

ELECTRIC COST OF SERVICE AND RATE DESIGN STUDY

Draft Report

December xx, 2018



REPORT OUTLINE

Cover Letter

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December 4, 2018

Logan City Light & Power 530 N 800 W Logan, UT 84321

Subject: Electric Rate Study

City Council Members:

Dave Berg Consulting, LLC has undertaken a study of the retail rates Logan City Light & Power (Logan) charges its customers for electric service. This report summarizes the analyses undertaken and the resulting recommendations for changes to the existing rates.

The recommended rate adjustments have been made based on overall revenue and cash reserve needs of the utility and the results of a cost-of-service analysis. No overall increase in revenues from rates is recommended at this time. However, certain cost-of-service based adjustments are recommended. These changes will impact different customers and customer classes in different ways. Some customer will see slight increases and other slight decreases in their bills.

Thank you for the opportunity to be of service to Logan through the conduct of this study. We wish to express our appreciation for the valuable assistance we received from utility staff relative to the execution of this study.

Sincerely,

Dave Berg Consulting, LLC

David A. Berg, PE Principal

Section 1 Introduction

Logan City, Utah owns a municipal utility providing service to approximately 20,500 retail electric customers. The electric utility is operated by Logan City Light & Power (Logan) and is under the direction of the Logan City Council. This report has been prepared by Dave Berg Consulting, LLC to examine the rates and charges for electric service in Logan City. The study includes an examination of the allocated cost of service based on FY 2018 utility operations (Test Year). It also includes projected operating results for FY 2019-2023 (Study Period). As a result of the analyses undertaken and reported on herein, electric rate recommendations have been developed for implementation by Logan.



Section 2 Projected Operating Results Existing Rates

The rates charged for electric service by Logan, combined with other operating and non-operating revenues, must be sufficient to meet the cost of providing services to Logan's retail electric customers. This is necessary to ensure the long-term financial health of Logan. The cost of providing electric service consists of normal operating expenses such as production and purchased power, transmission and distribution functions, customer and administrative functions, system depreciation expenses, capital improvements, debt service and other non-operating expenses.

An analysis of the operating results for Logan during the FY 2019-2023 Study Period has been performed assuming the current retail rates and charges remain in effect for the electric utility through the Study Period. This analysis has been done to determine the overall need, if any, for additional revenue through rates to meet projected revenue requirements. The analyses and assumptions utilized in these projections are explained below.

Estimated Revenues - Existing Rates

Retail Sales

Logan sells retail power and energy to residential, commercial, industrial customers as well as to Utah State University. Total sales to all Logan retail customers for the Study Period has been assumed to remain at FY 2018 levels with no net growth in overall electric sales.

Exhibit 2-A is a summarized listing of Logan's historical and projected electric operating results at existing retail rates. The historical and projected revenues from retail sales of



power and energy to different groups of customers are included in Charges for Services under Operating Revenues.

Other Operating Income

The electric department generates additional operating income from connection fees and other miscellaneous operating income.

Revenue Requirements

Generation and Purchased Power

Logan currently meets its wholesale capacity requirements through its ownership of local generation resources, its participation in projects through the Utah Associated Municipal Power Systems (UAMPS) and its contractual relationships with the Western Area Power Administration for Colorado River Storage Project capacity. Logan also makes market purchases through UAMPS.

Logan's actual retail sales and wholesale requirements and sources for the FY 2018 Test Year are shown in Table 2-1.

Table 2-1											
Retail Sales And Wholesale Requi	And Wholesale Requirements										
ltem	FY 2018										
Metered Retail Sales	410,348,121 kWh										
Losses/Unmetered (% of sales)	2.95 %										
Total Requirements	422,454,297 kWh										
Annual Peak	93,535 kW										
Wholesale Energy Sources											
Hunter	81,319,964 kWh										
CRSP	70,423,496 kWh										
UAMPS Pool	7,906,477 kWh										
Market	175,527,252 kWh										
WAPA	12,928,759 kWh										
PV Wind	9,471,013 kWh										
NEBO	20,395,718 kWh										
VEYO	11,978,317 kWh										
Internal Generation	<u>32,503,301 kWh</u>										
Total	422,454,297 kWh										

Operating and maintenance costs and Administrative and General costs for UAMPS related projects have been escalated at 3% annually going forward, debt service costs are assumed to remain constant. Fuel and market costs are assumed to escalate by 2% from current levels.

Other Operating Expenses

Logan incurs other operating expenses associated with local electric system operations. Transmission and distribution operating and maintenance expenses are related to the substations, overhead and underground lines and customer facilities located in Logan. Customer accounts and customer information expenses are directly related to service to

individual customers. Administrative and general expenses are required for utility management, employee benefits, training and other administrative costs.

Depreciation

Logan has annual depreciation costs based on its system investments. Depreciation during the Study Period is based on budgeted Logan amounts and future capital improvements. Depreciation is a funded non-cash expense that generates monies available for annual capital improvements and reserves.

Non-operating Revenue (Expenses)

Logan's non-operating revenue is primarily associated with investment income.

City Support

Logan makes a direct cash transfer to the City of Logan, amounts of this transfer during the Study Period are based on the assumed continuation of current Logan policy of transferring 8% of gross operating revenue.

Capital Improvements

Logan makes annual normal capital investments in its electric system. Annual electric capital improvements for the Study Period, as budgeted by Logan, are shown in Table 2-2 below.

Table 2-2Capital Improvements by Fiscal Year

Capital Item	2019	2020	2021	2022	2023
Total Capital	\$11,907,045	\$4,900,000	\$4,900,000	\$6,900,000	\$3,000,000

Projected Operating Results – Existing Rates

Based on the assumptions outlined above, the resulting projected operating results assuming continued application of the existing retail rates are summarized in Table 2-3 for the electric utility. A summary presentation of the operating results is shown in Exhibit 2-A.

	Existing Rates												
Fiscal Year	2019	2020	2021	2022	2023								
Operating Revenues	\$36,324,012	\$36,324,012	\$36,324,012	\$36,324,012	\$36,324,012								
Less Operating Expenses	(31,269,184)	(32,280,911)	(33,126,147)	(33,936,641)	(34,881,717)								
Plus Non -Operating Revenue (Expenses)	130,000	130,000	130,000	130,000	\$130,000								
Less Transfer Out	(2,905,921)	(2,905,921)	(2,905,921)	<u>(2,905,921)</u>	(2,905,921)								
Change in Net Position	\$2,278,907	\$1,267,180	\$421,944	\$(388,550)	\$(1,333,626)								
Net Position as Percent of Revenues	6.3%	3.5%	1.2%	-1.1%	-3.7%								

Table 2-3 Projected Operating Results Existing Rates

Cash Reserves

A summary of the impact of the projected operating results on Logan's cash reserves for the Study Period is shown at the end of Exhibit 2-A and in Table 2-4 below.

As shown below, under existing retail rates and estimated revenue requirements over the Study Period, the cash reserves for the electric utility are projected to decrease from approximately \$32.1 million at the end of FY 2018 to approximately \$16.1 million by the end of FY 2023. Logan has a policy to target cash levels at a minimum of 42% of the

utility's annual operating revenues. As shown in Table 2-4 below, the balance at the end of the Study Period is 44% of annual operating revenues.

Table 2-4 Projected Cash Reserves Existing Rates

		•			
Fiscal Year	2019	2020	2021	2022	2023
Beginning of Year	\$32,067,169	\$24,600,328	\$23,525,706	\$21,769,181	\$17,365,496
Plus Change in Net Position	2,278,907	1,267,180	421,944	(388,550)	(1,333,626)
Plus Depreciation	2,161,297	2,558,198	2,721,531	2,884,865	3,114,865
Less Capital Improvements	<u>(11,907,045)</u>	(4,900,000)	(4,900,000)	(6,900,000)	(3,000,000)
End of Year	\$24,600,328	\$23,525,706	\$21,769,181	\$17,365,496	\$16,146,734
As a percent of Operating Revenue	68%	65%	60%	48%	44%

City of Logan Light & Power Electric Operating Results at Existing Rates Fiscal Years ending June 30

	Historical							Projected									
	 2014		2015		2016		2017		2018		2019	2020		2021	2022		2023
OPERATING REVENUES																	
Charges for Services	\$ 36,113,915	\$	34,423,245	\$	35,037,369	\$	34,865,484	\$	35,205,487	\$	35,733,012 \$	35,733,012 \$	5	35,733,012 \$	35,733,012	\$	35,733,012
Connection Fees	576,828		330,338		315,939		585,714		545,502		385,000	385,000		385,000	385,000		385,000
Miscellaneous	 1,945,264		371,433		342,028		566,119		700,904		206,000	206,000		206,000	206,000		206,000
Total Operating Revenues	\$ 38,636,007	\$	35,125,016	\$	35,695,336	\$	36,017,317	\$	36,451,892	\$	36,324,012 \$	36,324,012 \$	5	36,324,012 \$	36,324,012	\$	36,324,012
OPERATING EXPENSES																	
Salaries and Wages	\$ 2,856,587	\$	2,912,031	\$	3,065,296	\$	3,546,743	\$	3,287,868	\$	3,577,299 \$	3,684,618 \$	5	3,795,157 \$	3,909,011	\$	4,026,282
Administrative Fees	1,116,022		1,275,518		1,266,913		1,292,456		1,315,266		1,315,266	1,354,724		1,395,366	1,437,227		1,480,343
Operating and Maintenance	24,136,892		24,068,103		22,295,239		21,933,405		22,607,509		24,215,323	24,683,371		25,214,094	25,705,539		26,260,228
Depreciation and Amortization	 1,714,690		1,800,815	_	1,887,413		2,010,404		2,048,044		2,161,297	2,558,198		2,721,531	2,884,865		3,114,865
Total Operating Expenses	\$ 29,824,191	\$	30,056,467	\$	28,514,861	\$	28,783,008	\$	29,258,687	\$	31,269,184 \$	32,280,911 \$	5	33,126,147 \$	33,936,641	\$	34,881,717
OPERATING INCOME	\$ 8,811,816	\$	5,068,549	\$	7,180,475	\$	7,234,309	\$	7,193,205	\$	5,054,828 \$	4,043,101 \$	5	3,197,865 \$	2,387,371	\$	1,442,295
NON-OPERATING REVENUE (EXPENSE)																	
Investment earnings	\$ 127,023	\$	190,858	\$	238,130	\$	338,645	\$	588,921	\$	130,000 \$	130,000 \$	5	130,000 \$	130,000	\$	130,000
Interest expense	-		-		-		-		-		-	-		-	-		-
Gain on Disposal of Assets	 20,230		44,495		(65,282)		3,549		10,700						-		-
Total Non-Operating Revenues (Expenses)	\$ 147,253	\$	235,353	\$	172,848	\$	342,194	\$	599,621	\$	130,000 \$	130,000 \$	5	130,000 \$	130,000	\$	130,000
Net Income before Contributions	\$ 8,959,069	\$	5,303,902	\$	7,353,323	\$	7,576,503	\$	7,792,826	\$	5,184,828 \$	4,173,101 \$	5	3,327,865 \$	2,517,371	\$	1,572,295
Capital Contributions	\$ -	\$	-	\$	-	\$	141,036	\$	104,885	\$	- \$	- \$	5	- \$	-	\$	-
Transfers Out	\$ (2,896,973)	\$	(3,529,947)	\$	(2,919,314)	\$	(2,882,640)	\$	(2,821,440)	\$	(2,905,921) \$	(2,905,921) \$	5	(2,905,921) \$	(2,905,921)	\$	(2,905,921)
CHANGE IN NET POSITION	\$ 6,062,096	\$	1,773,955	\$	4,434,009	\$	4,834,899	\$	5,076,271	\$	2,278,907 \$	1,267,180 \$	5	421,944 \$	(388,550)	\$	(1,333,626)
As Percent of Revenues	15.7%		5.1%		12.4%		13.4%		13.9%		6.3%	3.5%		1.2%	-1.1%		-3.7%
CASH RESERVES - TOTAL																	
Beginning of Year							:	\$	28,340,426	\$	32,067,169 \$	24,600,328 \$	5	23,525,706 \$	21,769,181	\$	17,365,496
Plus Change in Net Position									5,076,271		2,278,907	1,267,180		421,944	(388,550)		(1,333,626)
Plus Depreciation									2,048,044		2,161,297	2,558,198		2,721,531	2,884,865		3,114,865
Less Capital Improvements							-		(3,397,572)		(11,907,045)	(4,900,000)		(4,900,000)	(6,900,000)		(3,000,000)
End of Year							:	\$	32,067,169	\$	24,600,328 \$	23,525,706 \$	5	21,769,181 \$	17,365,496	\$	16,146,734
As a percent of Operating Revenue									88%		68%	65%		60%	48%		44%

Section 3 Cost-of-Service

A cost-of-service analysis was performed to determine the allocated cost to serve each of Logan's customer classes within the electric utility. Customer classes exist, in part, because the cost to serve different kinds of customers varies. The cost-of-service analysis has been performed on a FY 2018 'Test Year' based on actual 2018 financials, operations and sales. The results of the cost-of-service study give an indication of the degree of revenue recovery warranted for each class of customers. A comparison of the allocated cost to serve a class of customers and the actual revenues received from that class is taken into consideration during rate design.

Functionalization of Costs

Logan's Test Year electric revenue requirements have been divided into four functional categories. These categories are described below.

Power Supply – the production function is related to the cost of Logan owned generating units and purchases from CRSP and through UAMPS.

Transmission and Distribution – T&D expenses are related to the Logan system for delivering power and energy to Logan customers. They include transmission, substation and distribution system costs.

Customer – these costs are fixed costs associated with the service facilities utilized to deliver electric power and energy directly to customers. They also include items such as meter reading, billing, collections and dealing with customers by customer service representatives.

Revenue – revenue related costs include certain non-operating revenues, transfers and utility margin.



Table 3-1 below summarizes the functional electric costs for the 2018 Test Year. The detailed cost functions are shown in Exhibit 3-A.

Table 3-1 Functional Electric Costs 2018 Test Year

	Revenue							
Component	Requirement							
Power Supply	\$23,088,888							
T&D	4,341,771							
Customer	1,160,213							
Revenue	<u>6,547,305</u>							
Total	\$35,138,177							

Classification of Costs

Within each function, the revenue requirements have been divided into distinct cost classifications. These cost classifications are described below.

Demand Related – demand related costs are fixed costs that do not vary with hourly consumption. Demand related costs are required to meet the overall demand of the system as expressed in kW.

Energy Related – energy related costs vary based on hourly consumption in kWh.

Customer Related – costs related to serving, metering and billing of individual customers.

Revenue Related – revenue related costs vary by the amount of revenue received by the utility.

Exhibits 3-B through 3-D show the detailed classification of revenue requirements within the power supply, T&D and customer functions.

Allocation of Costs

Based on an analysis of customer class service characteristics, the classified costs summarized above were allocated to the major Logan customer classes. Allocation of costs was performed on a fully-distributed, embedded cost allocation basis. Specific allocation factors were utilized in each of the cost classification categories as described below. Exhibit 3-E contains a summary of the development of the various allocation factors.

Demand Allocations

Customer class demands on a system can be reflected in various ways. Two primary demand allocation types were utilized in this analysis. A common industry allocator known as Coincident Peak Demand (CP) allocator is utilized to allocate demand related costs based on each class' contribution to the system peak demand each month. A 12 CP demand allocator was utilized for production demand costs. A 1 CP demand allocator was utilized for local transmission demand costs (TD) A Non-coincident Peak Demand (NCP) reflects a class maximum demand regardless of when it occurs. A distribution NCP method, an estimate of each class' maximum annual demand on the local system, was utilized for allocating local system demand related costs.

Energy Allocations

Each class' share of energy requirements was used to allocate energy related costs. Power supply energy related expenses were allocated based on each customer class' share of total energy requirements.

Customer Allocations

Two separate customer allocators were utilized. The customer facilities (CF) allocator was used to allocate costs associated with the physical facilities required to serve individual customers. The customer service (CS) allocator is

for allocation of costs associated with customer service – meter reading, billing, collections and customer inquiries. For both the customer facilities and customer service allocators, a weighted customer allocation factor is developed. Weighting factors are developed to represent the difference in service configurations between customer classifications. For instance, a larger customer facility is required for a single large power customer than for a single residential customer, or a single large power customer requires more customer service than a single residential customer.

Revenue Allocations

Revenue related costs were allocated based on each class' share of total demand, energy, customer distribution, customer service and direct costs.

Cost of Service Results

Based on the classifications and allocations described above, the estimated cost to serve each major class of customers for the 2018 Test Year was determined. Exhibit 3-F presents this analysis in detail. Table 3-2 below summarizes the total allocated electric costs for each class compared to the total electric revenues received from the class during 2018.

\$35,138,177

Electric Cos Comparison o	Table 3-2Electric Cost of Service ResultsComparison of Cost and Revenues2018 Test Year									
Customer Classification	Allocated Cost to Serve	Revenues								
Residential	\$10,978,607	\$10,473,555								
Commercial	15,197,249	16,292,657								
Industrial	7,072,973	6,526,643								
USU	1,889,347	1,845,321								

\$35,138,177

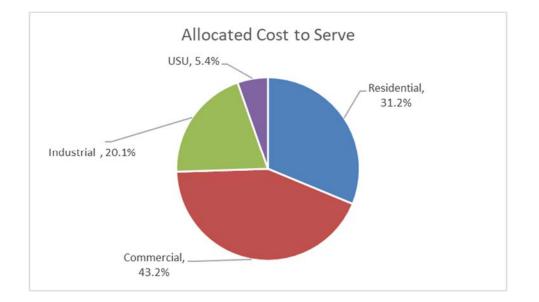
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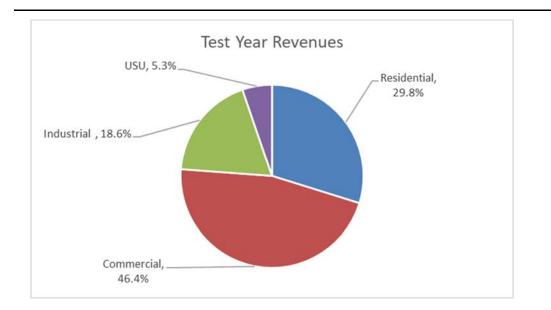
The revenue requirements and revenues as allocated to each class and summarized above are shown on a total dollars basis. Table 3-3 below makes the comparison based on percentages of total cost to serve and total revenues. The charts following Table 3-3 show a graphical comparison between allocated cost to serve and revenues as a percentage of the totals. The percentage increase/(decrease) in each class' revenue shown below is the adjustment necessary to produce revenues from each class in accordance with the allocated cost to serve. The percentage adjustments do not represent the recommended change in each class' rates. The cost-of-service results are one item for consideration in rate design. It is important to note also that the adjustments shown in the table below would not change the total revenue received by the utility and are not indicative of overall revenue needs of the utility going forward. Recommendations regarding rate design are included in Section 4 of this report.

Table 3-3

Electric Cost of Service Results Comparison of % Cost and Revenues 2018 Test Year

Customer Classification	Allocated Cost to Serve	Revenues	Increase/ (Decrease)
Residential	31.2%	29.8%	4.8%
Commercial	43.2%	46.4%	-6.7%
Industrial	20.1%	18.6%	8.4%
USU	<u>5.4%</u>	<u>5.3%</u>	<u>2.4%</u>
Total	100.0%	100.0%	0.0%





As indicated above, Logan's existing class revenues do not exactly match the allocated cost to serve each class. Cost based rates are one of several goals in establishing rates. The relationship between allocated costs and revenues for each class should be considered, in addition to other rate related goals, in developing recommended rates.

City of Logan Light & Power Functionalization of FY 2018 Test Year Revenue Requirements

VENUE REQUIREMENT		2018 <u>Test Year</u>	Po	wer Supply		Dist		Customer		Revenue	Classification Basis
PERATING EXPENSES											
530100 : Electric Administration											
530-530100-411000 : Benefited Employees	\$	239,501	\$	15,463	\$	148,995	\$	75,042	\$	-	labor
530-530100-414000 : Overtime		695		45		432		218		-	labor
530-530100-418000 : Pay For Performance		-		-		-		-		-	labor
530-530100-419000 : Benefits		112,976		7,294		70,283		35,399		-	labor
530-530100-421000 : Subscriptions & Memberships		-		-		-		-		-	NA
530-530100-422000 : Ads & Publications		257		203		44		10		-	total operating expenses
530-530100-423000 : Travel & Training		12,108		9,558		2,070		480		-	total operating expenses
530-530100-424000 : Office Supplies		3,345		2,640		572		133		-	total operating expenses
530-530100-425000 : Maintenance		455		359		78		18		-	total operating expenses
530-530100-427000 : Utilities		12,682		10,011		2,168		503		-	total operating expenses
530-530100-428000 : Telephone		3,530		2,787		604		140		-	total operating expenses
530-530100-431000 : Professional & Technical		30,305		23,922		5,181		1,202		-	total operating expenses
530-530100-443000 : Special Departmental Supplies		26,716		21,089		4,568		1,059		-	total operating expenses
530-530100-443010 : Other Supplies - Renewables		63,818		50,376		10,911		2,531		-	total operating expenses
530-530100-443090 : Inventory Adjustments		43		34		7		2		-	total operating expenses
530-530100-451000 : Claims & Insurance		2,492	-	1,967	-	426	-	99	-	-	total operating expenses
SubTotal : 530100 : Electric Administration	\$	508,923	\$	145,749	\$	246,339	\$	116,835	Ş	-	
530105 : Electric Metering	ć	653.086	ć		ć		ć	653.086	ć		100% austamar
530-530105-411000 : Benefited Employees	\$	652,086	\$	-	\$	-	\$	652,086	ډ	-	100% customer
530-530105-412000 : Non-Benefited Employees		33,458		-		-		33,458 27,880		-	100% customer 100% customer
530-530105-414000 : Overtime		27,880		-		-				-	
530-530105-415000 : Other Pay		10,262		-		-		10,262		-	100% customer
530-530105-419000 : Benefits		297,458		-		-		297,458		-	100% customer
530-530105-423000 : Travel & Training		11,257		-		-		11,257		-	100% customer
530-530105-424000 : Office Supplies		151		-		-		151		-	100% customer
530-530105-425000 : Maintenance		192,500		-		192,500		-		-	100% T&D
530-530105-425010 : Fuel		10,914		-		10,914				-	100% T&D
530-530105-425020 : Vehicle Maintenance		4,364				4,364					100% T&D
530-530105-428000 : Telephone		8,146				8,146					100% T&D
530-530105-443000 : Special Departmental Supplies SubTotal : 530105 : Electric Metering	\$	17,417 1,265,894	\$		\$	17,417 233,341	\$	- 1,032,553	\$		100% T&D
-	Ŧ	_,,	Ť		•		*	_,,	Ŧ		
530110 : Electric Distribution											
530-530110-411000 : Benefited Employees	\$	1,097,980	\$	-	Ş	1,097,980	Ş	-	\$	-	100% T&D
530-530110-412000 : Non-Benefited Employees		18,714		-		18,714		-		-	100% T&D
530-530110-414000 : Overtime		26,170		-		26,170		-		-	100% T&D
530-530110-415000 : Other Pay		9,014		-		9,014		-		-	100% T&D
530-530110-419000 : Benefits		509,517		-		509,517		-		-	100% T&D
530-530110-423000 : Travel & Training		16,793		-		16,793		-		-	100% T&D
530-530110-425000 : Maintenance		458,635		-		458,635		-		-	100% T&D
530-530110-425010 : Fuel		24,486		-		24,486		-		-	100% T&D
530-530110-425020 : Vehicle Maintenance		58,390		-		58,390		-		-	100% T&D
530-530110-427000 : Utilities		9,647		-		9,647		-		-	100% T&D
530-530110-428000 : Telephone		17,555		-		17,555		-		-	100% T&D
530-530110-443000 : Special Departmental Supplies		82,835		-		82,835		-		-	100% T&D
530-530110-443020 : Other Supplies		23,250		-		23,250		-		-	100% T&D
SubTotal : 530110 : Electric Distribution	\$	2,352,987	\$	-	\$	2,352,987	\$	-	\$	-	
530115 : Electric SOCC											
530-530115-411000 : Benefited Employees	\$	287,715	\$	98,836	\$	188,880	\$	-	\$	-	power supply/T&D
530-530115-414000 : Overtime		12,386		4,255		8,131		-		-	power supply/T&D
530-530115-419000 : Benefits		134,008		46,034		87,974		-		-	power supply/T&D
530-530115-423000 : Travel & Training		15,046		5,169		9,878		-		-	power supply/T&D
530-530115-425000 : Maintenance		60,771		20,876		39,895		-		-	power supply/T&D
530-530115-425010 : Fuel		-		-		-		-		-	power supply/T&D
530-530115-425020 : Vehicle Maintenance		-		-		-		-		-	power supply/T&D
530-530115-426000 : Building & Grounds Maint		3,366		1,156		2,209		-		-	power supply/T&D
530-530115-427000 : Utilities		11,671		4,009		7,662		-		-	power supply/T&D
530-530115-428000 : Telephone		718		247		471		-		-	power supply/T&D
530-530115-431000 : Professional & Technical		9,511		3,267		6,244		-		-	power supply/T&D
530-530115-443000 : Special Departmental Supplies	+	3,995	-	1,373	-	2,623	_	-	_	-	power supply/T&D
SubTotal : 530115 : Electric SOCC	\$	539,188	\$	185,221	Ş	353,967	Ş	-	\$	-	
530120 : Electric System Support											
530-530120-423000 : Travel & Training	\$	8,555	\$	2,939	\$	5,616	\$	-	\$	-	power supply/T&D
530-530120-425000 : Maintenance		39,828		13,682		26,147		-		-	power supply/T&D
530-530120-425010 : Fuel		11,704		4,021		7,684		-		-	power supply/T&D
530-530120-427000 : Utilities		3,460		1,188		2,271		-		-	power supply/T&D
530-530120-443000 : Special Departmental Supplies		12,052	<u>_</u>	4,140	~	7,912	~	-	~	-	power supply/T&D
SubTotal : 530120 : Electric System Support	\$	75,599	\$	25,970	Ş	49,630	Ş	-	\$	-	
530125 : Electric Tree Clearance 530-530125-431000 : Professional & Technical	*	252.046	~		ć	252.044	ć		ŕ		1000/ 79 5
	<u>\$</u>	252,016	<u>></u>	-	>	252,016		-	<u>></u>	-	100% T&D
SubTotal : 530125 : Electric Tree Clearance	\$	252,016	\$	-	\$	252,016	Ş	-	\$	-	

City of Logan Light & Power Functionalization of FY 2018 Test Year Revenue Requirements

		2018									
REVENUE REQUIREMENT		Test Year	F	Power Supply		Dist		Customer		Revenue	Classification Basis
530130 : Electric Engineering											
530-530130-431000 : Professional & Technical	\$	47,898	\$	16,454	\$	31,444	\$	-	\$	-	power supply/T&D
SubTotal: 530130: Electric Engineering	\$	47,898	\$	16,454	\$	31,444	\$	-	\$	-	
530135 : Electric Purchase Power											
530-530135-429005 : CRSP	\$	2,044,223	\$	2,044,223	ć		Ś		Ś		100% power supply
530-530135-429003 : CKSF 530-530135-429010 : Hunter II	Ş	3,406,280	ç	3,406,280	Ş	-	ç		ç	-	100% power supply
530-530135-429010 : Huller II 530-530135-429015 : UAMPS Surcharges		242,441		242,441		-		-		-	
530-530135-429015 : OAMPS Surcharges		242,441 617,521		617,521		-		-		-	100% power supply 100% power supply
530-530135-429020 : Vey0 530-530135-429025 : IPP		12,249		12,249		-				-	100% power supply
530-530135-429020 : Nebo						-				-	
530-530135-429035 : Wind		2,892,994		2,892,994		-		-		-	100% power supply
		585,398		585,398		-		-		-	100% power supply
530-530135-429040 : Craig Mona		8,204		8,204 (200,290)		-		-		-	100% power supply
530-530135-429045 : Uamps Pool 530-530135-429050 : UAMPS Power Exchange & Five Year Firm Contract		(200,290) 10,517,443		10,517,443		-				-	100% power supply 100% power supply
530-530135-429055 : CFPP		10,317,443		10,517,445		-				-	100% power supply
		-		-		-		-		-	
530-530135-429060 : OS WAPA		445,667		445,667		-		-		-	100% power supply
530-530135-443000 : Special Departmental Supplies	-	140,000	-	140,000	-	-	-		-	-	100% power supply
SubTotal: 530135: Electric Purchase Power	\$	20,712,131	Ş	20,712,131	Ş	-	\$	-	\$	-	
530140 : Electric Combustion Turbines Plant											
530-530140-425000 : Maintenance	\$	124	\$	124	\$	-	\$	-	\$	-	100% power supply
530-530140-425010 : Fuel		33,737		33,737		-		-		-	100% power supply
530-530140-431000 : Professional & Technical		-		-		-		-		-	100% power supply
SubTotal : 530140 : Electric Combustion Turbines Plant	\$	33,861	\$	33,861	Ś	-	Ś		\$	-	
	Ŧ	,		,	+		*		*		
530145 : Electric Hydraulic Power Generation											
530-530145-425000 : Maintenance	\$	19,366	\$	19,366	\$	-	\$	-	\$	-	100% power supply
530-530145-425010 : Fuel		262		262		-		-		-	100% power supply
530-530145-426000 : Building & Grounds Maint		7,442		7,442		-		-		-	100% power supply
530-530145-427000 : Utilities		1,831		1,831		-		-		-	100% power supply
530-530145-443000 : Special Departmental Supplies		5,725		5,725		-		-		-	100% power supply
530-530145-443010 : Other Supplies		17,259		17,259		-		-		-	100% power supply
SubTotal: 530145: Electric Hydraulic Power Generation	\$	51,886	\$	51,886	\$	-	\$	-	\$	-	
530900 : Electric Financial Functions											
530-530900-419100 : Pension Expense Adjustment	\$	(181,954)	\$		\$	(113,195)	Ş	(57,011)	Ş	-	labor
530-530900-496000 : Depreciation		2,048,044		711,307		1,330,420		6,316		-	plant in service
530-530900-498000 : Admin Fees		1,315,266		1,038,240		224,870		52,157		-	total operating expenses
530-530900-499000 : IT Assessments		53,711		42,398		9,183		2,130		-	total operating expenses
530-530900-499010 : Risk Assessments	_	183,238		144,644	_	31,328		7,266		-	total operating expenses
SubTotal: 530900: Electric Financial Functions	\$	3,418,305	\$	1,924,841	\$	1,482,606	\$	10,858	\$	-	
Total Operating Expenses	\$	29,258,687	Ś	23,096,112	\$	5,002,330	\$	1,160,246	Ś	-	
····· • • • • • • • • • • • • • • • • •	+			,,	*	-,,	*	_,,_	Ŧ		
Non Operating Revenues (Expenses)											
Investment earnings	\$	588,921	\$	-	\$	-	\$	-	\$	588,921	100% revenue
Interest expense		-		-		-		-		-	NA
Gain on Disposal of Assets		10,700		3,716		6,951		33			plant in service
Capital Contributions	_	104,885		-	_	-		-		104,885	100% revenue
Total Non Operating Revenues	\$	704,506	\$	3,716	\$	6,951	\$	33	\$	693,806	
Other Operating Revenues											
530-000000-340900 : Unbilled Revenue	\$	81,744	\$	-	\$	-	\$	-	\$	81,744	100% revenue
530-000000-340915 : Recoveries Of Write-Offs	•	6,013	*	-	Ŧ	-	+	-	Ŧ	6,013	100% revenue
530-000000-340920 : Bad Debt		(58,369)		-		-				(58,369)	100% revenue
530-000000-347130 : Street Lighting Fees		208,000		-		-				208,000	100% revenue
530-000000-347135 : Renewable Energy Fees		3,508		3,508						200,000	100% power supply
530-000000-347145 : Service Charges		289,463		-		-				289,463	100% revenue
530-000000-340905 : Connection Fees		307,913		-		307,913				-	100% T&D
530-000000-340910 : Commercial Connection Fees		237,589				237,589					100% T&D
530-000000-362000 : Rents & Royalties		2,355						-		2,355	100% revenue
530-000000-362100 : Pole Attachment Fees		108,106				108,106		-		_,555	100% T&D
530-000000-369000 : Miscellaneous Revenue		590,442		-		100,100		-		- 590,442	100% revenue
Total Other Operating Revenues	\$	1,776,764	\$	3,508	\$	653,608	\$		\$	1,119,648	2007010001000
530-530900-491000 : Transfers	\$	2,821,440	\$	-	\$	-	\$		\$	2,821,440	100% revenue
	ş										
Margin		5,539,320	\$	-	\$	-	\$	-		5,539,320	100% revenue
Total Revenue Requirement	\$	35,138,177	Ş	23,088,888	Ş	4,341,771	Ş	1,160,213	Ş	o,547,305	

City of Logan Light & Power FY 2018 Test Year Power Supply Classification

		2018					
REVENUE REQUIREMENT OPERATING EXPENSES		Test Year		Demand		Energy	Classification Basis
530100 : Electric Administration							
530-530100-411000 : Benefited Employees	\$	15,463		7,732		7,732	50/50 demand/energy
530-530100-414000 : Overtime		45		22		22	50/50 demand/energy
530-530100-418000 : Pay For Performance		-		-		-	NA
530-530100-419000 : Benefits		7,294		3,647		3,647	50/50 demand/energy
530-530100-421000 : Subscriptions & Memberships 530-530100-422000 : Ads & Publications		- 203		- 102		- 102	NA 50/50 demand/energy
530-530100-423000 : Travel & Training		9,558		4,779		4,779	50/50 demand/energy
530-530100-424000 : Office Supplies		2,640		1,320		1,320	50/50 demand/energy
530-530100-425000 : Maintenance		359		180		180	50/50 demand/energy
530-530100-427000 : Utilities		10,011		5,005		5,005	50/50 demand/energy
530-530100-428000 : Telephone		2,787		1,393		1,393	50/50 demand/energy
530-530100-431000 : Professional & Technical 530-530100-443000 : Special Departmental Supplies		23,922 21,089		11,961 10,545		11,961 10,545	50/50 demand/energy 50/50 demand/energy
530-530100-443010 : Other Supplies - Renewables		50,376		25,188		25,188	50/50 demand/energy
530-530100-443090 : Inventory Adjustments		34		17		17	50/50 demand/energy
530-530100-451000 : Claims & Insurance		1,967		983		983	50/50 demand/energy
SubTotal: 530100: Electric Administration	\$	145,749	\$	72,874	\$	72,874	
FOR AFT Flackets Markening							
530105 : Electric Metering 530-530105-411000 : Benefited Employees	\$					_	NA
530-530105-412000 : Non-Benefited Employees	Ļ	-		-		-	NA
530-530105-414000 : Overtime		-		-		-	NA
530-530105-415000 : Other Pay		-		-		-	NA
530-530105-419000 : Benefits		-		-		-	NA
530-530105-423000 : Travel & Training		-		-		-	NA
530-530105-424000 : Office Supplies		-		-		-	NA
530-530105-425000 : Maintenance 530-530105-425010 : Fuel		-					NA
530-530105-425020 : Vehicle Maintenance		-		_		_	NA
530-530105-428000 : Telephone		-		-		-	NA
530-530105-443000 : Special Departmental Supplies		-		-		-	NA
SubTotal : 530105 : Electric Metering	\$	-	\$	-	\$	-	
530110 : Electric Distribution	\$						NA
530-530110-411000 : Benefited Employees 530-530110-412000 : Non-Benefited Employees	Ş	-					NA
530-530110-414000 : Overtime		-		-			NA
530-530110-415000 : Other Pay		-		-		-	NA
530-530110-419000 : Benefits		-		-		-	NA
530-530110-423000 : Travel & Training		-		-		-	NA
530-530110-425000 : Maintenance		-		-		-	NA
530-530110-425010 : Fuel 530-530110-425020 : Vehicle Maintenance		-					NA
530-530110-427000 : Utilities		-		-			NA
530-530110-428000 : Telephone		-		-		-	NA
530-530110-443000 : Special Departmental Supplies		-		-		-	NA
530-530110-443020 : Other Supplies		-		-		-	NA
SubTotal : 530110 : Electric Distribution	\$	-	\$	-	\$	-	
530115 : Electric SOCC							
530-530115-411000 : Benefited Employees	\$	98,836		49,418		49,418	50/50 demand/energy
530-530115-414000 : Overtime		4,255		2,127		2,127	50/50 demand/energy
530-530115-419000 : Benefits		46,034		23,017		23,017	50/50 demand/energy
530-530115-423000 : Travel & Training		5,169		2,584		2,584	50/50 demand/energy
530-530115-425000 : Maintenance		20,876		10,438		10,438	50/50 demand/energy
530-530115-425010 : Fuel 530-530115-425020 : Vehicle Maintenance		-		-		-	NA
530-530115-426000 : Building & Grounds Maint		1,156		578		578	50/50 demand/energy
530-530115-427000 : Utilities		4,009		2,005		2,005	50/50 demand/energy
530-530115-428000 : Telephone		247		123		123	50/50 demand/energy
530-530115-431000 : Professional & Technical		3,267		1,634		1,634	50/50 demand/energy
530-530115-443000 : Special Departmental Supplies	.	1,373		686		686	50/50 demand/energy
SubTotal : 530115 : Electric SOCC	\$	185,221	\$	92,611	Ş	92,611	
530120 : Electric System Support							
530-530120-423000 : Travel & Training	\$	2,939		1,469		1,469	50/50 demand/energy
530-530120-425000 : Maintenance		13,682		6,841		6,841	50/50 demand/energy
530-530120-425010 : Fuel		4,021		2,010		2,010	50/50 demand/energy
530-530120-427000 : Utilities		1,188		594		594	50/50 demand/energy
530-530120-443000 : Special Departmental Supplies SubTotal : 530120 : Electric System Support		4,140		2,070		2,070	50/50 demand/energy 50/50 demand/energy
······	\$	25,970 51,940	\$	12,985 25,970	Ś	12,985 25,970	50/50 demand/energy
530125 : Electric Tree Clearance	Ŷ	51,540	ب	23,370	Ŷ	23,370	
530-530125-431000 : Professional & Technical	\$	-		-		-	NA
SubTotal: 530125: Electric Tree Clearance	\$	-	\$	-	\$	-	

City of Logan Light & Power FY 2018 Test Year Power Supply Classification

		2018					
REVENUE REQUIREMENT		Test Year		Demand		Energy	Classification Basis
530130 : Electric Engineering							
530-530130-431000 : Professional & Technical	\$	16,454		8,227		8,227	50/50 demand/energy
SubTotal : 530130 : Electric Engineering	\$	16,454	\$	8,227	\$	8,227	
530135 : Electric Purchase Power							
530-530135-429005 : CRSP	Ś	2,044,223		1,206,358		837,865	CRSP
530-530135-429010 : Hunter II	•	3,406,280		946,397		2,459,882	Hunter
530-530135-429015 : UAMPS Surcharges		242,441		-		242,441	100% energy
530-530135-429020 : Veyo		617,521		442,928		174,593	VEYO
530-530135-429025 : IPP		12,249		12,249		-	IPP
530-530135-429030 : Nebo		2,892,994		1,856,800		1,036,195	NEBO
530-530135-429035 : Wind 530-530135-429040 : Craig Mona		585,398 8,204		33,272 8,204		552,126	Wind Craig Mona
530-530135-429045 : Uamps Pool		(200,290)		(7,168)		(193,122)	Pool
530-530135-429050 : UAMPS Power Exchange & Five Year Firm Contract		10,517,443		-		10,517,443	PX
530-530135-429055 : CFPP		-		-		-	NA
530-530135-429060 : OS WAPA		445,667		-		445,667	OS WAPA
530-530135-443000 : Special Departmental Supplies	_	140,000		140,000		-	100% demand
SubTotal : 530135 : Electric Purchase Power	\$	20,712,131	\$	4,639,041	\$	16,073,089	
530140 : Electric Combustion Turbines Plant							
530-530140-425000 : Maintenance	\$	124		124		-	100% demand
530-530140-425010 : Fuel		33,737		-		33,737	100% energy
530-530140-431000 : Professional & Technical	_	-		-		-	NA
SubTotal : 530140 : Electric Combustion Turbines Plant		33,861		124		33,737	
530145 : Electric Hydraulic Power Generation							
530-530145-425000 : Maintenance	\$	19,366				19,366	100% energy
530-530145-425010 : Fuel		262		-		262	100% energy
530-530145-426000 : Building & Grounds Maint		7,442		7,442		-	100% demand
530-530145-427000 : Utilities		1,831		-		1,831	100% energy
530-530145-443000 : Special Departmental Supplies		5,725		5,725		-	100% demand
530-530145-443010 : Other Supplies SubTotal : 530145 : Electric Hydraulic Power Generation		17,259 51,886		- 13,167		17,259 38,718	100% energy
Subfolar. SS0145. Electric Hydraulic Power Generation		51,000		15,107		56,710	
530900 : Electric Financial Functions							
530-530900-419100 : Pension Expense Adjustment	\$	(11,748)		(11,748)		-	100% demand
530-530900-496000 : Depreciation		711,307		711,307		-	100% demand
530-530900-498000 :Admin Fees 530-530900-499000 :IT Assessments		1,038,240 42,398		519,120 42,398		519,120	50/50 demand/energy 100% demand
530-530900-499010 : Risk Assessments		42,598 144,644		42,558		-	100% demand
SubTotal : 530900 : Electric Financial Functions		1,924,841	-	1,405,721		519,120	
Total Operating Expenses	\$	23,096,112	\$	6,244,751	Ş	16,851,361	
Non Operating Revenues (Expenses)							
Investment earnings	\$	-		-		-	NA
Interest expense		-		-		-	NA
Gain on Disposal of Assets Capital Contributions		3,716		3,716		-	100% demand
Capital Contributions Total Non Operating Revenues	Ś	3.716	Ś	3.716	Ś		NA
	Ŷ	5,710	Ŷ	5,710	Ŷ		
Other Operating Revenues							
530-00000-340900 : Unbilled Revenue	\$	-		-		-	NA
530-000000-340915 : Recoveries Of Write-Offs 530-000000-340920 : Bad Debt		-		-		-	NA NA
530-00000-347130 : Street Lighting Fees		-		-		_	NA
530-000000-347135 : Renewable Energy Fees		3,508		-		3,508	100% energy
530-000000-347145 : Service Charges		-		-		-	NA
530-000000-340905 : Connection Fees		-		-		-	NA
530-000000-340910 : Commercial Connection Fees		-		-		-	NA
530-000000-362000 : Rents & Royalties		-		-		-	NA
530-000000-362100 : Pole Attachment Fees 530-000000-369000 : Miscellaneous Revenue		-		-		-	NA NA
Total Other Operating Revenues	\$	3,508	\$	-	\$	3,508	110
	Ŷ	5,500	Ý		Ŧ	2,500	
530-530900-491000 : Transfers	\$	-		-		-	NA
Marria	*						
Margin	\$	-		-		-	NA
Total Revenue Requirement	\$	23,088,888	\$	6,241,035	\$	16,847,853	

City of Logan Light & Power FY 2018 Test Year Distribution Classification

FY 20.	18 Test Year Distributio	on Classification			
		Logan		. .	
	2018	Transmission	Distribution	Customer	Classification Basis
REVENUE REQUIREMENT OPERATING EXPENSES	Test Year	Demand	Demand	Facilities	Classification Basis
530100 : Electric Administration					
530-530100-411000 : Benefited Employees	148,995	75,137	35,586	38,272	total revenue requirement
530-530100-414000 : Overtime	432	218	103	111	total revenue requirement
530-530100-418000 : Pay For Performance	-	-	-	-	NA
530-530100-419000 : Benefits	70,283	35,443	16,787	18,054	total revenue requirement
530-530100-421000 : Subscriptions & Memberships	-	-	-	-	NA
530-530100-422000 : Ads & Publications	44	22	11	11	total revenue requirement
530-530100-423000 : Travel & Training	2,070	1,044	494	532	total revenue requirement
530-530100-424000 : Office Supplies	572	288	137	147	total revenue requirement
530-530100-425000 : Maintenance	78	39	19	20	total revenue requirement
530-530100-427000 : Utilities	2,168	1,093	518	557	total revenue requirement
530-530100-428000 : Telephone	604	304	144	155	total revenue requirement
530-530100-431000 : Professional & Technical	5,181	2,613	1,237	1,331	total revenue requirement
530-530100-443000 : Special Departmental Supplies	4,568	2,303	1,091	1,173	total revenue requirement
530-530100-443010 : Other Supplies - Renewables	10,911	5,502	2,606	2,803	total revenue requirement
530-530100-443090 : Inventory Adjustments	7	4	2	2	total revenue requirement
530-530100-451000 : Claims & Insurance	426	215	102	109	total revenue requirement
SubTotal : 530100 : Electric Administration	246,339	124,226	58,836	63,277	
F2010E - Flastria Matering					
530105 : Electric Metering 530-530105-411000 : Benefited Employees					NA
530-530105-411000 : Benefited Employees 530-530105-412000 : Non-Benefited Employees	-	-	-	-	NA
530-530105-412000 : Non-beneficial Employees					NA
530-530105-414000 : Other Pav					NA
530-530105-419000 : Benefits					NA
530-530105-423000 : Travel & Training	-	-	-	-	NA
530-530105-424000 : Office Supplies	-	-	-	-	NA
530-530105-425000 : Maintenance	192,500	-	-	192,500	100% Cust facilities
530-530105-425010 : Fuel	10,914	-	-	10,914	100% Cust facilities
530-530105-425020 : Vehicle Maintenance	4,364	-	-	4,364	100% Cust facilities
530-530105-428000 : Telephone	8,146	-	-	8,146	100% Cust facilities
530-530105-443000 : Special Departmental Supplies	17,417	-	-	17,417	100% Cust facilities
SubTotal : 530105 : Electric Metering	233,341	-	-	233,341	
530110 : Electric Distribution					
530-530110-411000 : Benefited Employees	1,097,980	563,665	264,548	269,767	Trans/Dist split
530-530110-412000 : Non-Benefited Employees	18,714	9,607	4,509	4,598	Trans/Dist split
530-530110-414000 : Overtime	26,170	13,435	6,305	6,430	Trans/Dist split
530-530110-415000 : Other Pay	9,014	4,628	2,172	2,215	Trans/Dist split
530-530110-419000 : Benefits	509,517	261,569	122,764	125,185	Trans/Dist split
530-530110-423000 : Travel & Training	16,793	8,621	4,046	4,126	Trans/Dist split
530-530110-425000 : Maintenance	458,635	235,448	110,504	112,684	Trans/Dist split
530-530110-425010 : Fuel	24,486	-	12,123	12,362	Dist/Cust split
530-530110-425020 : Vehicle Maintenance	58,390	-	28,910	29,480	Dist/Cust split
530-530110-427000 : Utilities	9,647	-	4,777	4,871	Dist/Cust split
530-530110-428000 : Telephone	17,555	-	8,692	8,863	Dist/Cust split
530-530110-443000 : Special Departmental Supplies	82,835	-	41,013	41,822	Dist/Cust split
530-530110-443020 : Other Supplies	23,250		11,511	11,739	Dist/Cust split
SubTotal: 530110: Electric Distribution	2,352,987	1,096,972	621,874	634,141	
530115 : Electric SOCC					
530-530115-411000 : Benefited Employees	188,880	96,964	45,509	46,407	Trans/Dist split
530-530115-414000 : Overtime	8,131	4,174	1,959	1,998	Trans/Dist split
530-530115-419000 : Benefits	87,974	45,163	21,196	21,615	Trans/Dist split
530-530115-423000 : Travel & Training	9,878	5,071	2,380	2,427	Trans/Dist split
530-530115-425000 : Maintenance	39,895	20,481	9,612	9,802	Trans/Dist split
530-530115-425010 : Fuel	-	-	-	-	NA
530-530115-425020 : Vehicle Maintenance					NA Trans (Dist split
530-530115-426000 : Building & Grounds Maint	2,209	1,134	532	543	Trans/Dist split
530-530115-427000 : Utilities 530-530115-428000 : Telephone	7,662	3,933	1,846	1,883	Trans/Dist split Trans/Dist split
530-530115-431000 : Professional & Technical	471 6,244	242 3,205	114 1,504	116 1,534	Trans/Dist split
530-530115-443000 : Special Departmental Supplies			632	644	Trans/Dist split
SubTotal : 530115 : Electric SOCC	2,623	1,347			manay proc split
SUBTOLAL SOULS : ELECTIC SOUL	353,967	181,714	85,285	86,968	
530120 : Electric System Support					
530120 : Electric System Support 530-530120-423000 : Travel & Training	5,616	2,883	1,353	1,380	Trans/Dist split
530-530120-425000 : Maintenance	26,147	13,423	6,300	6,424	Trans/Dist split
530-530120-425000 : Maintenance	7,684	3,944	1,851	1,888	Trans/Dist split
530-530120-423010 : Puer 530-530120-427000 : Utilities	2,271	1,166	547	558	Trans/Dist split
530-530120-4427000 : Otheres 530-530120-443000 : Special Departmental Supplies	7,912	4,062	1,906	1,944	Trans/Dist split
SubTotal : 530120 : Electric System Support	49,630	25,478	11,958	1,944	Turis, Disc split
Subjoral - SSOIZO - LIEUTIC SYSTEM Support	49,050	20,476	11,938	12,194	
530125 : Electric Tree Clearance					
530-530125-431000 : Professional & Technical	252.016	_	252.016	_	100% Dist demand
SubTotal : 530125-431000 : Protessional & Technical	252,016		252,016	-	100% Dist defiiditu
Subtotal - SSUIZS : Electric Tree Clearance	252,016	-	252,016	-	

530130 : Electric Engineering

City of Logan Light & Power FY 2018 Test Year Distribution Classification Logan

		Loga			
	2018	Transmissio			
REVENUE REQUIREMENT	Test Year	Deman		Facilities	Classification Basis
530-530130-431000 : Professional & Technical	31,444		31,444	<u> </u>	100% Dist demand
SubTotal : 530130 : Electric Engineering	31,444	-	31,444	-	
530135 : Electric Purchase Power					
530-530135-429005 : CRSP	-	-	-	-	NA
530-530135-429010 : Hunter II	-	-	-	-	NA
530-530135-429015 : UAMPS Surcharges	-	-	-	-	NA
530-530135-429020 : Veyo	-	-	-	-	NA
530-530135-429025 : IPP	-	-	-	-	NA
530-530135-429030 : Nebo	-	-	-	-	NA
530-530135-429035 : Wind	-	-	-	-	NA
530-530135-429040 : Craig Mona	-	-	-	-	NA
530-530135-429045 : Uamps Pool	-	-	-	-	NA
530-530135-429050 : UAMPS Power Exchange & Five Year Firm Contra	-	-	-	-	NA
530-530135-429055 : CFPP	-	-	-	-	NA
530-530135-429060 : OS WAPA	-	-	-	-	NA
530-530135-443000 : Special Departmental Supplies			·		NA
SubTotal : 530135 : Electric Purchase Power	-	-	-	-	
530140 : Electric Combustion Turbines Plant					
530-530140-425000 : Maintenance	-	-	-	-	NA
530-530140-425010 : Fuel	-	-	-	-	NA
530-530140-431000 : Professional & Technical		-	-		NA
SubTotal: 530140: Electric Combustion Turbines Plant	-	-	-	-	
530145 : Electric Hydraulic Power Generation					
530-530145-425000 : Maintenance	-	-	-	-	NA
530-530145-425010 : Fuel	-	-	-	-	NA
530-530145-426000 : Building & Grounds Maint	-	-	-	-	NA
530-530145-427000 : Utilities	-		-	-	NA
530-530145-443000 : Special Departmental Supplies	-	-	-	-	NA
530-530145-443010 : Other Supplies	-		-	-	NA
SubTotal : 530145 : Electric Hydraulic Power Generation					
SubTotal . SS0145 . Electric Hydraulic Power Generation	-		-	-	
530900 : Electric Financial Functions					
	(112 105)	/EQ 110) (27.272)	(27 011)	Trans/Dist split
530-530900-419100 : Pension Expense Adjustment	(113,195)	(58,110 682,992		(27,811) 326,876	Trans/Dist split
530-530900-496000 : Depreciation	1,330,420			55,249	Trans/Dist split
530-530900-498000 : Admin Fees	224,870	115,440			
530-530900-499000 : IT Assessments	9,183	4,714		2,256	Trans/Dist split
530-530900-499010 : Risk Assessments	31,328	16,083		7,697	Trans/Dist split
SubTotal: 530900 : Electric Financial Functions	1,482,606	761,119	357,220	364,267	
	\$ 5,002,330	ć 0.400 F00	¢ 4 440 622	\$ 1,394,188	
Total Operating Expenses	\$ 5,002,550	\$ 2,189,509	\$ 1,418,633	\$ 1,394,188	
Non Operating Revenues (Expenses)					
Investment earnings	_				NA
Interest expense	-		-	-	NA
	- C 0F1		3,441	2 500	Dist/Cust split
Gain on Disposal of Assets Capital Contributions	6,951		5,441	3,509	NA
•					INA
Total Non Operating Revenues	6,951	-	3,441	3,509	
Other Operating Revenues					
530-000000-340900 : Unbilled Revenue	-	-	-	-	NA
530-000000-340915 : Recoveries Of Write-Offs	-	-	-	-	NA
530-00000-340920 : Bad Debt	-	-	-	-	NA
530-000000-347130 : Street Lighting Fees	-	-	-	-	NA
530-00000-347135 : Renewable Energy Fees	-	-	-	-	NA
530-00000-347145 : Service Charges		-		-	NA
530-000000-340905 : Connection Fees	307,913	-	152,453	155,460	Dist/Cust split
530-00000-340910 : Commercial Connection Fees	237,589	-	117,634	119,955	Dist/Cust split
530-00000-362000 : Rents & Royalties	-	-	-	-	NA
530-00000-362100 : Pole Attachment Fees	108,106	-	108,106	-	100% Dist demand
530-000000-369000 : Miscellaneous Revenue		-	. <u> </u>		NA
Total Other Operating Revenues	653,608	-	378,193	275,415	
530-530900-491000 : Transfers	-	-	-	-	NA
Margin	-	-	-	-	NA
Total Revenue Requirement	\$ 4,341,771	\$ 2,189,509	\$ 1,036,998	\$ 1,115,263	

City of Logan Light & Power FY 2018 Test Year Customer Classification

	2018		
REVENUE REQUIREMENT	Test Year	Customer	Classification Basis
OPERATING EXPENSES			
530100 : Electric Administration			
530-530100-411000 : Benefited Employees	75,042	75,042	100% Customer
530-530100-414000 : Overtime	218	218	100% Customer
530-530100-418000 : Pay For Performance	-	-	NA 100% Customer
530-530100-419000 : Benefits 530-530100-421000 : Subscriptions & Memberships	35,399	35,399	100% Customer NA
530-530100-422000 : Ads & Publications	- 10	- 10	100% Customer
530-530100-423000 : Travel & Training	480	480	100% Customer
530-530100-424000 : Office Supplies	133	133	100% Customer
530-530100-425000 : Maintenance	18	18	100% Customer
530-530100-427000 : Utilities	503	503	100% Customer
530-530100-428000 : Telephone	140	140	100% Customer
530-530100-431000 : Professional & Technical	1,202	1,202	100% Customer
530-530100-443000 : Special Departmental Supplies	1,059	1,059	100% Customer
530-530100-443010 : Other Supplies - Renewables	2,531	2,531	100% Customer
530-530100-443090 : Inventory Adjustments	2	2	100% Customer
530-530100-451000 : Claims & Insurance	99	99	100% Customer
SubTotal : 530100 : Electric Administration	116,835	116,835	
F2010E - Floatric Matering			
530105 : Electric Metering	653.096	652.086	100% Customer
530-530105-411000 : Benefited Employees 530-530105-412000 : Non-Benefited Employees	652,086 33,458	652,086 33,458	100% Customer
530-530105-412000 : Non-Benefited Employees	27,880	27,880	100% Customer
530-530105-415000 : Other Pay	10,262	10,262	100% Customer
530-530105-419000 : Benefits	297,458	297,458	100% Customer
530-530105-423000 : Travel & Training	11,257	11,257	100% Customer
530-530105-424000 : Office Supplies	151	151	100% Customer
530-530105-425000 : Maintenance	-	-	NA
530-530105-425010 : Fuel	-	-	NA
530-530105-425020 : Vehicle Maintenance	-	-	NA
530-530105-428000 : Telephone	-	-	NA
530-530105-443000 : Special Departmental Supplies			NA
SubTotal : 530105 : Electric Metering	1,032,553	1,032,553	
530110 : Electric Distribution			NA
530-530110-411000 : Benefited Employees 530-530110-412000 : Non-Benefited Employees	-	-	NA
530-530110-412000 : Non-Benefited Employees			NA
530-530110-415000 : Other Pay		-	NA
530-530110-419000 : Benefits	-	-	NA
530-530110-423000 : Travel & Training	-	-	NA
530-530110-425000 : Maintenance		-	NA
530-530110-425010 : Fuel	-	-	NA
530-530110-425020 : Vehicle Maintenance	-	-	NA
530-530110-427000 : Utilities	-	-	NA
530-530110-428000 : Telephone	-	-	NA
530-530110-443000 : Special Departmental Supplies	-	-	NA
530-530110-443020 : Other Supplies			NA
SubTotal : 530110 : Electric Distribution	-	-	
530115 : Electric SOCC			NA
530-530115-411000 : Benefited Employees 530-530115-414000 : Overtime			NA
530-530115-419000 : Benefits			NA
530-530115-423000 : Travel & Training		-	NA
530-530115-425000 : Maintenance	-	-	NA
530-530115-425010 : Fuel		-	NA
530-530115-425020 : Vehicle Maintenance	-	-	NA
530-530115-426000 : Building & Grounds Maint	-	-	NA
530-530115-427000 : Utilities	-	-	NA
530-530115-428000 : Telephone	-	-	NA
530-530115-431000 : Professional & Technical	-	-	NA
530-530115-443000 : Special Departmental Supplies			NA
SubTotal: 530115: Electric SOCC	-	-	
530120 : Electric System Support			1000/ Custower
530-530120-423000 : Travel & Training 530-530120-425000 : Maintenance	-	-	100% Customer
530-530120-425000 : Maintenance 530-530120-425010 : Fuel	-	-	100% Customer 100% Customer
530-530120-425010 : Puer	-	-	100% Customer
530-530120-442000 : Special Departmental Supplies		-	100% Customer
SubTotal : 530120 : Electric System Support	-	-	
530125 : Electric Tree Clearance			
530-530125-431000 : Professional & Technical	-	-	NA
SubTotal : 530125 : Electric Tree Clearance	-	-	
E20120 · Electric Engineering			

530130 : Electric Engineering

City of Logan Light & Power FY 2018 Test Year Customer Classification

REVENUE REQUIREMENT		2018 <u>Test Year</u>		Customer	Classification Basis
530-530130-431000 : Professional & Technical		<u> </u>	-		NA
SubTotal : 530130 : Electric Engineering		-		-	
530135 : Electric Purchase Power					
530-530135-429005 : CRSP		-		-	NA
530-530135-429010 : Hunter II		-		-	NA
530-530135-429015 : UAMPS Surcharges		-		-	NA
530-530135-429020 : Veyo		-		-	NA
530-530135-429025 : IPP		-		-	NA
530-530135-429030 : Nebo 530-530135-429035 : Wind		-			NA NA
530-530135-429040 : Craig Mona		-		-	NA
530-530135-429045 : Uamps Pool		-		-	NA
530-530135-429050 : UAMPS Power Exchange & Five Year Firm Contr	i	-		-	NA
530-530135-429055 : CFPP		-		-	NA
530-530135-429060 : OS WAPA		-		-	NA
530-530135-443000 : Special Departmental Supplies		-	_	-	NA
SubTotal: 530135: Electric Purchase Power		-		-	
520440 - Electric Combustion Turkings Direct					
530140 : Electric Combustion Turbines Plant 530-530140-425000 : Maintenance					NA
530-530140-425010 : Fuel		-			NA
530-530140-431000 : Professional & Technical		-		-	NA
SubTotal : 530140 : Electric Combustion Turbines Plant		-			
530145 : Electric Hydraulic Power Generation					
530-530145-425000 : Maintenance		-		-	NA
530-530145-425010 : Fuel		-		-	NA
530-530145-426000 : Building & Grounds Maint		-		-	NA
530-530145-427000 : Utilities		-		-	NA
530-530145-443000 : Special Departmental Supplies 530-530145-443010 : Other Supplies		-		-	NA NA
		-	-		NA
SubTotal: 530145: Electric Hydraulic Power Generation		-			
530900 : Electric Financial Functions					
530-530900-419100 : Pension Expense Adjustment		(57,011)		(57,011)	100% Customer
530-530900-496000 : Depreciation		6,316		6,316	100% Customer
530-530900-498000 : Admin Fees		52,157		52,157	100% Customer
530-530900-499000 : IT Assessments		2,130		2,130	100% Customer
530-530900-499010 : Risk Assessments		7,266	_	7,266	100% Customer
SubTotal : 530900 : Electric Financial Functions		10,858		10,858	
Total Operating Expenses	\$	1,160,246	\$	1,160,246	
Total Operating Expenses	Ļ	1,100,240	Ŷ	1,100,240	
Non Operating Revenues (Expenses)					
Investment earnings		-		-	NA
Interest expense		-		-	NA
Gain on Disposal of Assets		33		33	100% Customer
Capital Contributions		-	_	-	NA
Total Non Operating Revenues		33		33	
Other Operating Revenues 530-000000-340900 : Unbilled Revenue					NA
530-00000-340915 : Recoveries Of Write-Offs		-			NA
530-000000-340920 : Bad Debt		-		-	NA
530-000000-347130 : Street Lighting Fees		-		-	NA
530-000000-347135 : Renewable Energy Fees		-		-	NA
530-000000-347145 : Service Charges		-		-	NA
530-000000-340905 : Connection Fees		-		-	NA
530-000000-340910 : Commercial Connection Fees		-		-	NA
530-000000-362000 : Rents & Royalties 530-000000-362100 : Pole Attachment Fees		-		-	NA NA
530-000000-362100 : Pole Attachment Fees 530-000000-369000 : Miscellaneous Revenue				-	NA
Total Other Operating Revenues				<u> </u>	NA
		-		-	
530-530900-491000 : Transfers				-	NA
Margin		-		-	NA
Total Revenue Requirement	\$	1,160,213	Ş	1,160,213	

City of Logan Light & Power FY 2018 Test Year Allocation Factors

Demand Allocation Factors	<u>Total</u>	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>USU</u>
12 Coincident Peak (kW)	862,101	289,662	366,163	140,276	66,000
12 CP	100.0%	33.6%	42.5%	140,270	7.7%
-					
1 Coincident Peak (kW) - Transmission	98,905	35,930	38,659	12,819	11,497
TD	100.0%	36.3%	39.1%	13.0%	11.6%
		45 600	45 404	44.007	6 000
1 Non-coincident Peak (kW)	111,177	45,688	45,481	14,007	6,000
1 NCP	100.0%	41.1%	40.9%	12.6%	5.4%
Distribution NCP	105,177	45,688	45,481	14,007	-
Dist NCP	100.0%	43.4%	43.2%	13.3%	0.0%
Sum of Max Demands	1,405,250	596,019	579,331	163,900	66,000
SMD	100.0%	42.4%	41.2%	11.7%	4.7%
Energy Allocation Factors					
Wholesale Energy Req. (kWh)	422,454,297	104,702,551	194,441,773	103,188,972	20,121,000
WE	100.0%	24.8%	46.0%	24.4%	4.8%
Customers					
Number of Customers	20,230	17,814	2,408	7	1
CN	100.0%	88.1%	11.9%	0.0%	0.0%
Customer Facilities Allocation Factor					
Weighted Number of Cust	39,262	17,814	14,448	7,000	_
CF	100.0%	45.4%	36.8%	17.8%	0.0%
C.	100.070	1311/0	50.070	17.070	0.070
Customer Service Allocation Factor					
Weighted Number of Cust	22,750	17,814	4,816	70	50
CS	100.0%	78.3%	21.2%	0.3%	0.2%
Deveryon Allegenter					
Revenue Allocator	ć 20 F00 072 ć	8 022 064	ć 10.000 F 40		ć 1 5 2 7 20 4
Sum Other Rev Reqs R	\$ 28,590,872 \$ 100.0%	8,932,961 31.2%	\$ 12,365,542 43.2%	\$ 5,755,064 20.1%	\$ 1,537,304 5.4%
ň	100.0%	31.2%	43.2%	20.1%	5.4%

City of Logan Light & Power FY 2018 Test Year Allocation of Revenue Requirements

The zoro rest real Anotation of Revenue Requirements									Allocation	
		Total		Residential		Commercial		Industrial	<u>USU</u>	Factor
Power Supply										
Demand		6,241,035		2,096,960		2,650,777		1,015,502	477,796	12 CP
Energy		16,847,853		4,175,631		7,754,511		4,115,268	 802,443	WE
Total Power Supply	\$	23,088,888	\$	6,272,591	\$	10,405,288	\$	5,130,770	\$ 1,280,239	
Transmission and Distribution										
Transmission Demand		2,189,509		795,399		855,815		283,779	254,516	TD
Distribution Demand		1,036,998		450,467		448,426		138,106	-	Dist NCP
Customer Facilities		1,115,263		506,019		410,405		198,840	 -	CF
Total T&D	\$	4,341,771	\$	1,751,885	\$	1,714,646	\$	620,725	\$ 254,516	
Customer										
Customer Service		1,160,213		908,485		245,608		3,570	 2,550	CS
Total Customer Service	\$	1,160,213	\$	908,485	\$	245,608	\$	3,570	\$ 2,550	
Revenue										
Other Revenue	\$	(1,813,454)		(566,598)		(784,318)		(365,031)	(97,508)	R
Margin/Transfer		8,360,760		2,612,244		3,616,026		1,682,940	 449,550	R
Total Revenue	\$	6,547,305	\$	2,045,647	\$	2,831,707	\$	1,317,909	\$ 352,042	
Total Revenue Requirements	\$	35,138,177	\$	10,978,607	\$	15,197,249	\$	7,072,973	\$ 1,889,347	
Total Revenues	\$	35,138,177	\$	10,473,555	\$	16,292,657	\$	6,526,643	\$ 1,845,321	
Percent Revenue Requirements		100.0%		31.2%		43.2%		20.1%	5.4%	
Percent Revenues		100.0%		29.8%		46.4%		18.6%	5.3%	
Percent Change		0.0%		4.8%		-6.7%		8.4%	2.4%	
Revenue Req/kWh		0.083		0.105		0.078		0.069	0.094	
Revenue/kWh		0.083		0.100		0.084		0.063	0.092	

Section 4 Proposed Rates

Changes to rates are generally based on the overall need for revenues and results of the cost-of-service analyses. The projected operating results at existing rates as presented in Section 2 of this report outline the overall revenue needs of the electric utility. Section 3 summarizes the cost-of-service results. These factors have been considered in developing the proposed rates summarized in this section of the report.

Proposed Rates

Revenue Needs

In Section 2, it shows that Logan's projected annual change in net position, assuming continuation of the existing retail rates, decreases from 6.3% of revenue in FY 2019 to negative 3.7% of revenue in FY 2023. Projected cash reserves are projected to remain above Logan's policy of 42% of operating revenue through the Study Period despite the decrease from \$24.6 million to \$16.1 million. The cash reserve projections are impacted by the levels of capital improvements and decreasing change in net position.

At this time, no overall increase in revenues from rates is recommended. However, as explained below, certain rate adjustments are suggested as a result of the cost-of-service results.

Rate Design Adjustments

As outlined above, no overall increase in revenues through rates is recommended at this time. However, there are rate design changes recommended based on the cost-of-service results. These changes are explained below and presented in Exhibit 4-A at the end of this section of this report.



Residential

The current residential rate does not include a fixed monthly customer charge. Most utilities charge a monthly customer charge to pay at least a portion of the fixed customer costs associated with having a customer connected to the system. For instance, Rocky Mountain Power charges a fixed charge of \$6 for single phase residential customers and \$12 for three phase customers. The cost-of-service analysis indicates that Logan could justify a residential customer charge of \$8.13. It is recommended that a customer charge of \$5 for single phase customers and \$10 for three phase customers be implemented. These charges would increase overall revenues from the residential class, reductions in the energy rates as shown in Exhibit 4-A are also recommended resulting in no overall increase in revenues from the residential class.

General Service

Based on the cost-of-service results, a slight overall decrease of 1.2% is recommended for this class. The current rate in this class also does not include a monthly customer charge. Separate customer charges for single phase(\$10) and three phase(\$15) customers are recommended with decreases in energy and demand charges as shown in Exhibit 4-A.

High Volume Industrial

Based on the cost-of-service results, an overall increase of 3.1% is recommended for this class. It not recommended that the demand charge be altered, and the increase be accomplished through an increase in the energy charge as shown in Exhibit 4-A.

High Volume Supplemental Service

No change in the High Volume Supplemental Service rate charged to USU is recommended at this time.

Projected Operating Results/Cash Reserves – Proposed Rates

The resulting projected operating results assuming implementation of all the proposed rates summarized above will not change the projected operating results or cash reserves presented in Section 2 of this report.

Net Metering

Based on the analyses contained in this study, we have identified several options for Logan's consideration relative to rate provisions applicable to net metering of small distributed generation facilities at customer locations, most notably solar power installations for residential customers. Net metering is a billing mechanism where customers with distributed generation (like rooftop solar) are credited for electricity they deliver back to the distribution system. For example, if a residential customer has a solar system on the home's rooftop, it may generate more electricity than the home uses during daylight hours. If the home is net-metered, the utility pays the customer for the excess generation. The rate paid for the excess generation varies by state and utility.

Under the current Logan net metering rate, a customer receives full retail rate credit for energy it delivers to the utility during periods when the on-site generator is producing more energy than the customer requires. Excess generation credits can be carried over from month to month, but each year in April any remaining excess generation is zeroed out and the customer receives no compensation for the accumulated annual excess. This is a common approach to net metering in the industry.

Within the electric industry, there are numerous discussions about the economic and operational 'fairness' of net metering programs. Distributed generation advocates argue that net metering programs help promote this beneficial program. Others argue that net metering customers do not contribute sufficiently to the fixed cost of the electric grid, resulting in subsidies from non-net metering customers. There are several potential rate approaches addressing the need for net metering customers to make a contribution to the fixed costs of the grid, even if their net use of energy during a billing period may be

zero. Based on the results of the cost-of-service study, we have examined the following rate scenarios and have designed cost based rates for your consideration.

- Current net metering policy
- Higher monthly customer charge
- Retail demand charge rate structure
- Separate charge based on solar generating capacity
- Minimum bill provision
- Feed-in-tariff

These options are discussed below including reference to the pros and cons of each option.

Current Net Metering Policy

Logan could opt to maintain its current net metering policy. It is similar to standard net metering policies in place at numerous utilities nationwide. The current policy does not address cost based concerns about potential subsidies from regular customers to net metering customers. This option leaves the net metering policy as is and is consistent with most utilities and jurisdictions. Changing the policy can be met with resistance by customers interested in the solar distributed generation option. However, this policy leaves in place industry recognized subsidies for distributed generation which would grow as solar costs decline and more customers add their own generation. Many states are examining an adjustment in net metering legislation because of this growing subsidy.

Higher monthly customer charge

Credits that net metering customers receive for power generated do not generally apply to the fixed monthly customer charge paid by customers. The fixed charge does not vary based on energy used by a customer. Customer charges are meant to recover fixed charges incurred by the utility simply by having a customer connected to the system. These can include meter reading, billing and customer services. They may also include fixed system costs such as portions of the distribution system, service transformers, service lines and meter installations. A higher customer charge can be designed to collect some or all of a customer's allocated fixed costs of the local system. This rate design alternative could be applied to all customers or to just net metering customers. If applied only to net metering customers, this option can be easily implemented and explained to customers. It addresses the subsidy issue. If applied to all customers, higher fixed charges are detrimental to small usage customers and not entirely fair on a cost of service basis. This option also does not adjust for different sized solar installations.

Retail demand charge rate structure

Solar net metering customers purchase less net energy from the utility while still placing demands on the system during times when the solar units are not generating (evenings/nights). This results in net metering customers having a much lower effective load factor for their service. Under a customer charge/energy charge rate structure, it is not possible to adjust rates to reflect wide disparities in load factor. Moving residential net metering customers to a demand and energy rate structure as is commonly done for non-residential customers can allow for contribution to fixed system charges by these customers despite their low energy use. Three part rates with customer, demand and energy components are the best way to reflect true cost-of-service to all types of customers. The demand charge will ensure fixed cost recovery from solar customers even is their net energy consumption is zero. Solar advocates argue that these rates, because the customer only receives the energy rate portion as a credit, do not properly reflect the value of solar generation to the system. When applied to all customers, these rates can cause confusion among smaller customers and individual impacts on bills can vary widely depending on monthly load factor.

Separate charge based on solar generating capacity

Net metering customers access the distribution system to deliver energy to the utility during surplus solar generation periods and to receive energy during low solar generation periods. Based on the size of the solar generation installation, a separate distribution access fee can be charged to a customer. This charge is levied on a \$/kW basis to reflect the fixed expense of the distribution system. The charge can either be assessed on the total generation size or the generation size less the average demand of a typical residential customer. For Logan, the average residential customer is estimated to have an average monthly peak demand of 2.8 kW. As an example, a solar customer with a 5 kW system, they could be charged for the full 5 kW of demand or for 2.2 kW (5 kW

generator capacity less the 2.8 kW average customer demand). This option is selfregulating from a size of generator perspective. Larger solar installations pay more for utilizing the benefits of the fixed distribution system. Customers still receive full retail credit for all energy generated. This option also does not require any additional metering requirements. Customers are billed a fixed amount every month based on the installed capacity. Solar advocates generally view these charges as unwarranted and unfair.

Minimum bill provision

Implementation of a simple minimum bill provision can ensure that net metering customers, as well as all customers, make a minimum contribution to system fixed costs. This option ensures receiving a minimum amount from customers, but often has little impact on self-generators who may still have net bills at or near this amount.

Feed-in-tariff

Feed-in-tariffs are designed to pay for output of distributed generation at a 'value of solar' rate. There is often discussion regarding what the value of solar should include relative to generation, transmission, distribution, environmental externalities and other costs. For our analysis, we have assumed a value equal to the avoided average power supply cost for Logan. Under this type of scenario, the output that is exported to the system by the generator is not paid the full retail rate in a net metering arrangement. The customer receives a credit for the excess generation based on the feed in tariff rate. This option requires metering net in and net out separately. It does reduce some of the subsidies, but is not as effective as other options in ensuring some contribution from the customer for fixed costs. This rate can also be utilized in a 'buy-all; sell-all' arrangement where the utility buys all output of the solar array and sells the customer all its energy needs.

A proposed rate is shown in the following table for each of the rate arrangements discussed above. These are cost based rates based on the FY 2018 test year included in the rate study. The footnotes contain a brief explanation of the basis for the calculations.

Net Metering Alternatives FY 2018 Test Year					
Item	Rate				
Current net metering policy ⁽¹⁾	Current rate				
Higher monthly customer	\$28.54/mo.				
charge ⁽²⁾	\$0.06/kWh				
	\$8.13/mo cust				
Retail demand charge ⁽³⁾	\$6.89/kW-mo demand				
	\$0.0490/kWh energy				
Separate charge based on solar capacity ⁽⁴⁾	\$5.28/kW-mo				
Minimum bill provision ⁽⁵⁾	\$28.54/mo.				
Feed-in-tariff ⁽⁶⁾	\$0.06/kWh				
(1) No change in current rate policy					

(2) Customer unit cost plus distribution fixed cost average customer plus wholesale power and transmission costs in energy.

(3) Cost based three part rate for all services.

(4) Local Transmission/Distribution fixed cost per kW.

(5) Equals higher customer charge computation.

(6) Allocated residential production cost.

Other Utah Municipals

Other Utah municipally-owned utilities were asked if they have instituted any special rate provisions for residential solar net metering customers. Many of them responded that they have not yet implemented anything new, but they are continuing evaluation of alternatives.

St. George, Nephi and Salem have implemented a version of the separate solar grid access charge based on the capacity of the solar installation.

Payson has implemented a feed-in-tariff rate for purchasing all excess energy produced by the generator with no carryover of net excess generation from month to month.

Provo has also implemented a feed-in-tariff rate for purchasing excess energy produced and has also implemented a slightly higher monthly customer charge for solar customers.

Logan City Light & Power Existing and Proposed Rates

<u>Class</u>	(Current <u>Rate</u>	Ρ	roposed <u>Rate</u>	Overall <u>Change</u>				
Residential Service Schedule #1					0.0%				
Customer single phase (per month)	\$	-	\$	5.00					
Customer three phase (per month)	\$	-	\$	10.00					
1st 400 kWh	\$ \$ \$	0.0949	\$	0.0900					
Next 600 kWh	\$	0.1162	\$	0.1050					
Over 1000 kWh		0.1302	\$	0.1171					
minimum bill - single phase service	\$	3.80	\$	5.00					
minimum bill - three phase service	\$	11.40	\$	10.00					
General Service Schedule #6					-1.2%				
Customer single phase (per month)	\$	-	\$	10.00					
Customer three phase (per month)	\$	-	\$	15.00					
1st 1500 kWh	\$	0.09788	\$	0.09675					
Over 1500 kWh	\$	0.05002	\$	0.04889					
Demand over 5 kW	\$	11.58	\$	11.00					
minimum bill - single phase service	\$	7.60	\$	10.00					
minimum bill - three phase service	\$	11.40	\$	15.00					
High Volume Industrial Service Schedule #7					3.1%				
Customer (per month)	\$	-	\$	-					
All kWh	\$	0.0364	\$	0.0384					
All Demand per kW	\$	16.86	\$	16.86					
High Volume Supplemental Service #8					0.0%				
Customer (per month)	\$	326.00	\$	326.00					
All kWh	\$	0.03306	\$	0.03306					
Demand rates per kW									
Partial Requirements	\$	13.93	\$	13.93					
CRSP delivery	\$	2.39	\$	2.39					
Backup Requirements	\$	3.97	\$	3.97					
Daily Backup	\$	0.38	\$	0.38					
Daily Maintenance	\$ \$	0.19		0.19					
Excess Power	\$	27.86	\$	27.86					
North Sub Displacement	\$	0.75	\$	0.75					
	Ŧ		т						
Net Metering Schedule #10									
Customer subject to normal rate schedu	ule								
Customer gets full retail credit for self generation									
Excess generation can be carried over to									
Annual accumulated excess generation zeroed out each April									
A main decommittee excess generation zeroeu out euen April									

Customer receives no compensation for annual excess