MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

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

FROM: Sue Fahey, Chief Financial Officer; Deborah Hart, Fiscal Services Supervisor; Jerry Reller, Sheila Crawford and Nate Schultz, Senior Financial Analysts

DATE: October 21, 2016

SUBJECT: 2017 Proposed Budgets, Revenue Requirements and Prices

OBJECTIVE: Direction on 2017 Budget and Prices

Issue

November 1, 2016 is the first of two public hearings on the 2017 proposed Electric and Water Utility budgets and price proposals which are scheduled for approval after the public hearing on December 6, 2016. Based on Board direction, final proposals will be prepared for the December meeting. The Board is required by statute to approve the Utility budgets prior to January 1st.

Background

Budget

Over the last several years, both the Water and Electric Utilities have faced financial challenges. Those challenges have been managed by strategically reducing operations & maintenance and capital costs, designing price structures that increase fixed cost recovery, asset sales, and prudently using reserves to strengthen financial metrics. The major strategies employed over the last several years are in Attachment 1.

At the October 4th Board meeting, staff presented draft budgets that included several assumptions. Staff also presented the revenue requirements associated with those assumptions and the resulting overall average price changes of 0% for the Electric Utility and 2.7% for the Water Utility. Since that time, management has continued to work to reduce the impact to our customers and is proposing an overall average 0% price change for Electric and 2.0% overall average for Water. These changes have been incorporated into the 2017 revenue requirements and proposed budgets.

Electric Price Proposal

In July 2016, EWEB engaged a consulting firm to conduct a comprehensive price study and develop an updated cost of service model. The new cost of service model results indicated that overall, no price changes were needed to meet revenue requirements. In 2017, staff will be engaging customers to assist in the development of a pricing strategy for EWEB products. Feedback from this work will likely change how prices are designed. The results of the cost of service study indicated that current

prices by customer class achieved each class' allocated revenue requirement within industry standard accepted variances. Additionally, in 2017 a plan will be developed to manage future long-term debt and pension costs, process improvement work will continue, and the residential load forecast will be reviewed due to the recent warmer winters in the Northwest. Given these variables, management recommends using the gradualism and stability ratemaking principles and holding prices constant for all customer classes.

Included in the price proposal is a new standby price for partial requirements service. The intent of the price is to create a way for large customers with generation to self-supply, while still ensuring that fixed transmission and distribution costs used to provide on-demand delivery service to these customers are recovered, thereby avoiding cost shifts to other customer classes.

The proposed standby price for partial requirements service includes standard utility pricing constructs such as basic charge (for meter reading, customer service, public purposes), distribution/facilities charges (for fixed distribution system costs and customer specific investments), and an energy charge (for power needs not supplied by customer owned generation), as well as generating capacity related costs (for generation capacity on standby to serve load). What is different is that the costs are allocated to billing determinants consistent with how the costs are incurred (i.e. whether fixed or variable, or meant to serve peak load).

Water Price Proposal

The 2017 Water Price Proposal represents a 2.0% increase in overall revenue requirements. In 2013, the Board approved a price smoothing strategy for the Water Utility in part based on the decision to avoid significant price increases during major construction years on a second water supply. Eugene is the largest city in Oregon without a diverse water supply, which poses a substantial risk to ensuring EWEB customers continue to receive safe, reliable, high quality water. Deposits to reserves prior to construction will be used to reduce the amount of capital bonds and will improve long-term financial stability. Management is recommending using the gradualism and stability ratemaking principles for setting 2017 water prices due to several factors. Like the Electric Utility, proposed prices by customer class achieved each class' allocated revenue requirement within industry standard accepted variances. Additionally, in 2017 a plan will be developed to manage future long-term debt and pension costs, process improvement work will continue, and the plan to diversify EWEB's source of supply will be refined. Proposed price changes are as follows:

Customer Class	**Rate Schedule**	**Change Proposed**
Residential – Inside/Outside City	R-1, R-2	0.0%
General Service – Inside/Outside City	G-1, G-2	5.1%
River Road and Santa Clara Water Districts	4	3.3%
Willamette Water Company	5	3.0%
Veneta	6	-9.0%
Private Fire Lines		1.0%
Elevation Charges		0.0%
Overall Average Increase		**2.0%**

Recommendation

Management recommends that the Board direct staff to prepare:

1) The Electric Utility 2017 price proposal with no price change for all customer classes
2) A standby price for partial requirement service as stated above
3) The Water Utility price proposal with a 2.0% overall average February 2017 price change and customer class changes as set forth in this document
4) The 2017 budgets using the assumptions set forth in this document

Requested Board Action

Management is not requesting Board action at the November 1st meeting; however, Management is requesting that the Board provide clear direction on the recommendations. At the December 6, 2016 Board meeting after the public hearing, Management will recommend approval of the 2017 Budgets, February 2017 Electric Price Proposal and February 2017 Water Price Proposal.

Attachment 1 – Financial Strategies 2012-2016
Attachment 2 – 2017 Key Budget Assumptions
Attachment 3 – Affordability Comparison
Attachment 4 – Average Bill Comparison

Attachment 1
Financial Strategies 2012-2016

2012

- Electric Utility introduced a rate stabilization fund to formally handle swings in revenue and expense due to natural fluctuation in hydro conditions.

2013

- Reduction measures:
  - Position reductions - Over 50 FTE
  - O&M reductions - $7.5M; Capital spending deferral $60M
- Established a centralized contingency account to be used for unanticipated expenses, revenue shifts and emergency needs.
- The budget assumed hydro generation based on 90% of average stream flow. Reserve draws to balance budget eliminated.
- Began ongoing water price design changes, relying more on basic charge and less on volumetric charge.
- Began completing budget hedging earlier in the year.
- Implemented priority based budgeting.

2014

- Reduction measures:
  - Position reductions - 20 FTE
  - O&M reductions - $3.6M; Capital spending deferral or elimination $20M
- Board approved financial policies to align Electric Utility with a single "A" rated utility.
- Established a designated fund for future second source filtration plant.
- Began ongoing Electric price design changes.
- Implemented department budget monitoring.

2015

- $28.8M Harvest Wind debt extinguished through strategic use of reserves.
- Water Utility established rate stabilization fund.
- Financial initiative adjustments - Electric Utility $2.5 million in ongoing savings, Water Utility $380,000 in ongoing savings.

2016

- Electric Utility realized savings of $19 million from refunding bonds at lower interest rates.
- Water Utility realized savings of $5.6 million from refunding bonds at lower interest rates.
- Electric Utility defeased $29 million in debt primarily using proceeds from Smith Creek.
- Cost savings: Electric Utility - $2.3 million and Water Utility - $270 thousand in ongoing reductions.
- Electric Utility AA rating restored.

Attachment 2
2017 Key Budget Assumptions

Both Utilities

- 1% non-labor CPI increase
- Labor/Benefit Increases:
  - 2.4% salary escalation
  - PERS increase – 4.6 percentage points above current rates
  - Health insurance increase – 2.2%
- Cost savings:
  - Electric: $2.3 million ongoing O&M reductions
  - Water: $270 thousand ongoing O&M reductions

Electric:

- Retail load approximately the same as 2016 budget – 2.4 million MWh
- Contribution margin risk tolerance of $3.2 million which represents 90% generation, 2.6% load reduction or 49% wholesale price reduction
- $25 melded mid-market price curve
- Partial year Carmen-Smith generation outage

Water:

- Consumption: 7.6 million kgal, approximately the same as the 2016 budget

Attachment 3
Affordability Comparison

Background

The Board has requested staff provide bill affordability information. To prepare this information, *Assessment of Affordability of Residential Rates* (Glenn Barnes and Shadi Eskaf; Environmental Finance Center at the University of North Carolina, Chapel Hill; 2016) was used.

The approach uses the local community's median household income (MHI) and is based on the following data:

1. Monthly water and electric bill at average residential consumption per month.
2. Annual bills at same level of use.
3. Median Household Income in 2014 for Eugene, OR

Currently, there is no national standard for what affordable percent (%) of MHI value is or is not. When using this assessment, consideration must be given to financial sustainability of the utility as a whole in addition to affordability of price. Setting artificially low prices may produce financial constraints to reinvesting in the system and eventually harm public health through poor product quality and service.

To address the limited income customer-owner bill impact, EWEB has maintained a customer care program for many years that provides assistance for bill payment and weatherization programs.

The six charts below demonstrates the Eugene, Portland, Everett, Vancouver, Tacoma and Seattle combined average water and electric bill for residential customers (water is 7 kgal and electric is 1050 kWh). This average is annualized and compared as a percentage of the MHI.

References:Assessment of Affordability of Residential Rates (Glenn Barnes and Shadi Eskaf; Environmental Finance Center at the University of North Carolina, Chapel Hill; 2016)

Eugene, Oregon Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$145.80
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$1,750
Median Household Income in 2014 for Eugene, OR	$43,715
Water & Electric % MHI	**4.00%**

Portland, Oregon Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$170.35
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$2,044
Median Household Income in 2014 for Portland, OR	$53,230
Water & Electric % MHI	**3.84%**

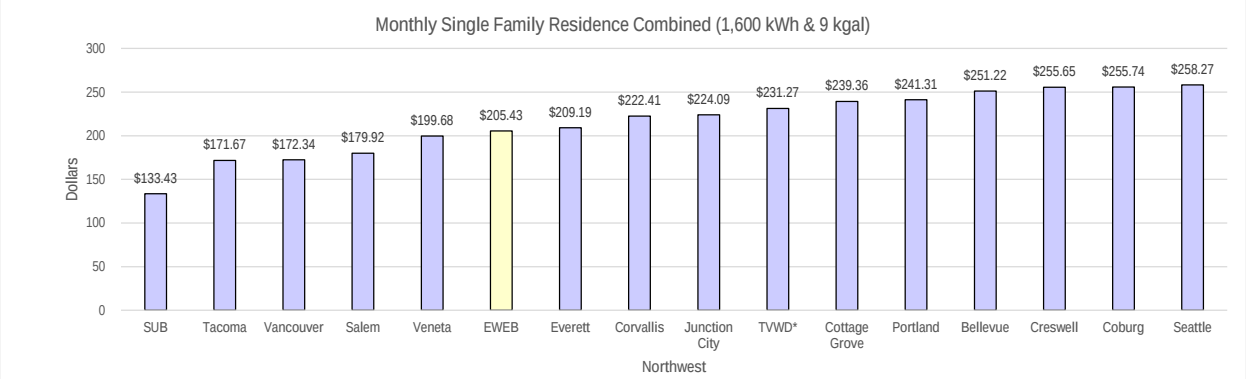
Everett, Washington Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$143.49
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$1,722
Median Household Income in 2014 for Everett, WA	$48,562
Water & Electric % MHI	**3.55%**

Vancouver, Washington Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$122.35
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$1,468
Median Household Income in 2014 for Vancouver, WA	$50,379
Water & Electric % MHI	**2.91%**

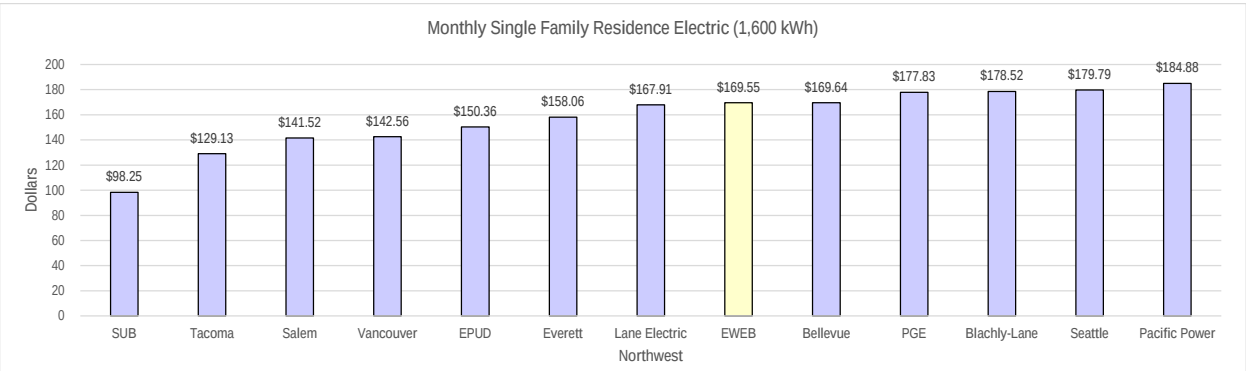
Tacoma, Washington Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$125.80
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$1,510
Median Household Income in 2014 for Tacoma, WA	$51,269
Water & Electric % MHI	**2.94%**

Seattle, Washington Consumption and MHI	**Current Prices**
Monthly water & electric bills at overall average residential consumption/month	$174.39
Overall average residential water consumption – 7 kgal; electric consumption – 1050 kWh)	
Annual bills at same level of use	$2,093
Median Household Income in 2014 for Seattle, WA	$67,365
Water & Electric % MHI	**3.11%**

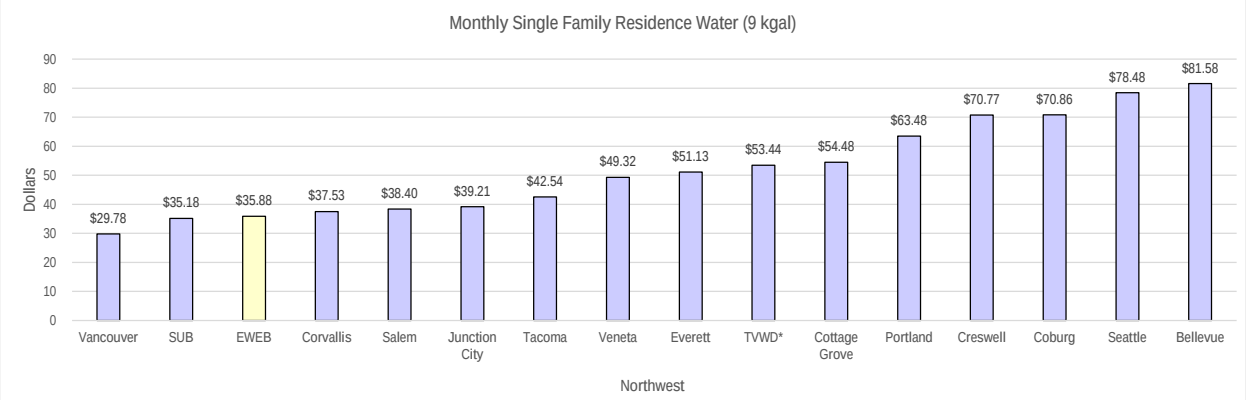
Attachment 4
Average Bill Comparison



* : Tualatin Valley Water District (TVWD) serves Beaverton, portions of Hillsboro and Tigard.



* : Include CILT, taxes and fees where applicable.
* : EPUD and Lane Electric serve surrounding rural areas and small towns in Lane County.
* : PGE serves Portland & Beaverton.
* : Pacific Power serves Corvallis, Junction City, Coburg, Creswell & Cottage Grove, and portions of Portland metropolitan area.



* : Tualatin Valley Water District (TVWD) serves Beaverton, portions of Hillsboro and Tigard.

Eugene Water & Electric Board

2017 Proposed BUDGET

November 1, 2016

Eugene Water & Electric Board

500 East 4th Avenue/Post Office Box 10148
Eugene, Oregon 97440-2148
541-685-7000
www.eweb.org

Board of Commissioners

	Ward	Term ends December 31,
John Simpson, President	At Large	2018
Richard Helgeson, Vice President	Wards 2, 3	2020
Steve Mital	Wards 1, 8	2020
John Brown	Wards 4, 5	2018
James Manning	Wards 6, 7	2016

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Board of Commissioners,

The 2017 Eugene Water & Electric Board Operations & Maintenance (O&M) and Capital proposed budgets totaling $267 million for the Electric Utility and $40 million for the Water Utility are submitted for your consideration and approval. The combined total for both Utilities is $307 million which is approximately 2% below the 2016 budget. The reduction was accomplished even with an increase in purchased power costs by reducing and restructuring debt service obligations, strategically cutting operation and maintenance and capital costs, achieving lower than projected benefits increases, and prudently using reserves to strengthen financial metrics.

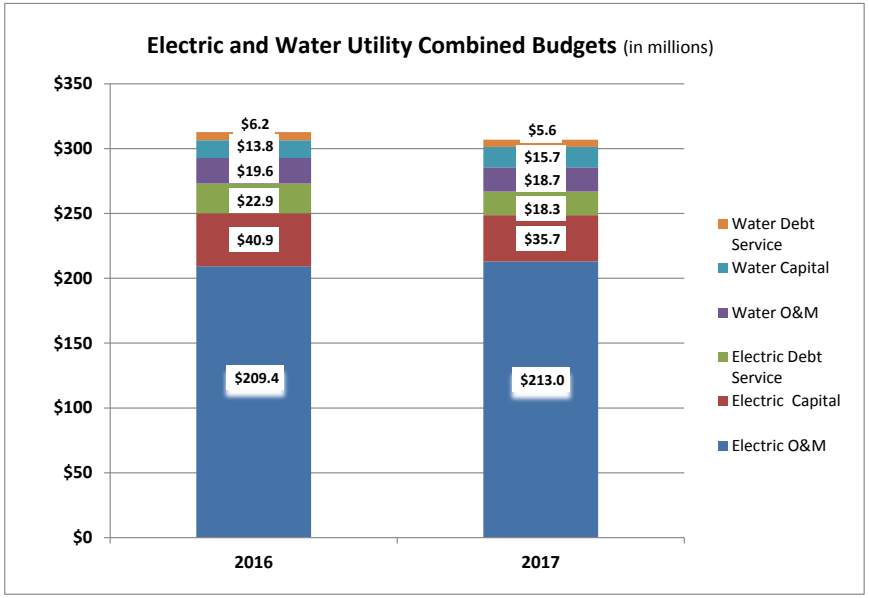
Early in 2016, management identified $2.6 million in O&M expense reductions. Additionally, both Utilities restructured debt resulting in significant long-term savings. The Water Utility refinanced debt that resulted in $5.6 million of savings. The Electric Utility defeased (paid off) $29 million of bonds with the proceeds from the sale of a remote generating facility combined with cash reserves and also refinanced bonds resulting in an additional $19 million of savings. The majority of these savings will be realized over the next several years. This work demonstrates the commitment by the Board, management, and staff to increase financial stability and provide a solid financial outlook for both Utilities as evident in the long-term financial plans. The proposed budgets include critical infrastructure rehabilitation and expansion projects and high priority technology projects designed to enhance our customer-owners' ability to make informed choices.

The subsequent impact of this work for the Electric Utility was the elimination of the projected 3.5% overall average price increase for 2017. Although the Electric Utility's long-term financial plan indicates future price increases to meet revenue requirements, the five year compounded price increase dropped to 10% from last year's projection of 18%.

The Water Utility revenue requirements resulted in an overall average price change of 2.0%. Several factors contributed to the lower than previously projected 3.6% price increase. Those factors include: decreased debt service as a result of refinancing, Oregon public retirement rates approved at a rate lower than projected, and management's commitment to hold 10 vacant FTE's for 2017.

In 2013, a smoothing methodology for future Water prices was adopted to avoid price spikes when the Water Utility incurs significant costs to secure a second source water supply. EWEB is the largest municipality in Oregon without a diverse water supply, and the ten-year capital improvement plan includes approximately $66 million to eliminate that risk. Utilizing the price smoothing technique in 2018 and beyond, the Water Utility's long-term financial plan indicates an increase in revenue requirement of 2.6% over plan horizon.

The following chart depicts the combined Electric and Water budgets for 2016 and 2017.



Lane County's economy is predicted to have moderate growth of 1.5% according to the February 2016 State of Oregon Employment Department, Economic Forecast. Recent data shows most industries at moderate growth. Industry sectors such as medical facilities, construction and technology are planning growth and expansion in the near future. EWEB's *Integrated Electric Resource Plan* established goals and objectives related to the acquisition of generation and energy conservation resources over the next twenty years. It also established a framework to allow EWEB to adaptively respond to changing energy markets and development environments. The current plan, adopted in January 2012 and updated annually includes the following directions: (1) Pursue conservation to meet forecasted load growth, and (2) develop strategies to partner with customers to reduce consumption to avoid the need for new peaking power plants. EWEB's adopted plan indicates the current supply of resources will meet its customers' energy requirements for the next ten years. For the 2017 budget, base retail load will remain at 2016 levels.

The Water Utility's consumption is budgeted at the same level as the 2016 budget. Consumption has not entirely rebounded since the loss of a major customer several years ago; however, the last two years' consumption has been higher than budgeted. Prior price redesign to increase fixed cost recovery helps shelter the Utility from revenue losses in low consumption years.

The Electric and Water Utilities' financial challenges have been very different over the last few years. Increased debt costs for rehabilitation of aging infrastructure, as well as renewable power investments, made achieving debt service coverage targets for the Electric Utility difficult, however over the last two years, management has proactively taken actions to reduce debt service costs:

- Paid off $28 million debt issued to purchase a share of Harvest Wind Project;
- Applied proceeds from the Smith Creek Project sale plus cash reserves to pay off $29 million debt;
- Refunded $126 million of bonds which resulted in savings of $19 million.

These actions resulted in significant improvement to the debt service coverage (DSC) ratio which continues to be the Electric Utility's biggest financial challenge.

The Water Utility does not have a large debt burden and while cash reserves historically have been low, in 2015 they reached and exceeded Board targets. Actions taken by the Board have increased financial stability over the last three years. However, the Water Utility plans to undertake a large capital project in order to diversify the water supply and will need reserves and borrowing capacity. Both Utilities' challenges have been managed by strategically reducing costs, designing price structures that increase fixed cost recovery, asset sales, and/or prudently using reserves to strengthen financial metrics.

EWEB continues to be a strong community partner as evidenced by its Community Care Program that provides bill payment assistance for limited income customers. The budget includes $1.5 million for this program. Additionally, EWEB provides almost $500,000 annually in grants to local schools.

As EWEB considers multiple strategies to reduce costs and manage debt, the Utility must balance the reliability of its electric and water systems with reasonable risk.

Electric Utility

Overview

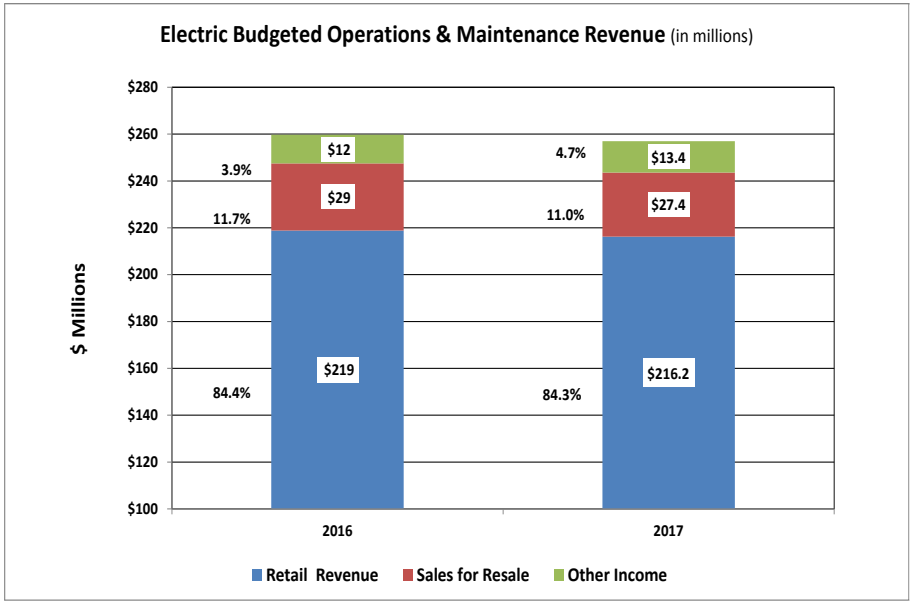
The Electric Utility has surplus power which is sold into the secondary markets. A continuation of depressed prices for the sale of surplus power has resulted in historically low wholesale revenues. This, combined with flat customer demand, requires that the Utility's fixed costs be spread over a smaller base. Additionally, EWEB has invested in renewable power (wind, biomass) which is more expensive than the historical hydro generation. Those investments and the bonds issued for infrastructure rehabilitation and replacements increased debt service costs and put pressure on financial metrics. As noted previously, 2016 debt management work has significantly reduced that pressure.

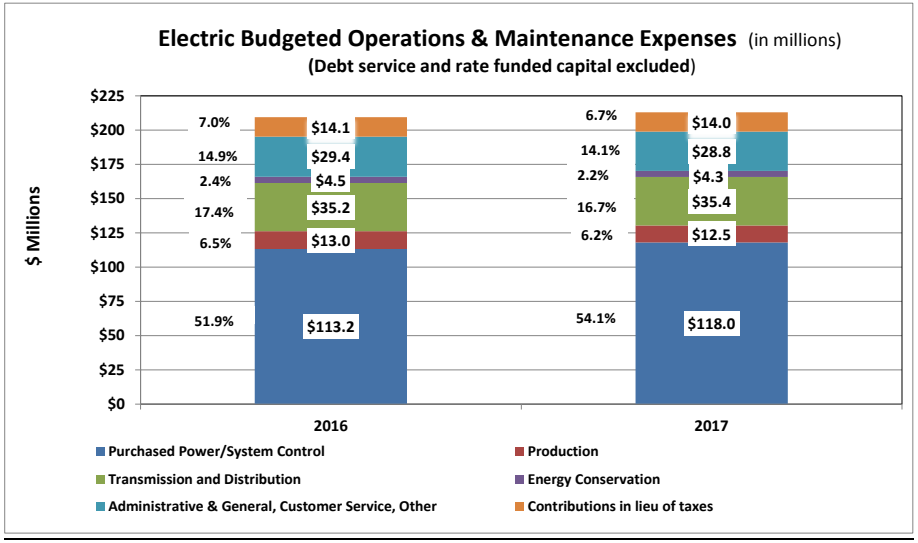
Operations & Maintenance Budget

The proposed 2017 Electric O&M budget is $213 million versus the 2016 O&M budget of $209.4 reflecting a 2% increase. The primary increase is in purchased power. Excluding purchased power costs, the operating costs are tracking with 2016 budget. A change in the allocation of overhead credits has resulted in shifting costs to the administrative & general category from other functional expense categories. The budget assumes a risk tolerance of $3.2 million which protects the Utility against revenue declines that are beyond its control. The $3.2 million would allow hydro generation to drop to 90%, a 2.6% load reduction, or 49% wholesale price reduction before revenues dropped below budget levels. Given its surplus power position, EWEB has a strong hedging program designed to protect the Utility from falling wholesale prices which mitigates the potential budget impact.

The budget includes a $7.8 million deposit to reserves. In 2017, staff will recommend that the Board make strategic decisions regarding the use of reserves and further strengthen the Utility's financial position.

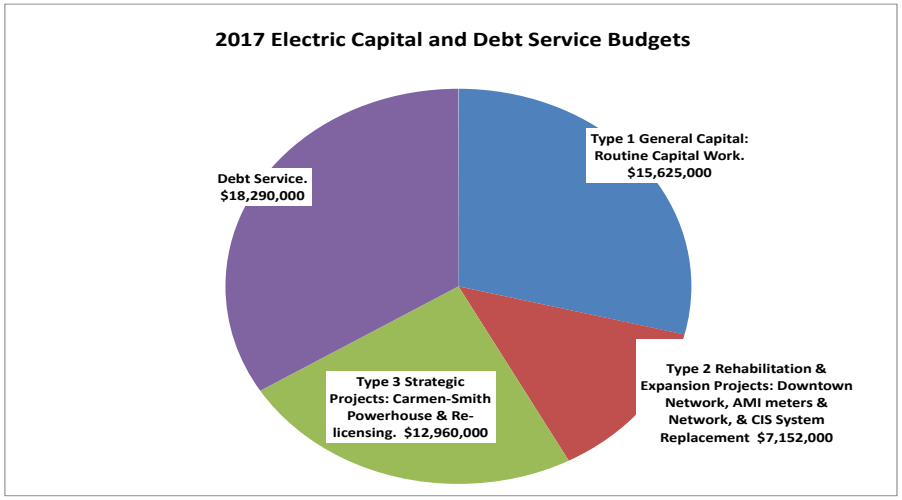
The following two charts compare the Electric 2017 and 2016 O&M revenue and expense budgets.





Capital and Debt Service Budgets

The Electric Capital and debt service budget of $54 million is $9.8 million less than the 2016 budget. This is primarily due to the completion of the reimbursable Lane Transit District EmX project and a $4.6 million decrease in debt service as a result of paying off debt and refinancing bonds. The following chart details the budget by type of cost.



General capital work targets replacing aging infrastructure in an effort to maintain, but not, improve reliability. Major rehabilitation and expansion work includes the downtown network, and replacement of the Customer Information System (CIS). Approximately $17.8 million of the capital work will be funded with electric rates. Additional detail on the capital budget is included in Attachment 1.

Water Utility

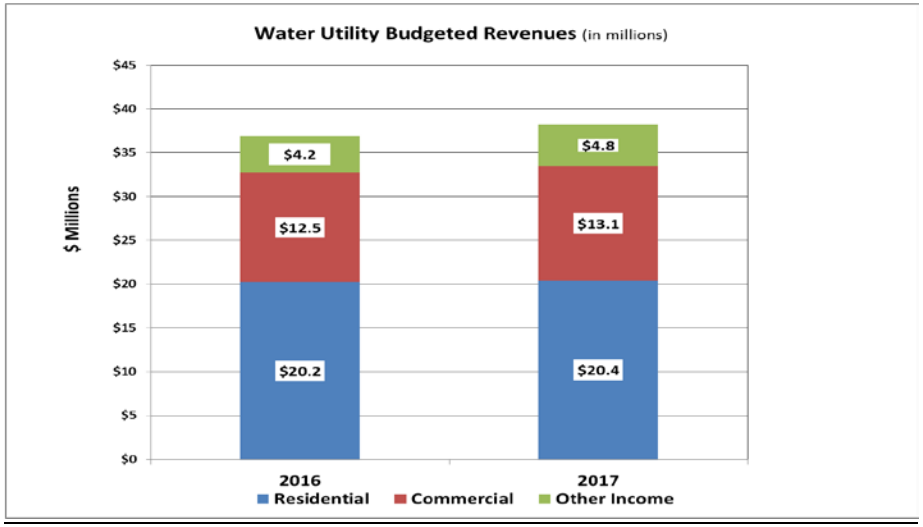
Overview

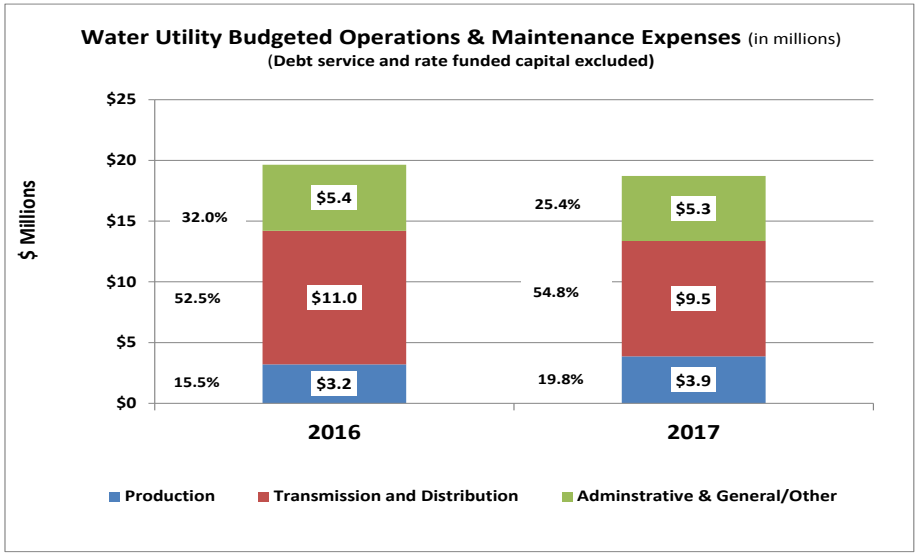
Like many Northwest water utilities, EWEB has aging infrastructure that needs replacement in order to reliably deliver safe, high quality water to customers. The extensive capital required to operate a large filtration plant and maintain about 800 miles of distribution pipes comes with high fixed costs. In an effort to increase the Water Utility's financial stability, over the last several years the Board has approved a price design that improved fixed cost recovery, implemented a price increase specifically for the future construction of a second water treatment plant, and adopted a price smoothing strategy to avoid a price spike when the treatment plant construction began. This, coupled with cost savings and higher than budgeted sales, has allowed the Utility to build reserves which will be strategically used to help the Utility maintain its recently achieved strong financial metrics.

Operations & Maintenance Budget

The 2017 Water Utility O&M budget is $18.7 million compared to $19.6 million in 2016. The budget assumes sales of 7.6 million kgals which is the same as the 2016 budget. Over 53% of Water Utility revenues are derived from residential customers and 34% from commercial customers. To meet the Water Utility revenue requirements, the budget includes an overall average price increase of 2.0% which would be effective on bills rendered beginning February 2017. The 2017 revenue budget shows an increase in non-operating revenues. This is due to increased reimbursable hydrant permits and interest and dividend income. The expense budget reflects a decrease in Transmission and Distribution (T&D) of approximately $1.5 million, and an increase to production of $651,000 from the 2016 budget. This adjustment is due to the reclassification of expenses from T&D to Production, and a reallocation of reductions related to capital overhead from Administrative & General to T&D.

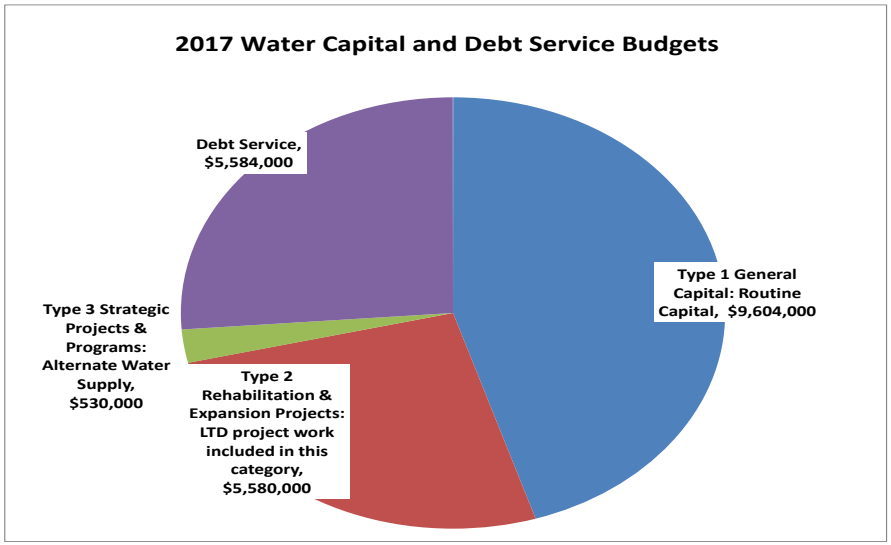
The budget results in a $4.7 million deposit to reserves, which the Board will allocate to specific reserve funds after the completion of the annual audit. The following charts compare the 2017 and 2016 Water Utility Budgeted O&M Revenues and Expenses.





Capital and Debt Service Budgets

The Water Capital and Debt Service budget of $21.3 million reflects an increase of 7% from the 2016 budget. This increase is due to the continued effort of addressing aging infrastructure in the distribution system such as main improvements, pump stations, reservoirs, and the intake system at Hayden Bridge. Depending on the type of project, funding is through water retail prices, customer contributions, or bonds. The debt service budget is $602,000 less than the 2016 budget primarily due to savings from refinancing bonds.



The 2017 budgets position both the Electric and Water Utilities to continue financial resiliency enhancements and to rise to the challenge of meeting and exceeding our customer-owners' expectations and EWEB's long-term strategic goals. As we continue to craft our vision and strategy, we will be guided by our commitment to provide greater value to our customer-owners through focus, increased effectiveness, and streamlining and simplifying work. I am looking forward to the opportunities and the challenges that lie ahead in cultivating our customer-owners' confidence and positioning EWEB to thrive for another 100 years in this dynamic industry.

I recommend the adoption of the 2017 Electric and Water Utility budgets presented in Attachment 1.

Respectfully submitted,

Frank Lawson, General Manager

Attachment 1

2017 Proposed Budgets

EUGENE WATER & ELECTRIC BOARD

ELECTRIC UTILITY OPERATIONS & MAINTENANCE BUDGET AND REVENUE REQUIREMENTS

2017 BUDGET COMPARED WITH 2016 BUDGET AND 2015 ACTUAL

	2017 Budget		2016 Budget		2015 Actual		
	MWH	REVENUE	MWH	REVENUE	MWH	REVENUE	
Residential	951,000	$ 107,654,000	975,000	$ 109,467,000	893,000	$ 93,321,000	
Commercial	864,000	78,729,000	889,000	79,232,000	843,400	70,164,000	
Industrial	559,000	29,752,000	544,000	30,141,000	552,000	27,989,000	
Retail sales	2,374,000	216,135,000	2,408,000	218,840,000	2,288,400	191,474,000	
Wholesale sales [1]	1,395,051	27,414,000	1,248,000	28,654,000	1,688,000	37,936,000	
Other Operating Revenues		6,952,000		6,924,000		9,573,000	
Operating revenues	3,769,051	250,501,000	3,656,000	254,418,000	3,976,400	238,983,000	
Other revenue		3,676,000		3,335,000		4,663,000	
Interest earnings		2,766,000		1,959,000		1,798,000	
Non-operating revenues		6,442,000		5,294,000		6,461,000	
Total revenues		256,943,000		259,712,000		245,444,000	
Purchased Power [1]		112,087,000		106,407,000		108,239,000	
System control		5,918,000		6,830,000		5,903,000	
Generation		12,487,000		12,973,000		11,631,000	
Wheeling		13,430,000		12,762,000		12,904,000	
Transmission & distribution		21,991,000		22,449,000		22,148,000	
Customer accounting		8,422,000		9,332,000		8,152,000	
Energy conservation		4,312,000		4,513,000		3,885,000	
Administrative & general		22,454,000		19,968,000		21,018,000	
Operating expenses		201,101,000		195,234,000		193,880,000	
Contributions in lieu of taxes		14,036,000		14,118,000		-	[2]
Change in balance sheet accounts/ other expenses		(2,131,000)		91,000		31,825,000	[3]
Non-operating expenses		11,905,000		14,209,000		31,825,000	
Total operations and maintenance expenses		213,006,000		209,443,000		225,705,000	
Rate funded capital		17,839,000		18,665,000			
Rate funded debt service		18,290,000		22,911,000			
Total rate funded capital related expenses		36,129,000		41,576,000			
Total rate funded expenses		249,135,000		251,019,000			
Revenues over/(under) expenses		$ 7,808,000		$ 8,693,000			
Deposit to (Draw on) Reserves:							
Deposit to Working Cash/Reserves		7,808,000	[4]	8,693,000			
Net change in reserves		$ 7,808,000		$ 8,693,000			
				Change in Net Position		$ 19,739,000	[5]

[1] Gross wholesale sales and purchased power. Does not include netting of sales and purchases where power was "net scheduled."

[2] 2015 CILT included as contra revenue in revenue section.

Dollars rounded to the nearest thousand.

[3] Includes depreciation, other revenue deductions, interest and amortization expense, contribution in aid, and contributed plant assets

[4] Board allocates working cash above target to specific reserve funds after annual audit

[5] Actual results are not directly comparable to budget due to a difference in accounting treatment

EUGENE WATER & ELECTRIC BOARD
ELECTRIC UTILITY CAPITAL AND DEBT SERVICE BUDGET
2017 BUDGET COMPARED WITH 2016 BUDGET

	2017 Budget	2016 Budget
Funding Source by Type		
Source of Funds		
Retail Revenue	$ 17,839,000	$ 18,665,000
Draw on Capital Reserves	-	1,250,000
Draw on Carmen Smith Reserves	8,050,000	-
Bond Proceeds	4,910,000	12,590,000
Customer Contributions in Aid	4,877,000	8,304,000
Interest Earnings on Reserve Fund	61,000	66,000
Total Source of Funds	35,737,000	40,875,000
Expenditures by Type		
Type 1- General Capital [1]		
Electric Infrastructure- Generation	1,196,000	1,916,000
Electric Infrastructure- Substations & Telecom	2,841,000	1,650,000
Electric Infrastructure- Transmission & Distribution	9,020,000	8,350,000
General Plant- Information Technology	494,000	1,130,000
General Plant- Buildings & Land	1,074,000	511,000
General Plant- Fleet	1,000,000	1,227,000
Total Type 1	15,625,000	14,784,000
Type 2- Rehabilitation & Expansion Projects [2]		
Downtown Network	1,000,000	4,000,000
LTD EmX Project	-	4,354,000
Upriver Re-Configuration/ Holden Creek Substation	250,000	3,000,000
Information Technology (CIS, AMI)	5,902,000	4,577,000
Leaburg Roll Gate	-	1,570,000
Total Type 2	7,152,000	17,501,000
Type 3- Strategic Projects & Programs [3]		
Carmen Smith Relicensing	12,960,000	8,590,000
Total Type 3	12,960,000	8,590,000
Total Electric Capital Budget	35,737,000	40,875,000
Rate Funded Debt Service	18,290,000	22,911,000
Total Electric Capital and Debt Service Budget	$ 54,027,000	$ 63,786,000

[1] Type 1 capital is routine capital work for projects totaling less than $1 million and is funded with rates and customer contributions.

[2] Type 2 capital projects are discrete, with a defined completion period, and lifetime expenditures over $1 million. Depending on the project, this work may be funded with rates, customer contributions, or bond funds.

[3] Type 3 capital projects are large strategic programs with long-term impacts, and are generally bond funded.

Dollars rounded to the nearest thousand.

EUGENE WATER & ELECTRIC BOARD

WATER UTILITY OPERATIONS & MAINTENANCE BUDGET AND REVENUE REQUIREMENTS

2017 BUDGET COMPARED WITH 2016 BUDGET AND 2015 ACTUAL

	2017 Budget		2016 Budget		2015 Actual	
	Gal (000)	REVENUE	Gal (000)	REVENUE	Gal (000)	REVENUE
Residential	3,685,000	$ 20,406,000	3,808,000	$ 20,219,000	4,028,000	$ 20,150,000
Commercial	3,220,000	13,067,000	3,096,000	12,509,000	3,520,000	13,879,000
Sales for Resale and Other	695,000	2,888,000	704,000	2,846,000	760,000	3,492,000
Operating revenues	7,600,000	36,361,000	7,608,000	35,574,000	8,308,000	37,521,000
Other revenue		1,473,000		1,260,000		207,000
Interest income		395,000		100,000		-
Non-operating revenues		1,868,000		1,360,000		207,000
Total revenues		38,229,000		36,934,000		37,728,000
Production		3,861,000		3,210,000		6,035,000
Transmission & distribution		9,508,000		10,990,000		5,172,000
Customer accounting		1,672,000		2,019,000		993,000
Conservation		429,000		316,000		180,000
Administrative & general		3,591,000		3,352,000		3,189,000
Operating expenses		19,061,000		19,887,000		15,569,000
Change in balance sheet accounts/other		(345,000)		(241,000)		2,217,000 [2]
Non-operating expenses		(345,000)		(241,000)		2,217,000
Total operations and maintenance expenses		18,716,000		19,646,000		17,786,000
Rate funded capital		9,234,000		10,102,000		
Rate funded debt service		5,584,000		6,186,000		
Total rate funded capital related expenses		14,818,000		16,288,000		
Total rate funded expenses		33,534,000		35,934,000		
Revenues over expenses		$ 4,695,000		$ 1,000,000		
Deposit to working cash, reserves, and second source fund [1]		4,695,000		-		
Net change in reserves		$ 4,695,000		$ 1,000,000		
Change in Net Position						$ 19,942,000 [3]

Dollars rounded to nearest thousand.

[1] Board allocates working cash above target to specific reserve funds after annual audit

[2] Includes depreciation, other revenue deductions, interest and amortization expense, contribution in aid, and contributed plant assets

[3] Actual results are not directly comparable to budget due to a difference in accounting treatment

EUGENE WATER & ELECTRIC BOARD
WATER UTILITY CAPITAL AND DEBT SERVICE BUDGET
2017 BUDGET COMPARED WITH 2016 BUDGET

	2017 Budget	2016 Budget
Funding Source by Type		
Source of Funds		
Retail Revenue	$ 9,234,000	$ 10,102,000
Bond Proceeds	4,935,000	2,110,000
Customer Contributions in Aid	1,133,000	1,133,000
System Development Charges	412,000	412,000
Total Source of Funds	15,714,000	13,757,000
Expenditures by Type		
Type 1 - General Capital [1]		
Source - Water Intakes & Filtration Plant	1,030,000	412,000
Distribution & Pipe Services	6,181,000	6,078,000
Distribution Facilities	1,339,000	525,000
Information Technology	196,000	199,000
Buildings, Land & Fleet	858,000	544,000
Total Type 1	9,604,000	7,758,000
Type 2- Rehabilitation & Expansion Projects [2]		
Source - Water Intakes & Filtration Plant	3,090,000	2,987,000
Distribution Facilities	1,277,000	1,597,000
Information Technology	1,213,000	900,000
Total Type 2	5,580,000	5,484,000
Type 3- Strategic Projects & Programs [3]		
Second Source	530,000	515,000
Total Type 3	530,000	515,000
Total Water Capital Budget	15,714,000	13,757,000
Rate Funded Debt Service	5,584,000	6,186,000
Total Water Capital and Debt Service Budget	$ 21,298,000	$ 19,943,000

[1] Type 1 capital is routine capital work for projects totaling less than $1 million and is funded with rates and customer contributions.

[2] Type 2 capital projects are discrete, with a defined completion period, and lifetime expenditures over $1 million. Depending on the project, this work may be funded with rates, customer contributions, or bond funds.

[3] Type 3 capital projects are large strategic programs with long-term impacts, and are generally bond funded.

Dollars rounded to nearest thousand.

Attachment 2

Department Operations & Maintenance 2017 Budget Compared to Prior Years

Eugene Water and Electric Board - Operations and Maintenance Budget: 2017

Summary

Description	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
	FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Building Operations, Physical Security and Fleet Services	26	$6,960,000	27	$6,933,000	19	$6,023,000
Customer and Community Relations	126	21,553,000	116	20,708,000	116	18,212,000
Electric, Generation and Trading Operations	117	162,120,000 [1]	122	166,072,000 [1]	124	160,677,000 [1]
Engineering and Environmental	59	10,717,000	58	10,159,000	58	10,906,000
Finance and Risk	48	9,033,000	55	10,224,000	46	8,429,000
General Manager	3	766,000	3	774,000	3	1,101,000
Human Resources	13	2,706,000	13	2,597,000	12	2,312,000
Information Services	57	10,681,000	58	11,061,000	69	10,350,000
Water Operations	78	12,409,000	78	12,327,000	77	11,120,000
	527	**$236,945,000**	**529**	**$240,855,000**	**523**	**$229,130,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] Includes certain costs for trading activity netted against trading revenues of the Electric Utility Operations & Maintenance budget in Attachment 1.

Note: Excludes organization-wide expenses.

Building Operations, Physical Security and Fleet Services

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual		
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars	
Wages / Benefits								
	Wages / Benefits	26	$2,914,000	27	$2,838,000	19 [1]	$2,301,000	
Purchases								
	Stores Materials and Supplies		4,000		7,000		2,000	
	EWEB Equipment		772,000		818,000		922,000	
	Landscaping and Buildings		32,000		44,000		23,000	
	Equipment		4,000		2,000		11,000	
	Energy		700,000		700,000		589,000	
	Water		190,000		190,000		173,000	
	Fuels		90,000		120,000		91,000	
	Vehicle Fuel and Oil		410,000		504,000		416,000	
	Materials and Supplies		221,000		215,000		352,000	
	Technology / Office Equipment		119,000		61,000		40,000	
Services								
	Contract Labor		12,000		70,000		390,000	[2]
	Construction Agreements		1,112,000		1,112,000		528,000	[2]
	Miscellaneous Services		13,000		18,000		31,000	
	Management Consultants		241,000		191,000		89,000	
	Software/Hardware Maintenance and Services		79,000		4,000		15,000	
	Property Rent		4,000		3,000		3,000	
	Printing and Postage		1,000		1,000		-	
	Fees and Licenses		10,000		8,000		10,000	
	Training and Travel		35,000		29,000		36,000	
Total			**$6,960,000**		**$6,933,000**		**$6,023,000**	

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] In 2015, 7 FTE and partial year expenditures for Physical Security were included in the Information Services division.

[2] 2015 actual expenses are low due to use of contract labor in lieu of outside services for some work

Customer and Community Relations

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	126 [1]	$13,877,000 [1]	116	$12,559,000	116	$11,574,000
Purchases							
	Stores Materials and Supplies		33,000		30,000		41,000
	EWEB Equipment		236,000		250,000		279,000
	Landscaping and Buildings		5,000		10,000		6,000
	Equipment		-		6,000		1,000
	Materials and Supplies		86,000		98,000		105,000
	Technology / Office Equipment		43,000		86,000		109,000
	Contract Labor		107,000		106,000		162,000
	Conservation Measures and Incentives		2,199,000		2,299,000		1,800,000
Services	Construction Agreements		86,000		17,000		46,000
	Miscellaneous Services		507,000		458,000		492,000
	Management Consultants		760,000 [2]		1,044,000 [2]		271,000
	Software/Hardware Maintenance and Services		291,000		312,000		298,000
	Property Rent		-		6,000		2,000
	Legal Services		155,000		130,000		94,000
	Printing and Postage		376,000		370,000		389,000
	Fees and Licenses		116,000		73,000		72,000
	Training and Travel		251,000		200,000		181,000
	Grants		892,000		866,000		612,000
	Uncollectable Accounts		542,000		800,000		483,000
	Low Income Services		990,000		990,000		1,193,000
Total			$21,553,000		$20,708,000		$18,212,000

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] In 2017, increase of FTE and Wages & Benefits cost due to company wide reorganization.

[2] 2016 and 2017, costs for multi-year Customer Information System conversion project.

Electric, Generation and Trading Operations

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual		
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars	
Wages / Benefits								
	Wages / Benefits	117	$16,290,000	122	$16,999,000	124	$16,528,000	
Purchases								
	Stores Materials and Supplies		383,000		347,000		387,000	
	EWEB Equipment		1,793,000		1,792,000		2,119,000	
	Landscaping and Buildings		41,000		27,000		166,000	
	Equipment		102,000		103,000		106,000	
	Energy		118,687,000		122,307,000		118,740,000	
	Water		17,000		45,000		35,000	
	Fuels		1,633,000		1,475,000		1,414,000	
	Vehicle Fuel and Oil		6,000		6,000		4,000	
	Materials and Supplies		522,000		562,000		535,000	
	Technology / Office Equipment		39,000		93,000		90,000	
Services								
	Contract Labor		168,000	[1]	3,012,000		2,902,000	
	Wheeling		13,430,000		12,762,000		12,974,000	
	Construction Agreements		6,253,000	[1]	3,490,000		1,915,000	
	Miscellaneous Services		76,000		97,000		146,000	
	Management Consultants		1,107,000		1,242,000		508,000	[2]
	Software/Hardware Maintenance and Services		728,000		720,000		719,000	
	Property Rent		124,000		124,000		234,000	
	Legal Services		45,000		96,000		467,000	
	Printing and Postage		3,000		5,000		8,000	
	Fees and Licenses		483,000		493,000		388,000	
	Insurance		15,000		15,000		-	
	Training and Travel		174,000		260,000		254,000	
	Grants		3,000		-		37,000	
Total			**$162,120,000**		**$166,072,000**		**$160,677,000**	

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] In 2017, Construction Agreements reflects contracted tree trimming services which in previous years was budgeted in Contract Labor.

[2] 2015 actual expenses are low due to deferred work.

Engineering and Environmental

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	59	$6,047,000	58	$6,143,000	58	$5,755,000
Purchases							
	Stores Materials and Supplies		2,000		2,000		3,000
	EWEB Equipment		76,000		86,000		99,000
	Landscaping and Buildings		5,000		6,000		63,000
	Equipment		22,000		22,000		5,000
	Energy		-		4,000		2,000
	Vehicle Fuel and Oil		-		-		7,000
	Materials and Supplies		72,000		130,000		82,000
	Technology / Office Equipment		45,000		64,000		32,000
Services							
	Contract Labor		5,000		22,000		254,000
	Construction Agreements		1,607,000	[1]	955,000		1,715,000
	Miscellaneous Services		316,000		314,000		302,000
	Management Consultants		1,462,000		1,371,000		1,633,000
	Software/Hardware Maintenance and Services		66,000		138,000		69,000
	Property Rent		115,000		102,000		109,000
	Legal Services		120,000		105,000		30,000
	Printing and Postage		1,000		-		8,000
	Fees and Licenses		482,000		425,000		339,000
	Training and Travel		204,000		196,000		160,000
	Grants		70,000		75,000		238,000
Total			**$10,717,000**		**$10,159,000**		**$10,906,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] Increase in 2017 is primarily due to Manufactured Gas Plant remediation expenses which are partially reimbursed.

Finance and Risk

Operations & Maintenance Budget

Category		2017 Proposed Budget		2016 Approved Budget		2015 Actual	
	Resource	FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	48	$6,071,000	55	$6,809,000	46	$5,398,000
Organization-wide Benefits							
	Organization-wide Benefits		-		-		133,000
Purchases							
	Stores Materials and Supplies		2,000		9,000		3,000
	EWEB Equipment		26,000		23,000		34,000
	Landscaping and Buildings		7,000		7,000		4,000
	Energy		-		-		3,000
	Materials and Supplies		37,000		101,000		94,000
	Technology / Office Equipment		17,000		99,000		78,000
Services							
	Contract Labor		10,000		44,000		56,000
	Miscellaneous Services		87,000		86,000		50,000
	Management Consultants		1,580,000		1,610,000		1,405,000
	Software/Hardware Maintenance and Services		143,000		121,000		105,000
	Property Rent		1,000		-		-
	Legal Services		165,000		160,000		156,000
	Printing and Postage		1,000		1,000		2,000
	Fees and Licenses		49,000		299,000		121,000
	Insurance		750,000		752,000		722,000
	Training and Travel		87,000		104,000		65,000
Total			**$9,033,000**		**$10,224,000**		**$8,429,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

General Manager

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	3	$585,000	3	$597,000	3	$955,000 [1]
Purchases							
	EWEB Equipment		-		-		1,000
	Materials and Supplies		13,000		12,000		13,000
	Technology / Office Equipment		5,000		12,000		10,000
Services							
	Contract Labor		-		-		18,000
	Miscellaneous Services		50,000		48,000		53,000
	Management Consultants		11,000		14,000		3,000
	Software/Hardware Maintenance and Services		-		-		(1,000)
	Legal Services		6,000		-		5,000
	Printing and Postage		5,000		-		-
	Fees and Licenses		-		-		-
	Training and Travel		79,000		86,000		38,000
	Grants		12,000		6,000		7,000
Total			**$766,000**		**$774,000**		**$1,101,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] 2015 Wages/Benefits actual includes cost for FTE included in other division due to reorganization.

Human Resources

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	13	$1,897,000	13	$1,808,000	12	$1,669,000
Purchases							
	EWEB Equipment		-		-		14,000
	Equipment		-		30,000		4,000
	Materials and Supplies		28,000		20,000		29,000
	Technology / Office Equipment		17,000		21,000		22,000
Services							
	Contract Labor		10,000		35,000		49,000
	Construction Agreements		5,000		3,000		1,000
	Miscellaneous Services		48,000		51,000		51,000
	Management Consultants		400,000	[1]	270,000		245,000
	Software/Hardware Maintenance and Services		75,000		100,000		65,000
	Legal Services		130,000		160,000		106,000
	Printing and Postage		5,000		5,000		2,000
	Fees and Licenses		-		-		5,000
	Training and Travel		91,000		94,000		50,000
Total			**$2,706,000**		**$2,597,000**		**$2,312,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] Increase due to one-time system conversion costs

Information Services

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual	
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars
Wages / Benefits							
	Wages / Benefits	57	$7,231,000	58	$7,476,000	69 [1]	$7,308,000
Purchases							
	Stores Materials and Supplies		-		-		-
	EWEB Equipment		-		-		1,000
	Equipment		-		-		(3,000)
	Materials and Supplies		12,000		-		(10,000)
	Technology / Office Equipment		243,000		705,000		1,154,000
Services							
	Contract Labor		135,000		75,000		205,000
	Construction Agreements		-		-		17,000
	Miscellaneous Services		159,000		193,000		230,000
	Management Consultants		1,020,000	[2]	400,000	[3]	211,000
	Software/Hardware Maintenance and Services		1,598,000	[2]	2,000,000	[3]	745,000
	Printing and Postage		-		-		1,000
	Fees and Licenses		46,000		10,000		247,000
	Training and Travel		238,000		203,000		244,000
Total			**$10,681,000**		**$11,061,000**		**$10,350,000**

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] In September 2015, 7 FTE for Physical Security transferred to Building Operations, and 4 FTE to Finance and Risk due to reorganization.

[2] Reallocation of budget between Management Consultants and Software/Hardware Maintenance and Services to more accurately reflect anticipated expenditures.

[3] 2016 increase over 2015 actual due to Customer Information System conversion and more centralized software and hardware maintenance work

Water Operations

Operations & Maintenance Budget

Category	Resource	2017 Proposed Budget		2016 Approved Budget		2015 Actual		
		FTE*	Dollars	FTE*	Dollars	FTE*	Dollars	
Wages / Benefits								
	Wages / Benefits	78	$8,070,000	78	$7,863,000	77	$7,042,000	[1]
Purchases								
	Stores Materials and Supplies		334,000		213,000		304,000	
	EWEB Equipment		747,000		829,000		829,000	
	Landscaping and Buildings		25,000		25,000		27,000	
	Equipment		82,000		72,000		64,000	
	Energy		1,006,000		986,000		1,040,000	
	Water		22,000		-		-	
	Fuels		2,000		2,000		1,000	
	Materials and Supplies		660,000		737,000		648,000	
	Technology / Office Equipment		47,000		73,000		89,000	
Services								
	Contract Labor		42,000		95,000		76,000	
	Conservation Measures and Incentives		40,000		37,000		48,000	
	Construction Agreements		794,000		998,000		620,000	
	Miscellaneous Services		80,000		67,000		68,000	
	Management Consultants		235,000		133,000		116,000	
	Software/Hardware Maintenance and Services		44,000		34,000		48,000	
	Printing and Postage		13,000		8,000		8,000	
	Fees and Licenses		108,000		104,000		61,000	
	Training and Travel		52,000		45,000		26,000	
	Grants		6,000		6,000		5,000	
Total			**$12,409,000**		**$12,327,000**		**$11,120,000**	

* FTE represents budgeted total and may include FTE assigned to the Capital Budget. Due to a reorganization in 2016, FTE by division may not be comparable between years. Accordingly, budgeted and actual dollars may not directly align with FTE.

[1] 2015 actual expense is low due to shift to capital work

Attachment 3

Labor and Employee Benefit Costs

EUGENE WATER & ELECTRIC BOARD
LABOR AND EMPLOYEE BENEFITS
2017 BUDGET COMPARED TO 2016 BUDGET AND 2015 ACTUAL

	2017 Budget		2016 Budget		2015 Actual	
Wages & benefits	**Budget**	**% of Total wages**	**Budget**	**% of Total wages**	**Actual**	**% of Total wages**
Regular Wages	$ 43,085,000	96	$ 43,472,000	97		
Premium Wages	1,778,000	4	1,455,000	3		
Total wages	44,863,000	100%	44,927,000	100%	To be provided in December.	
Public employees retirement fund	12,995,000	29	14,179,000	32		
Other benefits - employer contribution [1]	3,893,000	9	3,859,000	9		
Health insurance [2]	8,711,000	19	8,753,000	19		
Post-retirement medical	1,167,000	3	1,184,000	3		
Long-term disability	259,000	1	274,000	1		
Life insurance	338,000	1	391,000	1		
Total benefits	27,363,000	61	28,640,000	64		
Total wages & benefits	$ 72,226,000		$ 73,567,000			

[1] Includes : Social Security/Medicare tax, Unemployment Insurance, Worker's Compensation Insurance.

[2] Includes Voluntary Employee's Beneficiary Association (VEBA) expense.

Attachment 4

Reserve Information

Contents of this page will be provided at December 6 Board meeting

Attachment 5

Budgeted Financial Ratios and Statistics

Contents of this page will be provided at December 6 Board meeting

Rely on us.

EWEB

Eugene Water & Electric Board
500 East 4th Avenue
Post Office Box 10148
Eugene, Oregon 97440-2148
541-685-7000

February 2017 Electric Price Proposal

Fiscal Services Department
November 2016

EUGENE WATER & ELECTRIC BOARD
FEBRUARY 2017 ELECTRIC PRICE PROPOSAL

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The 2017 Price Proposal was developed in accordance with the proposed 2017 budget. The cost of service analysis results, revenue requirements and proposed price schedules by customer class, are included in this document.

In July 2016, EWEB engaged a consulting firm to conduct a comprehensive price study and develop an updated cost of service model. This work is incorporated into the 2017 proposed budget and price proposal. The new cost of service model results indicated that overall, no price changes were needed to meet revenue requirements. Additionally, current prices by customer class achieved each class' allocated revenue requirement within industry standard accepted variances.

In 2017, EWEB will be engaging customers to assist in the development of a product pricing strategy which will likely change how prices are designed in the future. This is one reason that management recommends using the gradualism and stability ratemaking principles and not change prices for any customer class in 2017. Other reasons include:

- Nominal class differences in revenue requirements from current prices,
- 2017 work to develop a plan to manage future long-term debt and pension costs, and
- Potential downward revision to residential load forecasts to reflect recent weather trends.

The cost of service study results are on page 15.

Additionally, a proposed standby charge has been developed and included in this document.

I. INTRODUCTION

Purpose of Study

The purpose of this price study is to provide background information and technical analyses in support of staff recommendations for electric prices. The study includes documentation of electric system revenue requirements, projected system loads and sales, and allocation of ongoing utility costs to individual customer classes for the 12-month period beginning January 2017. The most recent electric price revision was February 2016, amounting to a 2.5% overall average revenue requirement increase. There was no price revision in 2015. Staff is again recommending no price change for all customer classes in 2017.

Establishment of Prices

EWEB is a locally regulated municipal utility operating under the authority of the Eugene City Charter and pertinent provisions of Oregon law. The responsibilities delegated to the Board pursuant to the City Charter are carried out by five elected Commissioners who serve without pay. As an independent municipal agency, the EWEB Commissioners have exclusive jurisdiction to approve annual operating budgets and establish prices for electric service.

Although EWEB's electric prices are not subject to regulatory review by any federal or state utility commission or similar agency, the Board must comply with the requirements of applicable state and federal statutes as they pertain to the development of prices and the general conduct of utility business. Current statutes and related case law provide two general standards concerning the establishment of retail electric prices.

The first of these price making standards allows EWEB to set prices at a level sufficient to recover the ongoing costs of utility operation. These costs include annual operating expense, requirements for capital additions, interest and amortization of outstanding debt, and applicable tax obligations and maintenance of adequate reserves. This standard is intended to ensure the financial integrity of the utility, while defining the costs of operation which can be lawfully recovered through prices.

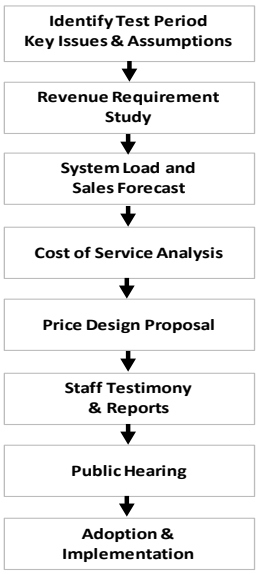
The second standard requires that prices and charges for utility service be fair and non-discriminatory. Prices are considered non-discriminatory when customers receiving like and contemporaneous service under similar circumstances are treated equally in the development and application of specific prices. This second standard protects the equity concerns of individual utility customers, based on established utility policies and practices for allocating costs among customers and customer classes.

The above standards, together with established Board policies concerning cost allocation and price design, allow EWEB to maintain prices at the lowest possible level consistent with sound financial principles and traditional utility price making practices. They also give EWEB's elected Board of Commissioners the ability to approve prices which are cost-based, non-discriminatory and in concert with the needs of EWEB customer-owners.

Price Review Process

EWEB's electric prices are reviewed with each annual budget cycle to ensure that they remain adequate to cover the cost of utility operations over the budget period. When budget projections or other forecasted operating conditions indicate the need for a price adjustment, EWEB staff prepares studies which determine appropriate price levels for each customer class. This formal review process involves several steps, all of which are coordinated with the EWEB Commissioners, General Manager and utility management. The process also affords an opportunity for review and comment by EWEB’s customer-owners and other interested parties (see *Figure 1*).

Figure 1
Price Review Process



The first step in the price review process is a detailed examination of the projected operating expenses, capital costs and anticipated revenues at current prices. The purpose of this effort is to confirm the overall revenue requirements which serve as a basis for development of proposed prices, the timing of the proposed price adjustment, and the period of time (or "test period") over which the new prices are expected to remain in place.

The next step is an assessment of the electric system load and resource forecasts. These projections are prepared consistent with historical and future growth trends in the EWEB service area. The forecasts are then used to estimate system sales by price class, as well as purchased power costs for the next several years. Test period load and sales forecasts are of major importance, since wholesale purchased power costs comprise approximately 50% of EWEB's total annual operating expenses.

Once EWEB's projected operating costs, revenue requirements and sales forecasts have been determined, the Fiscal Services Department staff typically performs a detailed Cost of Service Analysis. The purpose of this study is to allocate test period costs to each of EWEB's customer classes and price schedules in accordance with the manner in which individual cost items are incurred. EWEB's cost-of-service procedures employ standard utility industry costing methods, consistent with the policy guidelines established by the Board.

Public Notice and Hearings Schedule

EWEB's price review process is a formal, sequential procedure. The underlying objective of this process is to ensure that EWEB customer-owners and the general public receive adequate notice and explanation of pending price change proposals and is an opportunity for the Board to hear and consider all public comment prior to approval and implementation of revised prices. Accordingly, EWEB Commissioners have adopted specific guidelines for public notice and hearings during discussion of electric price recommendations which runs concurrent with the budget approval process. A legal notice of the public hearing was published as follows:

The name of the newspaper and the publication date for the legal notice is:

Publication Name	Date
The Register-Guard	September 26, 2016

Exhibit 1 contains the text used in the published legal notices.

Customers are invited to comment on EWEB's budget and price assumptions throughout the budget development process. There are two scheduled public hearings specifically for price proposals. The hearings will be held during the EWEB Board meetings on Tuesday, November 1st, beginning at 5:30 p.m. and Tuesday, December 6th, beginning at 5:30 p.m. at the EWEB Headquarters, 500 East Fourth Ave., in Eugene.

Written comments are also welcome and may be sent to the attention of EWEB's Fiscal Services Department, PO Box 10148, Eugene, OR 97440. E-mail comments may be directed to budget@eweb.org. For timely consideration at the November Board meeting, comments must be received prior to November 1, 2016.

EXHIBIT 1

BEFORE THE EUGENE WATER & ELECTRIC BOARD

In the Matter of Consideration and Adoption of Budgets, Revised Charges for EWEB Electric and Water Service	NOTICE OF PUBLIC HEARINGS AND INVITATION TO COMMENT

1. Two dates are scheduled for public hearings to seek comment regarding proposed 2017 budget approval and adjustments to EWEB water & electric rates. If approved, the proposed changes for residential, general service, and other customers of the Eugene Water & Electric Board would become effective with utility billings rendered either, on or after February 1, 2017.

2. Public hearings will be held in the EWEB Board Room, 500 East 4th Avenue, Eugene, Oregon, on the following dates and times:

November 1, 2016	5:30 p.m.
December 6, 2016	5:30 p.m.

Background information concerning the budget and rate proposals will be presented at the meeting, followed by the public hearing which will provide opportunity for public testimony and comment.

3. Specific rate recommendations for each customer class may be obtained beginning October 28, 2016 by calling EWEB's Fiscal Services Department at (541) 685-7000 or emailing budget@eweb.org. Copies of the budget document and rate proposals will be made available at the public hearing.

4. Written public comments are also welcome and may be brought to the hearings or mailed to: EWEB Fiscal Services, PO Box 10148, Eugene, OR 97440. For timely consideration, written comments must be received prior to the public hearing on November 1, 2016. E-mail comments may be directed to: Deborah.hart@eweb.org.

II. BACKGROUND INFORMATION

A. Organizational Structure

EWEB is responsible for providing electric and water service within the City of Eugene and certain outlying areas. The specific duties delegated to the Board pursuant to the Eugene City Charter are carried out by five elected Commissioners who serve without pay. The Commissioners and expiration dates of their respective terms of office are as follows:

	Area	Term Expires December 31,
John Simpson, President	At-Large	2018
Dick Helgeson, Vice President	Wards 2, 3	2020
Steve Mital	Wards 1, 8	2020
John Brown	Wards 4, 5	2018
James Manning	Wards 6, 7	2016

As EWEB's primary policy and decision-making body, the individual Board members represent a broad range of professional experience and community perspectives on matters concerning local utility service. The Board meets regularly on the first Tuesday of each month. All meetings are open to the public and provide opportunities for public participation.

Under the direction of General Manager Frank Lawson and the executive team, EWEB employed 500 combined electric and water personnel as of third quarter 2016. EWEB's organization chart is shown as *Figure 2*. The executive team, responsible for each of the major operating areas, is as follows:

Executive	Title
Frank Lawson	General Manager
Susan Fahey	Chief Financial Officer
Lena Kostopulos	Chief Human Resources Officer
Erin Erben	Chief Customer Officer
Mel Damewood	Chief Engineering & Operations Officer
Matt Barton	Information Services Manager
Anne Kah	Executive Assistant to Board and GM

The General Manager meets daily with the executive team members who hold regular meetings with their department staff to ensure efficient and effective operations.

Figure 2

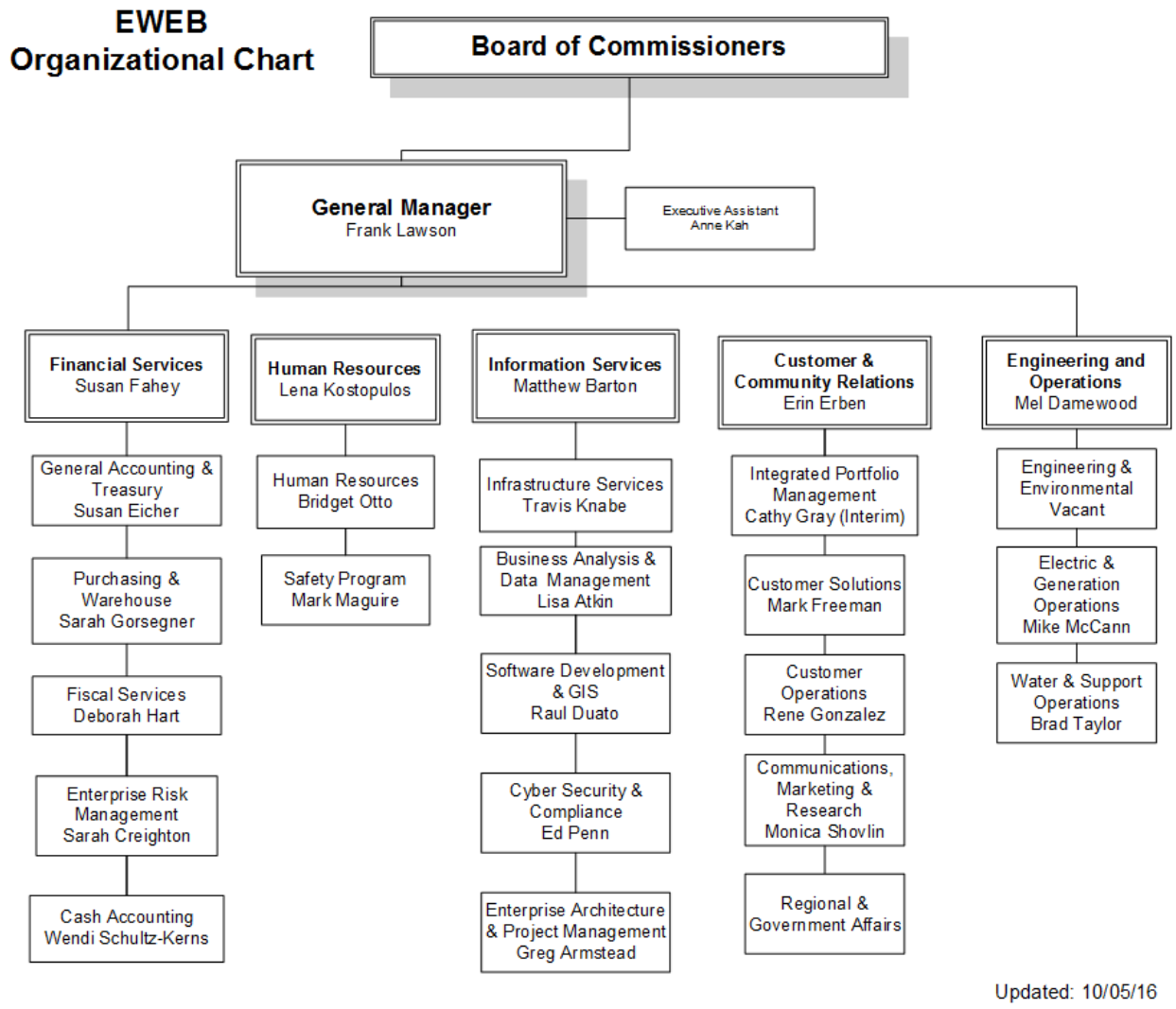


Table 1 below shows the percentage change in EWEB employees, customers and electric sales over the past ten years. Although Electric customer loads have seen recent decreases due to warm winter weather, there is evidence of customer count growth for residential customers.

Table 1
Employee, Customer, & Megawatt Hour Sales Statistics
For the Period 2005-2015

Year	Total Employees	% Change	Customer Count	% Change	MWh Sales	% Change
2006	489	0.4%	85,400	1.5%	2,689,923	1.0%
2007	495	1.2%	86,600	1.4%	2,728,685	1.4%
2008	510	3.0%	86,700	0.1%	2,625,659	-3.8%
2009	538	5.5%	86,900	0.2%	2,494,222	-5.0%
2010	558	3.7%	87,200	0.3%	2,463,227	-1.2%
2011	562	0.7%	87,700	0.6%	2,489,432	1.1%
2012	532	-5.3%	89,300	1.8%	2,457,626	-1.3%
2013	515	-3.2%	90,100	0.9%	2,489,496	1.3%
2014	513	-0.4%	91,100	1.1%	2,411,455	-3.1%
2015	516	0.6%	91,370	0.3%	2,377,381	-1.4%

EWEB places a high value on quality service and responsiveness to the needs of its customers. Because of its standards for reliability and design, electric service interruptions are infrequent and limited in duration. EWEB also offers a variety of customer-oriented programs designed to provide information about utility services, promote efficient use of energy resources, and give assistance to customers.

B. Electric System Highlights

EWEB is the largest publicly owned utility in the state of Oregon, the principal generating public utility in Oregon, and the sixth largest public agency customer of the Bonneville Power Administration. Founded by the citizens of Eugene in 1911, EWEB has remained a successful provider of essential utility services to the local community for over 100 years.

The 238-square-mile area now served by EWEB includes most of the City of Eugene and adjacent areas, including locations near municipally owned power projects at Walterville and Leaburg. EWEB's service area adjoins the City of Springfield municipal electric system on the east, the Emerald People's Utility District on the north, the Blachly-Lane Electric Cooperative on the west, and the Lane Electric Cooperative system on the south.

Current customers range in size from smaller residential and commercial customers, to moderately sized processing and manufacturing facilities, to large institutional and industrial accounts. System load characteristics therefore vary throughout the year, with peak loads occurring in the winter months consistent with local weather patterns and electric space heating requirements.

EWEB's local electric system consists principally of three hydroelectric projects, an industrial cogeneration facility, and the necessary transmission and distribution facilities for provision of service to the end use consumers. EWEB currently maintains 35 substations which are networked together through 167 circuit miles of transmission lines and 1,132 circuit miles of primary distribution lines. EWEB also owns, operates and maintains a remote generating facility which includes a hydroelectric project interconnected to the interstate transmission grid through 7 miles

of 115 kV transmission line, and an industrial cogeneration and wind generation facilities. The book value of the EWEB electric utility plant-in-service is approximately $753 million.

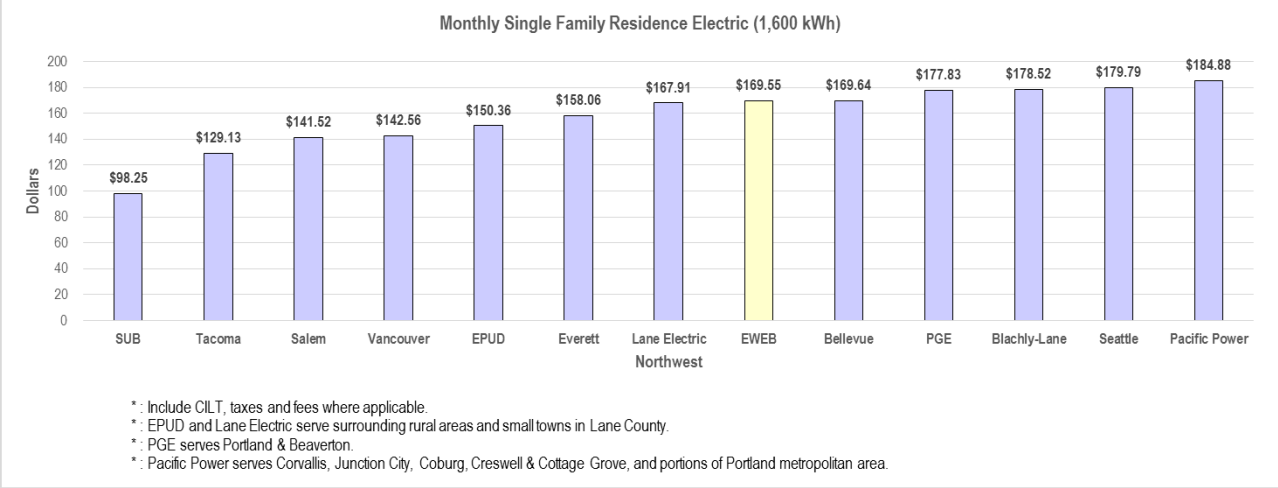
As Oregon's largest generating public utility, generating facilities have a combined nameplate rating of 191 megawatts (including the hydroelectric plants at Carmen-Smith, Leaburg, Walterville, Stone Creek, two cogeneration facilities at International Paper and Wauna, and wind power generators at Foote Creek Rim), which is used to service annual retail and wholesale loads. Another source of supply is purchased through contracts with various generating public and private utilities and energy suppliers. The remaining portion of EWEB's firm power portfolio is obtained through long-term contracts with the Bonneville Power Administration (BPA), a federal power marketing agency.

EWEB's power supply costs have historically ranked fairly low nationally. Recent concerns about future BPA price stability have emphasized the need for continued resource planning. EWEB's Integrated Electric Resource Plan (IERP) approved by the Board in 2012 relies on energy efficiency and demand response programs to meet future load growth.
EWEB also plays a key role in the Pacific Northwest energy network and has often assumed leadership, working directly with other federal and state planning agencies to prepare plans and proposals which will shape the Northwest's energy future.

C. Residential Bill Comparisons

A comparison of current residential bills for selected Northwest communities is shown in *Figure 3*. Sample bills are calculated using EWEB's average monthly single family residence consumption of 1,600 kilowatt-hours. A bill of $169.55 for EWEB in the figure is calculated using the existing and proposed residential price.

Figure 3



III. REVENUE REQUIREMENTS STUDY

This section contains a general description of EWEB's annual budgeting process. It also includes documentation of EWEB's 2017 proposed budget for operating, capital and debt costs and the revenue requirements which have been designated as the test period for the current price proposal. In addition to determining the overall revenue requirements needed to sustain operation of the electric utility, test period revenue requirements are a primary input to the Cost of Service Analysis.

A. Preparation of Annual Budgets

Annually the Utility's strategic priorities are identified by the Board, General Manager and a planning group made up of the executive team and other key personnel. Major organizational goals and strategic initiatives are then documented in the strategic plan which drives specific performance targets to address management priorities through ongoing work assignments and schedules.

EWEB management and staff use a priority based budgeting (PBB) approach for budget development. This approach has served EWEB well in its effort to align budgets with EWEB's mission, strategic plan and customer-owner priorities.

Over the last several years, the Electric Utility has faced financial challenges due to a high debt load as wholesale power prices plummeted. Those challenges have been managed by strategically reducing operations & maintenance and capital costs, designing price structures that increase fixed cost recovery, reducing and restructuring debt, and prudently using reserves to strengthen financial metrics. While Electric loads have seen recent decreases due to warm winter weather, there is evidence of customer count growth for residential customers and load growth in general service. Power sales revenue has been relatively flat for the last few years.

In developing the 2017 budget, management identified more than $2.3 million of O&M expenditure reductions, reduced debt service $5.5 million through debt restructuring and defeasance, while continuing to focus on and prioritize strategic investments to increase resiliency.

All levels of the EWEB organization are involved in preparation of the annual Electric Utility Budget in order to place responsibility for cost control on the staff who project and incur the costs. Each department is allocated a budget that is prepared in accordance with the PBB process and Board direction.

If a budget deficit cannot be corrected through cost reductions or deferrals, the amount of the deficit becomes an additional revenue requirement recommended for recovery through an electric price adjustment.

A draft budget with explanations on variances from prior years is discussed with the EWEB Commissioners. The Board reviews the draft budget and may suggest program adjustments and revisions. Public hearings are held to ensure customer-owners have the opportunity to provide feedback. The Board approves a final budget in December which then becomes the operating plan for the next year.

All managers and supervisors are expected to monitor budgets and expend funds in a manner consistent with approved budget estimates. Year-to-date balances are compared to budgets to ensure that costs continue to track as expected. Quarterly financial reports and any significant deviations are brought to the attention of the Board for review in accordance with Board Policy EL-1, Financial Controls. Year-end results are routinely checked against budgets, with differences noted for potential input to the next year's budget cycle.

B. Test Period Revenue Requirements

EWEB has designated calendar year 2017 as the "test period" for development of electric system costs and revenues in this current price proposal. This corresponds with the expenditures included in the 2017 Proposed Electric Utility Budget.

For the February 2017 price study, staff incorporated the projected sales, revenues and expenditure data from the proposed 2017 budget directly as a basis for this revenue requirement proposal.

IV. SYSTEM LOAD AND SALES FORECAST

A. Overview of the Forecasting Process

EWEB routinely prepares both short- and long-range electric system load sales forecasts as part of its ongoing planning activities. Annual projections of total system electric loads are prepared by the Fiscal Services and Integrated Portfolio Management departments. These annual forecasts employ both historical load data from EWEB records and projected economic, demographic and weather trends for the Eugene area. Other regional forecasts, such as BPA's 20-year Forecast of Electricity Consumption, are also reviewed for consistency and applicability to EWEB.

Basic growth projections for EWEB's system are developed through application of various forecasting methods, which include statistical trending, econometric analysis and end use models. Annual system forecasts are examined regularly and adjusted for changing local economic conditions and customer characteristics. The resulting base forecasts become a key input to energy resource planning, power scheduling, facilities design and preparation of annual budgets. They also become an integral part of the price development process as a basis for allocation of operating costs and design of proposed prices for each customer class. Actual growth may vary considerably from year to year due to changes in local weather patterns and commercial activity.

EWEB's annual electric load forecast was adopted as the basis for estimating total system sales for the current price study. Specifically, the twelve-month period from January through December 2017 was selected for analysis, corresponding with the test period budget and revenue requirements documented in Section III - Revenue Requirements Study. The remainder of this section describes how the system load and sales forecasts are applied to the development of retail prices, and the results obtained for 2017 test period.

B. Methodology and Procedures

In order to develop appropriate retail electric prices, EWEB's annual system forecast must be translated into a detailed projection of monthly energy sales and customer use characteristics for the upcoming price period. This is done in a manner consistent with original forecast assumptions to arrive at a monthly estimate of customer counts, kilowatt-hour sales, and consumption patterns for each of EWEB's major customer classes.

The projection of monthly customer sales relies on historical data from a number of internal sources. Monthly historical sales statistics are obtained from EWEB financial statements and accounting records. Other local agencies are consulted as necessary for additional data pertinent to the forecasting of utility sales. Customer-specific data is also sought for major commercial/industrial users, since the short-run requirements of these customers are often related to particular business cycles rather than long-term trends.

Once the basic forecasting data is assembled, it is reviewed for consistency with recent historical trends, budget assumptions, and conditions expected to prevail over the price test period. Such review ensures that the sales forecast used in the price design process remains consistent with

projections used to prepare purchased power budgets and the EWEB revenue requirements discussed in Section III.

The next step in the forecasting process is to divide the total system forecast into component parts by month and price class grouping. Customer sales statistics for the past three to ten years were used to calculate current class contribution to annual system sales and typical monthly distribution of consumption for each class.

Monthly projections for some classes, such as Street and Private Lighting, were calculated directly based on known load characteristics and seasonal traits. Customer-supplied estimates for larger commercial/industrial accounts were substituted for historical averages when it was reasonable to do so. The final projections were then correlated with available load research and engineering data for the EWEB system. The results were used to determine projected customer class contribution to system peaks, non-coincident peak loads and demand billing units. EWEB's consultant is in the process of reviewing procedures for developing street and private lighting prices. The updated methodology will be implemented in the 2018 price proposal.

C. 2017 Forecast Results

The results of EWEB's sales forecast for the 2017 price test period are summarized briefly below:

Table 2
Test Period Forecast of Electric Utility
Customers & Sales by Price Class
for 2017 Price Test Period

Customer Class	Customer Counts	Energy Sales in MWH	% of Sales
Residential	83,659	951,000	40.1%
Small General Service	7,726	165,000	7.0%
Medium General Service	1,816	488,000	20.6%
Large General Service	57	203,000	8.6%
Very Large General Service	1	8,000	0.3%
Contract Customers	3	550,000	23.2%
Street Lighting	N/A	8,000	0.3%
Private Lighting	N/A	1,000	0.0%
Total	**93,262**	**2,374,000**	**100.0%**

NOTE: Energy Sales does not include line loss.

The above information represents an increase in EWEB customers by the end of 2017 in accordance with recent trends, vacancy rates, and projected new service connections. The percentage of total EWEB sales represented by each customer class has remained stable for many years. Total electric sales for the period are forecast at 2.4 billion kilowatt-hours which is comparable to 2016.

The 2017 Load and Sales Forecast are used as a basis for cost allocation, price design and revenue projections at current and proposed prices.

V. COST OF SERVICE ANALYSIS

This section documents the procedures used in development of a Cost of Service study.

A. Cost of Service Methods and Procedures

In April of 1980 in concert with Public Utility Regulatory Policies Act (PURPA) provisions, the Board also adopted the Cost of Service standard as the primary mechanism for price development. In 2016, EWEB engaged a consultant to update its model which was developed over two decades ago.

EWEB's updated Cost of Service methodology uses standard electric utility costing procedures to allocate the test period revenue requirements to each customer class. The allocated costs reflect the contribution of each price class to total system costs during the period for which prices are being developed. Study results also measure the equitability of prices charged to individual customer classes by testing the adequacy of revenues received relative to allocated costs of service.

Through this process, the Cost of Service study apportions the test period revenue difference as a basis for determining appropriate price levels and percentage adjustments for each customer class. The study also derives unit costs used to assist in development of the actual energy, demand and basic charge components recommended for each electric price schedule.

EWEB's Cost of Service study begins with a detailed assessment of the proposed operating budget and revenue requirements for the upcoming price period. The analysis relies on anticipated electric system expenditures, retail sales and projected revenues contained in the 2017 Proposed Electric Utility Budget.

Once the total utility revenue requirement has been determined, individual line item costs are grouped according to major utility functions, such as power production, transmission, distribution, or customer accounting. Each line item expense is then classified as varying with contribution to monthly system peak demands, total energy consumption or number of customers for each price class. Specific items are also identified for direct assignment when they are clearly associated with service to particular price classes.

To more accurately assign costs to individual price classes, EWEB's Cost of Service model also breaks down the various demand and customer costs into subcomponents. Demand-related costs are segregated into transmission, primary and secondary distribution components according to voltage level. Basic customer costs are sub-classified as either facilities or customer service related.

After classification and sub-classification, each cost category is distributed to one or more price classes through a detailed allocation procedure. Several related analyses are conducted to develop the many allocation factors applied in this step. For example, calculating the class contribution to monthly system peaks and seasonal energy requirements involves a full examination of all customer loads during the test period. Accordingly, the allocation step relies on the sales projections and available load research data described in Section IV, System Load and Sales Forecast.

When all of the allocation factors have been developed, they are then applied to yield a segregation of total system costs assigned to the different price classes. The final step is to combine the calculations in a summary table showing total allocated costs and recommended percentage adjustments for each customer class. These results can then be represented as unit costs, which form the basis for actual price design.

B. COSA Results

Table 3
Forecast of Electric Utility
Customers & Sales by Class
for 2017 Price Test Period (000's)

Customer Class	Price Schedule(s)	Current Budgeted Revenue	COSA Revenue Requirement
Residential	R-6	$107,654	$106,529
Small General Service	G1	19,140	18,916
Medium General Service	G-2	43,538	44,717
Large General Service	G-3	16,051	16,065
Very Large General Service	G-4	660	660
Contract A	N/A	20,253	20,216
Contract C	N/A	3,968	4,139
Contract D	N/A	3,790	3,935
Contract Customers	N/A	28,012	28,290
Street Lighting*	J-3, J-4, J-5	960	922
Private Lighting*	L-3, L4	120	104
Total		**$216,136**	**$216,203**

*Methodology being reviewed by consultant

VI. PRICE RECOMMENDATIONS

The purpose of this section is to present staff's proposal for revisions to the prices and each of EWEB's published price schedules.

Prices are developed in accordance with EWEB's price design objectives, to recover the costs allocated to each customer class. Consideration is given to the various elements of each price schedule to ensure that the schedules are consistent with each class' share of allocated demand, energy and customer costs. In addition, the proposal reflects other price making objectives, such as stability of prices and equity to customers within a class. As noted in the executive summary, management recommends using the gradualism and stability ratemaking principles and not change prices for any customer class in 2017 for the following reasons:

- 2017 customer engagement work on product pricing strategy
- Nominal class differences in revenue requirements from current prices,
- 2017 work to develop a plan to manage future long-term debt and pension costs, and
- Potential downward revision to residential load forecasts to reflect recent weather trends.

This recommendation results in the following proposed revenue requirement by class:

Table 4
Forecast of Electric Utility
Proposed Sales by Price Class
for 2017 Price Test Period

Customer Class	Price Schedule(s)	Propsed Revenue Requirement
Residential	R-6	$108,000
Small General Service	G1	19,000
Medium General Service	G-2	44,000
Large General Service	G-3	16,000
Very Large General Service	G-4	1,000
Contract Customers	N/A	28,000
Street Lighting	J-3, J-4, J-5	960
Private Lighting	L-3, L4	120
Overall Change	**N/A**	**$216,100**

The following subsections briefly describe pertinent issues for the design of charges in each published price schedule. Tables showing projected billing units, current and proposed prices, and projected revenues follow each subsection, with a summary of anticipated customer impacts.

A. Residential Service (Schedule R-6)

Residential customers are served under EWEB's Schedule R-6, which applies to single family and smaller multifamily dwellings. This price schedule consists of a fixed monthly customer charge with a tiered energy price applied to all monthly metered consumption. Currently, about 82,600 residential customers are served under this schedule.

In this proposal, management is recommending no price change.

Table 5
Residential Service R-6
Bill Comparison

	Current Prices		Proposed Prices		
Basic Charge		$20.50			$20.50
Delivery Charge		0.0262			0.0262
Energy Charge					
	First 800	0.05948		First 800	0.05948
	Over 800	0.07435		Over 800	0.07435
KWH USAGE	Current Bill		Proposed Bill	Dollar Difference	Percent Difference
0	$	20.50	$ 20.50	$ -	0%
50		24.79	24.79	-	0%
200		37.64	37.64	-	0%
500		63.36	63.36	-	0%
800		89.08	89.08	-	0%
1000		109.19	109.19	-	0%
1500		159.49	159.49	-	0%
1600		169.55	169.55	-	0%
2000		209.78	209.78	-	0%
3000		310.37	310.37	-	0%
4000		410.96	410.96	-	0%
5000		511.55	511.55	-	0%
7000		712.73	712.73	-	0%
10000		1,014.50	1,014.50	-	0%

B. Small General Service (Schedule G-1)

The Small General Service schedule consists of accounts with monthly billing demands from 0 to 30 kW. Customers are assigned to this class based on an average of the three highest demands in the prior 12 months falling below 30 kW.

There are about 7,600 commercial customers presently served in the demand range for Small General Service (Schedule G-1). This price typically applies to non-residential accounts for service at secondary distribution voltages of 480 volts or less. Under the General Service schedule, EWEB provides all distribution and service facilities necessary to meet the power requirements of the customer.

The structure of the Small General Service price is similar to the Residential schedule in that both contain a basic charge and an energy charge. It varies from the Residential price structure, in that it includes a demand charge (based on the customer's peak load during the month), a flat energy charge, and a two-step delivery charge. Under the General Service price, these costs are separate price components and are additive in computing the bill.

In this proposal, management is recommending no price changes for 2017.

Table 6

Small General Service G-1
Existing Prices vs Proposed Prices
(0 - 30 Monthly kW)

	Existing Prices	Proposed Prices	
Basic Charge			
Single-Phase	$23.06	$23.06	per month
Three-Phase	$34.08	$34.08	per month
Demand Charge			
First 10 kW	No Charge	No Charge	per kW
Over 10 kW	$7.124	$7.124	per kW
Delivery Charge			
First 1,750 kWh	$0.03577	$0.03577	per kWh
Additional kWh	0.00132	0.00132	per kWh
Energy Charge			
All kWh	$0.06900	$0.06900	per kWh

C. Medium General Service (Schedule G-2)

Table 7

Medium General Service G-2
Existing Prices vs Proposed Prices
(31 - 500 Monthly kW)

	Existing Prices		Proposed Prices		
	Secondary	Primary	Secondary	Primary	
Basic Charge					
Single-Phase	$38.23	---	$38.23	---	per month
Three-Phase	$59.30	$3,444	$59.30	$3,444	per month
Demand Charge					
First 300 KW	$7.43	---	$7.43	---	per KW
Over 300 KW	$7.43	$7.28	$7.43	$7.28	per KW
Energy Charge					
All kWh	$0.06236	$0.06148	$0.06236	$0.06148	per kWh

The Medium General Service schedule consists of accounts with monthly billing demands between 31 and 500 kW. Customers are assigned to the class based on an average of the three highest demands in the last 12 months falling between 31 and 500 kW.

There are approximately 1,800 commercial customers presently served in the demand range for Medium General Service (Schedule G-2). This price typically applies to non-residential accounts for service at secondary distribution voltages of 480 volts and primary voltages of up to 12.47 kilovolts. Under the General Service schedule, EWEB provides all distribution and service facilities necessary to meet the power requirements of the customer at the delivered voltage.

Similar to the Small General Service price, the proposed form of the Medium General Service price also includes a basic charge, a demand charge (based on the customer's peak load during the month), and an energy charge.

In addition to the standard or "secondary" Medium General Service price, EWEB offers an alternative price to larger qualifying customers. The Primary Service Power price is available to any commercial or industrial customer located outside the underground secondary network who:

1) receives single-point delivery at primary distribution voltages of 12.47 kV or greater,

2) is willing to contract for and pay for a minimum of 300 kilowatts of demand per month, and

3) is willing to provide, own, install and maintain all necessary transformers, cutouts, protection equipment, primary metering enclosures, and all distribution facilities beyond the point of delivery.

In this proposal, management is recommending no price changes for 2017.

D. Large General Service (Schedule G-3)

The Large General Service class consists of accounts with monthly billed demands greater than 501 kW up to 10,000 kW. Customers are assigned to the class based on an average of the three highest demands in the last 12 months falling between 501 - 10,000 kW.

There are 58 commercial, industrial, and public agency customers presently served in the demand range for Large General Service price (Schedule G-3). This price typically applies to non-residential accounts for service at secondary distribution voltages of 480 volts and primary voltages of up to 12.47 kilovolts. Under the General Service schedule, EWEB provides all distribution and service facilities necessary to meet the power requirements of the customer at the delivered voltage.

In addition to the "secondary" Large General Service price, EWEB offers an alternative commercial price to larger qualifying customers. The Primary Service Power price is available to any commercial or industrial customer located outside the underground secondary network who:

1) receives single-point delivery at primary distribution voltages of 12.47 kV or greater,

2) is willing to contract for and pay for a minimum of 300 kilowatts of demand per month, and

3) is willing to provide, own, install and maintain all necessary transformers, cutouts, protection equipment, primary metering enclosures, and all distribution facilities beyond the point of delivery.

In this proposal, management is recommending no price changes for 2017.

Table 8

Large General Service G3
Existing Prices vs Proposed Prices
(501 - 10,000 Monthly kW)

	Existing Prices		Proposed Prices		
	Secondary	Primary	Secondary	Primary	
Basic Charge	$2,757	$2,680	$2,757	$2,680	per month
Demand Charge					
First 300 KW	---	---	---	---	per KW
Over 300 KW	$7.688	$7.486	$7.688	$7.486	per KW
Energy Charge					
All kWh	$0.04944	$0.04851	$0.04944	$0.04851	per kWh

E. Very Large General Service (Schedule G-4) (For Service in excess of 10,000 kW without a Contract)

This service is available to Very Large General Service loads over 10,000 kilowatts of demand, or customers classified as "New Large Single Load" by the BPA that are not presently covered under a Power Sales Agreement with EWEB. The basic charge for Very Large General Secondary Service is per month and Primary Service from $2,711; demand charge is $0 for the first 300 kW for both Secondary and Primary; Over 300 kW is $7.350 per kW for Secondary and $7.140 per kW for Primary; and the energy charge is $0.0668 per kWh for both Secondary and Primary.

Table 9

Very Large General Service G4
Existing Rates vs Proposed, based on 2014 COSA
(over 10,000 Monthly KW)

	Existing Rates		Proposed Rates		
	Secondary	**Primary**	**Secondary**	**Primary**	
Basic Charge	$2,785	$2,711	$2,785	$2,711	per month
Demand Charge					
First 300 KW	---	---	---	---	per KW
Over 300 KW	$7.350	$7.140	$7.35000	$7.14000	per KW
Energy Charge					
All kWh	$0.06680	$0.06680	$0.06680	$0.06680	per kWh

In this proposal, management is recommending no price increase for 2017

F. Customer-Owned Street Lighting (Schedule J-3, J-4, J-5)

Customer-owned street lighting service is available to government agencies, lighting districts, and water districts. Proposed street lighting prices do not include any direct costs for installation or maintenance of customer-owned fixtures. The proposed price schedules recover only costs for energy and associated costs necessary to operate the customer's lighting equipment which meets the Board's specifications. This practice is appropriate because ongoing maintenance tasks are now the responsibility of the other agencies.

There are approximately 11,400 street lights served on the EWEB system. It is estimated that agency streetlights will consume 8.5 million kilowatt-hours during 2017. This estimate is based on the wattage rating of each individual lighting fixture and the total number of night-time hours per year. The proposed agency lighting prices reflect allocated customer, demand and energy costs by fixture type, consistent with available engineering data.

The following table provides information on existing and proposed Customer-Owned Street Lighting prices.

Table 10

J-3 Customer Owned Street Lighting Service

Description	Lamp Type	Existing Monthly Flat Price	Proposed Monthly Flat Price
175 Watt MV	Mercury Vapor	$8.07	$8.07
250 Watt MV	Mercury Vapor	$10.58	$10.58
400 Watt MV	Mercury Vapor	$15.28	$15.28
700 Watt MV	Mercury Vapor	$24.79	$24.79

Table 11

J-4 Customer Owned Street Lighting Service

Description	Lamp Type	Existing Monthly Flat Price	Proposed Monthly Flat Price
35 Watt HPS	High Pressure Sodium	$3.74	$3.74
50 Watt HPS	High Pressure Sodium	$4.20	$4.20
70 Watt HPS	High Pressure Sodium	$5.11	$5.11
100 Watt HPS	High Pressure Sodium	$5.77	$5.77
150 Watt HPS	High Pressure Sodium	$7.39	$7.39
200 Watt HPS	High Pressure Sodium	$9.30	$9.30
250 Watt HPS	High Pressure Sodium	$11.07	$11.07
310 Watt HPS	High Pressure Sodium	$12.97	$12.97
400 Watt HPS	High Pressure Sodium	$15.82	$15.82
1000 Watt HPS	High Pressure Sodium	$33.51	$33.51
1000 Watt MH	Metal Halide	$33.23	$33.23

Table 12

J-5 Customer Owned Street Lighting Service (LED)

Description	Lamp Type	Existing Monthly Flat Price	Proposed Monthly Flat Price
0 to 10 Watts	Light Emitting Diode	$2.61	$2.61
11 to 20 Watts	Light Emitting Diode	$2.89	$2.89
21 to 30 Watts	Light Emitting Diode	$3.17	$3.17
31 to 40 Watts	Light Emitting Diode	$3.46	$3.46
41 to 50 Watts	Light Emitting Diode	$3.74	$3.74
51 to 60 Watts	Light Emitting Diode	$4.03	$4.03
61 to 80 Watts	Light Emitting Diode	$4.46	$4.46
81 to 125 Watts	Light Emitting Diode	$5.45	$5.45
126 to 175 Watts	Light Emitting Diode	$6.74	$6.74
176 to 225 Watts	Light Emitting Diode	$8.16	$8.16
226 to 275 Watts	Light Emitting Diode	$9.58	$9.58
276 to 350 Watts	Light Emitting Diode	$11.44	$11.44
351 to 750 Watts	Light Emitting Diode	$18.13	$18.13

G. Private Property Lighting Service (Schedule L-3, L-4)

EWEB also offers lighting service to individuals and businesses to provide overhead outdoor lighting for private property from dusk to dawn each day throughout the year. All equipment used to furnish service under this schedule is installed, owned, operated and maintained by EWEB.

There are presently about 1,600 private security lights comprised of various lamp sizes on the EWEB system. It is estimated that these lights will consume about 890,000 kWh during the 12-month test period. In addition to collecting energy revenue, the prices presently in effect for private security lighting are designed to amortize capital costs and to provide for depreciation, funds for fixture replacement, maintenance, regular lamp washing, and lamp replacement.

Table 13

L-3 Private Property Lighting Service

Description	Lamp Type	Existing Monthly Flat Price	Proposed Monthly Flat Price
100 Watt HPS	High Pressure Sodium	$6.06	$6.06
200 Watt HPS	High Pressure Sodium	$9.82	$9.82
400 Watt HPS	High Pressure Sodium	$16.74	$16.74

Table 14

L-4 Private Property Lighting Service

Description	Lamp Type	Existing Monthly Flat Price	Proposed Monthly Flat Price
50 Watt HPS	High Pressure Sodium	$4.40	$4.40
70 Watt HPS	High Pressure Sodium	$5.37	$5.37
150 Watt HPS	High Pressure Sodium	$7.79	$7.79

H. Business Growth and Retention Price 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 General Service electric price 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 a minimum of 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. Customers taking service must first be approved for participation in EWEB's Business Growth & Retention Program based on specified attributes the project brings to the community.

2. Price

The BGR-1 Rider shall be calculated by subtracting the monthly average ICE Mid-C Settled Index price from the customer's average applicable retail energy (kWh) price to establish the retail/wholesale market differential. The monthly retail/wholesale market differential is allocated to the customer as an incentive price. 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 Rider 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 more 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 Rider is provided under a three-year signed agreement.

4. Start Date

The start date of the incentive price period shall commence within 24 months from the date of execution of the contract for service and shall be designated by the customer and EWEB within the BGR-1 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.

I. Standby or Partial Requirements Service Pricing

The concept of a partial requirements pricing option applies to customers that own generation over 1 megawatt of installed capacity and wish to offset retail load through self-supply. The intent of the partial requirements price plan is to create a way for large customers with generation to self-supply, while still ensuring that fixed transmission and distribution costs used to provide on-demand delivery service to these customers are recovered, thereby avoiding cost shifts to other customer classes.

The proposed standby price for partial requirements service includes standard utility pricing constructs such as basic charge (for meter reading, customer service, public purposes), distribution/facilities charges (for fixed distribution system costs and customer specific investments), and an energy charge (for power needs not supplied by customer owned generation), as well as generating capacity related costs (for generation capacity on standby to serve load). What is different is that the costs are allocate to billing determinants consistent with how the costs are incurred (i.e. whether fixed or variable, or meant to serve peak load).

Table 15
Standby Charges

Basic Charge	$341.88	Per month
Facilities Charge	$1.09	Per kilowatt of facilities capacity
Demand Charge	$4.66	Per kilowatt of demand
Energy Charge	$0.05140	Per Kilowatt hour

Eugene Water & Electric Board
500 East 4th Avenue
Post Office Box 10148
Eugene, Oregon 97440-2148
541-685-7000

February 2017 Water Price Proposal

Fiscal Services Department
November 2016

EUGENE WATER & ELECTRIC BOARD
2017 Water Price Proposal

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The 2017 Price Proposal was developed in accordance with the proposed 2017 budget. The cost of service analysis, revenue requirements and proposed price schedules by customer class, are included in this document.

In accordance with industry standard, Eugene Water & Electric Board (EWEB) conducts a comprehensive Cost of Service Analysis (COSA) a minimum of every 3-5 years or when a major shift to COSA variables occurs and performs an update to the COSA in the other years. For 2017, the COSA was updated to determine the revenue requirement for each customer class: Residential, General Service, and Wholesale.

Table 1, on page 11, provides the detailed revenue requirements which are based on the proposed 2017 budget. Overall, this resulted in a 2.0% change in revenue requirements and prices. Management is recommending using gradualism and stability ratemaking principles for set 2017 prices due to several factors. Proposed prices by customer class achieved each class' allocated revenue requirement within industry standard accepted variances. Additionally, in 2017 a plan will be developed to manage future long-term debt and pension costs, process improvement work will continue, and the plan to diversify EWEB's source of supply will be refined. The proposed revenue and price change by customer class are presented in *Table 4* on page 16.

I. INTRODUCTION

Purpose of Study

The purpose of this price study is to provide background information and technical analyses in support of the EWEB management proposal for revised water prices. The study includes documentation of water system revenue requirements, projected system loads and sales, and unit costs for serving water customers during the twelve-month period beginning January 2017. The most recent changes to water prices occurred in February 2016, with an overall average increase of 3.6%. The 2017 Water Price Proposal is for an overall average increase of 2.0%, although price changes vary by customer class. This increase is included in the 2017 proposed budget.

The proposed price changes accommodates the price smoothing strategy adopted by the Board in 2013. This strategy was adopted to mitigate significant price increases when construction on a second water supply is scheduled to begin in 2019. The 2017 proposed budget assumes net consumption of 7.6 million kgals which is approximately the same as the 2016 budget but lower than actual 2015 consumption of 8.3 million kgals and 2016 projected consumption.

In keeping with proposed 2017 budget assumptions, anticipated expenditures, forecasted sales for the 12-month period and the results of an updated Cost of Service study, EWEB staff is recommending an average price increase of 2.0%.

If approved by the EWEB Commissioners following the scheduled public hearings, revised water prices will become effective with billings rendered on and after February 1, 2017 with the exception of the

Water Districts. Consistent with prior years, the Water Districts' price increase will become effective July 1, 2017.

Establishment of Prices

EWEB is a locally regulated municipal utility operating under the authority of the Eugene City Charter and pertinent provisions of Oregon law. Five elected Commissioners, who serve without pay, carry out the responsibilities delegated to the Board pursuant to the City Charter. The EWEB Commissioners have exclusive jurisdiction to approve annual operating budgets and establish prices for water service.

Although EWEB's water prices are not subject to regulatory review by any federal or state utility commission or similar agency, the Board must comply with the requirements of applicable state and federal statutes as they pertain to the development of prices and the general conduct of utility business. Current statutes and related case law provide two general standards concerning the establishment of water prices.

The first of these price making standards allows EWEB to set prices at a level sufficient to recover the ongoing costs of utility operations. These costs include annual operating expense, requirements for capital additions, interest and amortization of outstanding debts, and additions to reserves. This standard is intended to ensure the financial integrity of the utility, while defining the costs of operation that can be lawfully recovered through prices.

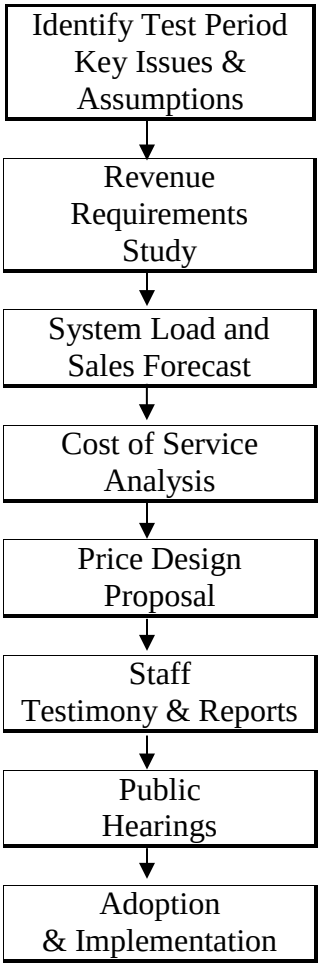
The second standard requires that prices and charges for utility service be fair and non-discriminatory. Prices are considered non-discriminatory when customers receiving like and synchronous service under similar circumstances are treated equally in the development and application of specific prices. This second standard protects the equity concerns of individual utility customers, based on established utility policies and practice for allocating costs among customers and customer classes.

The above standards, together with the established Board policies concerning cost allocation and price design, allow EWEB to maintain prices at the lowest possible level consistent with sound financial principles and traditional utility price making practice. They also give EWEB's elected Board of Commissioners the ability to approve prices that are cost-based, non-discriminatory, and in concert with the needs of EWEB customer-owners.

Price Review Process

EWEB's water prices are reviewed with each annual budget cycle to ensure that they remain adequate to cover the cost of utility operations over the budget period. When budget projections or other forecasted operating conditions indicate the need for a price adjustment, staff prepare studies which determine appropriate price levels for each customer class. This formal review process involves several steps, all of which are coordinated with the Commissioners, General Manager and utility management. The process also affords an opportunity for review and comment by EWEB customer-owners and other interested parties (see *Figure 1*).

Figure 1
Price Review Process



The first step in the price review process is a detailed examination of the projected operating expenses, capital costs, and anticipated revenues at current prices. The purpose of this effort is to confirm the overall revenue requirements that serve as a basis for development of proposed prices, the timing of the proposed price adjustment, and the period of time (or "test period") over which the new prices are expected to remain in place.

The next step is an assessment of the water system sales forecasts. These projections, consistent with historical and future growth trends in the EWEB service area, are then used to estimate system sales by price class. Once EWEB's projected operating costs, revenue requirements, and sales forecasts have been determined, a Cost of Service Analysis is performed. This study allocates test period costs to each of EWEB's customer classes and price schedules in accordance with the manner in which individual cost items are incurred.

EWEB's cost of service procedures employ standard utility industry costing methods, consistent with the policy guidelines established by the Board. A summary of EWEB's cost of service methodology is contained in Section V - Cost of Service Analysis. Price recommendations for each of EWEB's four major customer classes are documented in Section VI - Price Recommendations. For 2017, the COSA was updated for projected operating costs, sales forecasts and total revenue requirements. It was used to allocate costs across the customer classes.

Public Notice and Hearings Schedule

EWEB's price review process is a formal, sequential procedure. The underlying objectives of this process are to ensure that EWEB customer-owners and the general public receive adequate notice and explanation of pending price change proposals, and provide an opportunity for the Board to hear and consider all public comments prior to approval and implementation of revised prices.

Concurrent with the budget approval process, two public hearings are scheduled to provide for official explanation of the price proposal and gather further public comment. A related legal notice was subsequently placed in a local newspaper.

The name of the newspaper and publication date for the legal notice was as follows:

Publication Name	Date
The Register-Guard	September 26, 2016

Exhibit 1 contains the text used in the published legal notice.

Customers are invited to comment on EWEB's budget and price assumptions at public hearings throughout the budget development process. There are two scheduled public hearings specifically for the price proposals. The hearings will be held during the EWEB Board meetings on Tuesday, November 1, 2016 at 5:30 p.m. and Tuesday, December 6, 2016 at 5:30 p.m. at the EWEB Headquarters, 500 East 4th Avenue, in Eugene.

Written comments are also welcome and may be sent to the attention of Budget, EWEB's Fiscal Services Department, PO Box 10148, Eugene, OR 97440 or by email to Budget@EWEB.org. For timely consideration, written comments must be received prior to November 1, 2016 to ensure delivery to the Board prior to their scheduled action on the price proposal.

EXHIBIT 1

BEFORE THE EUGENE WATER & ELECTRIC BOARD

In the Matter of Consideration and Adoption of Budgets, Revised Charges for EWEB Electric and Water Service

NOTICE OF PUBLIC HEARINGS AND INVITATION TO COMMENT

1. Two dates are scheduled for public hearings to seek comment regarding proposed 2017 budget approval and adjustments to EWEB water & electric rates. If approved, the proposed changes for residential, general service, and other customers of the Eugene Water & Electric Board would become effective with utility billings rendered either, on or after February 1, 2017.

2. Public hearings will be held in the EWEB Board Room, 500 East 4th Avenue, Eugene, Oregon, on the following dates and times:

November 1, 2016	5:30 p.m.
December 6, 2016	5:30 p.m.

   Background information concerning the budget and rate proposals will be presented at the meeting, followed by the public hearing which will provide opportunity for public testimony and comment.

3. Specific rate recommendations for each customer class may be obtained beginning October 28, 2016 by calling EWEB's Fiscal Services Department at (541) 685-7000 or emailing budget@eweb.org. Copies of the budget document and rate proposals will be made available at the public hearing.

4. Written public comments are also welcome and may be brought to the hearings or mailed to: EWEB Fiscal Services, PO Box 10148, Eugene, OR 97440. For timely consideration, written comments must be received prior to the public hearing on November 1, 2016.
   E-mail comments may be directed to: Deborah.hart@eweb.org.

II. BACKGROUND INFORMATION

A. Organizational Structure

EWEB is responsible for providing electric and water service within the City of Eugene and certain outlying areas. The specific duties delegated to the Board pursuant to the Eugene City Charter are carried out by five elected Commissioners who serve without pay. The Commissioners and expiration dates of their respective terms of office are as follows:

	Area	Term Expires December 31,
John Simpson, President	At Large	2018
Dick Helgeson, Vice President	Wards 2, 3	2020
Steve Mital	Wards 1, 8	2020
John Brown	Wards 4, 5	2018
James Manning	Wards 6, 7	2016

As EWEB's primary policy and decision-making body, the individual Board members represent a broad range of professional experience and community perspectives on matters concerning local utility service. The Board meets regularly on the first Tuesday of each month. All meetings are open to the public and provide opportunities for public participation.

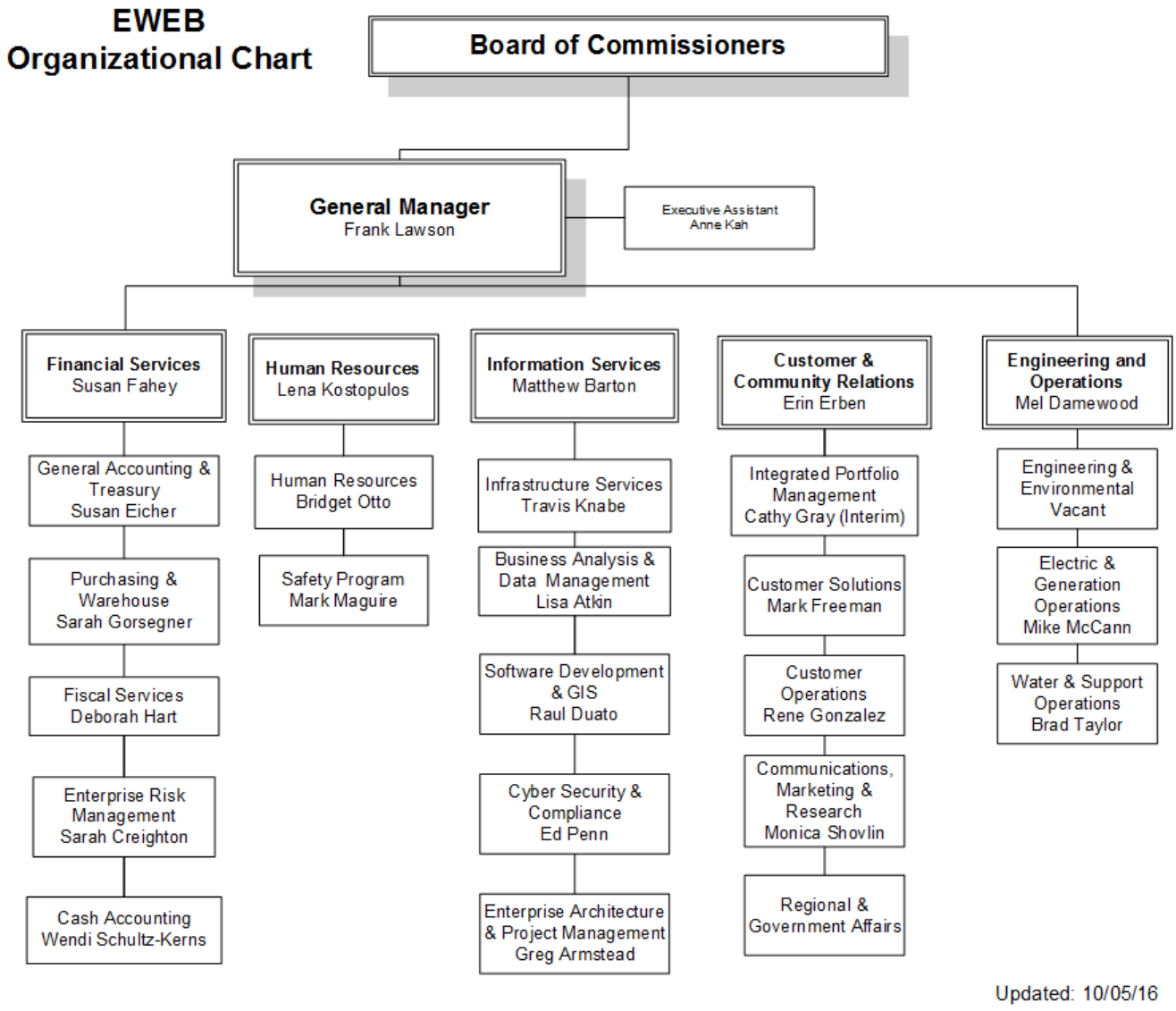
Under the direction of General Manager Frank Lawson and the executive team, EWEB employed 500 combined electric and water personnel as of third quarter 2016. EWEB's organization chart is shown as *Figure 2*. The executive team, responsible for each of the major operating areas, is as follows:

Executive	Title
Frank Lawson	General Manager
Susan Fahey	Chief Financial Officer
Lena Kostopulos	Chief Human Resources Officer
Erin Erben	Chief Customer Officer
Mel Damewood	Chief Engineering & Operations Officer
Matt Barton	Information Services Manager
Anne Kah	Executive Assistant to Board and GM

The utility's business priorities are reviewed annually by the Board, General Manager and a planning group made up of the executive team and other key personnel. Each work unit addresses management priorities through ongoing work plans and schedules. The General Manager meets daily with the executive team members who hold regular meetings with their department staff to ensure efficient and effective operations.

EWEB places a high value on quality service and responsiveness to the needs of its customers. Because of its standards for reliability and design, water service interruptions are infrequent and limited to short duration.

Figure 2


EWEB
Organizational Chart
Board of Commissioners
General Manager
Frank Lawson
Executive Assistant
Anne Kah
Financial Services
Susan Fahey
General Accounting & Treasury
Susan Eicher
Purchasing & Warehouse
Sarah Gorsegner
Fiscal Services
Deborah Hart
Enterprise Risk Management
Sarah Creighton
Cash Accounting
Wendi Schultz-Kerns
Human Resources
Lena Kostopulos
Human Resources
Bridget Otto
Safety Program
Mark Maguire
Information Services
Matthew Barton
Infrastructure Services
Travis Knabe
Business Analysis & Data Management
Lisa Atkin
Software Development & GIS
Raul Duato
Cyber Security & Compliance
Ed Penn
Enterprise Architecture & Project Management
Greg Armstead
Customer & Community Relations
Erin Erben
Integrated Portfolio Management
Cathy Gray (Interim)
Customer Solutions
Mark Freeman
Customer Operations
Rene Gonzalez
Communications, Marketing & Research
Monica Shovlin
Regional & Government Affairs
Engineering and Operations
Mel Damewood
Engineering & Environmental
Vacant
Electric & Generation Operations
Mike McCann
Water & Support Operations
Brad Taylor
Updated: 10/05/16

B. Water System Highlights

EWEB is the largest publicly owned utility in the state of Oregon. Founded by the citizens of Eugene in 1911, EWEB has remained a successful provider of essential utility services to the local community for over 100 years.

The Water System provides water to all areas within the city, two water districts, a wholesale company, and the City of Veneta. Water is supplied from the McKenzie River and is treated at the Hayden Bridge Filtration Plant, one of the largest treatment plants in Oregon. Water is pumped from the Hayden Bridge Filtration Plant into the distribution system through two large transmission mains. The water distribution system consists of 26 enclosed reservoirs with a combined storage capacity of 94 million gallons, 31 pump stations, and approximately 800 miles of distribution mains.

C. Average Bill Comparisons

A comparison of current monthly residential bills for selected Northwest communities is shown in *Figure 3*. Sample bills are calculated using EWEB's monthly average single family residence consumption of 9 kgals. A bill of $35.88 for EWEB in the figure is calculated using the existing and proposed residential price. A sample General Service bill using 250 kgals consumption at current prices is shown in *Figure 4*.

Figure 3

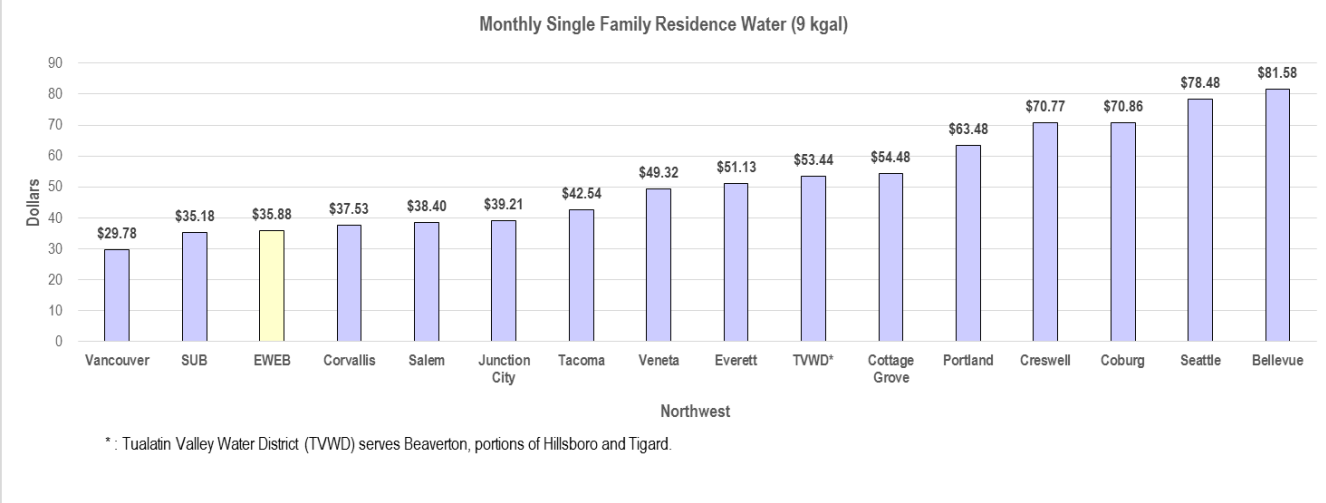
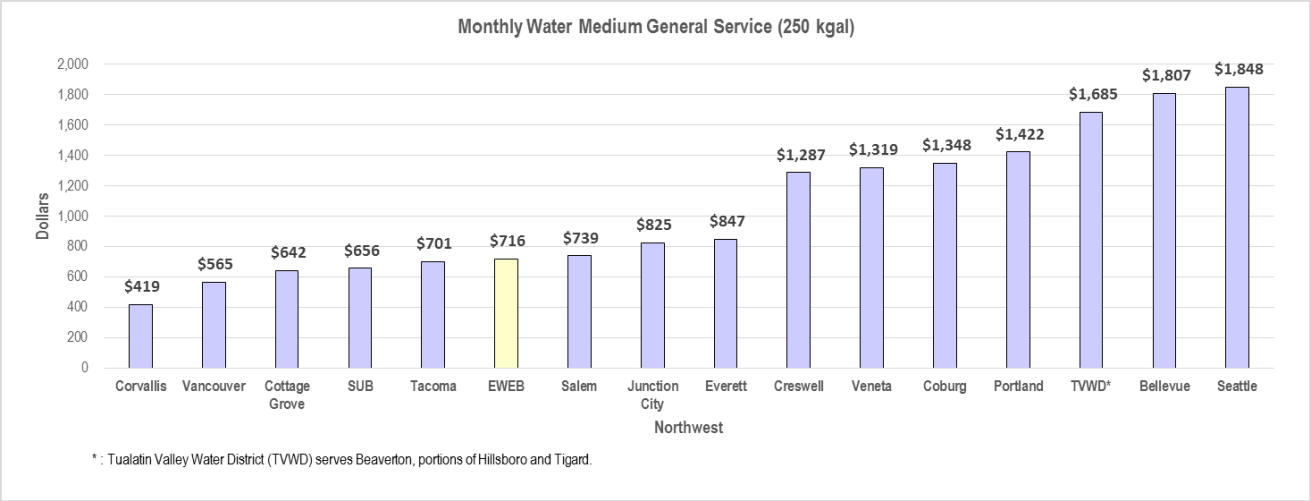


Figure 4



III. REVENUE REQUIREMENTS STUDY

This section contains a general description of EWEB's annual budgeting process. It includes the documentation of EWEB's 2017 proposed budgeted expenses and revenue requirements which has been designated as the test period for the current price proposal. In addition to determining the overall percentage revenue increase needed to sustain operation of the Water Utility, the test period revenue requirements are a primary input to the Cost of Service Analysis (see Section V).

A. Preparation of the Annual Budgets

Annually the Utility's strategic priorities are identified by the Board, General Manager and a planning group made up of the executive team and other key personnel. Major organizational goals and strategic initiatives are then documented in the strategic plan which drives specific performance targets to address management priorities through ongoing work assignments and schedules.

EWEB management and staff use a priority based budgeting (PBB) approach for budget development. This approach has served EWEB well in its effort to align budgets with EWEB's mission, strategic plan and customer-owner priorities. All levels of the EWEB organization are involved in preparation of the annual Water Utility Budget in order to place responsibility for cost control on the staff who project and incur the costs. Each department is allocated a budget that is prepared in accordance with the PBB process and Board direction.

If a budget deficit cannot be corrected through cost reductions or deferrals, the amount of the deficit becomes an additional revenue requirement recommended for recovery through a price adjustment.

A draft budget with explanations on variances from prior years is discussed with the EWEB Commissioners. The Board reviews the draft budget and may suggest program adjustments and revisions. Public hearings are held to ensure customer-owners have the opportunity to provide feedback.

The Board approves a final budget in December which then becomes the operating plan for the next budget year.

All managers and supervisors are required to expend funds in a manner consistent with approved budget estimates and monitor those expenses. Year-to-date balances are compared to budgets to ensure that costs continue to track as expected. Quarterly financial reports and any significant deviations are brought to the attention of the Board for review in accordance with Board Policy EL-1, Financial Controls. Year-end results are routinely checked against budgets, with differences noted for potential input to the next year's budget cycle.

B. Test Period Revenue Requirements

EWEB has designated calendar year 2017 as the "test period" for development of water system costs and revenues in this current price proposal. This corresponds with the annual expenditures included in the 2017 proposed Water Utility Budget. For the February 2017 price study, staff incorporated the projected sales, revenues and expenditure data from the proposed 2017 budget directly as a basis for this price proposal.

Table 1 contains a summary of the revenue requirements for the 2017 test period to be recovered through proposed water prices. The first column represents the financial results anticipated at current prices, while the second column indicates the results obtained under management's price adjustment proposal. As indicated earlier, proposed prices are designed to increase operating revenues by 2.0%, in order to eliminate the deficit that would occur without a price adjustment.

Table 1
Water System Revenue Requirements
For 2017 Test Period

	Current Prices	Revenues at Proposed Prices	% of Total
Revenues			
Operating Revenues	$35,637,000	$36,361,000	83.44%
Bond Proceeds, Interest, and Other Income[1]	7,215,000	7,215,000	16.56%
Total	**42,852,000**	**43,576,000**	**100.00%**
Expenditures			
Source of Supply	803,000	803,000	4.21%
Pumping	1,228,000	1,228,000	6.44%
Power for Pumping	1,028,000	1,028,000	5.39%
Purification	3,058,000	3,058,000	16.04%
Transmission & Distribution	7,252,000	7,252,000	38.05%
Customer Accounting	1,672,000	1,672,000	8.77%
Conservation	429,000	429,000	2.25%
Administrative & General	3,591,000	3,591,000	18.84%
Subtotal	**19,061,000**	**19,061,000**	**43.74%**
Construction & Capital[2]	14,581,000	14,581,000	73.57%
Debt Service, Interest, and Amortization	5,584,000	5,584,000	28.17%
Balance Sheet Changes	(345,000)	(345,000)	-1.74%
Subtotal	**19,820,000**	**19,820,000**	**45.48%**
To Working Cash/ Reserves	4,695,000	4,695,000	10.77%
Revenue Requirements	**43,576,000**	**43,576,000**	**100.00%**
Surplus / (Deficiency)	**($724,000)**	**$0**	
As a % of Rate Revenue	**-2.0%**	**0%**	

[1] Includes System Development Charge Revenue

[2] Net of Contribution In Aid

IV. SYSTEM SALES AND REVENUE FORECAST

A. Overview of EWEB's Forecasting Process

EWEB routinely prepares both short and long-range water system sales forecasts as part of its ongoing planning activities. Annual projections of total system water sales are prepared using both historical sales data from EWEB records and projected economic and demographic data for the Eugene area. The annual sales forecast forms the basis for revenue projections in the water cost of service analysis.

Basic growth projections for EWEB's system are developed through application of various forecasting methods, which include trending and econometric analysis. System forecasts are examined regularly and adjusted for changing local economic conditions and customer characteristics. The resulting base forecasts become a key input to water resource planning, facilities design and preparation of annual budgets. They also become an integral part of the price development process as a basis for allocation of operating costs and design of proposed prices for each customer class.

Actual consumption may vary considerably from year to year due to changes in local weather patterns, the economy and commercial activities. The twelve-month period from January through December 2017 was selected for analysis, corresponding with the test period budget and revenue requirements documented in Section III - Revenue Requirements Study. The remainder of this section describes how the system sales forecast is applied to the development of prices and the results obtained for the 2017 test period.

B. Methodology and Procedures

In order to develop appropriate water prices, EWEB's annual system forecast must be translated into a detailed projection of monthly water sales and customer use characteristics for the upcoming price period. This is done in a manner consistent with original forecast assumptions to arrive at a monthly estimate of customer counts and consumption patterns for each of EWEB's major customer classes.

Projection of monthly customer sales relies on historical data collected from a number of internal sources. Monthly historical sales statistics are obtained from EWEB financial statements and accounting records. In addition, Fiscal Services maintains a detailed record of customer billing statistics for each price classification. Other local agencies are consulted as necessary for additional data pertinent to the forecasting of utility sales.

Once the basic forecasting data is assembled, it is reviewed for consistency with recent historical trends, budget assumptions and conditions expected to prevail over the price test period. Such review ensures that the sales forecast used in the price design process remains consistent with projections used to prepare the EWEB revenue requirements discussed in Section III.

The next step in the forecasting process is to divide the total system forecast into component parts by month and price class groupings. Historical customer sales statistics were used to calculate current class contribution to annual system sales and typical monthly distribution of consumption for each class. These

historical ratios are then applied to the initial aggregate utility forecast to produce a monthly projection of consumption by price class.

C. 2017 Forecast Results

The results of EWEB's sales forecast for the 2017 price test period are summarized briefly below:

Table 2
Water System Revenue Requirements
For 2017 Test Period

Customer Class	Count	Kgal Sales (1,000 Gallons)	% of Sales
Residential - Inside City	46,382	3,650,000	48.0%
Residential - Outside City	414	35,000	0.5%
General Service - Inside City	5,071	3,048,000	40.1%
General Service - Outside City	233	172,000	2.3%
Water Districts	2	565,000	7.4%
Willamette Water Company	1	27,000	0.4%
City of Veneta	1	103,000	1.4%
Private Fire Lines [1]	1,086	N/A	N/A
Total	**53,190**	**7,600,000**	**100.0%**

[1] Elevation number of customers and consumption sales are included in the above customer classes

V. COST OF SERVICE ANALYSIS

This section documents the procedures used in development of EWEB's Cost of Service study.

A. Costing Methods and Procedures

EWEB's Cost of Service methodology uses standard Water Utility costing procedures to allocate the test period revenue requirements to each customer class. The allocated costs reflect the contribution of each customer class to total system costs during the period for which prices are being developed. Study results also measure the degree of equity in prices charged to individual customer classes by testing the adequacy of revenues received relative to allocated costs of service. Through this process, the Cost of Service study apportions the test period revenue deficiency as a basis for determining appropriate price levels and percentage adjustments for each customer class.

In accordance with industry standards, EWEB conducts a comprehensive COSA a minimum of every 3-5 years or when a major shift in COSA variables occurs, and performs an update to the COSA in the off years. The comprehensive Cost of Service study begins with a detailed assessment of the Utility's draft operating budget and revenue requirements for the upcoming price period. The current analysis uses the base information contained in the 2017 Proposed Water Utility Budget.

Once the total utility revenue requirement has been determined, individual line item costs are grouped according to major utility functions, such as power for pumping, transmission, distribution or customer accounting. Each line item expense is then classified according to its contribution to system peak demands, total water consumption or number of customers for each price class. Specific items are also identified for direct assignment when they are clearly associated with service to particular price classes.

The Cost of Service model breaks down the various demand and customer costs into sub-components to assign costs to individual price classes. Demand-related costs are segregated into peak-day and peak-hour components, while basic customer costs are sub-classified as relating to either "meters and services" or "billing and collecting."

After classification and sub-classification, each cost category is distributed to one or more price classes through a detailed allocation procedure. Several related analyses are conducted to develop the many allocation factors applied in this step. For example, calculating the class contribution to peak-day demand involves full examination of all customer loads during the test period. Accordingly, the allocation step relies on the sales projections and available load data.

When all of the allocation factors have been developed, they are then applied to yield a segregation of total system costs assigned to the different price classes. The final step is to combine the calculations in a summary table showing the total allocated costs and recommended percentage adjustments for each customer class. These results can then be represented as unit costs, which form the basis for actual price design.

B. Cost of Service Summary

As documented previously in Section III, Revenue Requirements Study, EWEB projects total operating expenses, capital costs, and reserve deposits for the Water Utility to be $43.6 million for the 2017 price test period. A net revenue requirement of $36.4 million remains after applying $7.2 million for bond proceeds, interest earnings and other non-retail revenues. At current prices, offsetting water sales revenue of $35.6 million leaves a remaining budget deficit of approximately $724 thousand to be recovered through the proposed price changes. This $724 thousand deficit translates to an increase in required price revenues during the test period.

The Cost of Service Analysis calculated an overall revenue requirement of $36.6 million. The difference between Cost of Service revenue and revenue at current prices is demonstrated in *Table 3.*

Table 3
Cost of Service Summary

Customer Class	Price Schedules	Revenue at Current Prices	COSA Revenue Requirement	Percent Difference
Residential [1]	R-1, R-2	19,598,220	19,541,176	-0.3%
General Service [1]	G-1, G-2	12,409,030	13,372,979	7.8%
Water Districts [2]	4	1,723,619	1,771,894	2.8%
Willamette Water Company	5	112,653	116,068	3.0%
City of Veneta	6	156,526	142,067	-9.2%
Private Fire Lines		850,000	856,367	0.7%
Elevation Charges		786,597	787,718	0.1%
Total		**35,636,644**	**36,588,268**	**2.7%**

[1] For Residential and General Service, both the inside and outside customers are included in the customer classes.

[2] Water District Administration charges are not included in price revenues.

VI. PRICE RECOMMENDATIONS

The purpose of this section is to present staff's proposal for revisions to each of EWEB's published water price schedules. Outside city prices for each retail class have a 30% differential.

For each customer class, tables showing projected billing units, current and proposed prices and projected revenue, and a summary of anticipated customer impacts follow.

Revenue at current prices and proposed increases for each of EWEB's major customer classes are shown the table below. Management is recommending using the gradualism and stability ratemaking principles

for setting 2017 water prices due to several factors. Like the Electric Utility, proposed prices by customer class achieved each class' allocated revenue requirement within industry standard accepted variances. Additionally, in 2017 a plan will be developed to manage future long-term debt and pension costs, process improvement work will continue, and the plan to diversify EWEB's source of supply will be refined. The 2017 Price proposal represents a 2.0% increase in overall revenue requirements, represented in *Table 4.*

Table 4
Proposed Revenue Requirement

Customer Class	Price Schedule (s)	Revenue at Current Prices	Revenue at Proposed Prices	Percent Revenue Difference	Proposed Price Change
Residential [1]	R-1, R-2	$19,598,220	$19,654,727	0.3% [3]	0.0%
General Service [1]	G-1, G-2	12,409,030	13,030,716	5.0%	5.1%
Water Districts [2]	4	1,723,619	1,771,340	2.8%	3.3%
Willamette Water Company	5	112,653	116,070	3.0%	3.0%
City of Veneta	6	156,526	142,376	-9.0%	-9.0% [4]
Private Fire Lines		850,000	858,500	1.0%	1.0%
Elevation Charges		786,597	787,001	0.1% [3]	0.0%
Total		**$35,636,644**	**$36,360,729**	**2.0%**	

[1] For Residential and General Service, both the inside and outside customers are included in the customer classes.

[2] Water District Administration charges are not included in price revenues.

[3] Revenue increased due to lower pricing in the first month of prior year and does not reflect a proposed change to the current price schedule

[4] Price change was volumetric only

A. Residential Service – Schedules R-1 and R-2

Residential customers are served under Schedule R-1, which applies to single family and smaller multi-family dwellings inside the City of Eugene. The price schedule consists of a fixed monthly basic charge depending on meter size and a 3-tiered usage price applied to all monthly metered consumption. Residential customers outside the City of Eugene are served under Schedule R-2, which includes a 30% price differential from R-1.

There is no proposed price change. Additionally, the monthly elevation charge determined by pumping level is proposed to remain at $3, $5, and $7, depending on the level. Though prices remain unchanged for Residential Customers, there is a slight increase in revenue due to the prior year price change being updated in February. *Table 5* shows the proposed price schedule for Residential inside the city and *Table 6* represents the proposed price schedule for Residential customers outside the city.

Table 5
Calculation of the Revenues at Present and Proposed Prices
SCHEDULE R-1 - Residental Water Service Inside City Limits
Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge	Proposed Annual Revenue [1]
BASIC CHARGE						
5/8"	42,544	510,528	$20.37	$10,349,679	$20.37	$10,399,455
3/4"	258	3,096	$21.20	$65,320	$21.20	$65,635
1"	3,485	41,820	$27.50	$1,144,544	$27.50	$1,150,050
1 - 1/2"	91	1,092	$42.08	$45,731	$42.08	$45,951
2"	4	48	$75.39	$3,601	$75.39	$3,619
Total	**46,382**	**556,584**		**$11,608,876**		**$11,664,711**
VOLUME CHARGE						
First 8,000 gallons	64.6%	2,359,457	$1.601	$3,777,491	$1.601	$3,777,491
Next 22,000 gallons	27.4%	998,284	2.703	2,698,363	2.703	2,698,363
Over 30,000 gallons	8.0%	292,171	4.378	1,279,126	4.378	1,279,126
Total		**3,649,913**		**$7,754,980**		**$7,754,980**
Total Calculated Revenue				**$19,363,855**		**$19,419,690**
Revenue Increase[2]						**$55,835**
% Change						0.3%

[1] Present and proposed revenues include one month at prior prices and eleven months at existing or proposed prices
[2] Revenue increased 0.3% due to lower pricing in the first month of prior year

Table 6
Calculation of the Revenues at Present and Proposed Prices
SCHEDULE R-2 - Residental Water Service Outside City Limits
Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge	Proposed Annual Revenue [1]
BASIC CHARGE						
5/8"	369	4,428	$26.50	$116,770	$26.50	$117,342
3/4"	1	12	$27.55	$329	$27.55	$331
1"	39	468	$35.75	$16,651	$35.75	$16,731
1 - 1/2"	4	48	$54.70	$2,613	$54.70	$2,626
2"	1	12	$98.00	$1,170	$98.00	$1,176
Total	**414**	**4,968**		**$137,534**		**$138,205**
VOLUME CHARGE						
First 8,000 gallons	61.6%	21,266	$2.081	$44,254	$2.081	$44,254
Next 22,000 gallons	30.3%	10,472	$3.514	36,799	3.514	36,799
Over 30,000 gallons	8.0%	2,772	$5.691	15,778	5.691	15,778
Total		**34,510**		**$96,831**		**$96,831**
Total Calculated Revenue				**$234,365**		**$235,036**
Revenue Increase[2]						**$672**
% Change						0.3%

[1] Present and proposed revenues include one month at prior prices and eleven months at existing or proposed prices
[2] Revenue increased 0.3% due to lower pricing in the first month of prior year

B. General Service Inside City Limits (Schedule G-1)

EWEB's commercial and industrial customers inside the City of Eugene are presently served at the General Service price Schedule G-1. This price also applies to larger multi-family residential accounts. Under the General Service schedule, EWEB provides all distribution and service facilities necessary to meet the water requirements of the customer.

Table 7 provides information on revenues at existing prices and revenues at proposed prices. *Table 8* provides information on monthly bill comparisons at existing and proposed prices.

Table 7
Calculation of the Revenues at Present and Proposed Prices
SCHEDULE G-1 - General Service Water Service Inside City Limits
Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge	Proposed Annual Revenue [1]
BASIC CHARGE						
5/8"	1,777	21,324	$22.10	$466,622	$23.23	$493,349
3/4"	49	588	$23.00	$13,391	$24.17	$14,155
1"	1,434	17,208	$29.84	$508,425	$31.36	$537,463
1 - 1/2"	987	11,844	$45.63	$535,122	$47.96	$565,739
2"	571	6,852	$81.77	$554,772	$85.94	$586,480
3"	108	1,296	$184.22	$236,398	$193.62	$249,916
4"	49	588	$314.54	$183,128	$330.58	$193,595
6"	60	720	$471.97	$336,472	$496.04	$355,705
8"	34	408	$683.19	$275,997	$718.03	$291,772
10"	2	24	$964.91	$22,930	$1,014.12	$24,240
Total	**5,071**	**60,852**		**$3,133,257**		**$3,312,413**
VOLUME CHARGE						
All KGAL (1,000 gallons)		3,048,234	$2.745	$8,367,404	$2.885	$8,764,472
Total Calculated Revenue				**$11,500,660**		**$12,076,884**
Revenue Increase						**$576,224**
% Change						5.0%
Average Cost per KGAL (1,000 gallons)				$3.77		$3.96

[1] Present and proposed revenues include one month at prior prices and eleven months at existing or proposed prices

Table 8
EUGENE WATER & ELECTRIC BOARD
Price and Monthly Bill Comparison

GENERAL SERVICE INSIDE CITY LIMITS
SCHEDULE G-1

	5/8" SERVICE			1" SERVICE			2" SERVICE			4" SERVICE			6" SERVICE		
Monthly Usage Level (KGAL)	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.
0	$22.10	$23.23	5.1%												
5	35.83	37.66	5.1%												
10	49.55	52.08	5.1%	$57.29	$60.21	5.1%									
15	63.28	66.51	5.1%	71.02	74.64	5.1%									
20	77.00	80.93	5.1%	84.74	89.06	5.1%	$136.67	$143.64	5.1%						
25	90.73	95.36	5.1%	98.47	103.49	5.1%	150.40	158.07	5.1%						
30	104.45	109.78	5.1%	112.19	117.91	5.1%	164.12	172.49	5.1%						
40	131.90	138.63	5.1%	139.64	146.76	5.1%	191.57	201.34	5.1%						
50	159.35	167.48	5.1%	167.09	175.61	5.1%	219.02	230.19	5.1%	$451.79	$474.83	5.1%			
75				235.72	247.74	5.1%	287.65	302.32	5.1%	520.42	546.96	5.1%			
100				304.34	319.86	5.1%	356.27	374.44	5.1%	589.04	619.08	5.1%	$746.47	$784.54	5.1%
200				578.84	608.36	5.1%	630.77	662.94	5.1%	863.54	907.58	5.1%	1,020.97	1,073.04	5.1%
250				716.09	752.61	5.1%	768.02	807.19	5.1%	1,000.79	1,051.83	5.1%	1,158.22	1,217.29	5.1%
500							1,454.27	1,528.44	5.1%	1,687.04	1,773.08	5.1%	1,844.47	1,938.54	5.1%
750										2,373.29	2,494.33	5.1%	2,530.72	2,659.79	5.1%
1,000										3,059.54	3,215.58	5.1%	3,216.97	3,381.04	5.1%
1,500													4,589.47	4,823.54	5.1%
2,000													5,961.97	6,266.04	5.1%
2,500													7,334.47	7,708.54	5.1%

[1] Due to lower pricing in the first month of prior year, in order to achieve 5% increase to revenue, both volumetric and fixed rates were raised to 5.1%

C. General Service Outside City Limits (Schedule G-2)

EWEB also offers a General Service water price for customers located outside the Eugene city limits. The schedule applies to commercial and industrial customers alike, as their total number is comparatively few.

The price structure of this schedule is identical to General Service (Schedule G-1). The only distinction is a differential in the prices themselves. EWEB and other water utilities typically charge a higher price to retail customers outside the city boundary in recognition of cost differences for serving non-municipal customers. Price schedule G-2 includes a 30% price differential from price schedule G1.

Table 9 provides information on revenues at existing prices and revenue at proposed prices. *Table 10* provides information on monthly bill comparisons at existing and proposed prices.

Table 9
Calculation of the Revenues at Present and Proposed Prices
SCHEDULE G-2- General Service Water Service Outside City Limits
Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge	Proposed Annual Revenue [1]
BASIC CHARGE						
5/8"	99	1,188	$28.75	$33,818	$30.20	$35,734
3/4"	3	36	$29.90	$1,066	$31.40	$1,126
1"	55	660	$38.80	$25,355	$40.75	$26,788
1 - 1/2"	24	288	$59.30	$16,910	$62.35	$17,884
2"	18	216	$106.30	$22,735	$111.70	$24,030
3"	7	84	$239.50	$19,920	$251.70	$21,057
4"	4	48	$408.90	$19,434	$429.75	$20,545
6"	4	48	$613.55	$29,160	$644.85	$30,828
8"	12	144	$888.15	$126,634	$933.45	$133,873
Total	**226**	**2,712**		**$295,033**		**$311,864**
VOLUME CHARGE						
All KGAL (1,000 gallons)		171,851	$3.569	$613,337	$3.751	$641,967
Total Calculated Revenue				**$908,370**		**$953,831**
Revenue Increase						**$45,461**
% Change						5.0%
Average Cost per KGAL (1,000 gallons)				$5.29		$5.55

[1] Present and proposed revenues include one month at prior prices and eleven months at existing or proposed prices

Table 10
EUGENE WATER & ELECTRIC BOARD
Price and Monthly Bill Comparison

GENERAL SERVICE OUTSIDE CITY LIMITS
SCHEDULE G-2

	5/8" SERVICE			1" SERVICE			2" SERVICE			4" SERVICE			6" SERVICE		
Monthly Usage Level (KGAL)	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.	Monthly Bill at Present Prices	Monthly Bill at Proposed Prices	Percent [1] Diff.
0	$28.75	$30.20	5.0%												
5	46.60	48.96	5.1%												
10	64.44	67.71	5.1%	$74.49	$78.26	5.1%									
15	82.29	86.47	5.1%	92.34	$97.02	5.1%									
20	100.13	105.22	5.1%	110.18	$115.77	5.1%	$177.68	$186.72	5.1%						
25	117.98	123.98	5.1%	128.03	$134.53	5.1%	195.53	$205.48	5.1%						
30	135.82	142.73	5.1%	145.87	$153.28	5.1%	213.37	$224.23	5.1%						
40	171.51	180.24	5.1%	181.56	$190.79	5.1%	249.06	$261.74	5.1%						
50	207.20	217.75	5.1%	217.25	$228.30	5.1%	284.75	$299.25	5.1%	$587.35	$617.30	5.1%			
75				306.48	$322.08	5.1%	373.98	$393.03	5.1%	676.58	711.08	5.1%			
100				395.70	$415.85	5.1%	463.20	$486.80	5.1%	765.80	804.85	5.1%	$970.45	$1,019.95	5.1%
200				752.60	$790.95	5.1%	820.10	$861.90	5.1%	1,122.70	1,179.95	5.1%	1,327.35	$1,395.05	5.1%
250				931.05	$978.50	5.1%	998.55	$1,049.45	5.1%	1,301.15	1,367.50	5.1%	1,505.80	$1,582.60	5.1%
500							1,890.80	$1,987.20	5.1%	2,193.40	2,305.25	5.1%	2,398.05	$2,520.35	5.1%
750										3,085.65	3,243.00	5.1%	3,290.30	$3,458.10	5.1%
1,000										3,977.90	4,180.75	5.1%	4,182.55	$4,395.85	5.1%
1,500													5,967.05	$6,271.35	5.1%
2,000													7,751.55	$8,146.85	5.1%
2,500													9,536.05	$10,022.35	5.1%

[1] Due to lower pricing in the first month of prior year, in order to achieve 5% increase to revenue, both volumetric and fixed rates were raised to 5.1%

D. Sale of Surplus Water (Schedules 4, 5, and 6)

EWEB provides firm surplus wholesale water to Santa Clara and River Road Water Districts. Each district has two contractual agreements with EWEB, one is for the service to be provided by EWEB and a second is for the supply of firm surplus water. EWEB also provides surplus wholesale water to Willamette Water Company and the City of Veneta. Prices include a basic and a volume charge.

The proposed annual price increase for Santa Clara and River Road Water Districts is 2.8% per *Table 11*. Willamette Water district requires a 3% price increase, illustrated in *Table 12*. The Cost of Service Analysis on Veneta has determined an overall decrease of 9% in revenue requirement. EWEB has been serving Veneta for only a few years, and the 2017 price proposal is the first one that has enough historical data to determine a consumption trend. The decrease is proposed to be applied to the volumetric pricing for all consumption levels, referenced in *Table 13*.

Table 11
Calculation of the Revenues at Present and Proposed Prices
SCHEDULE 4 - Service to Santa Clara and River Road Water Districts
Estimated 12 Months Ended December 31, 2017

Meter Size		Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge [2]	Proposed Annual Revenue [1]
BASIC CHARGE							
6"		5	60	$1,132.29	$67,320	$1,170.11	$69,072
8"		1	12	$1,955.34	$23,251	$2,020.65	$23,856
Total		**6**	**72**		**$90,571**		**$92,928**
VOLUME CHARGE							
Jan-June	All KGAL		213,758	$2.859	$611,135	$2.912	$622,464
July - Dec	All KGAL*		350,931	$2.912	1,021,912	$3.009	1,055,947
Total			**564,690**		**$1,633,048**		**$1,678,412**
Total Calculated Revenue					**$1,723,619**		**$1,771,340**
Revenue Increase							**$47,721**
% Change							2.8%
Average Cost per KGAL (1,000 gallons)					$3.05		$3.14

* July 1, 2017 effective date

[1] Present and proposed revenues are based on six months of proposed price and six months of existing or proposed prices
[2] Proposed basic charge and Jul-Dec volume charge were increased 3.3% in order to achieve 2.8% revenue increase

Table 12

Calculation of the Revenues at Present and Proposed Prices

SCHEDULE 5 - Willamette Water Company

Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices [1]	Proposed Charge [2]	Proposed Annual Revenue [1]
BASIC CHARGE						
5/8"	5		$28.75	$1,708	$29.61	$1,772
3/4"	0		$29.90	$0	$30.80	$0
1"	1		$38.80	$461	$39.96	$478
1 - 1/2"	0		$59.30	$0	$61.08	$0
2"	0		$106.30	$0	$109.49	$0
3"	0		$239.50	$0	$246.69	$0
4"	0		$408.90	$0	$421.17	$0
6"	0		$613.55	$0	$631.96	$0
8"	1		$888.15	$10,553	$914.79	$10,951
Total	**7**			**$12,722**		**$13,202**
VOLUME CHARGE						
All KGAL (1,000 gallons)		27,353	$3.660	$99,931	$3.770	$102,868
Total Calculated Revenue				**$112,653**		**$116,070**
Revenue Increase						**$3,417**
% Change						3.0%
Average Cost per KGAL (1,000 gallons)				$4.12		$4.24

[1] Present and proposed revenues include one month at prior prices and eleven months at existing or proposed prices

[2] Proposed basic charge and volume charge were increased 3% in order to achieve 3% revenue increase

Table 13

Calculation of the Revenues at Present and Proposed Prices

SCHEDULE 6 - City of Veneta

Estimated 12 Months Ended December 31, 2017

Meter Size	Projected Active Services	Projected Annual Consumption	Existing Charge	Revenue @ Existing Prices	Proposed Charge [2]	Proposed Annual Revenue [1]
BASIC CHARGE						
8"	2		$927.48	$21,837	$927.48	$22,260
Total	**2**			**$21,837**		**$22,260**
VOLUME CHARGE						
All KGAL (1,000 gallons)		103,448	$1.327	$134,689	$1.168	$120,116
Total Calculated Revenue				**$156,526**		**$142,376**
% Change						-9.0%
Average Cost per KGAL (1,000 gallons)						$1.38

[1] Proposed revenues include one month at existing prices and eleven months at existing or proposed prices

[2] Proposed basic charge was unchanged and volume charge decreased 12% in order to achieve 9% revenue decrease

E. Private Fire Lines

Private fire lines are separate attachments or services to the system for the provision of sufficient water capacity to meet fire requirements. The services are typically larger than the customer's normal domestic line, but conduct water for emergency use only. The fire protection is usually a requirement of the municipal fire chief, insurance companies or both. Since there is no routine water consumption for a private fire line, the only charge for the service is a flat price per month, based on the per-inch diameter of the pipe.

The monthly minimum is set at a 4-inch size for customers within the city and is currently $10.99 per month for each inch diameter of pipe with a $43.97 minimum charge. Prices charged to outside City customers are similarly based on the 4-inch size and are $14.00 per month per inch diameter with a $55.99 per month minimum.

In this proposal, management recommends a 1% change to fire line prices. Prices for fire lines are contained within the Customer Service Policy & Procedures for General Service Inside and Outside City.

Table 14
Monthly Price Comparison
Private Fire Lines

Line Size	Existing Inside City	Existing Outside City	Proposed Inside City	Proposed Outside City
1"	$43.97	$55.99	$44.41	$56.55
1 - 1/2"	$43.97	$55.99	$44.41	$56.55
2"	$43.97	$55.99	$44.41	$56.55
3"	$43.97	$55.99	$44.41	$56.55
4"	$43.97	$55.99	$44.41	$56.55
6"	$65.96	$83.98	$66.62	$84.82
8"	$87.94	$111.97	$88.82	$113.09
10"	$109.93	$139.96	$111.03	$141.36
12"	$131.92	$167.96	$133.24	$169.64
16"	$175.89	$223.94	$177.65	$226.18