

KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2012
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KERRVILLE PUBLIC UTILITY BOARD

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EXECUTIVE SUMMARY

INTRODUCTION

This report was prepared to provide the Kerrville Public Utility Board with a long-term financial plan and an electric cost of service and unbundling rate study. The specific purposes of the financial plan and rate study are identified below:

- 1) ***Determine KPUB's revenue requirements for calendar year 2012.*** The KPUB's revenue requirements were projected for the period from 2011 – 2016 and include adjustments for the following:
 - a. Changes in fuel cost and purchased power costs.
 - b. Capital improvements 2011 - 2016. The Kerrville Public Utility Board provided the capital improvement information.
- 2) ***Identify cross-subsidies that may exist between rate classes.*** Cross-subsidies exist when certain customer classes subsidize the electric costs of other customers. The rate study determined if cross-subsidies exist and practical ways to reduce the subsidies.
- 3) ***Recommend rate adjustments needed to meet targeted revenue requirements.*** The primary purpose of a rate study is to identify appropriate revenue requirements and the rate adjustments needed to meet targeted revenue requirements. The report includes a long-term rate track for the Kerrville Public Utility Board to help ensure the financial stability of the utility in future years.
- 4) ***Provide information on unbundled electric rates.*** The cost of providing electricity to customers consists of a number of components, including power generation, distribution, customer services, transmission, and payment in lieu of tax. Electric unbundling identifies the cost of each component to assist the utility in preparing for electric restructuring, understanding its cost structure and developing special rate forms for customers such as net metering rates, standby rates, and time of use rates.
- 5) ***Identify the appropriate monthly customer charge for each customer class.*** The monthly customer charge consists of fixed costs to serve customers that do not vary based on the amount of electricity used.

The Kerrville Public Utility Board retained Utility Financial Solutions to review the above items and make recommendations on the appropriate course of action. This report includes results of the long-term financial plan and electric cost of service study.

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The Executive Summary Section of this report is structured in the following manner:

- A) Executive Summary
 - 1) Utility Revenue Requirements for 2010
 - 2) Cost of Service Summary
 - 3) Unbundled Electric Rates
 - 4) Recommended Rate Adjustment
- B) Functionalization of Utility Revenue Requirements
- C) Unbundling Process
 - 1) Distribution Cost Breakdown
 - 2) Customer-Related Cost Breakdown
 - 3) Unbundled Distribution Rates for Major Customer Classes
 - 4) Power Supply Cost Summary
 - 5) Combined Cost Summary
- D) Significant Assumptions Used in Analysis
- E) Summary of Recommendations
- F) Compilation Report

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PART ONE - UTILITY REVENUE REQUIREMENTS FOR 2012

To determine revenue requirements, the revenues and expenses for 2009 and 2010 and budget 2011 were analyzed with adjustments made to actual expenses to reflect projected operating characteristics. Detailed descriptions of the methodology are included in the section "Summary of Significant Assumptions".

Projected operating income for 2012 (test year) is \$521,520 and decreases to a loss of (\$545,140) by 2016. Cash generated from operating income is currently not sufficient to support the projected maintenance and capital improvement program. The projection should be updated annually as it will change as actual revenues and expenses materialize.

Table One – Financial Projection

	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Electric Revenue	\$ 41,093,177	\$ 42,467,366	\$ 43,903,749	\$ 45,404,997	\$ 46,973,890
Distributed Generation	44,857	44,857	44,857	44,857	44,857
Other Revenues	554,558	560,104	565,705	571,362	577,076
Total Revenues	\$ 41,692,592	\$ 43,072,327	\$ 44,514,311	\$ 46,021,215	\$ 47,595,822
Expenses					
Purchased Power	31,475,916	32,744,396	34,063,995	35,436,774	36,864,876
Distribution	2,420,983	2,493,613	2,568,421	2,645,474	2,724,838
Customer Accounting	881,286	907,725	934,956	963,005	991,895
Customer Service & Information	166,495	171,490	176,635	181,934	187,392
Administration	2,773,098	2,856,291	2,941,980	3,030,239	3,121,146
Franchise Fee - City of Ingram	31,274	31,587	31,903	32,222	32,544
Payment In-Lieu-of-Taxes	1,214,560	1,232,795	1,274,021	1,317,112	1,362,150
Depreciation & Amortization	2,207,458	2,344,201	2,524,027	2,698,132	2,856,120
Total O&M	\$ 41,171,072	\$ 42,782,098	\$ 44,515,939	\$ 46,304,892	\$ 48,140,962
Operating Income	\$ 521,520	\$ 290,229	\$ (1,628)	\$ (283,677)	\$ (545,140)
Interest Expense	(261,500)	(135,500)	(115,295)	(105,000)	(101,287)
Interest Income	173,762	133,998	105,193	124,425	86,720
Other	56,782	56,782	56,782	56,782	56,782
Total Other Income & Expenses	\$ (30,956)	\$ 55,280	\$ 46,681	\$ 76,207	\$ 42,215
Net Income	\$ 490,564	\$ 345,509	\$ 45,053	\$ (207,470)	\$ (502,924)

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Cash Reserves and Balances

To help ensure timely completion of capital improvements and protect the Kerrville Public Utility Board from large unexpected expenditures, a minimum cash reserve policy should be established. The methodology used in this report is based on certain assumptions related to percent of operation and maintenance, rate base, capital improvements, and debt service. The establishment of minimum cash reserves should consider a number of factors including:

- Timing differences between when expenses are incurred and revenues received from customers (O&M expenses)
- Investment in assets (Historical Rate Base)
- Annual debt service
- Capital improvement program

The minimum recommended cash reserve for 2012 is \$9.2 million and decreases slightly to \$9.02 million in 2016 (as calculated on page 9). For 2012, the projected cash reserve is \$6.7 million and decreases to \$2.9 million by 2016. This cash balance includes the following:

1. Capital improvement program provided by the KPUB
2. Anticipated \$3.0 million bond issuance in 2014
3. Use of Bond Reserve fund held for final bond payment in 2013 of \$2.5 million

The cash flow should be reviewed and updated annually to reflect changes in the financial projection as changes in capital improvement plan can greatly affect cash balances.

Table Two – Projected Cash Balance vs Minimum Cash Reserves Calculation

Projected Cash Flows	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Add Net Income	\$ 490,564	\$ 345,509	\$ 45,053	\$ (207,470)	\$ (502,924)
Add Back Depreciation Expense	2,207,458	2,344,201	2,524,027	2,698,132	2,856,120
Subtract Debt Principal	2,405,000	2,094,200	172,100	106,083	109,796
Add Bond Sale Proceeds	0	0	3,000,000	0	0
Reserve For Last Bond Payment		2,520,172			
Cash Available from Operations	\$ 293,022	\$ 3,115,682	\$ 5,396,980	\$ 2,384,579	\$ 2,243,400
Estimated Annual Capital Additions	2,281,213	4,555,905	4,435,421	4,269,805	3,629,623
Net Cash From Operations	\$ (1,988,191)	\$ (1,440,223)	\$ 961,559	\$ (1,885,226)	\$ (1,386,223)
Beginning Cash Balance	8,688,084	6,699,893	5,259,671	6,221,230	4,336,004
Ending Cash Balance	\$ 6,699,893	\$ 5,259,671	\$ 6,221,230	\$ 4,336,004	\$ 2,949,781
Total Cash Available	6,699,893	5,259,671	6,221,230	4,336,004	2,949,781
Recommended Minimum	9,173,919	8,432,346	8,634,043	8,879,760	9,021,347

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COST OF SERVICE SUMMARY RESULTS

A cost of service study was completed to determine the cost of providing service to each class of customers and assist in design of electric rates. A cost of service study consists of the following general steps:

- 1) Determine utility revenue requirement for 2012
- 2) Classify revenue requirements into common cost pools
- 3) Allocate costs to customer classes based on each classes' contribution to KPUB's expenses
- 4) Compare revenues projected from each class with the cost to serve each class of customers

The cost of service summary included in table three below compares projected cost to serve each class of customers with projected revenue received from each class using the current rates. The "% change" column is the rate adjustment for each class to achieve cost of service requirements.

Table Three – Cost of Service Summary

Customer Class	Cost of Service	Projected Revenues	% Change
Residential	\$ 23,741,546	\$ 23,872,164	-1%
Outdoor Area Lighting	152,726	151,271	1%
Street Lighting	172,989	172,041	1%
Commercial Service	13,883,704	12,805,504	8%
LGS - Primary	542,993	521,770	4%
LGS Secondary	966,280	938,064	3%
Contract Secondary	2,481,888	2,178,750	14%
Contract Primary	485,246	453,613	7%
Total	\$ 42,427,372	\$ 41,093,177	3.2%

The study indicates an overall increase of 3.2% is needed to meet cost of service for 2012.

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Development of Recommended Rate Track

As part of this study, a long term financial projection was developed allowing the identification of future rate adjustments needed by KPUB. This section discusses the development of the five year rate plan and the recommended rate adjustments. When evaluating rates to charge customers, three factors are considered:

1. Debt Coverage Ratio
2. Minimum Cash Reserves
3. Optimal Net Income

These factors are discussed below:

1. **Debt Coverage Ratio** - Debt coverage ratios are mandated by KPUB's bond covenants. The covenant requires that cash generated from operations exceed 1.1 times the annual debt service payment. For purposes of setting rates we have established a minimum coverage target of 1.65 consistent with KPUB's current policy. A 1.65 coverage target allows for changes in sales and other unforeseen events that could adversely impact the coverage ratio and creates a safety factor to help ensure KPUB meets or exceeds the bond covenant requirements.

The table below are KPUB's projected debt coverage ratios from 2012–2016. KPUB exceeds the minimum target from 2013 – 2016 without rate adjustments and falls slightly below target in 2012.

Table Four – Debt Coverage Ratio

Debt Coverage Ratio	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Add Net Income	\$ 490,564	\$ 345,509	\$ 45,053	\$ (207,470)	\$ (502,924)
Add Depreciation Expense	2,207,458	2,344,201	2,524,027	2,698,132	2,856,120
Add Interest Expense	261,500	135,500	115,295	105,000	101,287
Add Transfer to City	1,214,560	1,232,795	1,274,021	1,317,112	1,362,150
Cash Available for Debt Service	\$ 4,174,082	\$ 4,058,005	\$ 3,958,396	\$ 3,912,774	\$ 3,816,633
Debt Principal and Interest	\$ 2,666,500	\$ 2,229,700	\$ 287,395	\$ 211,083	\$ 211,083
Projected Debt Coverage Ratio (Covenants)	1.57	1.82	13.77	18.54	18.08
Minimum Debt Coverage Ratio	1.65	1.65	1.65	1.65	1.65

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2) **Minimum cash reserve** - To help ensure timely completion of capital improvements and enable the utility to fund large unexpected expenditures, a minimum cash reserve policy should be established. A minimum cash reserve policy attempts to quantify the minimum amount of cash the utility should keep in reserve, the actual cash reserves may vary above the minimum. If KPUB establishes a minimum cash reserve policy, and cash reserves fall below the established minimums, action would be needed to re-establish the reserves. Typical action includes; rate adjustments or debt issuances. To establish a minimum cash reserves policy a number of factors are considered including:

- **Working Capital Requirements** – Are timing differences between when expenses (O&M) are incurred and revenues received from customers. For analysis purposes working capital requirements were separated into Power Supply & O&M. UFS reviewed the monthly variations in each expense category resulting in a recommended working capital that equals 20% of O&M expenses and 11% of Power Supply Expenses. These factors result in 47 days of working capital requirement for KPUB.
- **Asset Risk** – Catastrophic events may occur that require substantial amounts of cash reserves to replace damaged assets. Some examples of catastrophic events include ice storms, earthquakes, wind storms, floods, or tornadoes. Many of these catastrophic events may allow the utility to recover the cost of damages from FEMA; however FEMA reimbursements can take between 6 months to 2 years to recover. The utility should ensure adequate cash reserves exist to replace the assets in a timely fashion. The minimum reserve levels are often combined with emergency funding from banks or bonding agencies. A 1% factor on asset investments was used to adjustment cash requirements for asset risk exposure.
- **Debt service payments** – Debt service payments do not occur evenly throughout the year and often occurs at periodic times typically every six months. To help ensure adequate cash reserves exist to fund the debt service payment when the payments are due one half (50%) of the annual debt service payment is recommended for the minimum cash reserve.
- **Capital improvement program** – Some capital improvements are funded through bond issuances and some through cash reserves. The establishment of a minimum cash reserve level helps to ensure timely replacement or construction of assets. This study used the five year work plan as a basis for establishing this target and used one-fifth (20%) of the five year capital plan less any bond proceeds.

	Percent Allocated	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Operation & Maintenance Less Depreciation Expense	20%	\$ 1,497,539	\$ 1,538,700	\$ 1,585,583	\$ 1,633,997	\$ 1,683,993
Power Costs	11%	\$ 3,544,886	\$ 3,687,744	\$ 3,836,360	\$ 3,990,966	\$ 4,151,802
Historical Rate Base	2%	590,849	636,408	680,763	723,461	759,757
Current Portion of Debt Service Payment	50%	1,114,850	143,698	105,542	105,542	-
Five Year Capital Improvements - Net of bond proceeds	20%	2,425,795	2,425,795	2,425,795	2,425,795	2,425,795
Minimum Recommended Cash Reserve		\$ 9,173,919	\$ 8,432,346	\$ 8,634,043	\$ 8,879,760	\$ 9,021,347
Projected Cash Reserves		\$ 6,699,893	\$ 5,259,671	\$ 6,221,230	\$ 4,336,004	\$ 2,949,781

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The recommended minimum target for 2012 is \$9.17 million and decreases slightly in 2016 to \$9.0 million. For 2012, the projected cash balance is \$6.7 million and decreases to \$2.9 million by 2016. This balance includes a \$3.0 million bond issuance in 2014. Cash balances are deficient throughout the projection.

3) **Optimal operating income targets** - The optimal target for setting rates is the establishment of a target operating income that helps ensure the funding of the following items:

- a. Interest expense on the outstanding principal on debt. (effective interest rate on debt)
- b. Inflationary increases on the assets invested in the system. (Inflation rate doubled to account for using NBV)

The target operating income established for 2012 is \$1.86 million and increases to \$2.12 million in 2016. The projected operating income for 2012 is \$521,520 and decreases each year resulting in an operating loss projected in 2016 of (\$545,140). The operating income is deficient throughout the projection period without rate adjustments.

Table Five - Optimal Operating Income Targets Compared to Projected

	Percent Allocated	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Outstanding Principal on Debt	5.6%	\$ 261,500	\$ 135,500	\$ 115,295	\$ 105,000	\$ (12,089)
System Equity	6.0%	1,595,689	1,854,044	1,979,053	2,079,719	2,132,717
Target Operating Income		\$ 1,857,189	\$ 1,989,544	\$ 2,094,348	\$ 2,184,719	\$ 2,120,627
Projected Operating Income		\$ 521,520	\$ 290,229	\$ (1,628)	\$ (283,677)	\$ (545,140)
Rate of Return in %		6.4%	6.4%	6.3%	6.3%	6.0%

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RECOMMENDED RATE TRACK

Using the financial targets established in the section above a rate track was developed to help ensure KPUB meets or exceeds each financial target. Table Six is the summary of the financial projection without rate adjustments. Table Seven is the recommended rate track to move toward the financial targets established in the study, minimize rate impacts on customers, and help ensure the financial stability of the Kerrville Public Utility Board. A rate adjustment of 3.75% is recommended for 2012. KPUB may want to consider small rate adjustments in the latter years as operating income falls below the targeted levels.

KPUB currently transfers 3% of revenues to the City's general fund. If KPUB adjusted the percent of revenues transferred to the City, electric rates should be adjusted by an equivalent amount to maintain the financial integrity of KPUB. For example, an increase in the transfer from 3% to 6% would result in the need for a three percent (3%) increase in base rates. KPUB is also considering a \$5.34 million AMR/LED project. If the project materializes, additional bonding and a slight increase in electric rates may be needed.

Table Six – Summary Financial Projection No Adjustments

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	City Transfer (%)	City Transfer \$	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
2012	0.00%	41,692,592	41,171,072	3.0%	1,214,560	521,520	6,699,893	2,281,213		1.57
2013	0.00%	43,072,327	42,782,098	3.0%	1,232,795	290,229	5,259,671	4,555,905	-	1.82
2014	0.00%	44,514,311	44,515,939	3.0%	1,274,021	(1,628)	6,221,230	4,435,421	3,000,000	13.77
2015	0.00%	46,021,215	46,304,892	3.0%	1,317,112	(283,677)	4,336,004	4,269,805		18.54
2016	0.00%	47,595,822	48,140,962	3.0%	1,362,150	(545,140)	2,949,781	3,629,623	-	18.08
Recommended Target in 2012						\$ 1,857,189	\$ 9,173,919			1.65
Recommended Target in 2016						\$ 2,120,627	\$ 9,021,347			1.65

Table Seven – Summary Financial Projection With Rate Adjustment

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	City Transfer (%)	City Transfer \$	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
2012	3.75%	43,233,586	41,171,072	3.0%	1,214,560	2,062,514	8,240,888	2,281,213		2.14
2013	0.00%	44,628,731	42,828,328	3.0%	1,279,025	1,800,403	8,341,659	4,555,905	-	2.53
2014	0.00%	46,086,279	44,562,631	3.0%	1,320,713	1,523,648	10,890,134	4,435,421	3,000,000	19.46
2015	0.00%	47,608,903	46,352,051	3.0%	1,364,272	1,256,852	10,638,814	4,269,805		26.50
2016	0.00%	49,199,387	48,188,593	3.0%	1,409,781	1,010,794	10,934,582	3,629,623	-	26.28
Recommended Target in 2012						\$ 1,857,189	\$ 9,173,919			1.65
Recommended Target in 2016						\$ 2,120,627	\$ 9,030,873			1.65

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COST OF SERVICE RESULTS

Table nine below shows average cost per kWh and compared with average revenue per kWh using the current rates. The table is sorted from lowest to highest average cost per kWh.

Table Eight - Average Cost per kWh compared with Average Revenue per kWh

Customer Class	Cost of Service	Projected Revenues
LGS - Primary	\$ 0.062	\$ 0.060
Contract Primary	0.064	0.060
LGS Secondary	0.067	0.065
Contract Secondary	0.069	0.061
Commercial Service	0.085	0.078
Residential	0.087	0.088
Outdoor Area Lighting	0.093	0.092
Street Lighting	0.183	0.182

Cost differences result from usage patterns of customers and how efficiently each class of customer uses facilities provided by Kerrville Public Utility Board.

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DETAIL INFORMATION ON UNBUNDLING ELECTRIC RATES

DISTRIBUTION RATES

Separation of distribution rates is necessary to identify the customer charge for customers and to ensure the Utility is recovering its operational costs. Distribution rates include the following costs:

- 1) Operation and maintenance of distribution & transmission system
- 2) Payment in Lieu of Tax
- 3) Customer service
- 4) Customer accounting
- 5) Meter reading
- 6) Billing
- 7) Meter operation & maintenance
- 8) Administrative expenses

The distribution rates consist of two components:

- 1) Monthly customer charge to recover the costs of meter reading, billing, customer service, and a portion of maintenance and operations of the distribution system.
- 2) Distribution rate based on billing parameter, (kW or kWh) to recover the cost to operate and maintain the distribution system. The table below identifies the cost based distribution rates for customer classes.

The distribution rates by customer class are listed below:

Table Nine – Distribution Rates by Customer

Customer Class	Monthly Customer Charge	Distribution Rate	Billing Basis	Contribution to City	Billing Basis
Residential	\$ 12.26	\$ 0.011	kWh	\$ 0.0027	kWh
Outdoor Area Lighting	2.14	0.010	kWh	0.0028	kWh
Street Lighting	4.25	0.084	kWh	0.0055	kWh
Commercial Service	24.96	4.16	KW	0.7713	KW
LGS - Primary	320.44	3.03	KW	0.8935	KW
LGS Secondary	493.97	3.29	KW	0.8832	KW
Contract Secondary	139.41	3.19	KW	0.7295	KW
Contract Primary	163.15	2.89	KW	0.7840	KW

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Delivery of electricity consists of many components that bring electricity from the power supply facilities to the communities and eventually into customer facilities. The facilities consist of four major components: transmission, distribution, customer-related services, and administration. Following are general descriptions of each of these facilities and the sub-breakdowns within each category.

Transmission

The transmission system is comprised of four types of subsystems that operate together:

- 1) Backbone and inter-tie transmission facilities are the network of high voltage facilities through which a utility's major production sources are integrated.
- 2) Generation set-up facilities are the substations through which power is transformed from a utility's generation voltages to its various transmission voltages.
- 3) Sub-transmission plant consists of lower voltage facilities to transfer electric energy from convenient points on a utility's backbone system to its distribution system.
- 4) Radial transmission facilities are those that are not networked with other transmission lines but are used to serve specific loads directly.

Operation of the transmission system also consists of providing certain services that ensures a stable supply of power. These services are typically referred to as ancillary services. The ERCOT has defined ancillary service charges for the use of transmission facilities. For the Kerrville Public Utility Board, these charges will be passed-through charges and included in power supply costs. Ancillary services normally consist of the following:

Ancillary Service Charges:

- Regulation and Frequency Response Service
- Energy Imbalance Charges
- Operating Reserves Spinning
- Operating Reserves Supplemental
- Power losses from use of transmission system

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Distribution System

The distribution facilities connect the customer with the transmission grid to provide the customer with access to the power that has been generated and transmitted. The distribution plant includes substations, primary and secondary conductors, poles, and transformers.

Substations typically separate the distribution plant from the transmission system. The substation power transformer reduces the voltage to a level that is more practical to install throughout the service territory.

The Distribution system provides primary circuits with voltages between 12.47 kV and 4.16 kV. Secondary circuits are 480 volts and less.

Distribution Customer Types

Sub-transmission customers are served directly from the substation feeder and bypass both the secondary and primary distribution lines. The charges for this type of customer should reflect the cost of the substation and not include the cost of primary or secondary line charges.

Primary customers are typically referred to as customers who own and maintain their own transformers. The rates for these customers should reflect the cost of substations and the cost of primary distribution lines and not include the cost of secondary line extensions.

Secondary customers have the services provided by the utilities directly into their facilities. The utility provides the customer with the transformer and the connection on the customers' facilities.

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Customer-Related Services

Certain administrative-type services are necessary to ensure customers are provided service connections and disconnections in a timely manner and the facilities are in place to read meters and bill for customer usages. These services typically consist of the following components:

- 1) Customer Services – The cost of providing personnel to assist customers with questions and dispatch personnel to connect and disconnect meters.
- 2) Billing and Collections – The cost of billing and collections personnel, postage, and supplies.
- 3) Meter Reading – The cost of reading customer meters.
- 4) Meter Operation and Maintenance – The cost of installing and maintaining customer meters.

Administrative Services

These costs are sometimes referred to as overhead costs and relate to functions that cannot be directly attributed to any service. These costs are spread to the other services through an allocator such as labor, expenses, or total rate base. These costs may consist of administrative expenses, property insurance, and wages for higher-level management of the utility.

System Losses

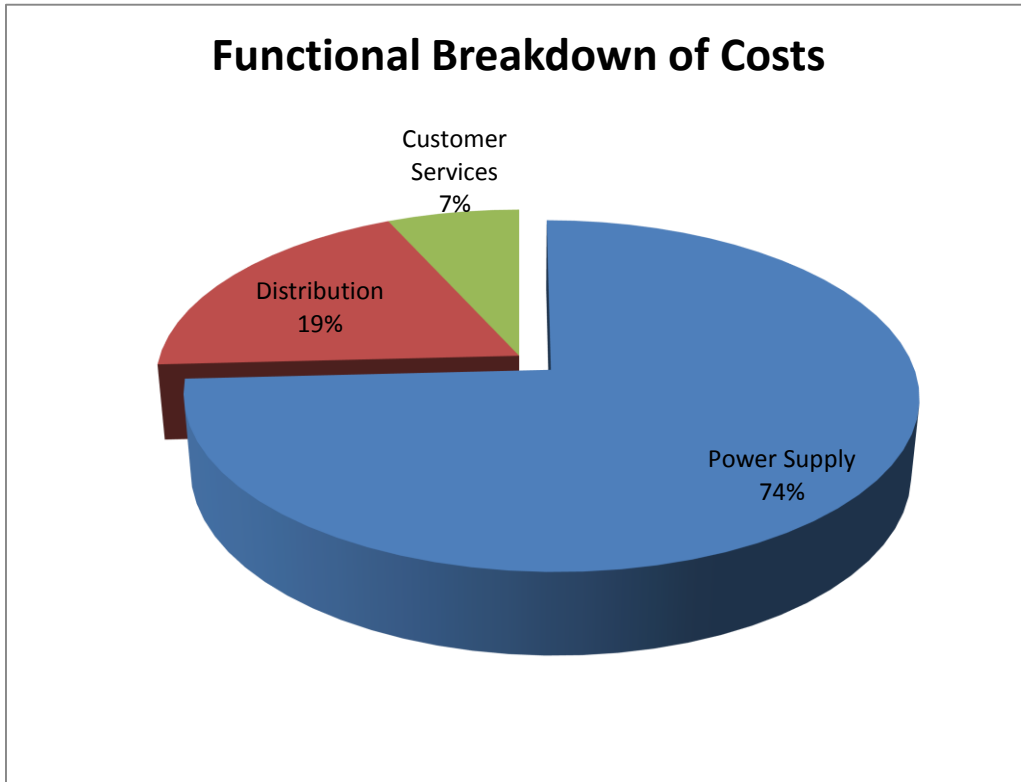
As energy moves through each component of the transmission and distribution system, some of the power is lost and cannot be sold to customers. Losses vary based on time of day and season. Typically, as system usage increases or ambient temperature increases, the percentages of losses that occur also increase.

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The cost of power supply, distribution, and customer services are identified as part of the unbundling process and are the first step in determining unbundled charges to customers. The total revenue requirements of \$42.4 million are separated into the three categories and are identified in the graph below.

Graph One – Breakdown of Cost Structure



The Kerrville Public Utility Board is projected to expend 74% of its total costs toward power supply from purchased power costs. Distribution-related costs are 19% and customer service amounts to 7%. These components are broken down into each of the subcomponents and are identified in the following sections.

KERRVILLE PUBLIC UTILITY BOARD

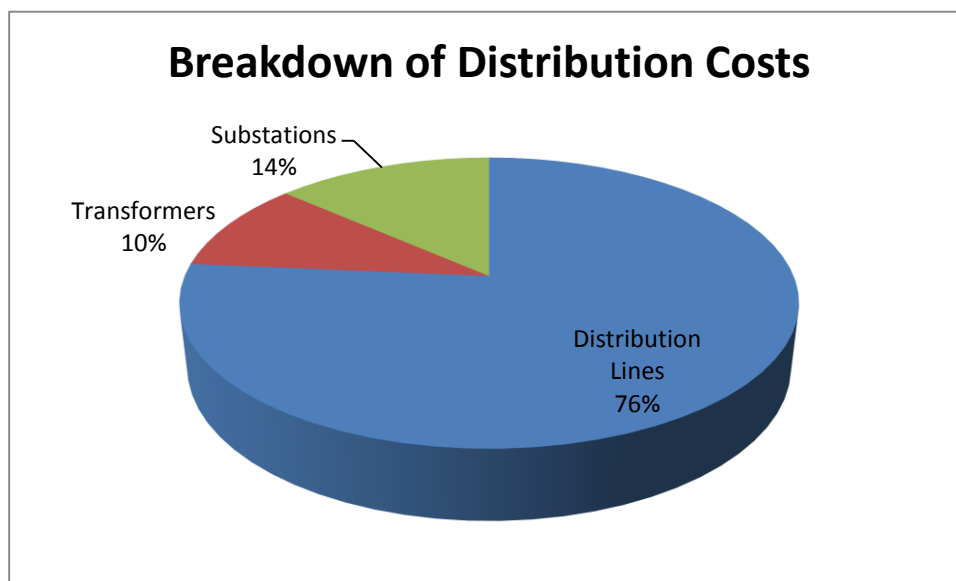
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DISTRIBUTION BREAKDOWN

As stated earlier, distribution rates consist of a number of different components and total distribution-related costs of \$8.0 million for FY 2012 are broken down into the main components of substations, transformers, and distribution lines.

Graph Two – Breakdown of Distribution Costs



Each cost component is allocated to customer groups based on certain factors established in the study. These factors are based on the efficiency of each customer class and the time of day or the season the electricity is used. Other factors are also considered, such as the length of line extensions to reach certain customer classes. A complete list of allocators is included in the detailed section of this report.

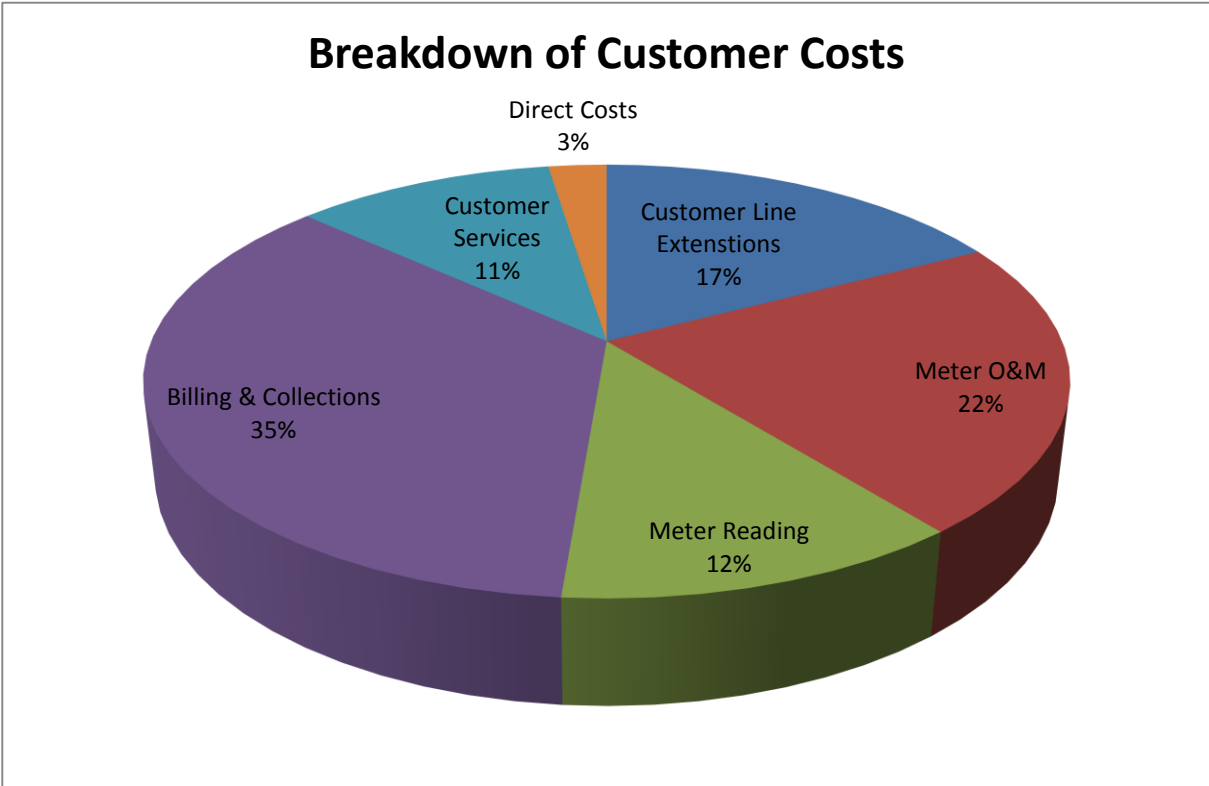
**KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2012**

EXECUTIVE SUMMARY

Customer-Related Cost Breakdown

Total expenses for customer-related cost are \$2.9 million for FY 2012 and broken down into the following components:

Graph Three – Breakdown of Customer Costs



Each component is broken down by customer class and the breakdown is included in the detailed analysis of this report.

KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2012

EXECUTIVE SUMMARY

POWER SUPPLY RATES

The table below identifies average cost of providing power supply to customers of the Kerrville Public Utility Board. For cost of service purposes the costs are separated into demand and energy components.

- 1) Demand component includes power supply and transmission expenses charged to KPUB that are incurred as a result of the system peak demands
- 2) Energy component includes charges related to the number of kWh's purchased by KPUB and include items such as fuel, market purchases of electricity, and the energy portion of power supply contracts

Table Ten - Power Supply Cost by Customer Class

Customer Class	Demand	Billing Basis	Energy	Billing Basis
Residential	\$ 0.0210	kWh	\$ 0.0424	kWh
Outdoor Area Lighting	-	kWh	0.0427	kWh
Street Lighting	-	kWh	0.0427	kWh
Commercial Service	6.56	kW	0.0426	kWh
LGS - Primary	6.35	kW	0.0410	kWh
LGS Secondary	6.28	kW	0.0427	kWh
Contract Secondary	6.06	kW	0.0427	kWh
Contract Primary	6.04	kW	0.0410	kWh

KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2011

EXECUTIVE SUMMARY

COMBINED COST SUMMARY

Table twelve below identifies cost of service rates for each customer class. Charging these rates would directly match the cost of providing service to customers identified in this study. The cost of service rates in the table below are not recommended at this time. The Board may consider small adjustments that move toward the costs identified in the table below.

Table Eleven – Total Cost of Service Rates by Customer Class

Customer Class	Monthly Customer Charge	Distribution Charges	Power Supply	
			Demand - kW	Energy - kWh's
Residential	12.26	0.0138		0.063
Outdoor Area Lighting	2.14	0.0129		0.043
Street Lighting	4.25	0.0896		0.043
Commercial Service	24.96	4.93	6.56	0.043
LGS - Primary	320.44	3.93	6.35	0.041
LGS Secondary	493.97	4.17	6.28	0.043
Contract Secondary	139.41	3.92	6.06	0.043
Contract Primary	163.15	3.68	6.04	0.041

**KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2011**

SIGNIFICANT ASSUMPTIONS

This section outlines the procedures used to develop the cost of service and unbundling study for the Kerrville Public Utility Board and related significant assumptions.

Forecasted Operating Expenses

Forecasted expenses were based on actual 2009 costs adjusted for power supply costs and inflation. The table below is a summary of Operating Expenses for 2009 - 2016.

	Actual 2009	Actual 2010 (Unaudited)	Projected 2011	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Purchased Power	31,130,360	29,961,104	30,895,428	31,475,916	32,744,396	34,063,995	35,436,774	36,864,876
Distribution	1,966,583	2,282,009	2,350,469	2,420,983	2,493,613	2,568,421	2,645,474	2,724,838
Customer Accounting	840,218	728,465	855,617	881,286	907,725	934,956	963,005	991,895
Customer Service & Information	87,045	156,938	161,646	166,495	171,490	176,635	181,934	187,392
Administration	2,234,652	2,613,911	2,692,328	2,773,098	2,856,291	2,941,980	3,030,239	3,121,146
Franchise Fee - City of Ingram	33,217	29,332	31,274	31,274	31,587	31,903	32,222	32,544
Payment In-Lieu-of-Taxes	1,357,303	1,241,898	1,250,853	1,214,560	1,232,795	1,274,021	1,317,112	1,362,150
Depreciation & Amortization	1,981,012	2,006,950	2,081,761	2,207,458	2,344,201	2,524,027	2,698,132	2,856,120
Total O&M	\$ 39,630,390	\$ 39,020,606	\$ 40,319,377	\$ 41,171,072	\$ 42,782,098	\$ 44,515,939	\$ 46,304,892	\$ 48,140,962

Load Data

Load data is one of the most critical components of a cost of service study. Information from the billing statistics combined with information from analysis of substation feeders were used to determine the usage patterns of each customer class. The study obtained information from substation feeders identifying load usage patterns for the residential class. The billing data provided information on peak demands for remaining rate classes. The peak demands calculated in the cost of service study was compared with the actual demands for the test year with only modest variations, verifying the integrity of the load research information used in the study.

KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2011

SIGNIFICANT ASSUMPTIONS

KWh Sales Forecast

The 2012 kWh sales forecast is based on actual 2010 adjusted for two year total growth of 1.0%. The table below is the projected sales for each rate class broken down by summer and winter season.

Customer Class	Summer	Winter	Summer	Winter	Total
	2010	2010	2012	2012	2012
Residential	93,017,841	171,588,708	95,789,401	176,701,365	272,490,766
Outdoor Area Lighting	553,312	1,084,922	552,977	1,084,266	1,637,243
Street Lighting	312,850	627,514	314,051	629,923	943,974
Commercial Service	61,167,502	99,692,655	62,434,036	101,756,891	164,190,927
LGS - Primary	3,381,351	5,438,375	3,339,006	5,370,270	8,709,276
LGS Secondary	5,344,947	8,762,687	5,483,691	8,990,149	14,473,840
Contract Secondary	13,289,900	21,545,242	13,634,879	22,104,513	35,739,393
Contract Primary	2,962,284	4,711,542	2,925,187	4,652,540	7,577,727
Total	180,029,986	313,451,646	184,473,229	321,289,917	505,763,146

Summer season – June – September

Winter season – October - May

System Loss Factors

Losses occurring from the transmission and distribution of electricity can vary from year to year depending upon weather and system loading. The system losses were analyzed based on discussions with staff and review of past years system losses.

Revenue Forecast

The revenue forecast was based 2010 usages adjusted for an annual growth rate assumption as stated above.

	Actual 2010 (Unaudited)	Projected 2011	Projected 2012	Projected 2013	Projected 2014	Projected 2015	Projected 2016
Electric Revenue	\$ 40,328,516	\$ 40,485,333	\$ 41,093,177	\$ 42,467,366	\$ 43,903,749	\$ 45,404,997	\$ 46,973,890
Distributed Generation	44,857	44,857	44,857	44,857	44,857	44,857	44,857
Other Revenues	492,688	549,068	554,558	560,104	565,705	571,362	577,076
Total Revenues	\$ 40,866,061	\$ 41,079,257	\$ 41,692,592	\$ 43,072,327	\$ 44,514,311	\$ 46,021,215	\$ 47,595,822

**KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2011**

SIGNIFICANT ASSUMPTIONS

Capital Improvement Program

The capital improvement program was provided by Kerrville Public Utility Board and is listed below:

Fiscal Year	Projected Capital Improvement
2011	\$ 3,740,526
2012	2,281,213
2013	4,555,905
2014	4,435,421
2015	4,269,805
2016	3,629,623

**KERRVILLE PUBLIC UTILITY BOARD
COST OF SERVICE STUDY 2011**

RECOMMENDATIONS

- The study indicates current revenues are not adequate to maintain the financial stability of the utility and a rate increase of 3.75% is recommended in 2012. The Board may consider additional increases if the operating income continues to fall below targets. The financial projection summary below is based on anticipated power supply costs and capital improvements for the period between 2012 and 2016. The financial projection and rate track should be reviewed annually as part of the budget process as costs and revenues may vary from projections.

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	City Transfer (%)	City Transfer \$	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
2012	3.75%	43,233,586	41,171,072	3.0%	1,214,560	2,062,514	8,240,888	2,281,213		2.14
2013	0.00%	44,628,731	42,828,328	3.0%	1,279,025	1,800,403	8,341,659	4,555,905	-	2.53
2014	0.00%	46,086,279	44,562,631	3.0%	1,320,713	1,523,648	10,890,134	4,435,421	3,000,000	19.46
2015	0.00%	47,608,903	46,352,051	3.0%	1,364,272	1,256,852	10,638,814	4,269,805		26.50
2016	0.00%	49,199,387	48,188,593	3.0%	1,409,781	1,010,794	10,934,582	3,629,623	-	26.28
Recommended Target in 2012						\$ 1,857,189	\$ 9,173,919			1.65
Recommended Target in 2016						\$ 2,120,627	\$ 9,030,873			1.65

- The cost of service study identified some customer classes are paying above cost of service and some below cost of service. It is recommended rates be designed to provide an overall rate adjustment of 3.75% in 2012, with a plus or minus 2% bandwidth from the average increase to move each rate class closer to cost of service. This assures that no customer class has an increase of greater than 5.75% or less than 1.75%. The table below is the cost of service results that would be used as guidance on the impacts on each rate class.

Customer Class	Cost of Service	Projected Revenues	% Change
Residential	\$ 23,741,546	\$ 23,872,164	-1%
Outdoor Area Lighting	152,726	151,271	1%
Street Lighting	172,989	172,041	1%
Commercial Service	13,883,704	12,805,504	8%
LGS - Primary	542,993	521,770	4%
LGS Secondary	966,280	938,064	3%
Contract Secondary	2,481,888	2,178,750	14%
Contract Primary	485,246	453,613	7%
Total	\$ 42,427,372	\$ 41,093,177	3.2%

- The Kerrville Public Utility Board should consider a bond issuance in 2014 to fund a portion of the projected capital improvements. The financial projection in this report includes a projected bond issuance of \$3.0 million for 2014.

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ACCOUNTANTS' COMPILATION REPORT

Kerrville Public Utility Board and Elected Officials

The accompanying forecasted statements of revenues and expenses of the Kerrville Public Utility Board were compiled for the year ending September 30, 2012 in accordance with guidelines established by the American Institute of Certified Public Accountants.

The purpose of this report is to assist management in forecasting revenue requirements and determining the cost to service each customer class. This report should not be used for any other purpose.

A compilation is limited to presenting, in the form of a forecast; information represented by management and does not include evaluation of support for any assumptions used in projecting revenue requirements. We have not audited the forecast and, accordingly, do not express an opinion or any other form of assurance on the statements or assumptions accompanying this report.

Differences between forecasted and actual results will occur since some assumptions may not materialize and events and circumstances may occur that were not anticipated. Some of these variations may be material. Utility Financial Solutions has no responsibility to update this report after the date of this report.

This report is intended for information and use by management and the Board of Directors for the purposes stated above. This report is not intended to be used by anyone except the specified parties.

UTILITY FINANCIAL SOLUTIONS

Mark Beauchamp, CPA, CMA, MBA
Holland, MI
January 28, 2012