES

- **RPU's Energy Rate Types**
  - **Residential**
    - **Inclining Block**: Higher price for increased usage
    - **Seasonal**: Summer and winter tier allocation
    - **TOU**:
      - On, mid, and off-peak periods based on time of delivery
      - Higher price for on-peak hours
      - TOU with Inclining Block
  - **Commercial**
    - **Inclining Block**
    - **Inclining Block with Demand**
    - **TOU with Demand**



FIXED VS. VARIABLE



Note: From 2018 Electric Cost of Service Analysis Report

ELECTRIC RATE STRUCTURES - DOMESTIC

	Effective January 1, 2022
Customer Charge ($/month)	$11.26
Network Access Charge ($/month)	
Tier 1 (< or = 12 Daily Avg kWh Usage)	$1.94
Tier 2 (>12 - 25 Daily Avg kWh Usage)	$4.65
Tier 3 (>25 Daily Avg kWh Usage)	$10.24
Energy Charge ($/kWh)	
Tier 1 (0–750 S; 0–350 W)	$0.1087
Tier 2 (751–1,500 S; 351–750 W)	$0.1729
Tier 3 (>1,500 S; >750 W)	$0.1961
Reliability Charge ($/month)	
Small Residence (<100 Amp)	$10.00
Medium Residence (101–200 Amp)	$20.00
Large Residence (201-400 Amp)	$40.00
Very Large Residence (>400 Amp)	$60.00

Notes:
1) Includes Multi-Family with tier allotments for each individual family accommodation.
2) Includes closed variations for electric water hear, electric space heater, and all electric homes.

ELECTRIC RATE STRUCTURES – DOMESTIC TIME-OF-USE

Effective January 1, 2022

Customer Charge ($/Month)		$11.26
Network Access Charge ($/month)		
Tier 1 (< or = 12 Daily Avg kWh Usage)		$1.94
Tier 2 (>12 - 25 Daily Avg kWh Usage)		$4.65
Tier 3 (>25 Daily Avg kWh Usage)		$10.24
Energy Charge ($/kWh)		
Summer– On Peak	Tier 1 (0–330 kWh)	$0.1834
	Tier 2 (>330 kWh)	$0.2934
Summer– Mid Peak	Tier 1 (0–550 kWh)	$0.1192
	Tier 2 (> 550 kWh)	$0.1907
Summer – Off Peak	Tier 1 (0–220 kWh)	$0.0917
	Tier 2 (>220 kWh)	$0.1467
Winter – On Peak	Tier 1 (0–135 kWh)	$0.1376
	Tier 2 (>135 kWh)	$0.2202
Winter – Mid Peak	Tier 1 (0-250 kWh)	$0.1100
	Tier 2 (>250 kWh)	$0.1760
Winter – Off Peak	Tier 1 (0–115 kWh)	$0.0917
	Tier 2 (>115 kWh)	$0.1467
Reliability Charge ($/month)		
Small Residence (<100 Amp)		$10.00
Medium Residence (101–200 Amp)		$20.00
Large Residence (201-400 Amp)		$40.00
Very Large Residence (>400 Amp)		$60.00

ELECTRIC RATE STRUCTURES – DOMESTIC ELECTRIC VEHICLE SEPARATELY METERED

	Effective January 1, 2022
Customer Charge ($/Month)	$11.26
Energy Charge ($/kWh)	
Summer Season	
On Peak	$0.2714
Mid Peak	$0.1550
Off Peak	$0.1087
Winter Season	
On Peak	$0.2037
Mid Peak	$0.1430
Off Peak	$0.1087

Note: Customer receives one Domestic Rate Tier 3 Network Access Charge.

ELECTRIC RATE STRUCTURES – COMMERCIAL – FLAT CLASS

	Effective January 1, 2022
Customer Charge ($/month)	$20.50
Network Access Charge ($/month)	
Tier 1 (0–500 kWh)	$2.79
Tier 2 (501–1,500 kWh)	$7.91
Tier 3 (1501–3000 kWh)	$14.08
Tier 4 (>3000 kWh)	$33.86
Energy Charge ($/kWh)	
Tier 1 (0-15,000 kWh)	$0.1450
Tier 2 (>15,000 kWh)	$0.2215
Reliability Charge ($/month)	
Tier 1 (0-500 kWh)	$10.00
Tier 2 (501–1,500 kWh)	$30.00
Tier 3 (>1,500 kWh)	$60.00

Note: Applicable to commercial customers with a monthly maximum demand not exceeding 20 kW in any two of the preceding 12 months.

ELECTRIC RATE STRUCTURES – COMMERCIAL – DEMAND CLASS

	Effective January 1, 2022
Customer Charge ($/month)	$17.68
Network Access Charge ($/kW)	$1.40
Energy Charge ($/kWh)	
Tier 1 (0-30,000 kWh)	$0.1212
Tier 2 (>30,000 kWh)	$0.1328
Demand Charge ($/kW)	
First 15 kW	$160.20
All excess kW	$10.68
Reliability Charge ($/month)	$90.00

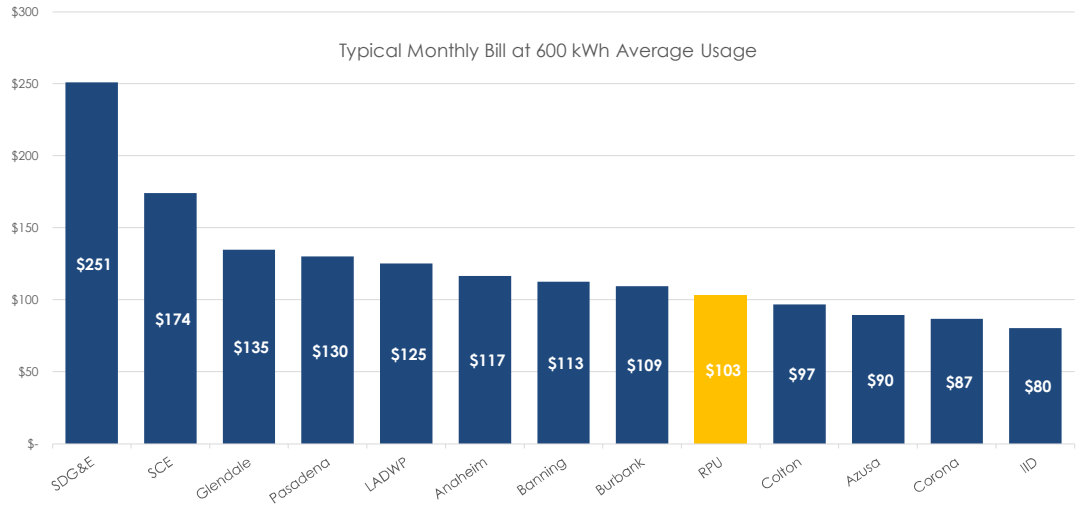
Note: Applicable for commercial customers with a billing demand equal to or exceeding 20 kW but less than 150 kW in any two of the preceding 12 months.

ELECTRIC RATE STRUCTURES – INDUSTRIAL TIME-OF-USE CLASS

Rate Component	Effective January 1, 2022
Customer Charge ($/month)	$666.28
Network Access Charge ($/Max kW)	$2.34
Energy Charge ($/kWh)	
On-Peak	$0.1124
Mid-Peak	$0.0922
Off-Peak	$0.0787
Demand Charge ($/kW)	
On-Peak	$7.27
Mid-Peak	$3.64
Off-Peak	$1.82
Reliability Charge ($/month, on Max kW)	
<= 100 kW	$350.00
101-150 kW	$750.00
151-250 kW	$900.00
251-500 kW	$1,100.00
501-750 kW	$1,850.00
> 750 kW	$2,650.00

Note: Applicable for a commercial/industrial customers with a monthly demand level equal to or exceeding 150 kW for any two of the preceding 12 months.

ELECTRIC RESIDENTIAL RATE COMPARISON



Note: Rates effective as of 3/1/22 including RPU's effective 1/1/22.

WATER RATES



WATER RATE TERMINOLOGY



Customer Charge:

- Monthly fixed charge that applies independent of consumption
- Also called a Basic Charge or Meter Charge
- Based on meter size



Quantity/Consumption Charge:

- Price per CCF (One hundred cubic feet = 748 gallons)
- May be more than one block (tier)
- May be seasonal

WATER DEFINITIONS – RATE COMPONENTS

Rate Component	Definition	Fixed	Variable
Customer Charge	Fixed costs that relate to operational support activities including accounting, billing, customer service, and administrative and technical support, along with meter and capacity related costs such as maintenance and system capital based on each customer's capacity.	X	
Quantity/ Consumption Charge	Recovers costs incurred by the water system to provide a basic level of service, and the sources of supply costs.		X
Outside City	Additional capital costs incurred to meet demands for water from the City's customers who reside outside of the City and who require additional infrastructure to receive water service.	X	X

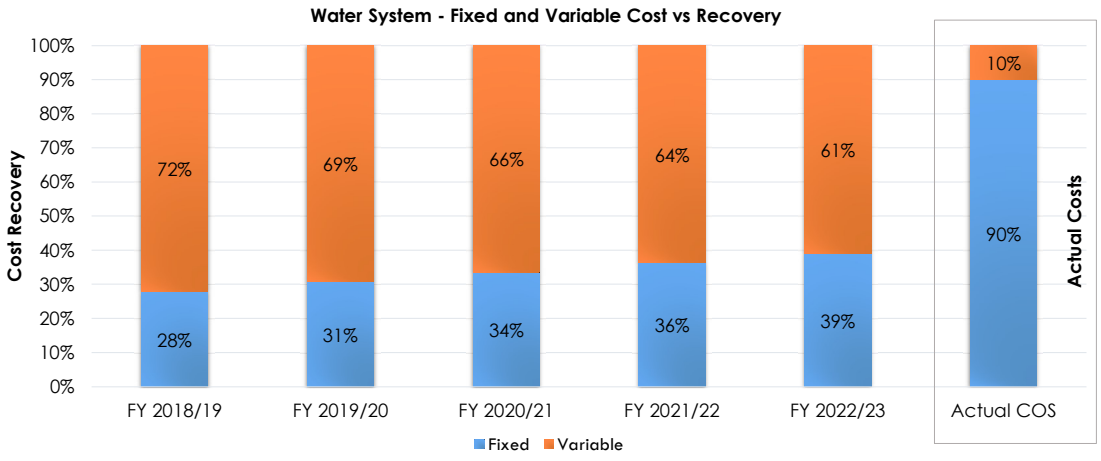
WATER RATE TYPES





- **RPU's Rate Types**
  - **Inclining Block**: Higher price for increased usage
  - **Seasonal**: Higher price in peak season (summer)
  - **Budgets:** Individual Agricultural Water Allocation

FIXED VS. VARIABLE



Note: From 2018 Water Cost of Service Analysis Report

WATER RATE STRUCTURES – CUSTOMER CHARGE *

Meter Size	Effective July 1, 2021
3/4" & 5/8"	$23.08
1"	$36.63
1.5"	$70.22
2"	$110.68
3"	$205.16
4"	$340.10
6"	$744.72
8"	$1,216.71
10"	$1,891.02
12"	$2,700.26

* Customer Charges are uniform among all rate classes.

WATER RATE STRUCTURES - RESIDENTIAL

Single Family Residential WA-1A	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
Tier 1 (First 9)	$1.26	$1.26
Tier 2 (10-35)	$1.58	$1.58
Tier 3 (> 35)	$2.91	$3.55

Multi-Family Residential WA-1B**	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
Tier 1 (First 7 per unit)	$1.25	$1.25
Tier 2 (> 7 per unit)	$1.81	$2.05

* One hundred cubic feet (CCF) = 748 gallons

**Applicable to Multi-Family Dwelling Units with 2 to 4 units.

WATER RATE STRUCTURES – COMMERCIAL, INDUSTRIAL, OTHER

Commercial and Industrial WA-6	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
All Usage	$1.58	$1.84

Interruptible City WA-7 & Recycled Water WA-10	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
All Usage	$1.57	$1.57

Landscape Irrigation WA-11	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
All Usage	$1.67	$2.14

* One hundred cubic feet (CCF) = 748 gallons



WATER RATE STRUCTURES – AGRICULTURAL SERVICE

WA-12 Agricultural Service With Residence	Effective July 1, 2021	
Consumption Rates ($/CCF)**	**Winter**	**Summer**
Tier 1 (First 9)	$1.26	$1.26
AWA* (CCF allocation per customer)	$1.26	$1.26
Tier 2 (Next 26 CCF above Tier 1+AWA)	$1.58	$1.58
Tier 3 (all CCF above Tier 1+AWA+Tier 2)	$2.91	$3.55

WA-12 Agricultural Service Without Residence	Effective July 1, 2021	
Consumption Rates ($/CCF)**	**Winter**	**Summer**
AWA* (CCF allocation per customer)	$1.26	$1.26
All CCF above AWA	$1.58	$1.84

*AWA: Agricultural Water Allocation in CCF per month, per Customer

AWA = evapotranspiration rate x crop factor x irrigated planted area x irrigation efficiency factor

** One hundred cubic feet (CCF) = 748 gallons



WATER RATE STRUCTURES - GAGE

Greenbelt Irrigation Service (WA-8)			Effective June 1, 2021
Customer Charge	(Per Meter/Per Month)		$9.92
Minimum Charge (First 156 CCF* per acre)	(Per Meter/Per Month/Per Acre)	Gage Canal Co. Rate	$33.33
Excess water/variable charges (Over 156 CCF per month per acre)	(Per CCF/Per Month/Per Meter)		
Next 156 CCF		Gage Canal Co. Rate	$0.433
CCF in excess of 312 CCF		Gage Canal Co. Rate	$0.866
Transportation Charge	(Per CCF/Per Month/Per Meter)	Gage Canal Co. Rate	$0.1922

* One hundred cubic feet (CCF) = 748 gallons

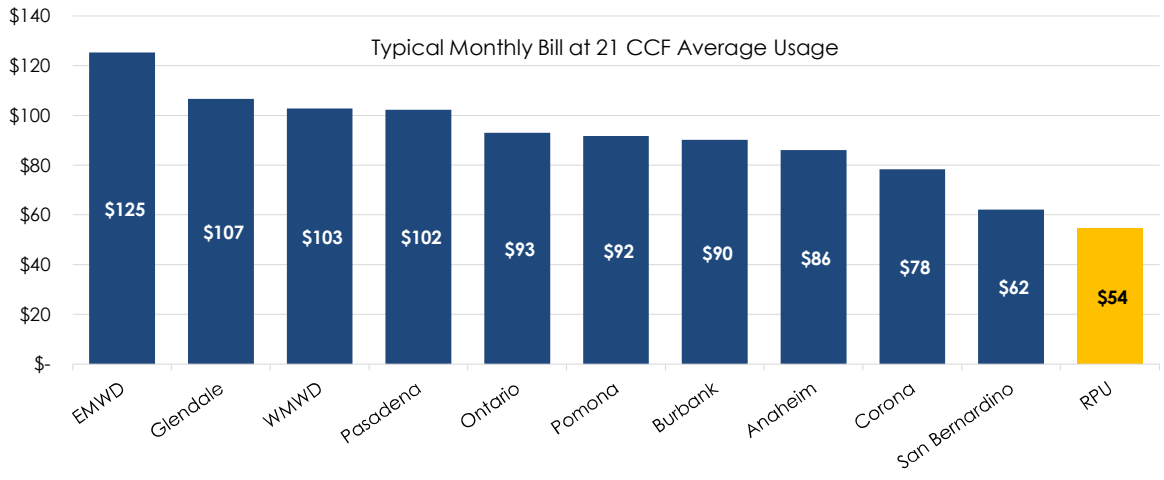
WATER RATE STRUCTURES - OTHER

Riverside Water Company Irrigators WA-4	Effective July 1, 2021	
Consumption Rates ($/CCF*)	**Winter**	**Summer**
Tier 1 (First 15)	$1.29	$1.29
Tier 2 (16-70)	$1.55	$1.55
Tier 3 (>70)	$2.40	$3.10

Temporary Service WA-2	Effective July 1, 2021
Consumption Rates ($/CCF*)	
All Usage	$2.39
Rental Fee	
Daily Rental Fee	$13.04
Fee (26 days - 34 days)	$391.00

* One hundred cubic feet (CCF) = 748 gallons

WATER COMPREHENSIVE RATE COMPARISON



Note: Rates effective as of 3/1/22 including RPU's effective 7/1/21

STRATEGIC PLAN ALIGNMENT

Strategic Priority 6 - Infrastructure, Mobility & Connectivity

Goal 6.2 - maintain, protect and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity

Cross-Cutting Threads

- Community Trust
- Fiscal Responsibility
- Sustainability & Resiliency
- Equity
- Innovation

RECOMMENDATIONS

That the Customer Relations/Finance Committee receive an update on Riverside Public Utilities' electric and water rate structures.