



**MEMORANDUM**  
EUGENE WATER & ELECTRIC BOARD

TO: Commissioners McRae, Barofsky, Schlossberg, Brown, and Carlson  
FROM: Frank Lawson, CEO & General Manager  
DATE: September 24, 2024 (October 1, 2024, Board Meeting)  
SUBJECT: Rate Design Plan Priorities and Process Highlights  
OBJECTIVE: Discussion/Direction

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**Issue**

EWEB Management wishes to clarify the intention of the organization’s re-evaluation of “rate design” and coalesce with Commissioner’s on expected outcomes of the process.

**Potential/Proposed Provision: Why is Rate Design important for EWEB?** Economics will inspire the behavior necessary for us to deliver economic, environmental, and social value to the Community.

**Potential/Proposed Provision: What Rate Design elements does EWEB anticipate will be included?** Choice-Neutral Re-Allocation of Costs, Time-of-Use, Residential Demand, Demand Response, Efficiency and Conservation, and more.

**Potential/Proposed Provision: What Rate Design elements will NOT be included?** Other than through beneficial consumption behavior, electricity and drinking water rates will not be used to resolve broader societal issues.

*Consistent with 2024 Organizational Goal #5, “In order to improve customer choice and business operations and to further optimize energy delivery, EWEB will develop a 5-year rate design plan for Board review and input in 2024. The rate design plan will include timelines for key initiatives required to enact said plan for the mutual benefit of the community, the environment, and the product/program participants.”*

**Background**

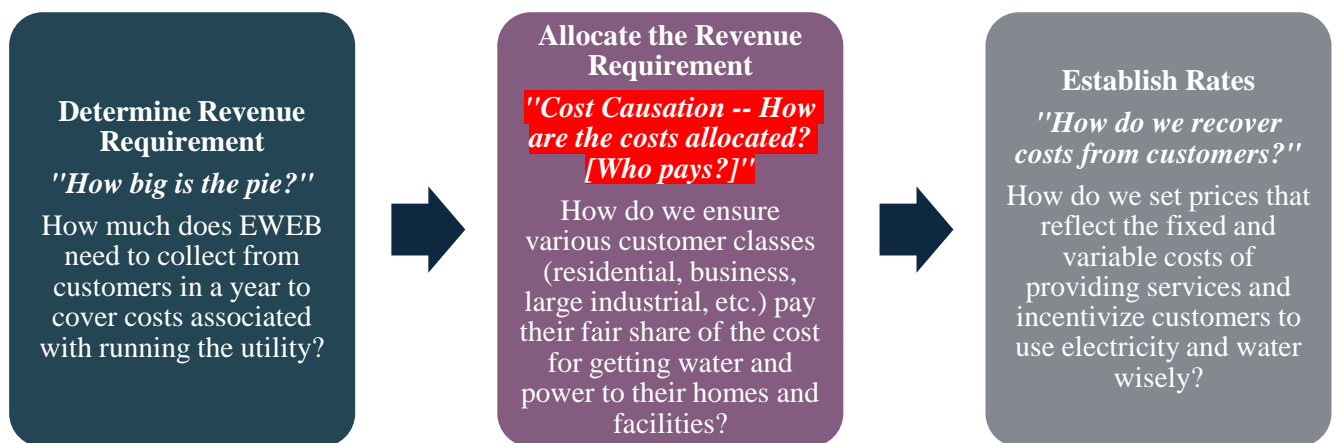
Strategic Importance

The future will diverge from the past. In 2016, as EWEB developed the present strategic plan, it was recognized that the efficient and effective delivery of ever scarce and volatile commodities will require customer participation. In other words, the adjustment of consumption patterns will be necessary to optimize the economic, environmental, and social benefits of both energy and drinking water delivery in the future.

Thus, EWEB’s Vision became “*to be a local utility that inspires our customer-owners to invest in and rely on us.*” EWEB’s vision implies that we will earn Community trust, and thereby their investment and participation in the programs integral to providing sustainable value. Additionally, using rates to influence and inspire beneficial behavior became a strategic tool (Phase 2 of the strategic plan) in support of the pursuit of this Vision.

### Ratemaking Principles and Methods

There are three main activities associated with establishing customer rates (i.e., ratemaking); establishing a revenue requirement, segmenting and allocating costs, and methods of collection (rate design). EWEB’s Board has exclusive authority to set rates for its service territory and can establish rates and customer classes to the extent the rates are just, reasonable, and do not discriminate between similarly situated persons.



Presently at EWEB, multiple efforts related to customer rates are happening concurrently:

#### **1. 2025 Budgets and Prices**

EWEB is developing 2025 budgets and price proposals for consideration at the November 2024 Board meeting and will request approval at the December 2024 meeting.

At the July 2024 Board Meeting, the Board provided direction on the strategic and operational priorities, business and economic forecast assumptions, Capital Improvement Plans (CIPs), and Long-Term Financial Plans (LTFPs) used to guide the proposed budgets and customer pricing schedules (rates) for 2025, which included an anticipated overall 2025 revenue requirement increase of 15.0% for the Electric Utility and 9.0% for the Water Utility. Staff has further mitigated these increases since July and will request feedback on new 2025 rates from the Board starting in October.

#### **2. Three-year Cost-of Service Analysis**

A Cost-of-Service Analysis for each utility (water and electric) is used to segment and allocate costs and develop the specific rates within customer classes. At the September 2021 Board meeting, the Board directed staff to prepare a three-year COSA intended to incorporate gradualism into specific recommendations to provide customer cost-based price signals while moderating any single-year impacts. Staff is currently updating the three-year COSA for 2025-2027 for presentation at the November 2024 board meeting.

### 3. Five-Year Plan for Future Rate Design

EWEB is developing a five-year plan for future rate design, consistent with the utility's [2024 Organizational Goal #5 \(listed above\)](#). The plan will include at least the four components listed below.

- Cost of Service Analysis
- Customer and internal stakeholder engagement
- Assessment of current and required systems to enable advanced rates
- Optional rate and payment choices to match customer preference and support beneficial behavior such as smart electrification

At the August 6, 2024, Board Meeting, the Rate Design Directional Discussion provided a framework for the Board to consider key strategic questions related to rate design, including EWEB rate-making principles, for further investigation and possible incorporation into the five-year plan for future rate design.

### Discussion

The Eugene Water & Electric Board (EWEB) is developing a 2025 budget and rate proposal, a three-year Cost-of-Service Analysis (COSA) for both the water and electric utilities, and a 5-Year Rate Design Plan to improve customer choice and business operations and to further optimize energy delivery.

EWEB engages with customers from a financial standpoint through rates, fees, and customer policies and programs, each serving a distinct purpose:

**Utility rates** are charges that customers pay for the consumption of electricity and water. They are typically designed to recover the costs of providing the service, including generation, transmission, and distribution, and can be structured in various ways (e.g., flat rates, tiered rates, time-of-use rates).

**Fees** are specific charges related to particular services or administrative functions, such as connection fees, installation charges, or late payment penalties. They are often designed to cover the costs associated with specific actions or services provided to customers, rather than the ongoing cost of service for consumption.

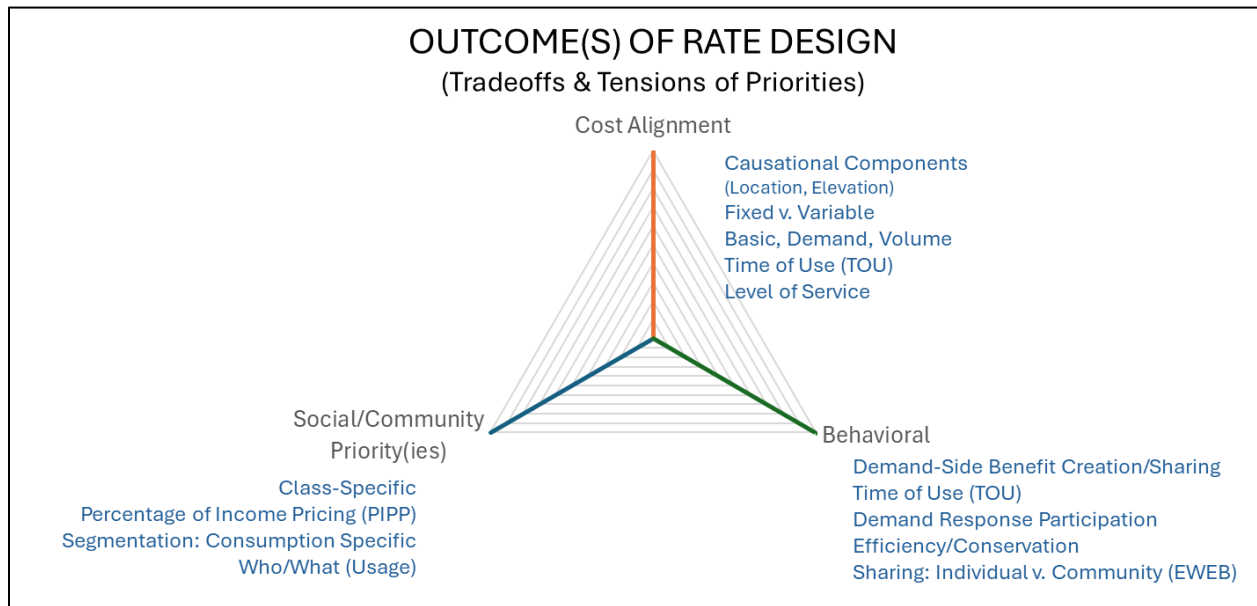
**Customer programs** refer to initiatives or incentives offered by EWEB to encourage behaviors and support operational goals or community values. Examples include energy efficiency rebates, bill assistance, and electrification or renewable energy incentives.

As EWEB embarks on the process of redesigning our rate structures, it is essential to understand how programs, rates, and fees work in conjunction, and to clarify EWEB's perceived and desired role within the broader community. This role will be discussed during a strategic discussion at the November 2024 Board Meeting.

## Rate Design Priorities and Outcome Drivers (Tradeoffs)

Having a clear, shared vision of EWEB's role in the community helps staff and the Board evaluate various approaches to rate design that are rooted in differing core philosophies, including designing rates based on actual realized costs, incentivizing behaviors that could create future benefits and/or help avoid future expenses, and aligning rates with the community's shared values [social interests/priorities].

While each philosophy offers valuable insights, they will not always be perfectly aligned, and tensions between them will require thoughtful consideration as we move forward. The challenge lies in finding an approach that integrates these perspectives to serve our customers and community equitably and sustainably, while also ensuring the financial stability of the utility.



Staff is seeking Board discussion and feedback on the following rate design philosophies and the priorities of potential outcome(s):

### Cost-Based-Driven Outcome(s)

A cost-based rate design philosophy prioritizes setting rates that directly reflect the actual or realized costs of providing utility services. This approach ensures that customers pay rates proportional to the expenses incurred in [acquiring and delivering] generating, transmitting, and distributing electricity or water. The goal is to match rates as closely as possible to the true cost of serving different customer classes with a variety of consumption characteristics, while promoting fairness and financial transparency and covering the utility's operational and capital costs.

EWEB has historically utilized an embedded cost-based rate design philosophy, which includes a Basic Charge, Delivery Charge, and Energy Charge for electric service and an Elevation Charge for drinking water services.

**The Basic Charge** is an important part of EWEB's continuing efforts to better recover the fixed costs of providing services that are not dependent on the amount of energy or water a customer uses. These costs include equipment like meters, poles, transformers, pipes, and trucks, as well as labor to provide customers with basic levels of safe and reliable service. The Basic Charge supports fleet, facility, and business functions, such as line maintenance, right-of-way clearing, customer service support, billing, information technology, and communication that are all required to do business.

Basic Charges provide a stable revenue stream for the utility, reducing reliance on variable charges that fluctuate with customer usage. This stability is crucial for long-term financial planning and maintaining the reliability of service, especially when consumption levels and patterns vary significantly.

Currently, Basic Charges do not cover all of EWEB's fixed costs.

**The Delivery Charge** supports grid services for delivery of power to customers at the necessary voltage to meet customer needs. These costs include transmission and distribution, substation equipment and operations and maintenance as well as poles, fixtures, conductors, and conduit.

**The Energy Charge** covers the costs of producing electricity and sending it long distance to our distribution system. It includes power purchases and sales, wind, biomass and hydro generation equipment, and related operations and maintenance expenses.

**The Consumption Charge** (water) covers the costs of acquiring, treating, and delivering drinking water. An **Elevation Charge** (water) is also charged to cover the higher costs associated with pumping to higher elevations.

#### Behavioral-Driven Outcome(s)

A behavior-based rate design philosophy aims to influence customer actions by setting rates based on desired future marginal or avoided costs. This approach encourages behaviors that help reduce future expenses, such as lowering peak demand or promoting energy efficiency, by charging rates that reflect the cost of serving additional load or the savings from avoided infrastructure upgrades. By incentivizing customers to use resources more efficiently, this philosophy seeks to minimize future operational costs and delay or avoid costly expansions or upgrades, benefiting both the utility and the community in the long term.

Behavior-based designs often favor lower fixed charges and higher variable rates that reflect the marginal cost of consumption or avoided costs, allowing customers to see more direct savings by adjusting their usage patterns. This approach maximizes the incentive for customers to engage in behaviors that help the utility avoid future costs.

In a behavior-based rate design philosophy, demand charges and time-differentiated rates are key tools for incentivizing customer behaviors that reduce future costs.

**Demand charges** are based on a customer's peak usage during a billing period, encouraging customers to reduce their maximum power draw, particularly during times of high system

demand. This can help lower the need for costly infrastructure upgrades or investments in additional generation capacity.

**Time-differentiated rates** (such as time-of-use pricing) vary depending on the time of day, charging more during peak periods when energy is more expensive to generate or purchase, and less during off-peak times. This pricing structure encourages customers to shift their energy usage to times when the grid is less strained, reducing the need for new capacity or costly energy purchases during peak demand.

By incorporating these elements, the rate design sends clear signals to customers to adjust both the timing and magnitude of their energy consumption, aligning customer behaviors with the utility's cost-saving goals. Often, an important consideration in a Behavior-Based Philosophy is who/how are the benefits of cost-saving behaviors shared between the participants and community at-large.

#### Social/Community-Driven Outcome(s)

A community values-based rate design philosophy prioritizes aligning utility rates with the broader social and environmental goals of the community. This approach often includes cross-subsidies of various types, including income-based or those intended to boost a particular sector of the economy. It may also incorporate funding for environmental programs, such as renewable energy initiatives or conservation efforts, which reflect the community's commitment to sustainability and climate action. Within this approach, who is consuming and what they are using the consumption for matters.

For example, the Basic Charge could be scaled according to income brackets, providing relief for low-income customers while maintaining a fixed charge for higher-income households. This adjustment helps support affordability while still encouraging behavior-based strategies, such as reducing peak demand or shifting usage to off-peak times.

Combining an income-based basic charge with variable rates that reflect marginal or avoided costs can promote equitable and cost-effective behavior changes that align with both community values and financial objectives.

#### **Five-Year Plan for Future Rate Design**

Rate design is a comprehensive process of evaluating, revising, and updating the pricing structures that EWEB uses to charge customers for electricity and water services. It involves creating rate programs that better align with the current and future needs of both the utility and our community. This process considers changes in supply and demand, advancements in technology, evolving customer expectations, and shifts in regulatory and environmental landscapes.

For EWEB, rate re-design is a critical priority for several reasons:

- Evolving Customer Needs: Our customers' expectations and behaviors are changing, with the increasing adoption of electric vehicles, growing interest in distributed generation and storage, and expansion of smart technology, all driving a need for rate structures that

offer more flexibility and actionable ways for customers to control their costs and environmental footprint.

- Environmental Goals: Climate change presents significant challenges and opportunities to rethink traditional rate structures to support energy and water conservation, peak demand management, integration of renewable energy, and investments in grid reliability.
- Equity and Affordability: Utility rate design is increasingly shaped by equity and affordability goals, which seek to ensure that all customers have fair access to essential services like water and electricity without facing disproportionate financial burdens. Rate re-design allows EWEB to consider social equity issues, particularly related to low-income households and other at-risk populations.
- Infrastructure Modernization: Rate design is closely linked to infrastructure investments and modernization, as these activities influence both the costs that the utility incurs and how these costs are distributed among customers. Capital investment costs must be recovered, and consideration must be given to infrastructure that is built to meet peak demand.
- Regulatory and Market Changes: The regulatory environment and energy markets are constantly evolving. Modern rate structures must take into consideration environmental regulations, changing energy supply costs, and growth in Distributed Energy Resources.

Staff is seeking Board discussion and feedback on the five-year rate design project scope and timeline.

### Rate Design Project Scope

The project scope outlines the boundaries and focus areas for EWEB's 5-year plan for rate design. It defines the customer segments, rate types, and other key elements that will be addressed throughout the project, including interdependent organizational initiatives.

- Rate Design Objectives: An early step in the rate design process will be clarifying and expanding on EWEB's rate design objectives. The Board's Rate Design Directional Discussion in July 2024 provided a framework for the Board to consider key strategic questions related to design. Additional Board discussions will be necessary to finalize rate design objectives for incorporation into the five-year plan.
- Rate Types and Components: The project will address electric and water rates and fees and consider components of rate structures that align with identified Rate Design Goals and Principles, including fixed charges, volumetric rates, time-of-use rates, demand charges, and incentive programs.
- Customer Segments: This project will consider the distinct needs, usage patterns, and costs to serve existing customer classes such as residential and general service, while also considering the creation of new customer segments.
- Technology and Data Integration: This project will assess current and required systems needed to enhance the effectiveness of new rate programs, including billing inputs and outputs, customer-facing tools, marketing, and communications channels that support the adoption of new rate options, and data governance practices.

- **Demand-Side Potential Assessment Integration:** The project will incorporate the findings from a demand-side potential assessment to inform the development of rate programs. This assessment will identify opportunities for energy and water conservation, demand response, electrification, and distributed generation and storage (Appendix A).
- **Distribution System Assessment and Optimization:** The project will conduct a comprehensive assessment and optimization of the distribution system to ensure infrastructure can meet future demands, including utilizing AMI data and upgraded SAP/GIS tools to conduct detailed assessments of current system loading, evaluating the need for modernization across substations and the distribution system, developing capacity and constraint maps that incorporate forecasted loading from factors like EV adoption, demographic changes, and load growth, establishing design and interconnection standards for demand-side resources, and facilitating site-specific service upgrades necessary for customer participation in demand response (DR).
- **Customer Engagement:** By gathering customer input, EWEB can design rate structures that are not only technically and economically sound but also aligned with customer preferences and community values. This process can help build support for the new rates and ensure a smoother transition.

### Rate Design Project Timeline and Milestones

#### **Phase I (2024)**

To align with the 2024 Organizational Goals, the first phase involves developing a 5-year rate design plan, which will be presented to the Board for review and input. Additionally, Phase I includes several interdependent projects related to rate design: implementing SAP Finance and Customer Systems, completing a Demand-Side Potential Assessment (DSPA), and refining the Energy Resource Study (ERS) modeling. Additionally, the organization may initiate rate adjustments and allocations that better align fixed and variable costs.

#### **Phase II (2025-2026)**

Phase II will concentrate on codifying EWEB’s rate design principles, customer engagement, cost and rate modeling, customer segmentation, and product development. Key deliverables will include:

- **Rate Design Principles:** Work with Commissioners to establish and formally codify the utility’s rate design principles. This step involves holding workshops and discussions with the Board and EWEB customers to ensure alignment on the core values and objectives that will guide the rate design process. These principles will serve as a foundation for all subsequent decisions, ensuring consistency and adherence to the utility’s mission and public service commitments.
- **Customer Engagement Strategy:** Determine how EWEB will inform and involve customers in the rate design process, build trust and transparency, ensure that the final rate design reflects customer interests and fosters a sense of ownership and participation among the community.
- **Research and Analysis:** Gather and analyze the critical data necessary to inform the rate design process. Key activities include conducting a Marginal Cost Study to understand the true cost of serving different customer segments and collecting and incorporating customer feedback to ensure the new rates reflect community needs. Additionally, the



phase involves integrating insights from the Demand Side Potential Assessment (DSPA) into load forecasting, modeling the power portfolio to support the Cost-of-Service Analysis (COSA), and developing detailed maps of distribution system capacity and constraints.

- **Design and Modeling:** Assess a variety of rate structures, including multiple Bonneville Power Administration (BPA) rate design alternatives, to understand their effects on revenue, customer billing, and usage behaviors. Establish segmented targets for customer conservation and electrification initiatives and develop a comprehensive portfolio of new products tailored to different customer segments.
- **Rate, Fees, and Policy Proposals:** Develop new rate structure proposals based on research, analysis, and modeling. Establish design & interconnection policies for distributed energy resources, update fees and processes related to smart meter deployment.
- **Implement Initial Rate Design Elements:** Initial rate design elements are anticipated to be implemented beginning in 2025-2026, depending on the primary desired rate design outcome(s) (cost alignment, behavior, or social/community) as prioritized by the Board's guidance.

### **Phase III (2027 – 2028)**

This phase focuses on implementation, horizontal alignment, and continuous improvement.

In this phase EWEB will:

- Pilot new rate designs to gather critical data and customer feedback.
- Develop and implement marketing and communication strategies for the new rate options, ensuring customer awareness and engagement.
- Finalize BPA contracts to ensure long-term power supply stability.
- Analyze segmented revenue to assess realized cost recovery, providing insights into the effectiveness of our pricing structures.
- Finalize and seek Board approval of new rate structures.
- Roll out new rates and provide customer support for transition.
- Adjust targets to align with evolving objectives.
- Identify the best cost options for addressing substation and distribution system capacity issues.
- Create a conceptual-level road map to guide budgetary capital inclusion and project scoping, ensuring a clear path forward for these initiatives.

### **Recommendation**

Management recommends Commissioners consider the comprehensive approach to re-evaluating rates, fees, and programs in the context of EWEB's existing, and soon-to-be recrafted strategic plan. Questions will be teed up at the October meeting to facilitate conversation, guidance, and feedback.

### **Requested Board Action**

Management is not requesting Board action at the October meeting. However, Management is requesting that the Board provide feedback and direction on Rate Design philosophies and

direction, along with the Five-Year Plan for Rate Design as described in this memo to be used in the development of the final five-year plan.