

2025 Cost of Service / Rate Design Study

**City of Crete
Electric Utility**

City Council Review Draft

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JKEC

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Executive Summary

This study was prepared by JK Energy Consulting, LLC for the City of Crete, Nebraska (City). The purpose of the study was to review the electric rates for the City and its electric utility (Utility) and ensure that electric rates are adequate to pay for projected expenses.

Based on the analysis completed, it appears the existing rates are projected to collect less revenue than projected revenue requirements in fiscal year (FY) 2025 and beyond. Projected retail revenue for FY 2025 was approximately \$10.7 million (Table 5), while projected revenue requirements (operating expenses and capital improvements less non-retail revenues) were approximately \$11.5 million (Table 5). Projected revenue requirements included increasing the Utility's budgeted capital improvements from \$120,000 in FY 2024 to \$250,000 in FY 2025 through FY 2030 (Table 1). The projected operating results indicate insufficient revenue to cover projected expenses in FY 2025 and beyond (Table 1, Line 23).

Of the projected revenue requirements, approximately \$9 million (Table 3) is for purchased power from the Municipal Energy Agency of Nebraska (MEAN) and Western Area Power Administration (Western), including transmission service to deliver these purchases. This represents approximately 78% of projected revenue requirements. In January 2025, MEAN approved a rate increase of approximately 9.9% for FY 2026, beginning April 1, 2025. For projection purposes, MEAN rates are projected to increase 4% annually in future periods through FY 2030.

By FY 2030, a cumulative rate increase of 33% would be necessary to cover projected operating expenses (Table 1, Line 24). The analyses indicated that rate increases of approximately 7% in FY 2026 and FY 2027, 6% in FY 2028 and FY 2029, and 5% in FY 2030 (Table 2, Line 12) would recover sufficient revenue for projected expenses. These increases will be dependent on power supply cost increases and how much reserve margin the City maintains for capital expenses and other needs. It is proposed to implement a rate ordinance that would increase changes of 7% in October 2025 (FY 2026) and 7% in October 2026 (FY 2027). Future rate changes should be implemented based on future operating results and cost of service analyses.

The cost of service analysis was completed to assess the amount that each rate class should be paying compared to the revenue that is being collected from existing rates (Table 5). The analysis also indicated how much revenue is collected in each season compared to the cost of service in the respective season (Table 6). In general, winter rates should be increased more than summer rates.

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the City. The proposed changes to the rate design include:

1. **Increase the customer charge:** The current customer charge is somewhat less than the cost of service. It is recommended that the customer charge be increased in each of the next two years to ensure it is consistent with the cost of service.
2. **Reflect cost of service results in rate change:** The cost of service results indicate that General Service rates tend to be higher relative to the cost of service than Residential and Large Power rates. It is recommended that the General Service rate class have a smaller rate increase, and the Residential and Large Power rate classes have a larger rate increase.
3. **Eliminate all-electric rates:** In August 2024, the City opted to eliminate the Residential and General Service All-Electric rate classes as the rates were the same as the Residential and General Service rate classes. Customers in the all-electric rate classes were transferred to the appropriate rate class. The all-electric rate classes will be removed from the rate schedule effective with the passage of the proposed rate ordinance (see Appendix A).

The proposed rate changes would increase revenue by 7% in FY 2026 (Table 7) and 7% in FY 2027 (Table 9). The typical Residential customer would experience an increase of \$7.90 per month in FY 2026 and \$8.47 per month in FY 2027. These changes are consistent with the cost of service analysis.

The proposed rates tend to be toward the higher end of the range of rates when compared to the City's peer group (Tables 10 and 11). Rates were compared to Nebraska Public Power District (NPPD), Norris Public Power District (Norris PPD), Lincoln Electric System (LES) and the City of Fairbury. These neighboring utilities may be experiencing power supply and operating cost increases over the next few years. For example, NPPD is projecting increased wholesale rates in future years, which are likely to be passed through to retail customers served by the NPPD retail division and NPPD's wholesale customers.

Conclusions

The following conclusions were reached, based on the information provided and analyses completed:

1. The projected revenue requirements for FY 2025 were \$11.5 million.
2. The largest component of the test year budget was purchased power expense, representing approximately 78% of the projected test year budget.
3. Projected revenue from existing rates is approximately \$10.7 million.
4. In FY 2025, the projected deficit on a cash basis was approximately \$719,000, increasing to approximately \$3.6 million by FY 2030.
5. The primary driver for the proposed rate increases is purchased power costs and increased capital expenditure reserves.
6. Rate increases of 7% in FY 2026 and FY 2027 would be necessary to help ensure sufficient revenue to cover projected expenses.

7. Additional rate increases of 6% in FY 2028 and FY 2029 and 5% in FY 2030 may be necessary to provide sufficient revenue to cover projected expenses.
8. The cost of service analysis indicated that rate increases should be implemented for all rate classes.
9. With the proposed rate increases, the projected typical bill for a Residential customer would increase approximately \$7.90 per month in FY 2026 and \$8.47 per month in FY 2027.

Recommendations

The following recommendations were developed based on the analyses completed and conclusions reached:

1. The City should adopt retail rate increases of 7% on October 1, 2025 (FY 2026) and October 1, 2026 (FY 2027). The proposed rate increases would be implemented with the ordinance included in Appendix A.
2. Rates should be increased for all rate classes.
3. The City should consider implementing 6% rate increases in FY 2028 and FY 2029 and a 5% rate increase in FY 2030. These rate increases will be dependent on future purchased power, operating and maintenance, and capital improvement costs.
4. The City should review its rates on a regular basis, particularly as purchased power and other operating costs increase.

Purpose and Approach

The purpose of this study was to review the electrical rates charged by the City and develop rates that were consistent with a number of goals established by the City. The rate goals established by the City included having rates that provide sufficient revenues to cover projected operating expenses and having rates that reflect the cost of service for each rate class.

The approach to the study involved completing several tasks. Retail sales, purchased power, operating expenses, capital project, and financial information were collected. Test year expenses for FY 2025 were projected and future revenues and expenses were projected through FY 2030. A rate plan was developed to meet the financial goals established by the City. The allocated cost of service for each rate class was calculated and compared to revenue from existing rates. Rates for each rate class were developed based on the cost of service and other goals established by the City. An ordinance was developed establishing new rates effective October 1, 2025 (FY 2026) and October 1, 2026 (FY 2027). A written report was prepared and presented to the City staff for review prior to submitting it to the City Council.

Background

City of Crete – Electric Utility

The City operates its electric utility, which serves customers located within the City and in some areas adjacent to the City. The Utility serves approximately 2,700 customers, including a mix of residential, rural, and general service customers along with three large power customers.

Purchased Power

The City purchases its total electric requirements from Western and MEAN. Western supplies approximately 10% of the City's capacity and energy requirements from its hydro-electric resources located in the upper Midwest. MEAN supplies the City's supplemental capacity and energy requirements under its Service Schedule M agreement. In FY 2025, the projected cost of purchased power from MEAN and Western is approximately 7.7¢/kWh, delivered to the City.

Purchased power represents approximately 78% of the City's test year budget, so any increase in power costs will most likely require a rate increase at the retail level. There is also future power cost uncertainty as MEAN has indicated its rates are likely to go up each year for the next several years. There has also been cost uncertainty for labor and materials with recent inflationary trends and supply chain issues affecting portions of the electric utility industry. These issues could result in a major change in the Utility's future costs and should be monitored because of their potential impact on the Utility's retail rates.

Projected Financial Results

The purpose of preparing projected financial results is to compare projected revenues with projected expenses and determine the need for future rate increases. Projections were prepared for the period FY 2024 through FY 2030 based on information provided by MEAN, Western, and the Utility.

Parameters

The following parameters were used to develop the projected financial results.

1. Historical and projected results were prepared based on the City's fiscal year (October through September).
2. The FY 2025 budget was used as the basis for the test year budget, with adjustments for known changes and to ensure consistency with historical actual expenditures.
3. MEAN rates were projected to increase approximately 10% in FY 2025 and 4% annually in FY 2026 through FY 2030.

4. Western rates were projected to remain stable throughout the study period.
5. Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually. This is in addition to cost escalation that was built into the current budget projections.
6. Projected financial results were presented on a “cash basis” as opposed to “accrual basis.” Cash basis accounting includes capital improvements and debt service principal as expenses but does not include depreciation expense.
7. Rate changes were developed using the cash basis operating results.

Projected Financial Results

Table 1 (see page 6) shows the projected financial results for FY 2024 through FY 2030, along with historical financial results for FY 2023. The projected financial results do not include rate increases.

Without a rate increase or use of reserve funds, the projected deficit on a cash basis would be approximately \$719,000 in FY 2025, increasing to approximately \$3.6 million in FY 2030. Between now and FY 2030, retail rates would need to be increased by approximately 33% to cover the projected deficit. The major cause of the deficit is increased purchased power expenses from MEAN, the funding of the City’s capital improvement plan, and general cost escalation.

Future Rate Changes

One of the rate design goals was to spread any major rate increases over a number of years. Table 2 (see page 7) shows projected financial results with projected rate increases of approximately 7% in FY 2026 and FY 2027, 6% in FY 2028 and FY 2029, and 5% in FY 2030. The proposed rate changes provide sufficient revenue to cover projected purchased power, operating and maintenance, and administrative and general costs.

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Table 1
 City of Crete
 2025 Cost of Service Study
 Projected Financial Results
 Existing Rates

Line	Description	Audited (1)	Projected (2)	Test Year	Projected				
		2023	2024	2025	2026	2027	2028	2029	2030
1	Operating Revenues								
2	Retail Sales - Existing Rates	\$ 11,088,015	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282
3	Rate Changes	-	-	-	-	-	-	-	-
4	Capacity Compensation	148,593	154,211	142,900	142,900	142,900	142,900	142,900	142,900
5	Other Operating Revenue	13,579	187,616	160,100	160,100	160,100	160,100	160,100	160,100
6	Total Operating Revenue	\$ 11,250,187	\$ 11,077,109	\$ 11,038,282	\$ 11,038,282	\$ 11,038,282	\$ 11,038,282	\$ 11,038,282	\$ 11,038,282
7	Operating Expenses								
8	Purchased Power	\$ 7,811,836	\$ 8,519,550	\$ 8,979,839	\$ 9,590,353	\$ 10,004,428	\$ 10,438,650	\$ 10,894,113	\$ 11,371,975
9	Internal O&M	1,591,689	1,669,055	1,777,000	1,919,160	2,072,693	2,155,601	2,241,825	2,331,498
10	Total Operating Expenses	\$ 9,403,525	\$ 10,188,605	\$ 10,756,839	\$ 11,509,513	\$ 12,077,121	\$ 12,594,251	\$ 13,135,938	\$ 13,703,472
11	Operating Income	\$ 1,846,662	\$ 888,504	\$ 281,443	\$ (471,231)	\$ (1,038,839)	\$ (1,555,969)	\$ (2,097,656)	\$ (2,665,190)
12	Non-Operating Expense/(Revenue)								
13	Interest Income	(74,814)	(66,090)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
14	Interest Expense	14,321	-	-	-	-	-	-	-
15	Debt Service Principal	120,000	125,000	125,000	130,000	130,000	-	-	-
16	Gain/Loss on Investment	(6,877)	-	-	-	-	-	-	-
17	Capital Improvements	289,355	56,992	300,000	309,000	318,270	327,818	337,653	347,782
18	Transfers	664,504	350,004	350,000	350,000	350,000	350,000	350,000	350,000
19	In Lieu of Taxes	-	-	-	-	-	-	-	-
20	Franchise Fee	120,000	120,000	250,000	250,000	250,000	250,000	250,000	250,000
21	Other	-	-	-	-	-	-	-	-
22	Total Non-Operating Expense/(Revenue)	\$ 1,126,489	\$ 585,905	\$ 1,000,000	\$ 1,014,000	\$ 1,023,270	\$ 902,818	\$ 912,653	\$ 922,782
23	Net Income - Cash Basis	\$ 720,173	\$ 302,598	\$ (718,557)	\$ (1,485,231)	\$ (2,062,109)	\$ (2,458,787)	\$ (3,010,308)	\$ (3,587,973)
24	Rate Change for Breakeven Cash Flow	-6.5%	-2.8%	6.7%	13.8%	19.2%	22.9%	28.0%	33.4%

Notes:

- (1) Based on audited financial statements.
- (2) Projected based on FY 2024 year-end report.

Table 2
City of Crete
2025 Cost of Service Study
Projected Financial Results
Projected Rates

Line	Description	Test Year	Projected			
		2025	2026	2027	2028	2030
1	Operating Revenues					
2	Retail Sales - Existing Rates	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282	\$ 10,735,282
3	Rate Changes	-	753,315	1,611,720	2,352,540	3,137,810
4	Capacity Compensation	142,900	142,900	142,900	142,900	142,900
5	Other Operating Revenue	160,100	160,100	160,100	160,100	160,100
6	Total Operating Revenue	\$ 11,038,282	\$ 11,791,597	\$ 12,650,002	\$ 13,390,822	\$ 14,176,092
7	Operating Expenses					
8	Purchased Power	\$ 8,979,839	\$ 9,590,353	\$ 10,004,428	\$ 10,438,650	\$ 10,894,113
9	Internal O&M	1,777,000	1,919,160	2,072,693	2,155,601	2,241,825
10	Total Operating Expenses	\$ 10,756,839	\$ 11,509,513	\$ 12,077,121	\$ 12,594,251	\$ 13,135,938
11	Operating Income	\$ 281,443	\$ 282,084	\$ 572,881	\$ 796,571	\$ 1,040,154
12	Rate Change Implemented	0.0%	7.0%	7.0%	6.0%	5.0%
13	Non-Operating Expense/(Revenue)					
14	Interest Income	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
15	Interest Expense	-	-	-	-	-
16	Debt Service Principal	125,000	130,000	130,000	-	-
17	Rate Stabilization	-	-	-	-	-
18	Capital Improvements	300,000	309,000	318,270	327,818	337,653
19	Transfers	350,000	350,000	350,000	350,000	350,000
20	In Lieu of Taxes	-	-	-	-	-
21	Franchise Fee	250,000	250,000	250,000	250,000	250,000
22	Operating Margin	-	-	-	-	-
23	Total Non-Operating Expense/(Revenue)	\$ 1,000,000	\$ 1,014,000	\$ 1,023,270	\$ 902,818	\$ 912,653
24	Net Income - Cash Basis	\$ (718,557)	\$ (731,916)	\$ (450,389)	\$ (106,247)	\$ 127,501
25	Rate Change for Breakeven Cash Flow	6.7%	6.8%	4.2%	1.0%	-1.2%

Cost of Service

The purpose of the cost of service analysis is to identify the costs related to serving each class of customers. Several steps were taken to prepare the cost of service analysis. A test year budget was prepared based on the FY 2025 operating budget with adjustments for known changes. Each expense item was identified and assigned to a utility function, and further classified as a demand, energy, or customer related expense. This process is called “functionalization” and “classification.” The costs related to each function are then allocated to each customer class based on generally accepted cost allocation principles for municipal electric utilities. The allocated costs were compared to revenues based on existing rates. The comparison of the cost of service to revenue from existing rates was used as a factor in designing rates.

Test Year Budget

The FY 2025 operating budget was used as the basis for the test year budget. The purpose of preparing a test year budget is to create a scenario that is as close to “normal” operating conditions as possible, reflecting known changes for the utility. The test year budget included the following adjustments to the FY 2025 operating budget:

- Adjusted purchased power costs for MEAN and Western to match projected rates.
- A capital improvement reserve of \$250,000 was included in the test year budget.

The test year budget for FY 2025 was approximately \$11.5 million and is summarized in Table 3 (see page 9). This figure represents the amount that needs to be collected from retail rates. It includes all operating expenses and is reduced for revenue from interest income and other non-retail revenue.

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Table 3
City of Crete
2025 Cost of Service Study
Test Year Budget by Function
Annual

Rate Class	Production / Transmission	Subtrans/ Distribution	Customer/ Admin	Total
Residential Service (127)	\$ 2,132,311	\$ 1,018,425	\$ 134,858	\$ 3,285,593
General Service (133)	482,197	169,941	16,702	668,840
General Service 3P (141)	453,463	125,821	17,169	596,453
City GS 3 Phase (143)	78,159	23,839	2,816	104,814
City GS (135)	95,681	37,912	6,931	140,524
GS Demand (149)	1,089,693	180,873	2,963	1,273,529
Large Power 1 (153)	2,593,146	388,197	866	2,982,209
Large Power 2 (155)	2,023,607	321,899	433	2,345,940
City GS Demand (151)	4,038	2,488	866	7,392
Irrigation (157)	4,892	7,277	213	12,382
Cogeneration G1 & G2	-	-	-	-
City Street Lighting (181)	22,652	5,145	31,805	59,601
Rental Lighting	-	1,586	7,889	9,475
Total	\$ 8,979,839	\$ 2,283,401	\$ 223,512	\$ 11,486,752
Percentage	78.2%	19.9%	1.9%	100.0%

Functionalization and Classification

Functionalization and classification involve assigning the expense items to a function and classifying those expenses by allocation method. Functions vary by utility and are based on power supply arrangements, size, and type of utility. The following functions were used for the Utility:

- Purchased power
- Transmission and sub-transmission service
- Distribution (primary and secondary)
- Services
- Meter reading
- Billing and customer accounting
- Street lighting
- Local generation

Expenses were classified into demand-related, energy-related, and customer-related classifications. Some costs are allocated solely to a single classification. For example, transmission service is classified as demand related. Other functions, including primary

distribution, are spread between the demand-related and customer-related classifications. The classifications were based on cost causation and how the costs should be recovered from the Utility's retail rate classes.

Table 4 summarizes the classification of test year expenses, including the allocation to the various retail rate classes. Approximately \$888,000 is customer-related, \$5 million is energy-related, and \$5.6 million is demand-related expense. Based on this classification, 7.7% of the Utility's test year budget is customer-related, 43.4% is energy-related, and 48.8% is demand-related.

Of note, the cost of service for customer-related service is \$24.95 per month for Residential rates. This compares to the existing Residential customer charges of \$19.50 per month. It is recommended that the customer charge be increased to reflect the cost of service more closely.

Table 4
City of Crete
2025 Cost of Service Study
Classification of Expenses
Annual

Rate Class	Customer		Energy		Demand			
	(\$)	(\$/mon)	(\$)	(¢/kWh)	(\$)	¢/kWh	\$/kW	\$/hp
Residential Service (127)	\$ 667,884	\$ 24.95	\$ 1,114,145	4.76	\$ 1,503,564	6.42		
General Service (133)	82,715	24.95	259,865	4.76	326,259	5.97		
General Service 3P (141)	40,847	34.35	230,947	4.76	324,660	6.69		
City GS 3 Phase (143)	10,957	56.19	41,108	4.76	52,749	6.10		
City GS (135)	26,972	56.19	46,035	4.76	67,517	6.98		
GS Demand (149)	9,683	53.80	600,639	4.76	663,207		24.64	
Large Power 1 (153)	2,231	92.97	1,536,922	4.76	1,443,056		23.02	
Large Power 2 (155)	1,116	92.97	1,144,790	4.76	1,200,034		22.49	
City GS Demand (151)	2,231	92.97	1,166	4.73	3,995			
Irrigation (157)	906	33.56	1,390	4.77	10,086	34.65		69.80
Cogeneration G1 & G2	-	-	-	-	-	-		
City Street Lighting (181)	32,720	151.48	13,569	4.75	13,312	4.66		
Rental Lighting	9,475	9.61	-	-	-			
Total	\$ 887,737		\$ 4,990,576		\$ 5,608,438			
Percentage	7.7%		43.4%		48.8%			

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Cost Allocation

The functionalized costs were allocated to the various rate classes using generally accepted methods for preparing embedded cost of service studies. There is no standard cost of service methodology set by a regulatory agency that the City is required to follow. There are a number of guidelines that municipal utilities typically follow, including publications and guidelines from the American Public Power Association, the National Association of Regulatory Utility Commissioners, and the Federal Energy Regulatory Commission.

Demand-related costs were allocated on the basis of coincident or non-coincident demands, depending on the function, and adjusted for losses. Energy-related costs were allocated on the basis of energy sales, adjusted for losses. Customer-related costs were allocated on the basis of the weighted number of customers within each rate class, with weighting factors determined based on the cost of metering, customer billing or services.

Some expenses are not easily assigned to a particular function. Examples of expenses that are not easily assigned include interest income, general administrative expenses, miscellaneous operating revenue and the net cost or margin from leasing the power plant to MEAN. These expenses were assigned to functions at the same ratio as expenses that were directly assigned to functions, which is one of several generally accepted methods for assigning these costs to the appropriate function.

Comparison of Revenues to Cost of Service

Revenues collected from existing rates were compared to the allocated cost of service. The purpose of this comparison was to provide guidance on the adequacy of existing rates for each rate class. This comparison can be used to assess the general magnitude of rate changes needed for each rate class and is one factor in determining the need for rate adjustments for individual rate classes.

Table 5 (see page 12) compares the revenue from existing rates to the calculated cost of service. On an annual basis, not including street lighting (which is provided to the City at a discount), the most significant deviation is for City General Service and Large Power 2 rate classes. Rate changes to cover the cost of service for non-City rate classes range between -3.9% and 9.8%.

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Table 5
City of Crete
2025 Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates
Annual

Rate Class	Existing Rates	Cost of Service	Difference	
			\$	%
Residential Service (127)	\$ 3,007,848	\$ 3,285,593	\$ 277,745	9.2%
General Service (133)	695,807	668,840	(26,967)	-3.9%
General Service 3P (141)	583,651	596,453	12,802	2.2%
City GS 3 Phase (143)	103,240	104,814	1,574	1.5%
City GS (135)	122,808	140,524	17,716	14.4%
GS Demand (149)	1,256,260	1,273,529	17,269	1.4%
Large Power 1 (153)	2,783,294	2,982,209	198,916	7.1%
Large Power 2 (155)	2,136,166	2,345,940	209,773	9.8%
City GS Demand (151)	6,699	7,392	693	10.3%
Irrigation (157)	11,328	12,382	1,054	9.3%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	20,063	59,601	39,538	197.1%
Rental Lighting	8,117	9,475	1,358	16.7%
Total	\$ 10,735,282	\$ 11,486,752	\$ 751,470	7.0%

Table 6 (see page 13) shows the calculated cost of service for the summer and winter season. Summer season rates would require a decrease of 2% to recover the cost of service, while winter season rates would need to increase approximately 13% to recover the cost of service.

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Table 6
City of Crete
2025 Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates

Summer

Rate Class	Existing Rates	Cost of Service	Difference	
			\$	%
Residential Service (127)	\$ 1,232,607	\$ 1,232,557	\$ (50)	0.0%
General Service (133)	273,885	243,832	(30,053)	-11.0%
General Service 3P (141)	234,594	222,790	(11,803)	-5.0%
City GS 3 Phase (143)	39,447	37,092	(2,356)	-6.0%
City GS (135)	47,776	48,700	924	1.9%
GS Demand (149)	527,401	448,956	(78,444)	-14.9%
Large Power 1 (153)	1,067,720	1,056,510	(11,211)	-1.0%
Large Power 2 (155)	741,558	773,786	32,228	4.3%
City GS Demand (151)	2,181	1,949	(233)	-10.7%
Irrigation (157)	2,962	4,649	1,687	56.9%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	5,686	16,118	10,432	183.5%
Rental Lighting	2,682	3,158	477	17.8%
Total	\$ 4,178,498	\$ 4,090,097	\$ (88,401)	-2.1%

Winter

Rate Class	Revenue April 2015 Rates	Cost of Service	Difference	
			\$	%
Residential Service (127)	\$ 1,775,242	\$ 2,053,036	\$ 277,794	15.6%
General Service (133)	421,922	425,008	3,086	0.7%
General Service 3P (141)	349,058	373,663	24,605	7.0%
City GS 3 Phase (143)	63,792	67,722	3,929	6.2%
City GS (135)	75,033	91,824	16,792	22.4%
GS Demand (149)	728,859	824,573	95,713	13.1%
Large Power 1 (153)	1,715,573	1,925,699	210,126	12.2%
Large Power 2 (155)	1,394,608	1,572,153	177,545	12.7%
City GS Demand (151)	4,518	5,444	926	20.5%
Irrigation (157)	8,366	7,733	(633)	-7.6%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	14,377	43,483	29,106	202.4%
Rental Lighting	5,436	6,317	881	16.2%
Total	\$ 6,556,784	\$ 7,396,654	\$ 839,870	12.8%

Rate Design

The purpose of rate design is to develop rates that help achieve established revenue and financial performance goals while balancing other rate goals established by the Utility. This process involves meeting goals that sometimes conflict with each other. For example, a goal to have competitive rates may conflict with the need to have rates that recover sufficient revenue to pay for projected expenses.

The rates were designed to best meet several goals that were established by the Utility and its consultant. These goals included:

- Ensuring the long-term financial integrity of the utility.
- Establishing rates that are fair, reasonable, and non-discriminatory.
- Developing rates that are competitive with neighboring utilities.
- Encouraging usage during low cost time periods, while discouraging usage during high cost periods.
- Recognizing the cost of service for rate classes and seasons.
- Phasing in large rate increases to minimize adverse impacts to customers.

Summary of Rate Design Changes

The proposed rate ordinance, included in Appendix A, would implement a rate increase of 7% on October 1, 2025, and 7% on October 1, 2026. The proposed rate changes are consistent with the cost of service results. The proposed rate changes by rate class, effective October 1, 2025 (FY 2026), are shown in Table 7 (see page 15). Table 8 (see page 16) shows the proposed rate increases broken out by summer and winter seasons. Table 9 (see page 17) shows the proposed rate changes by rate class for FY 2027, effective October 1, 2026.

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Table 7
City of Crete
2025 Cost of Service Study
Proposed Rate Change by Rate Class - FY 2026
Annual

Rate Class	Existing Rates	Proposed Rates	Difference	
			\$	%
Residential Service (127)	\$ 3,007,848	\$ 3,219,314	\$ 211,466	7.0%
General Service (133)	695,807	736,265	40,459	5.8%
General Service 3P (141)	583,651	617,459	33,808	5.8%
City GS 3 Phase (143)	103,240	109,177	5,937	5.8%
City GS (135)	122,808	129,830	7,022	5.7%
GS Demand (149)	1,256,260	1,343,354	87,094	6.9%
Large Power 1 (153)	2,783,294	2,989,379	206,085	7.4%
Large Power 2 (155)	2,136,166	2,294,343	158,177	7.4%
City GS Demand (151)	6,699	7,201	502	7.5%
Irrigation (157)	11,328	12,119	791	7.0%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	20,063	21,468	1,404	7.0%
Rental Lighting	8,117	8,688	571	7.0%
Total	\$ 10,735,282	\$ 11,488,597	\$ 753,315	7.0%

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Table 8
City of Crete
2025 Cost of Service Study
Proposed Rate Change by Rate Class - 2026

Summer

Rate Class	Existing Rates	Proposed Rates	Difference	
			\$	%
Residential Service (127)	\$ 1,232,607	\$ 1,317,148	\$ 84,541	6.9%
General Service (133)	273,885	289,680	15,795	5.8%
General Service 3P (141)	234,594	248,023	13,430	5.7%
City GS 3 Phase (143)	39,447	41,704	2,257	5.7%
City GS (135)	47,776	50,486	2,710	5.7%
GS Demand (149)	527,401	563,948	36,548	6.9%
Large Power 1 (153)	1,067,720	1,146,823	79,102	7.4%
Large Power 2 (155)	741,558	796,467	54,909	7.4%
City GS Demand (151)	2,181	2,345	164	7.5%
Irrigation (157)	2,962	3,180	217	7.3%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	5,686	6,084	398	7.0%
Rental Lighting	2,682	2,870	189	7.0%
Total	\$ 4,178,498	\$ 4,468,757	\$ 290,259	6.9%

Winter

Rate Class	Existing Rates	Proposed Rates	Difference	
			\$	%
Residential Service (127)	\$ 1,775,242	\$ 1,902,166	\$ 126,924	7.1%
General Service (133)	421,922	446,586	24,664	5.8%
General Service 3P (141)	349,058	369,436	20,378	5.8%
City GS 3 Phase (143)	63,792	67,473	3,680	5.8%
City GS (135)	75,033	79,345	4,312	5.7%
GS Demand (149)	728,859	779,405	50,546	6.9%
Large Power 1 (153)	1,715,573	1,842,556	126,983	7.4%
Large Power 2 (155)	1,394,608	1,497,876	103,268	7.4%
City GS Demand (151)	4,518	4,856	338	7.5%
Irrigation (157)	8,366	8,939	573	6.9%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	14,377	15,384	1,006	7.0%
Rental Lighting	5,436	5,818	382	7.0%
Total	\$ 6,556,784	\$ 7,019,839	\$ 463,056	7.1%

Table 9
City of Crete
2025 Cost of Service Study
Proposed Rate Change by Rate Class - FY 2027
Annual

Rate Class	Existing Rates	Proposed Rates	Difference	
			\$	%
Residential Service (127)	\$ 3,219,314	\$ 3,446,032	\$ 226,718	7.0%
General Service (133)	736,265	778,908	42,643	5.8%
General Service 3P (141)	617,459	653,030	35,571	5.8%
City GS 3 Phase (143)	109,177	115,430	6,253	5.7%
City GS (135)	129,830	137,239	7,409	5.7%
GS Demand (149)	1,343,354	1,435,568	92,214	6.9%
Large Power 1 (153)	2,989,379	3,210,828	221,449	7.4%
Large Power 2 (155)	2,294,343	2,464,856	170,513	7.4%
City GS Demand (151)	7,201	7,664	463	6.4%
Irrigation (157)	12,119	12,966	847	7.0%
Cogeneration G1 & G2	-	-	-	0.0%
City Street Lighting (181)	21,468	22,970	1,503	7.0%
Rental Lighting	8,688	9,299	610	7.0%
Total	\$ 11,488,597	\$ 12,294,790	\$ 805,583	7.0%

Specific Rate Design Issues

In general, the Utility's rate structure is reasonable for its size and customer base. A number of specific rate design issues were identified based on the cost of service results, a review of the existing rate structure, and based on input from Utility staff. The following rate design changes are recommended and included in the rate ordinance (see Appendix A):

1. **Increase the customer charge:** The current customer charge is somewhat less than the cost of service. It is recommended that the customer charge be increased in each of the next two years to ensure it is consistent with the cost of service.
2. **Reflect cost of service results in rate change:** The cost of service results indicate that General Service rates tend to be higher relative to the cost of service than Residential and Large Power rates. It is recommended that the General Service rate class have a smaller rate increase, and the Residential and Large Power rate classes have a larger rate increase.

3. **Eliminate all-electric rates:** In August 2024, the City opted to eliminate the Residential and General Service All-Electric rate classes as the rates were the same as the Residential and General Service rate classes. Customers in the all-electric rate classes were transferred to the appropriate rate class. The all-electric rate classes will be removed from the rate schedule effective with the passage of the proposed rate ordinance (see Appendix A).

Rate Comparisons

The proposed rates tend to be higher than neighboring utilities. Rates were compared to NPPD, Norris PPD, LES, and the City of Fairbury. Table 10 compares Residential rates and Table 11 (see page 19) compares General Service rates at various usage levels for the summer and winter seasons.

Rate comparisons are important but do take not into account multiple factors that cause rate differences. For example, transfers and discounted services to municipal accounts would not be available if NPPD or Norris PPD served the City's retail customers. Municipally owned utilities may transfer funds to the City as an in-lieu-of tax payment and, in some cases, provide free or discounted labor and equipment to the City or other enterprise funds. The comparisons were based on existing rate schedules for 2025 and do not consider future rate changes that may be implemented by other utilities. NPPD and Norris PPD retail and wholesale customers may see an increase in wholesale costs in future years based on current projections. The neighboring utilities that were compared are experiencing cost pressures related to labor, materials and purchased power costs. If those factors were taken into account, the City's rates may compare more favorably to neighboring utilities.

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Table 10
Typical Bill Comparison
Rate Comparisons - Proposed Rates
Residential Service (127)

Summer Comparisons					
Utility	500 kWh	Utility	1,000 kWh	Utility	2,500 kWh
LES	69.50	LES	105.50	LES	213.50
Fairbury	76.25	Fairbury	134.50	Norris	280.70
Crete	79.50	Norris	134.74	Fairbury	309.25
NPPD	85.59	Crete	137.00	Crete	309.50
Norris	86.09	NPPD	142.80	NPPD	314.44
Winter Comparisons					
Utility	500 kWh	Utility	1,000 kWh	Utility	2,500 kWh
LES	60.25	LES	87.00	LES	167.25
Fairbury	70.75	NPPD	118.99	Norris	242.67
NPPD	74.30	Norris	119.53	NPPD	249.39
Norris	78.49	Fairbury	121.06	Fairbury	254.86
Crete	79.50	Crete	129.65	Crete	270.65

Table 11
Typical Bill Comparison
Rate Comparisons - Proposed Rates
General Service

Summer Comparisons					
Utility	1,000 kWh	Utility	5,000 kWh	Utility	10,000 kWh
LES	128.50	LES	510.50	LES	988.00
Norris PPD	143.86	Norris PPD	569.55	Norris PPD	1,101.66
Fairbury	148.30	NPPD	613.08	NPPD	1,172.34
NPPD	165.67	Fairbury	621.50	Fairbury	1,213.00
Crete	183.85	Crete	666.25	Crete	1,269.25
Winter Comparisons					
Utility	1,000 kWh	Utility	5,000 kWh	Utility	10,000 kWh
LES	97.90	LES	357.50	LES	682.00
Norris PPD	133.33	NPPD	496.08	NPPD	938.34
Fairbury	135.10	Norris PPD	516.90	Norris PPD	996.36
NPPD	142.27	Fairbury	528.25	Fairbury	999.25
Crete	183.85	Crete	595.95	Crete	1,106.45

Conclusions

The following conclusions were reached, based on the information provided and analyses completed:

1. The projected revenue requirements for FY 2025 were \$11.5 million.
2. The largest component of the test year budget was purchased power expense, representing approximately 78% of the projected test year budget.
3. Projected revenue from existing rates is approximately \$10.7 million.
4. In FY 2025, the projected deficit on a cash basis was approximately \$719,000, increasing to approximately \$3.6 million by FY 2030.
5. The primary driver for the proposed rate increases is purchased power costs and increased capital expenditure reserves.
6. Rate increases of 7% in FY 2026 and FY 2027 would be necessary to help ensure sufficient revenue to cover projected expenses.
7. Additional rate increases of 6% in FY 2028 and FY 2029 and 5% in FY 2030 may be necessary to provide sufficient revenue to cover projected expenses.
8. The cost of service analysis indicated that rate increases should be implemented for all rate classes.
9. With the proposed rate increases, the projected typical bill for a Residential customer would increase approximately \$7.90 per month in FY 2026 and \$8.47 per month in FY 2027.

Recommendations

The following recommendations were developed based on the analyses completed and conclusions reached:

1. The City should adopt retail rate increases of 7% on October 1, 2025 (FY 2026) and October 1, 2026 (FY 2027). The proposed rate increases would be implemented with the ordinance included in Appendix A.
2. Rates should be increased for all rate classes.
3. The City should consider implementing 6% rate increases in FY 2028 and FY 2029 and a 5% rate increase in FY 2030. These rate increases will be dependent on future purchased power, operating and maintenance, and capital improvement costs.
4. The City should review its rates on a regular basis, particularly as purchased power and other operating costs increase.

Appendix A – Rate Ordinance

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF CRETE, NEBRASKA, PERTAINING TO MUNICIPAL ELECTRIC DEPARTMENT, ELECTRICAL RATES; PROVIDING FOR THE CODIFICATION AS PART OF SECTIONS 3-123 AND 3-124 OF ARTICLE 1 OF CHAPTER 3 AS IT NOW EXISTS AND PROVIDING FOR THE REPEAL OF ALL OTHER ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH; AND PROVIDING FOR A TIME WHEN THIS ORDINANCE SHALL BE IN FULL FORCE AND EFFECT.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF CRETE, NEBRASKA:

Section 1. That Sections 123 and 124, Article 1, Chapter 3, of the City Code of the City of Crete, Nebraska is hereby amended and re-codified to reflect rates as shown on Attachment 1, effective as of October 1, 2025.

Section 2. That Sections 123 and 124, Article 1, Chapter 3, of the City Code of the City of Crete, Nebraska as now existing and all other ordinances and parts of ordinances in conflict herewith are hereby repealed as of October 1, 2025.

Section 3. That this ordinance shall take effect and be in full force and effect from and after its passage and approval and publication in pamphlet form as provided by law.

PASSED AND APPROVED this _____ day of _____, 2025.

Mayor

ATTEST:

City Clerk

ATTACHMENT 1

§3-123 Municipal Electric Department: Rates. The following monthly rate schedules shall apply to all customers of the Municipal Electric Department, according to the applicable service classification:

A. RESIDENTIAL SERVICE

RESIDENTIAL SERVICE R

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$22.00	\$25.00
PLUS		
<i><u>Summer</u></i>		
All kWh used, per month	\$0.1150/kWh	\$0.1210/kWh
<i><u>Winter</u></i>		
First 650 kWh, per month	\$0.1150/kWh	\$0.1210/kWh
Balance used, per month	\$0.0940/kWh	\$0.1020/kWh
Minimum Bill, per month	\$22.00	\$25.00

B. GENERAL SERVICE

1. GENERAL SERVICE G

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month		
Single Phase Service	\$36.00	\$39.00
Three Phase Service	\$63.25	\$69.00
PLUS		
<i><u>Summer</u></i>		
All kWh used, per month	\$0.1206/kWh	\$0.1270/kWh
<i><u>Winter</u></i>		
First 650 kWh, per month	\$0.1206/kWh	\$0.1270/kWh
Balance used, per month	\$0.1021/kWh	\$0.1075/kWh

2. GENERAL SERVICE DEMAND GD

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$92.50	\$97.50
PLUS		
<i><u>Summer</u></i>		
On-peak demand charge	\$30.79/kW	\$32.91/kW
Off-peak demand charge	\$10.48/kW	\$11.20/kW
Energy charge, all kWh used, per month	\$0.0495/kWh	\$0.0529/kWh

Winter

On-peak demand charge	\$22.45/kW	\$24.00/kW
Off-peak demand charge	\$22.45/kW	\$24.00/kW
Energy charge, all kWh used, per month	\$0.0495/kWh	\$0.0529/kWh

Minimum Bill:

The greater of:

- The customer charge; or
- The customer charge plus the demand charge associated with 65% of the maximum recorded billing demand for the previous summer (June-September) months; or
- One dollar and fifty cents (\$1.50) per KVA of installed transformer capacity.

C. LARGE POWER SERVICE

1. LARGE POWER SERVICE LP1

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$250.00	\$275.00
PLUS		
<u>Summer</u>		
On-peak demand charge	\$29.27/kW	\$31.45/kW
Off-peak demand charge	\$9.13/kW	\$9.81/kW
Energy charge, all kWh used, per month	\$0.0436/kWh	\$0.0468/kWh
<u>Winter</u>		
On-peak demand charge	\$22.50/kW	\$24.18/kW
Off-peak demand charge	\$22.50/kW	\$24.18/kW
Energy charge, all kWh used, per month	\$0.0436/kWh	\$0.0468/kWh

Minimum Bill:

The greater of:

- The demand charge plus the energy charge, and the customer charge; or
- One dollar and fifty cents (\$1.50) per KVA of installed transformer capacity.

2. LARGE POWER SERVICE LP2

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$250.00	\$275.00
PLUS		
<u>Summer</u>		
On-peak demand charge	\$28.14/kW	\$30.22/kW
Off-peak demand charge	\$8.86/kW	\$9.52/kW
Energy charge, all kWh used, per month	\$0.0424/kWh	\$0.0456/kWh
<u>Winter</u>		
On-peak demand charge	\$21.32/kW	\$22.89/kW
Off-peak demand charge	\$21.32/kW	\$22.89/kW
Energy charge, all kWh used, per month	\$0.0424/kWh	\$0.0456/kWh

Minimum Bill:

The greater of:

- a) The demand charge plus the energy charge, and the customer charge; or
- b) One dollar and fifty cents (\$1.50) per KVA of installed transformer capacity.

D. IRRIGATION SERVICE IP

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$55.00	\$60.00
PLUS		
Annual Fixed Charge		
On-peak HP charge	\$100.45/HP	\$107.18/HP
(connection per season)		
Off-peak HP charge	\$34.92/HP	\$37.26/HP
(connection per season)		
<i>Off-peak: Minimum 30 HP, restricted hours use</i>		
Energy charge, all kWh used	\$0.0901/kWh	\$0.0961/kWh

Subject to application of fuel and energy adjustment as provided in Section 3-123.

Irrigation Season:

The period from June 1 through September 30

Off-Season Service:

The period from October 1 through May 31

Energy charge, all kWh used Billed at the General Service G rate

Minimum Seasonal Charge:

The greater of:

- a) The HP charge; or
- b) A charge of one hundred twenty-five dollars (\$125.00).

Billing HP shall be the nameplate rating of the motor(s) connected to this service.

E. LIGHTING

1. CITY STREET LIGHTING SL

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month	\$10.70	\$11.45
PLUS		
<u>Summer</u>		
Energy charge, all kWh used, per month	\$0.0671/kWh	\$0.0718/kWh
(where applicable)		
<u>Winter</u>		
Energy charge, all kWh used, per month	\$0.0671/kWh	\$0.0718/kWh
(where applicable)		

OR: Rental lighting charge, PL or ML, as applicable.

2. RENTAL LIGHTING PL

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month		
PL1 175 watt mercury vapor light	\$9.10/fixture	\$9.74/fixture
PL2 100/150 watt sodium vapor light	\$8.24/fixture	\$8.82/fixture
PL3 400 watt mercury vapor light	\$15.68/fixture	\$16.78/fixture
PL4 400 watt sodium vapor light	\$15.68/fixture	\$16.78/fixture

NOTE: LED fixtures will be billed based on the sodium vapor fixture with the closest characteristics in terms of light output.

3. RENTAL LIGHTING ML

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month		
ML1 175 watt mercury vapor light	\$4.92/fixture	\$5.26/fixture
ML2 100/150 watt sodium vapor light	\$4.65/fixture	\$4.98/fixture
ML3 400 watt mercury vapor light	\$6.05/fixture	\$6.47/fixture
ML4 400 watt sodium vapor light	\$5.72/fixture	\$6.12/fixture

Note: LED fixtures up to 40 watts will be billed based on PL2/ML2. LED fixtures greater than 40 watts will be billed based on PL4/ML4.

F. COGENERATION

Owners of small power and energy production facilities must execute a small power and cogeneration agreement with the City.

1. COGENERATION G1

The producer shall pay a minimum monthly charge to the city for each measured interconnection.

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month		
<u>240 Volts or Less</u>		
Single phase meter	\$13.91/meter	\$14.88/meter
Three phase meter	\$31.03/meter	\$33.20/meter
<u>Over 240 Volts</u>		
Single phase meter	\$31.03/meter	\$33.20/meter
Three phase meter	\$54.57/meter	\$58.39/meter
For energy purchased by City		
All kWh purchased by City, per month	\$0.0404/kWh	\$0.0433/kWh

PLUS

The fuel and energy adjustment applied to the City electric rate classification for retail power and energy sales to the producer.

2. COGENERATION G2

For the purchase of power and/or energy by the City from small power and energy producers with production capability of more than 100 kW.

The producer shall pay a minimum monthly charge to the City for each measured interconnection.

EFFECTIVE DATE:	<u>October 1, 2025</u>	<u>October 1, 2026</u>
Customer Charge, per month		
<u>240 Volts or Less</u>		
Single phase meter	\$13.91/meter	\$14.88/meter
Three phase meter	\$31.03/meter	\$33.20/meter
<u>Over 240 Volts</u>		
Single phase meter	\$31.03/meter	\$33.20/meter
Three phase meter	\$54.57/meter	\$58.39/meter

For energy purchased by City

All kWh purchased by City, per month	\$0.0404/kWh	\$0.0433/kWh
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PLUS

The fuel and energy adjustment applied to the City electric rate classification for retail power and energy sales to the producer, based on the pooled energy adjustment assessed by the City's power supplier.

Time-of-Day Metering

Single phase meter	\$31.03/meter	\$33.20/meter
Three phase meter	\$54.57/meter	\$58.39/meter

G. **PRODUCTION COST ADJUSTMENT**

The base production cost for the tariffs presently in effect is 76.59 mills/kWh (\$0.07659/kWh) including purchased power costs and transmission service.

(Amended by Ord. No. 1629, 5/17/05) (Ord. No. 1722, 12/02/08) (Ord. No. _____, _____)

§30-124 Municipal Electric Department: Rate Adjustment Availability. The City reserves the right to increase the cost per kilowatt-hour (kWh) to compensate for any increase in fuel and energy costs per kWh or any production cost adjustment or pooled energy adjustment assessed by the City's power supplier.