

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: AUGUST 8, 2022

SUBJECT: RIVERSIDE PUBLIC UTILITIES ELECTRIC AND WATER RATE TRENDS STUDIES

ISSUE:

Consider receiving an update and providing feedback on Riverside Public Utilities' Electric and Water Rate Trends Studies.

RECOMMENDATION:

That the Board of Public Utilities receive an update and provide feedback on Riverside Public Utilities' Electric and Water Rate Trends Studies.

CUSTOMER RELATIONS/FINANCE COMMITTEE RECOMMENDATIONS:

On May 16, 2022, the Board of Public Utilities Customer Relations/Finance Committee, with three members present and one member absent, unanimously received the Electric Rate Trends Study update and provided feedback that included considering:

1. The timing of the advanced metering infrastructure implementation when reviewing a transition to entirely time of use rates for the domestic and small and medium commercial classes;
2. Battery storage programs; and
3. Other factors along with the timing of rate adjustments being effective after the current five-year rate plan on January 1, 2024.

On June 20, 2022, the Board of Public Utilities Customer Relations/Finance Committee, with three members present and one member absent, unanimously received the Water Rate Trends Study update and provided feedback including:

1. Ensure compliance with legal requirements including California Propositions 218 and 26;
2. Consider rate structures that are resilient when volumetric water sales differ along with volumetric usage that does not fluctuate when evaluating fixed cost recovery;
3. Review ratepayer affordability by providing the impacts on low-income water customers and their water usage;

4. Evaluate the water utility's cost structure and the costs and benefits of implementing budget-based water rates prior to beginning the Phase V - Budget-Based Rate Design and Implementation Plan; and
5. Consider other factors along with the timing of rate adjustments being effective after the current five-year rate plan on July 1, 2023.

BACKGROUND:

On September 27, 2021, the Board of Public Utilities approved the agreement with NewGen Strategies and Solutions, LLC. (NewGen) to complete an electric utility cost of service analysis (COSA) and rate design project for financial planning purposes. The final year of the current electric utility five-year rate plan rate adjustment is effective January 1, 2023. After completing the draft Riverside Public Utilities (RPU) Self-Generation Program Review, NewGen and RPU staff began the COSA and Electric Rate Trends Study phases of the project.

On March 14, 2022, the Board of Public Utilities approved the agreement with Carollo Engineers, Inc. (Carollo) to complete a water utility COSA and rate design project for financial planning purposes. The final year of the current water utility five-year rate plan rate adjustment is effective July 1, 2022. Carollo and RPU staff have begun the COSA and Water Rate Trends Study phases of the project.

DISCUSSION:

The purpose of the Electric and Water Rate Trends Studies (Studies) phase within the Electric and Water COSA and Rate Design Projects is to evaluate and analyze different rate structures in the electric and water utility industries and how they could influence, impact, or apply to RPU currently and in the future. The different rate structures and industry concepts researched include, but are not limited to, emerging technologies and their future implications, electricity and water pricing, customer classification, and new customer choices. The Electric Rate Trends Study includes current rate offerings from investor-owned utilities (IOUs) and various municipal utilities like RPU. The use of multiple IOUs and municipal utilities is intended to best inform RPU of the different rate trends and rate structures in California and in the broader United States. The Water Rate Trends Study includes a review of current rate offerings from neighboring water utilities.

The goal of these Studies is to help RPU develop rates that are cost of service based, a reflection of industry best practices and meet the City's Strategic Goals and Cross Cutting Threads. With the COSA results and Study information, RPU will be optimally positioned to discuss and design electric and water rates for the future of each utility.

Electric Rate Trends Study (Attachment 1)

The Electric Rate Trends Study includes the following sections:

- Section 1 Introduction – Purpose of the Electric Rate Trends Study within the Electric Cost of Service Analysis and Rate Design Project.

- Section 2 General Rate Making Principles - An overview of general rate making principles including RPU's rate making principles and alignment with the City Council's Envision Riverside 2025 Strategic Plan Cross-Cutting Thread themes.
- Section 3 Electric Rate Alternatives – A discussion of various electric rate alternatives based on recent and emerging trends in the electric utility industry. The section highlights various summary rate matrices showing the rate structures of the utilities researched; the advantages and disadvantages; rankings of the alternative rates; and short-, mid-, and long-term considerations.
- Section 4 General Recommendations - Summary of general recommendations.
- Section 5 General Implementation Considerations - Discusses implementation considerations such as customer acceptance, usage patterns, technology, and costs and benefits.

The Electric Rate Trends Study includes general recommendations to:

1. Continue current practices, monitoring and updating its rate structure as necessary based on the COSA, regarding seasonal rates, economic development rates, stand-by charge, and time of use (TOU) rates.
2. Continue current practices regarding domestic electric vehicle (EV) charging rates and implement EV charging rates for commercial customers and public charging stations while also monitoring other utilities' practices and the applicable regulations and mandates of local, state, and federal regulatory bodies.
3. Continue using fixed cost recovery mechanisms like reliability charges and network access charges. RPU should continue analysis of these cost recovery mechanisms to ensure they are in line with COSA results.
4. Continue the plan to close the current net energy metering program and to implement the proposed self-generation program and continue to offer the feed-in tariff while also analyzing customer acceptance and customer knowledge of these types of rates. RPU should consider educating customers regarding the details and differences of the rates. As these rates are analyzed and modified as necessary, RPU should investigate potential aggregated self-generation programs consistent with potential state mandates.
5. RPU should not implement residential demand charges, real-time pricing rates, or critical peak pricing rates at this time, but should monitor other utilities' practices with regard to these rate alternatives.
6. RPU should not implement cost adjustment such as power cost adjustment, regulatory adjustment, or decoupling at this time but should monitor exposure to fluctuations in power costs, increasing regulatory costs, and other utilities' practices with regard to these rate alternatives. It is also recommended that RPU discontinue the current obsolete power cost adjustment factor due to the structure being out of date and not implemented for many years.

7. RPU should consider collapsing tiered rates with the goal of eventually transitioning out of tiered rates into entirely TOU rates for the domestic and small and medium commercial classes.
8. RPU should explore a small domestic rate for individually metered building units to charge customers more equitably for their costs.

The Electric Cost of Service and Rate Design Project includes five overall phases. NewGen was first tasked with Phase V Self-Generation Program Review. The Self-Generation Program Review report was included with the Self-Generation Program approved by City Council on Tuesday, May 10, 2022. NewGen was then tasked with Phase I Cost of Service Analysis and Phase II Electric Rate Trends Study. The results of the Electric Rate Trends Study will guide the Phase III Rate Design Recommendation and supporting Phase IV Customer Impact Rate Design Model which will begin after the completion of the Phase I Cost of Service Analysis.

Electric Cost-Of-Service and Rate Design Project	Status
Phase I - Cost of Service Analysis	Underway
Phase II - Electric Rate Trends Study	Draft
Phase III - Rate Design Recommendation	Following Phase I and II
Phase IV - Customer Impact Rate Design Model	With Phase III, Following Phase I and II
Phase V - Self-Generation Program Review	Complete

Water Rate Trends Study (Attachment 2)

The Water Rate Trends Study includes the following chapters:

- Chapter 1: Introduction - Includes recent trends in water demands and revenue recovery, RPU customer data and trends, and revenue stability and sufficiency.
- Chapter 2: Ratemaking Principles - An overview of general ratemaking principles including RPU's ratemaking principles and alignment with the City Council's Envision Riverside 2025 Strategic Plan Cross-Cutting Thread themes.
- Chapter 3: Existing Rate Structures - Discusses RPU's current water rate structures.
- Chapter 4: Emerging and Alternative Rate Structures - Discusses various water rate alternatives based on recent and emerging trends in the Water utility industry.
- Chapter 5: Promising Technological Trends - Discusses emerging technological trends and how RPU can benefit and improve communication with customers.
- Chapter 6: Rate Structure Evaluation Matrix - The chapter highlights various summary rate matrices showing RPU's current rate structures; emerging and alternative rate structures; their advantages and disadvantages for RPU and customers; short-, mid-, and long-term implementation considerations; and a comparison of each rate structure including customer acceptance, behavior changes, and technology costs.
- Chapter 7: Conclusions and Recommendations - Summary of general recommendations.

The Water Rate Trend Study recommends potential refinements and focus areas for the short-term including:

1. Customer Rate Classes: While the need for changes is not likely, RPU should evaluate the customer classes during the upcoming COSA Study and determine whether refinements to class assignments or additional classes are necessary.
2. Fixed Cost Recovery: RPU should continue to track and evaluate fixed and variable costs and set fixed cost recovery levels to balance the need to minimize potential revenue shortfalls with customer affordability. During the upcoming COSA Study, fixed costs, fixed revenues, and variable revenues associated with minimal, hardened demand should be evaluated to assess the sufficiency of fixed revenues, with potential increases to the proportion of fixed revenues if necessary.
3. Volumetric Rate Structures: RPU should evaluate the variable rates applied to each customer class during the upcoming COSA Study and make any necessary refinements. Refinements may include modifications to tier break points to align with current demand patterns, changes to seasonal rate assumptions, and other refinements.
4. Drought and Demand Management Rates: RPU should consider implementing drought and demand management rates to provide a means to adequately recover costs during times of high conservation or otherwise decreased demands. The rates could include a full drought and demand management rate structure with updated rates for all rate components for varied levels of conservation or cutbacks or could be structured as fixed or volumetric surcharges applied equally to all customer classes.
5. Water Budget-Based Rates: RPU should evaluate whether water budget-based rates could be beneficial for RPU and its customers along with the level of effort that would be needed to implement budget-based rates. This evaluation is planned for the upcoming COSA Study.
6. Other Rate Structure Elements: The upcoming COSA Study should evaluate the potential for other rate structure elements such as Supply/Infrastructure charges and Regulatory pass-throughs.
7. Recycled Water Rates: As the recycled water system is expanded and additional customers are connected, RPU should work to refine the recycled water rates and potentially adopt a recycled water specific rate rather than grouping recycled water with interruptible service once sufficient data is available to do so.

The Water Rate Trend Study recommends potential refinements and focus areas for the long-term including:

8. AMI Implementation, Time of Use Rates, and Demand Charges: With the eventual implementation of AMI and additional customer usage information available, RPU should explore whether time of use rates and demand charges would be beneficial for RPU and its customers.

The Water Cost of Service and Rate Design Project includes five overall phases. Carollo was first tasked with beginning the Phase I Cost of Service Analysis and Phase II Water Rate Trends Study. The results of the Water Rate Trends Study will guide the Phase III Rate Design Recommendation and supporting Phase IV Customer Impact Rate Design Model which will begin after the completion of the Phase I Cost of Service Analysis.

Water Cost of Service and Rate Design Project	Status
Phase I - Cost of Service Analysis	Underway
Phase II - Water Rate Trends Study	Draft
Phase III - Rate Design Recommendation	Following Phase I and II
Phase IV - Recycled Water Rate Design	Following Phase III
Phase V - Budget-Based Rate Design and Implementation Plan	Following Phase III

STRATEGIC PLAN ALIGNMENT:

This phase of the Electric and Water Cost of Service Analysis and Rate Design Projects contributes to **Strategic Priority 6 - Infrastructure, Mobility & Connectivity**, and **Goal 6.2** to maintain, protect and improve assets and infrastructure within the City's built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

The item also aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – The Electric and Water Cost of Service Analysis and Rate Design Projects are transparent and developed with our customers' and the community's wellbeing as a top priority.
2. **Equity** – The Electric and Water Cost of Service Analysis and Rate Design Projects include an equitable allocation of costs among customer classes which is incorporated into the resulting rate design recommendation.
3. **Fiscal Responsibility** – The Electric and Water Cost of Service Analysis and Rate Design Project incorporates a forecasted revenue requirement that includes operating and capital expenditures funded by the prudent use of rate revenue, bond proceeds, and reserves.
4. **Innovation** – The Electric and Water Cost of Service Analysis and Rate Design Projects includes the Electric and Water Utility Rate Trend Studies that evaluate emerging rate structures, technologies, and trends and how they may apply or be implemented by RPU.
5. **Sustainability & Resiliency** – The Electric and Water Cost of Service Analysis and Rate Design Projects will design future rates for a five-year period to equitably recover costs while maintaining the financial health of RPU.

FISCAL IMPACT:

There is no fiscal impact associated with this report.

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Attachments:

1. NewGen Strategies and Solutions, LLC Draft Electric Rate Trends Study
2. Carollo Engineers, Inc. Draft Water Rate Trends Study
3. Presentation