



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD



TO: Commissioners Brown, Carlson, Mital, Simpson and Helgeson
FROM: Susan Ackerman, Chief Energy Officer; Jeannine Parisi, Customer Relations
Manager, Adam Rue, Senior Financial Analyst
DATE: March 1, 2018
SUBJECT: Preliminary Residential Electric Pricing Committee Findings
OBJECTIVE: Information Only

Issue

This memo provides a process overview and general conclusions from the work of the Ad Hoc Residential Pricing Committee. A previous update on the committee's work was provided as Correspondence in the August 2017 Board packet and is linked here for reference - [August Pricing Committee Memo](#).

Background

Electric pricing redesign, or alternative rate structuring, is often cited as one of the most significant trends in the utility industry. Utilities across the country are proposing pricing redesign as one way to adjust to a variety of power sector trends while holding true to core rate-making principles such as stability, revenue adequacy and fairness. Customer acceptance of pricing redesign efforts has been varied, at best.

EWEB experienced its own challenges in 2015 when Management proposed several options including a \$10 increase to the basic charge to better reflect the true cost of doing business. This proposal was intended to capture more of the utility's costs that do not change with consumption in the fixed, per customer charge. Some community members raised concerns that a \$30 dollar basic charge disproportionately harmed limited income customers and was a disincentive to conservation. In response, the Board directed staff to hit the pause button on pricing reform.

In February 2017, the Board agreed to revisit this issue and supported staff's proposal to conduct a comprehensive review of electric pricing options with the assistance of a customer committee. The committee would have the benefit of a series of in-depth discussions on different pricing scenarios, and provide independent advice to staff on the values, preferences and tradeoffs in play. The Board assisted in committee member selection, as shown in the following table.

Name	Relevant Background or Interests	Appointed By
Steve Jole	HACSA Energy Program Manager	John Brown
Keith Appleby	Limited Income/Equity	Steve Mital
Mary Walston	4-J School Board/Former IERP member	Sonya Carlson
Doug Campoli	Arcimoto Chief Financial Officer	John Simpson
Rick Johnson	Communications	Dick Helgeson
Catherine Roner-Reiter	UO Law Student	Staff
Gary Rayer	PV Customer/former City Councilor	Staff
Beth Goodman	Eco Northwest Planner	Staff

*The staff appointee to represent senior/fixed income customer segment resigned after first meeting.

Discussion

The scope of the committee focused on near-term pricing redesign issues and we intentionally deferred conversations relating to AMI and time of use prices as beyond the scope. The ad hoc committee analyzed three main residential electric pricing structures over the course of six meetings:

1. Tiered rates (removing tiers entirely and moving the existing tier from 800 kWh to a higher consumption level)
2. Increasing the basic charge to recover more fixed utility costs (with a corresponding decrease to the energy charge)
3. Establishing a new residential demand charge to replace the volumetric delivery charge, which was technically beyond the scope but was included to get a better understanding of customer's receptiveness and understanding of the concept.

Staff stressed that there is no ideal pricing structure; rather each scenario involved trade-offs among EWEB's overarching pricing goals:

- Better align pricing with the true cost of doing business
- Promote equity by reducing subsidies between customers
- Be transparent and simple for customers to understand
- Facilitate customer fuel choices and usage decisions (e.g. solar, electric vehicles)
- Provide financial sustainability to the utility.

Also, while pricing redesign can be revenue-neutral to the utility, such structural changes have positive and negative financial impacts across different customer groups. In its discussions, the committee considered tradeoffs among the goals above as well as the bill impacts to four different residential customer types, the likelihood of public acceptance, and whether the change helped prepare the utility for the future. Brief descriptions of the pricing scenarios that were formally evaluated at the last committee meeting are included in Attachment A.

In terms of its advice to EWEB, the committee acknowledged that the trends driving utility conversations around electric price restructuring are compelling, but not widely understood. Members emphasized that pricing redesign should be made with an eye towards the future, a focus on customer benefit and coupled with clear, proactive messaging about the changes. However, they cautioned that pricing redesign can seem like insider baseball with limited value proposition to most customers. Even with a thoughtful communication plan, the utility runs a high risk of customer

misunderstanding and concern about impacts to bills and/or consumption behavior (change just looks like a bill increase).

Accordingly after six in-depth discussions, the ad hoc pricing committee concluded that EWEB should move gradually with less disruptive options until such a time as technology would enable more customer value and choices. Of particular interest were value-added solutions like time-of-use or demand based pricing and pre-payment billing enabled by AMI and CIS billing system upgrades. The benefits of these and other customer-side technologies would provide greater visibility and control over real-time usage and would help customers to better manage monthly bills.

TBL Assessment

Management presented the committee with a general economic philosophy around electric service and the social equity implications around pricing this product as follows:

- Electricity is a necessary product for the good of society and is provided most efficiently via a natural monopoly. As the provider of a product without market competition, EWEB has an obligation to serve all customers equitably, and be ready to meet their highest demand.
- Trends including more self-generation, fuel-switching and greater efficiency are leading to fewer customers sharing the costs to operate and maintain a system that is built for maximum demand. This risks fracturing the social pact where electricity is provided to all customers in the most equitable and cost-efficient way. In this sense, EWEB's pricing redesign effort aims to retain this long-held principle.

Social equity and impacts to customer's usage behavior, like solar and electric vehicle adoption and conservation choices, weighed heavily in both staff's analysis and the committee's evaluation of different pricing scenarios. And while impacts to limited income customers were at the forefront of the conversations, it is important to recognize that EWEB does not have access to customer financial data unless required for program eligibility.

Recommendation

Management will share more information on the committee's advice and details on the pricing scenarios that garnered the most support. The Board has already adopted some structural changes, and because EWEB is not faced with the same time-pressure as utilities with higher solar penetration, a gradual approach continues to make sense.

Requested Board Action

None at this time.

Scenario 1. STATUS QUO

- Basic Charge:** \$20.50 per month
Delivery Charge: 2.62 cents per kWh
Energy Charge:
- First 800 kWh: 5.95 cents per kWh
 - Over 800 kWh: 7.4 cents per kWh

Summary Analysis

This structure does not fully collect customer costs and is overly-reliant on increased consumption to cover growing grid O&M costs. Higher users subsidize lower uses.

The tiers are unrelated to EWEB's actual power costs. At 800 kWh, most all-electric customers fall into a higher tier in winter regardless of conservation efforts. Tiers required shorter meter-reading cycles, which increase labor costs.

Scenario 2. ELIMINATE TIERS

- Basic Charge:** \$20.50 per month
Delivery Charge: 2.62 cents per kWh
Energy Charge: 6.52 cents per kWh

Summary Analysis

Removing tiers reduces inter-class subsidies as higher users pay the same per kWh as everyone else. This scenario maintains the basic charge at current levels, so it does not fully collect fixed customer costs.

Eliminating tiers simplifies the bill and allows for more flexible meter-reading cycles to facilitate labor savings. It has minimal bill impacts to all four customer types studied (plus or minus 4 percent).

Scenario 3. ALL-IN BASIC CHARGE

Basic Charge: \$28.50 per month
Delivery Charge: 2.62 cents per kWh
Energy Charge: 5.67 cents per kWh

Summary Analysis

This option collects all customer-costs in the fixed charge, reducing the energy charge as above. The tier is moved from 800 to 2000 kWh (impacting 6% of bills) and has a 3 cent premium as price penalty for high usage.

Meter-reading cycle issues remain, but to a lesser extent. Low users still pay more year-round due to the higher basic charge, but high users don't get as much financial benefit as in Scenario 3 – a high tier shrinks the differential between customer types.

Summary Analysis

This option collects all customer-costs in the basic charge (\$8 increase), while reducing the energy charge. In combination with flat rates, this option results in less seasonal variation in bills for most users.

Higher fixed costs means customers have less bill control which could have real or perceived impacts on conservation behavior.

Low and high users have bill impacts plus/minus 11 percent, so gradual increases are recommended.

Scenario 4. HIGH TIER

Basic Charge: \$28.50 per month
Delivery Charge: 2.62 cents per kWh
Energy Charge:

- First 2000 kWh: 5.46 cents per kWh
- Over 2000 kWh: 8.46 cents per kWh

Summary Analysis

Just the debt service portion of grid costs are added to the all-in basic charge to increase fixed cost recovery. This reduces both the energy and the volumetric demand charge, stabilizing bills year-round and better reflecting EWEB's true costs of doing business.

A \$12 increase to the basic charge could impact public perception around conservation efforts and influence fuel choices (ROI for solar, gas vs. electric, EVs). This option has larger bill impacts and would require a gradual phase-in.

Scenario 5. CUSTOMER COST+ BASIC CHARGE

Basic Charge: \$32.50
Delivery Charge: 2.24 cents per kWh
Energy Charge: 5.63 cents per kWh

Scenario 6. RESI DEMAND CHARGE

Basic Charge: \$28.50 per month

Delivery Charge: \$5.00 per kilowatt

Energy Charge: 5.20 cents per kWh

Summary Analysis

Rather than using a fixed charge to recover grid access costs, the delivery charge is converted to a demand charge based on maximum hourly monthly demand. This solution requires AMI so implementation would likely be phased in two parts: increase basic charge then convert delivery charge to demand charge post-AMI.

All grid service costs are recovered through demand charge, and the pricing design can be tailored to work with seasonal or TOU rates. This is an uncommon residential rate structure, so significant education would be needed for customers to understand how it works, and retain more bill control if enacted.

Scenario 7. BUNDLED PRICING

Basic Charge: \$44 per month

NO Delivery Charge

Energy Charge: 5.20 cents per kWh

- First 300 kWh: Included in Basic Charge
- Over 300 kWh: 8.17 cents per kWh

Summary Analysis

A high basic charge is collected, but includes all customer costs plus essential electric consumption of 300 kWh. Grid access costs are combined with a volumetric energy charge for simplicity.

This option has little actual bill impact to most users, but would need significant testing and messaging to be successful. Almost 20 percent of bills/year have usage of less than 300 kWh – EWEB needs more research on who these customers are to understand bill impacts. Unresolved questions about if and how this option would apply to PV customers.