



## PRPA Rates published 8/12/16

UFS Updated Cost of Service,  
Financial Projection and Rate  
Designs to reflect Platte River Power  
Authorities wholesale rates  
provided to the Power Utility on  
Friday August 12<sup>th</sup>.

# City of Loveland Power Utility

## Discussion points

- Cost of Service summary adjustments
- Financial projection adjustments
- Proposed 2017 rate design adjustments
- Residential self generation analysis
- Recommended minimum cash reserve

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## Cost of Service Summary Results

Approved July 27, 2016

Customer Class	Cost of Service	Projected Revenues	% Change
Residential	\$ 25,318,104	\$ 24,425,298	3.7%
Small General	10,298,969	9,127,515	12.8%
Residential-Demand	12,823	12,719	-0.8%
Large General	15,488,144	14,541,804	6.5%
Primary <4,000 kW	558,602	517,451	8.0%
Coincident Peak Demand	4,842,428	4,808,102	5.1%
Area Lighting, Flat Rates	16,303	23,543	-30.8%
Wholesale	711,199	494,155	43.9%
<b>Total</b>	<b>\$ 67,244,372</b>	<b>\$ 63,750,684</b>	<b>6.50%</b>

Results adjusted to account for:

- PRPA energy efficiency cost breakdown between Res & Com classes
- Customer Relations cost breakdown between Res & Com classes



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## Cost of Service Summary Results

Proposed with PRPA Rates provided 8/12/16

Customer Class	Cost of Service	Projected Revenues	% Change
Residential	\$ 25,129,375	\$ 24,425,296	2.9%
Small General	10,234,624	9,127,515	12.1%
Residential-Demand	12,525	12,719	-1.5%
Large General	15,368,824	14,541,804	5.7%
Primary <4,000 kW	553,515	517,451	7.0%
Coincident Peak Demand	4,793,265	4,608,102	4.0%
Area Lighting, Flat Rates	16,183	23,543	-31.3%
Wholesale	706,057	494,155	42.9%
<b>Total</b>	<b>\$ 56,814,368</b>	<b>\$ 53,750,584</b>	<b>5.70%</b>

Results adjusted to account for:

- PRPA energy efficiency cost breakdown between Res & Com classes
- Customer Relations cost breakdown between Res & Com classes
- Updated PRPA rates provided 8/12/16



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## Projection Summary

Approved July 27, 2016

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income <sup>(1)</sup>	Projected Cash Balances	Capital Improvements (less PIF)
2017	6.50%	\$ 84,711,965	\$ 82,905,229	\$ 2,423,072	\$ 9,890,877	\$ 11,004,350
2018	6.00%	88,785,274	86,171,346	3,230,263	10,370,789	8,151,080
2019	3.00%	71,888,781	68,530,146	3,072,871	11,401,044	8,746,800
2020	3.00%	75,374,463	72,736,398	3,254,391	12,143,249	10,045,519
2021	3.00%	78,952,737	74,435,428	5,133,645	18,518,310	8,527,895
Recommended Target in 2017				\$ 4,837,367		
Recommended Target in 2021				\$ 5,398,659		
Recommended MINIMUM Target in 2017					\$ 15,408,332	
Recommended MINIMUM Target in 2021					\$ 16,790,093	

Results include original PRPA 2017 projected rates listed below:

	2015	2016	2017	Change
Summer-Energy	\$ 0.03943	\$ 0.04121	\$ 0.04301	4%
Winter-Energy	\$ 0.03783	\$ 0.03954	\$ 0.04080	3%
Summer-Demand	\$ 10.84	\$ 11.33	\$ 10.49	-7%
Winter-Demand	\$ 7.57	\$ 7.91	\$ 8.96	13%



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## Projection Summary

### Proposed with PRPA Rates provided 8/12/16

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income <sup>[1]</sup>	Projected Cash Balances	Capital Improvements (less PIF)
2017	5.70%	\$ 64,233,811	\$ 62,485,106	\$ 2,365,041	\$ 9,735,148	\$ 11,004,350
2018	5.00%	68,276,725	65,697,011	3,196,051	10,258,334	8,151,060
2019	3.00%	71,454,406	69,033,711	3,037,031	10,694,235	8,746,600
2020	3.00%	74,816,869	72,216,560	3,216,645	10,525,953	10,045,519
2021	3.00%	78,368,529	73,890,964	5,093,901	14,326,591	8,527,695
Recommended Target in 2017				\$ 4,741,881		
Recommended Target in 2021				\$ 5,288,842		
Recommended MINIMUM Target in 2017					\$ 12,536,352	
Recommended MINIMUM Target in 2021					\$ 13,577,329	

Results include PRPA rates provided below on 8/12/16:

	2015	2016	2017	Change
Summer-Energy	\$ 0.03943	\$ 0.04121	\$ 0.04200	2%
Winter-Energy	\$ 0.03783	\$ 0.03954	\$ 0.04028	2%
Summer-Demand	\$ 10.84	\$ 11.33	\$ 11.33	0%
Winter-Demand	\$ 7.57	\$ 7.91	\$ 8.64	9%



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## 2017 Rate Design Summary Results

### Approved July 27, 2016

Customer Class	No. of Customer Meters	% of Revenues	Calculated Revenue	Revenue with Adjustments	Dollar Adjustment	Percent Change
Residential Schedule R	30,648	R 45.44%	\$ 24,425,296	\$ 25,977,313	\$ 1,552,017	6.35%
Small General Schedule SG	3,906	SG 16.98%	9,127,515	9,812,425	684,910	7.50%
Large General Schedule LG	327	LG 27.05%	14,541,804	15,486,777	944,973	6.50%
Primary Schedule PT	3	PT 0.96%	517,451	555,662	38,211	7.38%
Other (see detail below)	2,156	0.99%	530,417	569,524	39,106	7.37%
Coincidental Peak Schedule CP	30	CP 8.57%	4,608,102	4,843,115	235,013	5.10%
<b>TOTAL REVENUE</b>	<b>37,041</b>		<b>\$ 53,750,585</b>	<b>\$ 57,244,816</b>	<b>\$ 3,494,231</b>	<b>6.50%</b>

*Other includes the following rateclasses*

Residential-Demand Schedule RD	3	RD 0.02%	12,719	13,469	750	5.90%
City Wholesale Schedule CW	91	CW 0.92%	494,155	531,217	37,062	7.50%
Area Lights Schedule AL	1,963	AL 0.03%	13,648	14,398	751	5.50%
Sprinkler Controls Schedule SC	84	SC 0.01%	5,296	5,587	291	5.50%
Signal Amplifier Schedule SA	4	SA 0.00%	1,710	1,804	94	5.50%
Bus Shelters Schedule BS	11	BS 0.01%	2,889	3,048	159	5.50%



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## 2017 Rate Design Summary Results

Proposed with PRPA Rates provided 8/12/16

Customer Class	No. of Customer Meters		% of Revenues	Calculated Revenue	Revenue with Adjustments	Dollar Adjustment	Percent Change
ResidentialSchedule R	30,648	R	45.44%	\$ 24,425,296	\$ 25,780,964	\$ 1,355,668	5.55%
Small GeneralSchedule SG	3,906	SG	16.98%	9,127,515	9,739,286	611,771	6.70%
Large GeneralSchedule LG	327	LG	27.05%	14,541,804	15,371,304	829,500	5.70%
Primary Schedule PT	3	PT	0.96%	517,451	551,511	34,060	6.58%
Other (see detail below)	2,156		0.99%	530,417	565,279	34,862	6.57%
Coincidental Peak Schedule CP	30	CP	8.57%	4,608,102	4,806,250	198,148	4.30%
<b>TOTAL REVENUE</b>	<b>37,041</b>			<b>\$53,750,585</b>	<b>\$ 56,814,594</b>	<b>\$2,865,862</b>	<b>5.70%</b>

### Other includes the following rateclasses

Residential-DemandSchedule RD	3	RD	0.02%	12,719	13,366	647	5.09%
City WholesaleSchedule CW	91	CW	0.92%	494,155	527,263	33,108	6.70%
Area LightsSchedule AL	1,963	AL	0.03%	13,648	14,289	641	4.70%
Sprinkler ControlsSchedule SC	84	SC	0.01%	5,296	5,545	249	4.70%
Signal AmplifierSchedule SA	4	SA	0.00%	1,710	1,791	80	4.70%
Bus SheltersSchedule BS	11	BS	0.01%	2,889	3,025	136	4.70%



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## Residential Self Generation Customers

- Completed avoided cost valuation of solar production:
- Identified power supply savings using PRPA wholesale rates
- Identified solar production at the time of the system peak demand
- Energy savings occurring from solar
- Distribution system savings
- Identified cost shift occurring under current methodology

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## Residential Self Generation

### Residential Customer

Apply an additional monthly charge per kW of installed solar capacity

- Year one = \$1.45
- Year two = \$2.89

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## Minimum Cash Reserve

UFS proposal to increase current Power Utilities policy of maintaining a minimum 15% of projected O&M

- Base on four components
- Improve credit rating

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## Minimum Cash Reserve Calculation

(with rate track presented in slide seven)

Retail Rate Adjust	5.70%	5.00%	3.00%	3.00%	3.00%
<b>Recommended Minimum Cash Reserve</b>					
O&M Less Depreciation & Purchased Power Expense	\$ 13,591,544	\$ 14,214,222	\$ 14,748,045	\$ 15,321,041	\$ 15,919,396
Historical Value of Assets (Rate Base)	200,412,485	208,563,545	217,310,145	227,355,664	235,883,359
Five Year Capital Plan (less PIF) - Net of bond proceeds	46,475,224	46,475,224	46,475,224	46,475,224	46,475,224
Annual Purchased Power Expense	44,363,341	45,472,424	46,609,235	47,774,466	48,968,827

  

	Percent Allocated	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021
O&M Less Depreciation & Purchased Power Expense	8.2%	\$ 1,117,113	\$ 1,168,292	\$ 1,212,168	\$ 1,259,264	\$ 1,308,443
Historical Value of Assets (Rate Base)	1.0%	2,004,125	2,085,635	2,173,101	2,273,557	2,358,834
Five Year Capital Plan (less PIF) - Net of bond proceeds	10%	4,647,522	4,647,522	4,647,522	4,647,522	4,647,522
Annual Purchased Power	10.7%	4,767,592	4,886,781	5,008,951	5,134,175	5,262,529
<b>Recommended Minimum Cash Reserve</b>		<b>\$ 12,536,352</b>	<b>\$ 12,788,231</b>	<b>\$ 13,041,743</b>	<b>\$ 13,314,517</b>	<b>\$ 13,577,329</b>
Days cash on hand @ Minimum Cash Reserve Recommendation		79	78	78	77	76
<b>Projected Cash Reserves (less PIF reserve)</b>		<b>\$ 9,735,148</b>	<b>\$ 10,258,334</b>	<b>\$ 10,694,235</b>	<b>\$ 10,525,953</b>	<b>\$ 14,326,591</b>
<b>Projected Cash Reserves (including PIF reserve)</b>		<b>\$ 9,832,845</b>	<b>\$ 10,277,311</b>	<b>\$ 11,269,172</b>	<b>\$ 11,969,840</b>	<b>\$ 18,299,088</b>
<b>Loveland Desired Balance (15% of Oper Exp excl'g deprn)</b>		<b>\$ 8,772,386</b>	<b>\$ 9,198,905</b>	<b>\$ 9,659,303</b>	<b>\$ 10,092,849</b>	<b>\$ 10,300,214</b>



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## Projection Summary

(with Optional rate track)

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income <sup>(1)</sup>	Projected Cash Balances	Capital Improvements (less PIF)
2017	5.70%	\$ 64,233,811	\$ 62,485,106	\$ 2,365,041	\$ 9,735,148	\$ 11,004,350
2018	5.00%	68,276,725	65,697,011	3,196,051	10,258,334	8,151,060
2019	4.00%	72,075,555	69,081,505	3,610,386	11,267,591	8,746,600
2020	4.00%	76,130,186	72,311,797	4,434,725	12,333,872	10,045,519
2021	3.00%	79,750,483	73,985,654	6,381,164	17,485,051	8,527,695
<b>Recommended Target in 2017</b>				<b>\$ 4,741,881</b>		
<b>Recommended Target in 2021</b>				<b>\$ 5,288,842</b>		
<b>Recommended MINIMUM Target in 2017</b>					<b>\$ 12,536,352</b>	
<b>Recommended MINIMUM Target in 2021</b>					<b>\$ 13,585,111</b>	



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