MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning, and Mital

FROM: Erin Erben, Power Resources & Strategic Planning Manager

Sue Fahey, Fiscal Services Supervisor

Mark Freeman, Customer Service and EMS Manager

DATE: September 24, 2013

SUBJECT: Rate Design Proposal for Pricing Action

OBJECTIVE: Board Direction for Rate Design to be Included in November 5th Rate Proposal

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Issue

At the March 5, 2013 Board meeting, management reviewed with the Board a white paper on rate design principles written by General Manager Gray that was intended to provide some background on rate design options for the new Board members and to lay some groundwork for future consideration of rate design modifications consistent with Business Strategy 5 in the 2013 Strategic Plan – Align rate structures with goals. The stated strategy's detailed description is to:

> *Actively pursue technologies and rate structures that give customers better and timelier information and pricing signals, promote conservation, and allow adequate recovery of costs.*

In this document, management is laying out a directional shift in customer pricing objectives to be gradually implemented over the years to come. As the rates for both water and power increase, rate design becomes increasingly important to assure revenue recovery, promote conservation, send rational price signals, create fairness among customers, and address competition. Last year, the Board tackled rate design for the water utility and that has improved financial performance. Management believes it is necessary to address the electric utility as well.

Background

Management is asking the Board to approve strategic changes to customer rate components coincident with the December 3, 2013 rate action. These include:

- improving fixed cost recovery to increase revenue stability, and
- reducing intra-class usage-base cost subsidies.

These strategic objectives are achieved by allocating a higher percentage of the proposed customer price increase to fixed cost and demand-related rate components and by beginning the process to flatten the residential energy price tiers. More detail regarding each proposed change is provided below.

In addition, management is recommending policy clarifications to the existing Very Large General Service rate schedule (G-4), for new customers over 10 MW per year, and the establishment of a new Business Growth & Retention Rate Rider (BGR) for customers with new or incremental load over 200 kW in a given year. This "Rider" would serve as an addendum to the otherwise applicable standard rate schedule.

The objectives of these changes are to:

- Better align pricing with cost causation to improve price equity by minimizing unintended subsidies
- Improve utility revenue stability to reduce risk, which in turn provides greater customer rate stability
- Use existing system resources more efficiently to help manage overall price level for customers
- Create pricing that allows the utility and its customers to become indifferent to generation bypass

Discussion

Each of the two proposed rate design changes (increasing the monthly service charge and flattening residential energy price tiers), the policy clarification to the G-4 rate schedule, and the proposed new BGR rate rider, are discussed in more detail below.

<u>Improving fixed cost recovery</u>

Improving fixed cost recovery will serve EWEB and its customers through the following:

- Better alignment of prices with costs to enhance revenue stability
- Improve intra-class equity through the reduction of unintended subsidies
- Move toward the goal of allowing EWEB to be indifferent to alternative energy supply
- Send the right price signals so customers can choose their energy investments based on accurate information and obtain sustainable cost savings from their investments

Today, EWEB's monthly service charge represents most of the fixed, customer-related costs (meters, meter reading, billing, low income support and uncollectible accounts) and none of the fixed distribution costs (largely comprised of substations, overhead and underground distribution lines, metering and service drops, and transformers). While the more accurate pricing mechanism for such charges would arguably be a demand price, this does not presently exist in the residential price schedule due to both meter limitations and a desire to keep the price signals simple. The next best alternative is to add these costs into the monthly service charge.

For our business customers, there is a demand component to the pricing. This represents fixed costs that vary based on the infrastructure installed to meet a customer's peak demand (i.e. transformers, share of distribution substation, overhead and underground lines). Some of these costs continue to be collected in the energy charge for our business customer rates. Management is proposing a gradual move toward better alignment of these cost components with their respective price components.

Lastly, EWEB believes that the most sustainable pricing model is one where the utility can be indifferent to customer supply preferences (whether gas, PV or electric) and their level of conservation. Getting the pricing right allows EWEB and its customers to be agnostic to external policy and price driven forces (such as PV tax subsidies and low natural gas prices) and doesn't create inequity perpetuated through price distortion for customers that remain with electric service. Sending sub-optimal price signals to customers may also cause them to make choices they may not have otherwise made, such as switching to gas, which could have GHG emission and other externality impacts not reflected in direct pricing.

Flattening residential price tiers

Management is proposing that EWEB begin to move to flatten its residential energy price tiers. The current construct was created to encourage conservation.[1] A byproduct is that it also encourages generation bypass and results in higher use customers subsidizing lower use ones (including gas-heated homes and seasonal visitors).[2] The industry debates the degree to which inclining tier blocks influence total consumption. One of the most progressive consumer-owned utilities in the nation (Sacramento Municipal Utility District) is currently recommending a transition from their two-tier pricing construct to a flat energy charge in anticipation of moving to time-based rates in 2018.

With traditional metering and the associated monthly billing paradigm, the connection between usage and cost is weak. Few customers pay that much attention to the individual pricing components in their bill. In fact, research regularly finds that a kWh is a non-intuitive concept to many if not most customers. When the customer only receives notice of passing into a new tier a month later on the bill, how strong of a signal is this really? With flat tiers based on the true cost of providing energy (vs. including fixed cost components), customers will still save from conservation, but it will be a more sustainable savings since the utility won't be driven to take back some of those savings by raising rates to ensure adequate fixed cost recovery, In this way, our energy efficiency programs benefit too. We want them to be sustainable rather than at odds with healthy utility financials.

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1 Inclining block rates may also be appropriate if marginal costs are increasing, but due to EWEB's length this is not the case, nor will it be for some time.

2 Based on data extrapolated from the NEEA Residential Building Stock Assessment, the average electric heating customer in our service territory consumes roughly 14,800 kWh annually with approximately 6,000 kWh used for space heating. The implied average non-electric heated home load is 8,800 kWh. (http://neea.org/docs/reports/residential-building-stock-assessment-single-family-characteristics-and-energy-use.pdf?sfvrsn=6)

Policy competition with renewable energy (utilities are increasingly forced to build or buy new renewable generation even when there is no load-driven need) has challenged the efficiency benefit model. EWEB recently experienced this first hand when it overbuilt generation resources in part to prepare for the Oregon Renewable Portfolio Standard (RPS). When coupled with changes to load growth, the result (ultimately) was that the economics around energy efficiency were fundamentally changed. The best path forward for sustainability of both renewables and efficiency programs is to set marginal prices appropriately so the utility can be indifferent to a customer's usage level or supply choice.

In addition, inclining block tiers directly conflict with the revenue stability objective since as long as customer and demand-related costs are collected in the variable energy charge rate component, as opposed to a demand-related or customer-related component, recovery risk is increased to include consumption risk (usage per customer) in addition to customer growth risk (number of customers). In fact, putting fixed cost recovery into variable price components argues for a declining tier structure to maintain revenue stability for the utility. Revenue stability is necessary to allow the utility access to capital to ensure it can continue to make the required fixed cost investments in the business.

Inclining block tiers can also create unexpected and unintended cost shifts within classes. For example, inclining blocks send an unintended price signal to electric vehicles (EVs) owners, since home charging could easily push a customer in to the highest Tier 3 price block. However, EWEB wants to encourage EVs to charge at night (off-peak) and in their home, especially at the lower voltages that help manage peak demand impacts and the frequency of associated system upgrades (such as larger residential transformers). This is an example where pricing and policy objective are clearly at odds... we neither encourage off-peak charging nor vehicle electrification in our current residential rate design. In addition, customers able to choose alternative generation supply, such as net metering customers, to date have also tended to be the more affluent customers that can afford the high cost of home upgrades such as adding PV. Reducing the inherent subsidy embedded in our rate structure (where fixed costs are recovered in variable price components) that results in other customers paying the distribution charges for services used by these customers will also enhance equity.

By sending clearer price signals to customers, we give them the information they need to optimize and choose what's best for them. Under-incenting can dampen demand for alternatives such as energy efficiency and PV, but over-incenting can create customer consternation as rates must then rise to compensate for the load loss in order to ensure fixed cost recovery. Our pricing construct needs to be sustainable over the long term.

<u>Business Growth and Retention (BGR) Rate Rider</u>

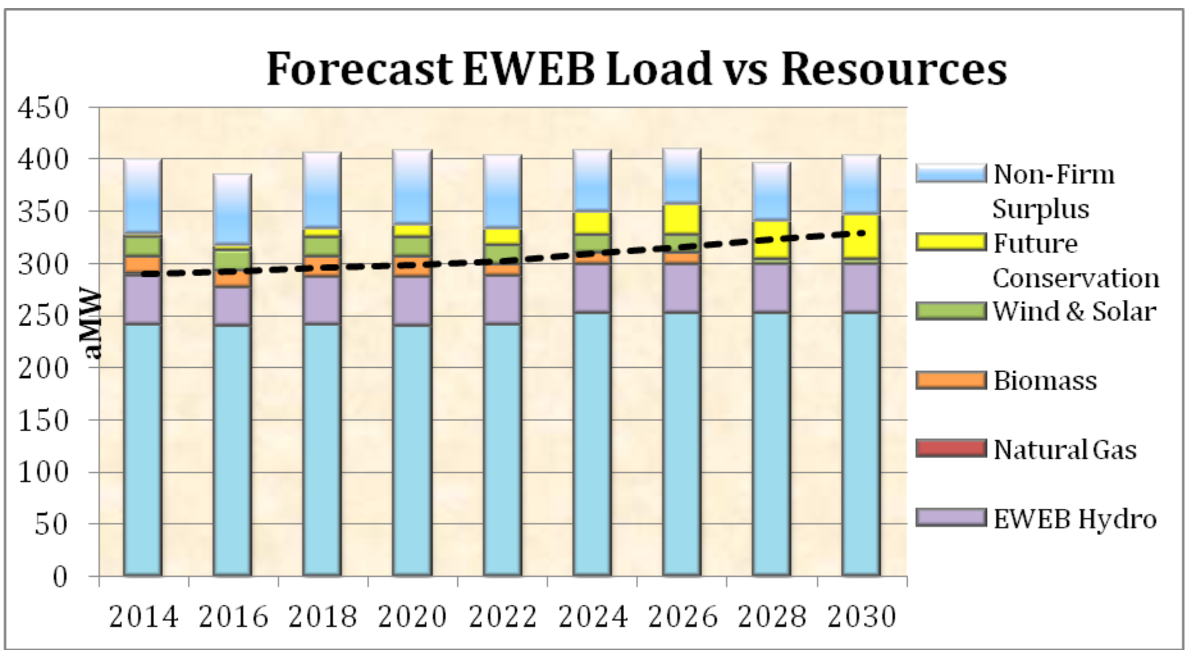
EWEB is surplus generation resources and sells its excess into short term wholesale markets, which have been lower than historical averages for some time. Since retail customer margins exceed current wholesale market returns, new customers or incremental growth of existing customers would make existing customers better off for as long as these two conditions exist (EWEB length and low wholesale electric prices).

To serve both as a catalyst for the local economy and to improve our existing customers' retail rates, management is proposing to establish a self-adjusting Business Growth & Retention Rate Rider designed to add value to all EWEB customers. The BGR rate is designed to help incent desirable new load to locate in Eugene. It is also designed to encourage existing customers to remain in Eugene and to grow their business. EWEB believes this benefits the community in many ways, including great economic prosperity through job creation and retention and lower energy costs due to greater sharing of the fixed costs of providing the system we all use.

EWEB regularly receives inquiries about pricing for new commercial/industrial load. The BGR rate would require an application process to ensure the project delivers positive community benefits, similar to the business loan program that the Board previously adopted.[3] Smart growth that builds jobs is the objective.

This rate is constructed to be self-adjusting as the wholesale market prices change. If the delta between retail and wholesale rates shrinks, the discount will shrink as well. If it grows, the discount will increase, but so will the contribution margin that goes back to other retail customers. Management recommends revisiting this rate when our long term load resource balance more closely aligns to ensure it still provides positive benefit to existing customers. Unless EWEB sells resources or a very large load comes to Eugene, we do not expect to see this for a decade or more (see Chart 1), when several of our existing power purchase contracts expire. The BGR rate credit is designed to last three years with a declining credit each year, as long as the customer meets the program requirements (see Appendix A for details).

Chart 1. EWEB's Load Resource Balance



3 This program was approved at the March 6, 2012 Board meeting.

Very Large General Service Pricing Policy

While EWEB does not currently carry an RPS obligation, we are legislatively bound to meet the state mandated, large utility RPS requirement should our load grow past the threshold amount.[4] Given our current strategy of meeting existing customer load growth through conservation, it is not expected that we will break through this minimum threshold unless a new large load locates in the service territory. The objective of this policy clarification is to make clear within the existing rate schedule the responsibility of a new large load to cover the cost of acquiring new renewable resources and RECs needed to meet the RPS obligation resulting from their load addition (see Appendix B for details).

Customer Bill Impacts

Residential Service (Schedule R-6)

Residential customers are served under EWEB's Schedule R-6, which applies to single family and smaller multi-family dwellings. There are currently 78,500 customers in this customer class. Management is presenting two alternative approaches to meet the stated rate design objectives, both shown in Table 1. These figures reflect the estimated impact of the proposed 4% rate increase in addition to the already approved 1.75% BPA pass through effective November 1, 2013.

Management's recommended approach is option 1, which is designed to make progress toward enhancing fixed cost recovery while also working to flatten the residential tier structure. Management's alternative proposal would be to simply put the increase in the monthly service charge in its entirety (option 2). While management acknowledges that the higher fixed cost recovery is an important objective that we must continue to pursue, staff believes the recommended approach balances the two rate design objectives states above (fixed cost recovery and intra-class equity) with the pricing principle of Gradualism by minimizing customer bill impacts (see Tables 2).

Because EWEB is a public utility, it is very concerned about bill impacts to its customer base, especially those least able to pay. Table 3 presents research staff conducted to compare the usage of low income customers we can identify in the billing system to the general population in order to assess how their consumption compares. What we see is that they appear to tend to cluster around the middle usage tiers where the bill impacts in both proposed options are closer to the average.

Management believes we can continue to make progress toward long term goals of equitable and accurate price signals in subsequent rate actions while also managing customer bill impacts by avoiding dramatic bill changes for any segment of customers through implementing change gradually. In addition, explicit provisions to address low income bill impacts, such as a flat-rate Low Income Rate Rider, would be additional possible tools for mitigating rate impacts and/or rate design changes in the future. Management will be looking into the billing system implications and administrative logistics of such a construct over the coming year.

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4 EWEB will incur an RPS obligation when and if our customer load exceeds our provision of eligible generation resources, including BPA and exempt hydro resources.

Table 1. Proposed Residential Rate Schedule (R-6) Options 1& 2

	Existing Rates		Proposed Rates (Option 1)	Percent Difference		Proposed Rates (Option 2)	Percent Difference
Basic Charge:	$11.15		$ 13.25	18.8%		$ 15.25	36.8%
Delivery Charge:	$0.03191		$0.03195	0.1%		$0.03191	0.0%
Energy Charge:							
SUMMER							
First 800 kWh	$0.05309		$0.05671	6.8%		$0.05309	0.0%
Next 900 kWh	$0.07147		$0.07089	-0.8%		$0.07147	0.0%
Over 1,700 kWh	$0.08509		$0.08365	-1.7%		$0.08509	0.0%
WINTER							
First 800 kWh	$0.05309		$0.05671	6.8%		$0.05309	0.0%
Next 2,200 kWh	$0.07147		$0.07089	-0.8%		$0.07147	0.0%
Over 3,000 kWh	$0.08509		$0.08365	-1.7%		$0.08509	0.0%

It is important to note that even for the higher percentage impacts, both approaches have actual dollar bill impacts near the average. The percent change can appear high due to the much smaller base usage for low use customers. The areas shaded in blue represent the usage tiers where the majority of our customers' usage lies.

Table 2. R-1 Monthly Customer Bill Impacts - Options 1 & 2

Winter kWh	Standard	Option 1	Average Bill Impact	% change	Option 2	Average Bill Impact	% change
0	$11.15	$13.25	$2.10	18.8%	$15.25	$4.10	36.8%
100	19.65	22.12	2.47	12.5%	23.75	4.10	20.9%
500	53.65	57.58	3.93	7.3%	57.75	4.10	7.6%
1000	99.83	104.75	4.92	4.9%	103.93	4.10	4.1%
2000	203.21	207.58	4.38	2.2%	207.31	4.10	2.0%
3000	306.59	310.42	3.83	1.3%	310.69	4.10	1.3%
4000	423.59	426.02	2.43	0.6%	427.69	4.10	1.0%
5000	540.59	541.62	1.03	0.2%	544.69	4.10	0.8%
10000	1,125.59	1,119.60	(5.98)	-0.5%	1,129.69	4.10	0.4%

Summer kWh	Standard	Option 1	Average Bill Impact	% change	Option 2	Average Bill Impact	% change
0	$11.15	$13.25	$2.10	18.8%	$15.25	$4.10	36.8%
100	19.65	22.12	2.47	12.5%	23.75	4.10	20.9%
500	53.65	57.58	3.93	7.3%	57.75	4.10	7.6%
1000	99.83	104.75	4.92	4.9%	103.93	4.10	4.1%
2000	207.29	211.41	4.12	2.0%	211.39	4.10	2.0%
3000	324.29	327.01	2.72	0.8%	328.39	4.10	1.3%
4000	441.29	442.61	1.31	0.3%	445.39	4.10	0.9%
5000	558.29	558.20	(0.09)	0.0%	562.39	4.10	0.7%
10000	1,143.29	1,136.19	(7.10)	-0.6%	1,147.39	4.10	0.4%

Table 3. Percent Population that Falls into Various Usage Tiers

Monthly kWh	Residential Customer Accounts	% population	Low Income Residential Customer Accounts [5]	% population
0	242	0.3%	-	0.0%
100	1,178	1.5%	5	0.1%
500	10,430	13.4%	1,004	13.1%
1000	23,433	30.1%	2,767	36.1%
2000	29,840	38.3%	2,646	34.5%
3000	9,381	12.1%	1,176	15.3%
4000	2,290	2.9%	39	0.5%
5000	644	0.8%	20	0.3%
10000	390	0.5%	5	0.1%
	77,828		7,662	

Management is also proposing rate component realignment in the General Service rate schedules to improve fixed cost recovery. Notably, the price signals in the business customer rate schedules are generally better aligned with underlying costs due to the existence of a demand charge for all but G-1 customers consuming less than 10 kW of peak demand.

Small General Service (Schedule G-1)

The Small General Service rate schedule serves customer accounts with monthly billing demand ranging from 0 to 30 kW. Customer eligibility for this schedule is based on having an average of the three highest peak demands over the prior 12 months falling below 30 kW. There are currently 7,400 customers served under schedule G-1. The proposed changes for the Small General Service schedule

5 Low income customer impacts are estimated based on participants in EWEB's Customer Care and Low Income Energy Assistance Programs.

are shown in Table 4. The respective bill impacts can be found in Table 5.

Table 4. Proposed Small General Service Rate Schedule (G-1)

	Existing Rates	Proposed Rates	
Basic Charge			
Single-Phase	$19.84	$21.80	per month
Three-Phase	$29.35	$32.25	per month
Demand Charge			
First 10 kW	No Charge	No Charge	per kW
Over 10 kW	$6.050	$6.850	per kW
Delivery Charge			
First 1,750 kWh	$0.03275	$0.03275	per kWh
Additional kWh	0.00121	0.00121	per kWh
Energy Charge			
All kWh	$0.06314	$0.06470	per kWh

Table 5. G-1 Monthly Customer Bill Impacts

	10 KW			20 KW			30 KW		
KWH LEVEL	**Old Rates**	**New Rates**	**Percent Diff**	**Old Rates**	**New Rates**	**Percent Diff**	**Old Rates**	**New Rates**	**Percent Diff**
500	$67.79	$70.57	4.1%	--	--	--	--	--	--
750	91.76	94.96	3.5%	--	--	--	--	--	--
1,000	115.73	119.34	3.1%	$176.23	$187.84	6.6%	--	--	--
1,200	134.91	138.85	2.9%	195.41	207.35	6.1%	--	--	--
1,500	163.68	168.11	2.7%	224.18	236.61	5.5%	--	--	--
2,000	203.74	209.00	2.6%	264.24	277.50	5.0%	$324.74	$346.00	6.5%
2,500	235.91	242.00	2.6%	296.41	310.50	4.8%	356.91	379.00	6.2%
3,000	268.09	275.00	2.6%	328.59	343.50	4.5%	389.09	412.00	5.9%
3,500	300.26	308.00	2.6%	360.76	376.50	4.4%	421.26	445.00	5.6%
4,000	332.44	341.00	2.6%	392.94	409.50	4.2%	453.44	478.00	5.4%
6,000	461.14	473.00	2.6%	521.64	541.50	3.8%	582.14	610.00	4.8%
8,000	--	--	--	650.34	673.50	3.6%	710.84	742.00	4.4%
10,000	--	--	--	779.04	805.50	3.4%	839.54	874.00	4.1%
12,000	--	--	--	907.74	937.50	3.3%	968.24	1,006.00	3.9%
15,000	--	--	--	--	--	--	1,161.29	1,204.00	3.7%
17,500	--	--	--	--	--	--	1,322.16	1,369.00	3.5%

Medium General Service (G-2)

The Medium General Service rate schedule serves customer accounts with monthly billing demands between 31 and 500 kW. Customer eligibility is based on an average of the three highest kW demand measurements over the prior 12 months falling between 31 and 500 kW. There are currently 1,900 commercial and industrial customers served by Schedule G-2. The proposed changes for Medium General Service schedule are shown in Table 6. The respective bill impacts can be found on Table 7.

Table 6. Proposed Medium General Service Rate Schedule (G-2)

	Existing Rates			Proposed Rates		
	Secondary	**Primary**		**Secondary**	**Primary**	
Basic Charge						
Single-Phase	$33.37	---		$36.75	---	per month
Three-Phase	$51.74	$3,004.68		$56.95	$3,305.00	per month
Demand Charge						
First 300 KW	$6.610	---		$7.000	---	per kW
Over 300 KW	$6.610	$6.461		$7.000	$6.850	per kW
Energy Charge						
All kWh	$0.05728	$0.05646		$0.05909	$0.05825	per kWh

Table 7. G-2 Monthly Customer Bill Impacts

	20 kW			100 kW			500 kW		
KWH LEVEL	**Old Rates**	**New Rates**	**% Change**	**Old Rates**	**New Rates**	**% Change**	**Old Rates**	**New Rates**	**% Change**
2,000	$299	$315	5.6%	--	--	--	--	--	--
2,500	327	345	5.4%	--	--	--	--	--	--
3,000	356	374	5.2%	--	--	--	--	--	--
3,500	384	404	5.0%	--	--	--	--	--	--
4,000	413	433	4.9%	--	--	--	--	--	--
6,000	528	551	4.5%	--	--	--	--	--	--
8,000	642	670	4.3%	$1,171	$1,230	5.0%	--	--	--
10,000	757	788	4.1%	1,286	1,348	4.8%	--	--	--
12,000	871	906	4.0%	1,400	1,466	4.7%	--	--	--
15,000	1,043	1,083	3.8%	1,572	1,643	4.5%	--	--	--
17,500	1,186	1,231	3.8%	1,715	1,791	4.4%	--	--	--
20,000	1,330	1,379	3.7%	1,858	1,939	4.3%	--	--	--
22,500	1,473	1,526	3.6%	2,002	2,086	4.2%	--	--	--
25,000	1,616	1,674	3.6%	2,145	2,234	4.2%	--	--	--
27,500	1,759	1,822	3.6%	2,288	2,382	4.1%	--	--	--
30,000	1,902	1,970	3.5%	2,431	2,530	4.1%	--	--	--
32,500	2,046	2,117	3.5%	2,574	2,677	4.0%	$5,218	$5,477	5.0%
35,000	--	--	--	2,718	2,825	4.0%	5,362	5,625	4.9%
40,000	--	--	--	3,004	3,121	3.9%	5,648	5,921	4.8%
60,000	--	--	--	4,150	4,302	3.7%	6,794	7,102	4.5%
80,000	--	--	--	--	--	--	7,939	8,284	4.3%
100,000	--	--	--	--	--	--	9,085	9,466	4.2%
120,000	--	--	--	--	--	--	10,230	10,648	4.1%
150,000	--	--	--	--	--	--	11,949	12,420	3.9%
180,000	--	--	--	--	--	--	13,667	14,193	3.8%
200,000	--	--	--	--	--	--	14,813	15,375	3.8%

Large General Service (G-3)

The Large General Service rate schedule serves customer accounts with monthly billed demands greater than 501 kW but less than 10,000 kW. Customer eligibility for this rate is based on having an average of the three highest peak demands over the last 12 months falling between 501 and 10,000 kW. There are approximately 60 commercial, industrial, and public agency customers served under the Large General Service schedule today (Schedule G-3). The proposed changes for G-3 are shown in Table 8. The respective bill impacts can be found in Table 9.

Table 8. Proposed Large General Service (G-3) Rate Schedule

	Existing Rates			Proposed Rates		
	Secondary	Primary		Secondary	Primary	
Basic Charge	$2,630	$2,559		$2,900	$2,825	per month
Demand Charge						
First 300 KW	---	---		---	---	per KW
Over 300 KW	$7.380	$7.170		$7.650	$7.445	per KW
Energy Charge						
All kWh	$0.04717	$0.04632		$0.04860	$0.04770	per kWh

Table 9. G-3 Monthly Customer Bill Impacts

	500 kW			1000 kW			3000 kW		
Monthly kWh	**Existing**	**Proposed**	**% change**	**Existing**	**Proposed**	**% change**	**Existing**	**Proposed**	**% change**
40,000	$5,922	$6,299	6.4%						
60,000	6,865	7,271	5.9%	--	--	--	--	--	--
80,000	7,809	8,243	5.6%	--	--	--	--	--	--
100,000	8,752	9,215	5.3%	$12,442	$13,040	4.8%	--	--	--
150,000	11,111	11,645	4.8%	14,801	15,470	4.5%	--	--	--
200,000	13,469	14,075	4.5%	17,159	17,900	4.3%	--	--	--
250,000	15,828	16,505	4.3%	19,518	20,330	4.2%	--	--	--
300,000	18,186	18,935	4.1%	21,876	22,760	4.0%	--	--	--
350,000	20,545	21,365	4.0%	24,235	25,190	3.9%	$38,995	$40,490	3.8%
500,000	--	--	--	31,310	32,480	3.7%	46,070	47,780	3.7%
600,000	--	--	--	36,027	37,340	3.6%	50,787	52,640	3.6%
700,000	--	--	--	40,744	42,200	3.6%	55,504	57,500	3.6%
800,000	--	--	--	--	--	--	60,221	62,360	3.6%
1,000,000	--	--	--	--	--	--	69,655	72,080	3.5%
1,500,000	--	--	--	--	--	--	93,240	96,380	3.4%
2,000,000	--	--	--	--	--	--	116,825	120,680	3.3%

Conclusion

The fundamentals of our industry are changing. We need to adapt and prepare. EWEB does not want to be an impediment to public policy objectives such the advancement of distributed generation; we see them as important tools in adapting to the future. To minimize the potential for growing subsidies across customers within a given class, we need to set price signals that show the true cost of our products, including those that are fixed in nature and those that are variable. This will allow customers, contractors and policy makers to optimize around the true costs and benefits of changing the business model.[6]

For these reasons, we believe the most prudent course going forward is to adopt a phased in approach to rate design changes that are necessary to improve fixed cost recovery, reduce the growing subsidies between customers, continue to confirm to cost-based pricing, flatten price energy price tiers to more nimbly respond to changing cost profiles in the industry, and use pricing to enhance customers bill management by identifying sustainable cost savings.

As technology continues to evolve, new and expanded uses of the electric grid - such as electric vehicles, distributed generation, and energy storage - will grow and the utility's ability to centrally manage and plan the grid is likely to diminish. Another growing trend across industries is that customers increasingly want and expect options and control. What we can do, as the electric utility provider, is set the right price signals so that both we and our customers can make the best long term investment decisions and help our customers have greater influence over when and how much energy they use. Take zero net energy homes at the extreme... what would our products and services be to consumers and communities with significant penetration levels? How would we price them? These will be topics to explore in our 2015 strategic plan, the discussion around which will begin with the Board in Q1 2014.

TBL Assessment

This proposal was developed in accordance with the principles of a triple bottom line perspective. The recommendations serve to balance the objectives of improving financials, efficient use of our resources, and supporting job creation in the community. In addition, consideration is given to social equity matters across the customer base.

Recommendation

The proposed changes presented in this Board backgrounder are consistent with the rate design objectives provided to the Board at the March 5 Board meeting, as well as Business Strategy 5 in the current Strategic Plan. Management recommends Option 1 as the preferred construct for the residential rate schedule (R-6) to be used in developing the November 5th rate proposal, based on its more balanced customer impacts and progress toward energy price tier flattening. Management will modify its November 5 proposal based on Board feedback received at the October 1 meeting and will seek final approval of the final rate schedules at the December 3 Board meeting.

6 Notably, the meter is the gateway technology in achieving this end.

Requested Board Action

Management is seeking policy direction in support of the proposed rate design objectives in addition to the specific rate design proposals included herein, leading up to approval of the proposed rate schedule changes to be presented at the December 3 Board meeting. Specifically, management seeks direction at the October 1 Board meeting on which residential rate option should be included in the November 5th rate proposal, the General Service rate component realignment, the new BGR-1 rate schedule, and the change to the G-4 rate schedule.

Appendix A. Proposed BGR Rate Rider

P. Business Growth & Retention Rider (BGR-1)
(For Service from 200 kW to 10,000 kW of new or incremental demand)

1. Applicable

This Rider is applicable as an addendum to the otherwise applicable electric rate schedule for qualified customers locating or expanding service on EWEB's transmission and/or distribution system(s). New or existing General Service customers who add at least 200 kilowatts (kW) of billing demand may qualify. Service is applicable to customers with the average of the three highest monthly kW demands in a 12-month rolling period falling between 200 and 10,000 kilowatts of either new or incremental demand. Customer taking service must first be approved for participation in EWEB Business Growth & Retention Program.

2. Rate

The BGR-1 shall be calculated by subtracting the monthly average ICE Mid-C Daily Settled Index price from the customer's average applicable retail energy (kWh) rate to establish the retail/wholesale market differential. The monthly retail/wholesale market differential is allocated to the customer as an incentive rate. The split is 50/50 in the first year, 60 (EWEB)/40 (customer) in the second year; and 80 (EWEB) /20 (customer) in the third year.

The BGR-1 is applied to the new or incremental energy (kWh) use only. The credit is based on a look back calculation for all energy consumed above the baseline and credited to the bill no less frequently than every six months. The BGR credit will not be paid for any billing period that customer fails to meet 200 kW minimum additional demand.

3. Contract

Service under this schedule is provided under a three-year, signed agreement.

4. Start Date

The start date of the incentive rate period shall commence within 24 months from the date of execution of the contract for service and shall be designated by the customer within the BGRR agreement. (*This 24 month period is to accommodate construction prior to full operation.)*

5. Metering

Separate electric metering for new or additional load may be required if, in EWEB's sole opinion, it is necessary to provide service under this schedule. The customer will be responsible for any costs associated with providing separate electric metering.

6. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB. (See, in particular, Electric Utility, page E.)

Appendix B. Proposed G-4 Rate Schedule Clarifying Terms of Cost Assignment to a New Large Single Load (NLSL) Connecting to the EWEB System

H. Very Large General Service – Schedule G-4 (For Service over 10,000 kW)

1. Applicable

   To electric service for large commercial, industrial and public agency customers with monthly billing demands over 10,000 kilowatts, or customers classified as New Large Single Load ("NLSL") by the Bonneville Power Administration ("BPA"). Service is applicable to NLSL customers or customers with the average of the three highest monthly kW demands in a 12-month period exceeding 10,000 kilowatts.

   Primary Service is available for customers who contract for 300 kilowatts or more at one point of delivery at approximately 12,000 volts. It is not available to customers inside the underground secondary network. All Primary Service shall be three-phase, 60-cycle, at 12,000 volts or higher at the option of EWEB. Service shall be furnished through one meter, at one point of delivery and at one voltage. Secondary Service applies to customers served below 12,000 volts.

   Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Provisions
   - **a.** Service to new loads will be provided under the Very Large General Service Rate Schedule G-4 or by separate power service contracts.
   - **b.** EWEB will, to the extent necessary, secure wholesale power and transmission service to serve the loads.
   - **c.** Loads defined as NLSL are not eligible to receive preference power for service to such NLSL. Prior to entering into a contract for service EWEB will discuss power supply options with the NLSL. All other fees and the minimum charge detailed below are applicable to NLSL's.
   - **d.** Based on their size, NLSL may incur non-traditional costs of service, such as Renewable Portfolio Standard ("RPS") compliance. The NLSL will bear the cost of compliance with the applicable RPS resulting from the addition of the NLSL.
   - **e.** For NLSL customers, the energy and demand rate will be calculated as necessary and is dependent on the forecast monthly energy and peak demand forecast for the customer and EWEB's cost of service including the power and demand to meet the NLSL load.
   - **f.** For NLSL customers, an Energy and/or Demand Power cost Adjustment ("PCA") may apply. An Energy or Demand PCA may be calculated at any time. A PCA will be calculated if the power purchased to serve the NLSL differs materially, or if the actual load differs materially from forecast.

g. A facilities charge will be applicable to NLSL customers and will be calculated as necessary.

h. All fees imposed by any governmental agency will be passed through to the NLSL customer.

i. A reactive power charge, expressed in cents per kVAR, will be included in the rates.

3. Monthly Rate Schedule
(for customers not served under contract)
(Resolution No. 1223)

	Secondary Service	Primary Service	
Basic Charge:	$2,670	$2,600	per month
Demand Charge:			
First 300 kW of Demand	No charge	No charge	
Over 300 kW of Demand	$7.05	$6.85	per kW
Energy Charge:			
All Kilowatt-Hours	$0.06405	$0.06405	per kWh

4. Minimum Charge

The minimum charge shall be the applicable basic charge.

5. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month as determined by a suitable demand meter.

6. Reactive Power Charge

Where applicable, a reactive power charge will be added to the above charges based on the maximum 15-minute reactive demand for the month, expressed in kilovars (kVAR). The monthly rate is $0.28 per kVAR.

7. Special Provisions – General

The customer's load characteristics must be acceptable to EWEB.

An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.

8. Special Provisions – Primary Service

The customer shall provide, own, install and maintain all necessary transformers, cutouts, protection equipment, concrete slab or vault, primary metering enclosure, and all distribution beyond the point of delivery. EWEB will furnish and install all distribution facilities to the point of delivery and the primary potential and current transformers.

For Primary Service under this rate schedule, transformer losses will be borne by the customer and will be measured or calculated at the option of EWEB.

9. Voltage Available

   Voltage and phase classifications available under this schedule are:

   208Y/120 volts, 3-phase wye, 4-wire

   480Y/277 volts, 3-phase wye, 4-wire

   12,470Y/7,200 volts, 4-wire, 3-phase wye

   12,470 volts, 3-wire, 3-phase delta

10. Power Cost Recovery Adjustment

    Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate. General Terms and Conditions

11. General Terms and Conditions

    Service under this schedule is subject to the policies and procedures of EWEB. Generally, those policies can be found in EWEB's Customer Services Policies & Procedures, All Utilities and Electric Utility.