BOPW SPECIAL MEETING MONDAY – AUGUST 18<sup>th</sup>, 2025, 5:30 PM CITY HALL - COUNCIL CHAMBERS 2307 BARADA STREET FALLS CITY, NE 68355

The Board may vote to go into Closed Session on any agenda item as allowed by State Law.

#### **ROUTINE BUSINESS**

- 1. Announcement of Open Meetings Act
- 2. Roll Call
- 3. Public Works Report

#### **CONSENT AGENDA**

- 1. Minutes Approval for August 7th, 2025
- 2. Agenda Approval
- 3. Consent Agenda

Any item listed on the Consent Agenda may, by the request of any single BOPW Member, be considered as a separate item under the Regular Agenda Section of the Agenda.

#### **OLD BUSINESS**

#### **REGULAR BUSINESS**

- 1. Discussion and Action Recommend Electric, Water, Wastewater and Gas Rate Ordinances as presented by JK Energy Consulting to City Council for adoption.
- 2. Discussion and Action Recommend to City Council the purchase of additional parts from Enterprise engine in Belleville, KS with Falls City's share in amount of \$22,075.00 to be added to existing joint agreement with Nebraska City.
- 3. Discussion and Action Recommend to City Council the purchase of a Reading truck body for the new Gas Department Ram 3500 service truck in amount of \$16,528.07 from American Equipment Co.
- 4. Discussion and Action Recommend to City Council the execution of SEL Engineering Services Agreement in amount of \$231,007.00 which includes items 2, 3 and 4 in the proposal for the design of the new SCADA system and relay replacements at the Power Plant.

#### **ADJOURNMENT**

Trevor Campbell, Public Works Director

# 2025 Cost of Service / Rate Design Study

# Falls City Utilities Electric Utility

Board of Public Works and City Council
Review Draft

August 8, 2025



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# **Executive Summary**

This study was prepared by JK Energy Consulting, LLC for the Falls City Utilities Electric Utility (Utility). The purpose of the study was to review the Utility's revenues and ensure electric rates are adequate to pay for projected expenses.

By fiscal year (FY) 2029, a cumulative rate increase of approximately 12.9% would be necessary to cover projected operating expenses (Table 1, Line 32). The analyses completed indicated that rate increases of approximately 4% in FY 2026 through FY 2029 would be necessary to cover projected expenses (Table 2, Line 32). These rate increases are primarily related to the construction of a new transmission tie to provide backup service to the City. The proposed rates would phase in sufficient revenue by FY 2028 to fund the estimated debt service associated with the new transmission line.

Based on the analyses completed, projected retail revenue for FY 2025 was approximately \$6.7 million (Table 5), while projected revenue requirements (operating expenses, debt service and capital improvements less non-retail revenues) were approximately \$7.0 million (Table 5). The \$7.0 million FY 2025 test year budget included a rate stabilization adjustment that would result in a rate increase of 4% (Table 5) based on the rate plan included in the projected operating results in Table 2.

Of the projected revenue requirements, approximately \$4.3 million (Table 3) was for local generation and purchased power from the Nebraska City 2 project (NC 2), Municipal Energy Agency of Nebraska (MEAN), and Western Area Power Administration (Western), including transmission service to deliver these purchases. This represents approximately 61% of projected revenue requirements.

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, future rate increases should be directed at all rate classes in an amount similar to the overall rate change being proposed. No rate classes have rates that significantly over-recover or under-recover revenue, particularly after implementing the proposed rate increase.

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the Utility. It is recommended to increase the Power Cost Adjustment (PCA) base rate with a corresponding increase in the base energy rates included in the rate schedule. This increase is reflective of recent increases in power supply costs that are includable in the PCA calculation. Based on conversations with staff and observations about the month-to-month volatility of the PCA, it is proposed to assess the PCA based on a six-month rolling average rather than on a monthly basis. This change would be phased in during the first half of fiscal year 2026.



It is also recommended that a portion of the rate change be designated for funding future capital projects. An "Infrastructure Fee" of 2% is proposed, with those funds being placed in a separate fund solely dedicated to funding future capital projects.

Another recommendation, first proposed in the 2022 Cost of Service Study, would be for FCU to consider collecting demand data for all customers that have a projected peak demand in excess of 25 kW. At some point in the future, it may be appropriate to implement a demand charge for smaller general service customers.

The proposed rate ordinance would allocate necessary rate increases between base energy rates and monthly customer charge. Rate changes are similar across all rate classes. The typical Residential customer monthly bill would increase \$4.63 per month in FY 2026 (Table 7) and \$4.80 per month in FY 2027 (Table 9). These changes were consistent with the cost of service analysis.

The proposed rates are competitive with neighboring utilities, even when the proposed rate increases are included (see Tables 10 and 11). Rates were compared to Nebraska Public Power District (NPPD), Omaha Public Power District (OPPD), Nebraska City Utilities (NCU), and the City of Auburn (Auburn). These neighboring utilities may be experiencing power supply and operating cost increases, which will help keep the Utility's rates competitive with these neighboring utilities.

#### **Conclusions**

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

- 1. The projected revenue requirement for FY 2025 was approximately \$7 million.
- 2. The largest component of the test year budget was purchased power expense, representing 61% of the projected test year budget.
- 3. Projected revenue from existing rates is approximately \$6.7 million.
- 4. In FY 2025, the projected surplus (cash basis) was approximately \$156,000, decreasing to a deficit of approximately \$866,000 by FY 2029. The deficit is primarily related to issuance of debt to fund a new transmission line.
- 5. Rate increases of 4% in FY 2026, 4% in FY 2027 and 4% FY 2028 would be necessary to ensure sufficient revenue to cover projected expenses.
- 6. An additional rate increase of 4% in FY 2029 may be necessary to provide sufficient revenue to cover projected expenses.
- 7. The current methodology for calculating the PCA, based on a single month calculation, results in rate volatility from month to month.
- 8. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of electric facilities.
- 9. With the proposed rate increases, the projected typical bill for a residential customer would increase approximately \$4.63 per month in FY 2026 and \$4.80 per month in FY 2027.



#### Recommendations

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

- 1. The Utility should adopt retail rate increases of 4% on October 1, 2025, 4% on October 1, 2026, and 4% on October 1, 2027. The proposed rate increases would be implemented with the rate ordinance included in Appendix A.
- 2. The Utility should consider implementing another 4% rate increase in FY 2029. The rate increase will be dependent on future purchased power, operating and maintenance, transfers, capital improvement costs and cost of debt service related to the new transmission line.
- 3. Rates should increase a similar amount for all rate classes with increases allocated between base energy and customer charges.
- 4. The Utility should calculate the PCA on a six-month rolling average rather than on a monthly basis.
- 5. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 2% of customer revenue be set aside in the proposed infrastructure fund.
- 6. The Utility should consider collecting demand data for all General Service Commercial customers with a projected peak demand in excess of 25 kW. This data would be helpful for engineering analyses of feeder loading. The data may also be used to establish a demand-based rate for these customers to more closely reflect the cost of service.
- 7. The Utility 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 Utility and develop rates that were consistent with a number of goals established by the Utility. The rate goals established by the Utility included having rates that were competitive with neighboring utilities, providing sufficient revenues to cover projected operating expenses, and having rates that reflected 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 2029. A rate plan was developed to meet the financial goals established by the Utility. 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 Utility. A rate ordinance was developed, establishing new rates that would increase in October 2025 (fiscal year 2026). A draft written report was prepared and presented to the Board of Public Works and City Council on August 18, 2025.



# **Background**

# Falls City Utilities – Electric Utility

Falls City Utilities, under the supervision of the Board of Public Works, operates its electric utility, which serves customers located within the City and in some areas adjacent to the City. The Utility serves approximately 2,100 Residential customers, 520 General Service customers, and two Large Power customer, along with a number of street and private security lighting accounts.

## **Power Supply Resources**

The Utility receives capacity and energy from a number of resources. These power supply resources include local generation capacity owned and operated by the Utility, participation in the NC 2 project, and non-firm energy purchases from MEAN. In addition, MEAN provides scheduling services for the Utility's resources.

Western provides approximately 14% of the Utility's capacity and energy requirements from hydro-electric resources on the upper Missouri River. The cost of Western capacity and energy is approximately 3.1¢/kWh, which is lower than the cost of other resources. Western increased their rates on January 1, 2025, and plan to implement another rate increase on January 1, 2026. Future Western rate increases may vary based on future hydro conditions.

The Utility owns approximately 5.5 MW of participation capacity in the NC 2 project. This project provides baseload capacity and energy from a coal-fired generation unit located near Nebraska City. The capital cost of this project was paid from unrestricted available funds in the Electric Utility Fund. The only NC 2 costs that have to be recovered from the Utility's rates are those related to operating and maintenance costs and future capital improvements. The projected cost of NC 2 operating, maintenance and capital costs is 3.6¢/kWh, excluding the original capital cost and transmission.

The Utility's remaining energy requirements are purchased from the Southwest Power Pool Integrated Marketplace (SPP IM), with MEAN acting as the City's agent. Purchased power costs through the SPP IM have been relatively stable in recent years.

Purchased power represents approximately 61% of the Utility'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 related to environmental restrictions, particularly for coal-fired generation. These issues could result in a major change in the Utility's future power costs and should be monitored because of the potential impact on the Utility's retail rates.



#### **Transmission**

The Utility is interconnected to OPPD via a single radial 69 kV line. This configuration means that local generation must be operated whenever the 69 kV line is out of service, whether for maintenance or as a result of an outage caused by weather or equipment failure. The lack of a backup transmission line also affects the ability to attract new customers that require high reliability service.

The Utility is investigating options to construct a new transmission line that would provide for looped backup service and additional delivery capacity. The cost of service analysis included additional debt service costs that would be used to fund the construction of this proposed transmission line.

# **Projected Financial Results**

The purpose of preparing projected financial results is to compare projected revenues with projected expenses, and to determine the need for future rate increases. Projections were prepared for the period FY 2025 through FY 2029 based on information provided by MEAN, Western, and the Utility.

#### **Parameters**

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

- Historical and projected results were prepared based on the Utility's fiscal year (October 1 through September 30).
- The FY 2025 budget was used as the basis for the test year budget.
- Western rates were projected to increase 5% in 2026 and 3% annually thereafter
- MEAN rates were projected to increase 2% annually.
- NC 2 energy rates were projected to increase 2% annually.
- MEAN's administrative fee was projected to increase 4% annually.
- Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually.
- Debt service was based on the debt provided by the Utility, with allocations between the electric, water and wastewater utilities based on information by the Utility. Additional debt service is included beginning in FY 2027 to fund construction of the new transmission line.
- Peak demand and energy requirements were projected to remain stable (no increase or decrease).
- 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. Rates were developed to ensure positive cash flow.



## **Projected Financial Results**

Table 1 (see page 8) shows the projected financial results for FY 2025 through FY 2029, along with test year FY 2025 and historical financial results for FY 2023 and FY 2024. The projected financial results do not include rate increases or use of available funds for rate stabilization.

Without a rate increase or use of rate stabilization funds, the projected surplus on a cash basis would be approximately \$156,000 in FY 2025, decreasing to a deficit of approximately \$866,000 by FY 2029. The major cause of the deficit is the debt service associated with construction of a new transmission tie to provide backup service to the City. Between now and FY 2029, existing rates would need to be increased by 12.9% to cover the projected deficit.

### **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 9) shows projected financial results with proposed rate increases of 4% in FY 2026 through FY 2029.



2025 Electric Cost of Service Study Projected Financial Results Existing Rates - Cash Basis Falls City Utilities

		•		;;				
		Actual		lest Year		Projected	cted	
Line	Description	2023	2024	2025	2026	2027	2028	2029
_	Operating Revenues							
7	Retail Sales - Existing Rates	\$ 6,944,292	\$ 6,969,568	\$ 6,706,098	\$ 6,706,098	\$ 6,706,098	\$ 6,706,098	\$ 6,706,098
က	PCA Change	•	•	•	112,774	\$ 116,158	\$ 119,642	\$ 123,232
4	Rate Changes			•	•	•		•
2	Capacity Sales Revenue			180,000	540,000	552,000	564,000	576,000
2	Other Operating Revenue	700,000	700,000	69,750	72,550	75,433	78,431	81,548
9	Total Operating Revenue	\$ 7,644,292	\$ 7,669,568	\$ 6,955,848	\$ 7,431,423	\$ 7,449,689	\$ 7,468,171	\$ 7,486,877
7	Operating Expenses							
∞	General and Administrative	\$ 1,213,671	\$ 614,125	\$ 230,075	\$ 236,977	\$ 244,087	\$ 251,409	\$ 258,951
6	Distribution	322,350	783,464	991,167	1,020,902	1,051,529	1,083,075	1,115,567
10	Depreciation (1)	790,357	923,232	923,232	950,929	979,457	1,008,841	1,039,106
1	Production	3,551,099	4,266,866	3,759,149	3,871,924	3,988,081	4,107,724	4,230,955
12	Total Operating Expenses	\$ 5,877,477	\$ 6,587,687	\$ 5,903,623	\$ 6,080,732	\$ 6,263,154	\$ 6,451,048	\$ 6,644,580
13	Operating Income	\$ 1,766,815	\$ 1,081,881	\$ 1,052,225	\$ 1,350,691	\$ 1,186,535	\$ 1,017,123	\$ 842,297
14	Non-Operating Expense/(Revenue)							
15	Interest Income	(74,190)	\$ (499,541)	\$ (108,706)	(108,706)	(108, 706)	(108,706)	(108,706)
16	Interest Expense - Existing	138,334	251,518	319,989	319,989	306,497	294,542	283,665
17	Interest Expense - Proposed			'	,	402,948	390,703	378,027
18	Transfers			(300,000)	'	•	•	-
19	Payment In Lieu of Taxes (PILOT)	387,555	498,934	507,782	507,782	507,782	507,782	507,782
20	Miscellaneous	(2,118,302)	914,451	'	,	•	•	•
21	Total Non-Operating Expense/(Revenue)	\$ (1,666,603)	\$ 1,165,362	\$ 419,065	\$ 719,065	\$ 1,108,521	\$ 1,084,321	\$ 1,060,768
22	Net Income - GAAP Basis	\$ 3,433,418	\$ (83,481)	\$ 633,160	\$ 631,626	\$ 78,014	\$ (67,198)	\$ (218,470)
23	Cash Basis							
24	Net Income	\$ 3,433,418	\$ (83,481)	\$ 633,160	\$ 631,626	\$ 78,014	\$ (67,198)	\$ (218,470)
25	Plus Depreciation	790,357	923,232	923,232	950,929	979,457	1,008,841	1,039,106
26	Debt Service Principal - Existing	485,000	535,000	800,000	713,245	733,492	735,993	751,243
27	Debt Service Principal - Proposed	•	•	'	'	310,000	325,000	335,000
28	Less Rate Stabilization	•	•	'	,	•	•	1
29	Less Capital Expenditures (2)	1,919,638	2,256,120	600,000	600,000	600,000	600,000	600,000
30	Net Income - Cash Basis	\$ 1,819,137	\$ (1,951,369)	\$ 156,392	\$ 269,310	\$ (586,020)	\$ (719,350)	\$ (865,607)
31	Rate Increase - Positive Cash Flow							
32	Cumulative	-26.2%	28.0%	-2.3%	-4.0%	8.7%	10.7%	12.9%

- Notes:
  (1) Based on 2024 depreciation expense.
  (2) Annual average capital improvement expense based on 10-Year Capital Improvement Plan.



Table 2
Falls City Utilities
2025 Electric Cost of Service Study
Projected Financial Results
Proposed Rates - Cash Basis

		Toet Voor			Projected	L			
Line	Description	2025		2026	2027		2028		2029
_	Operating Revenues								
7	Retail Sales - Existing Rates	\$ 6,706,098	\$	6,706,098	\$ 6,706,098	\$	6,706,098	↔	6,706,098
က	Rate Change	'		269,444	546,455	55	836,557		1,138,264
4	PCA Change	,		112,774	116,158	88	119,642		123,232
2	Capacity Sales Revenue	180,000		540,000	552,000	0	564,000		576,000
9	Other Operating Revenue	69,750		72,552	75,433	င္သ	78,427		81,540
7	Total Operating Revenue	\$ 6,955,848	₩	7,700,869	\$ 7,996,143	<u>ა</u>	8,304,725	₩	8,625,133
∞	Operating Expenses								
6	General and Administrative	\$ 230,075	↔	236,977	\$ 244,087	\$ 2	251,409	↔	258,951
10	Distribution	991,167		1,020,902	1,051,529	6	1,083,075		1,115,567
1	Depreciation (1)	923,232		950,929	979,457	2.5	1,008,841		1,039,106
12	Production	3,759,149		3,871,924	3,988,081	~	4,107,724		4,230,955
13	Total Operating Expenses	\$ 5,903,623	₩	6,080,732	\$ 6,263,154	.¥	6,451,048	↔	6,644,580
4	Operating Income	\$ 1,052,225	₩	1,620,137	\$ 1,732,989	& 60	1,853,676	↔	1,980,553
15	Non-Operating Expense/(Revenue)								
16	Interest Income	(108,706)	_	(108,706)	(108,706)	(90	(108,706)		(108,706)
17	Interest Expense - Existing	319,989		319,989	306,497	76	294,542		283,665
18	Interest Expense - Proposed	'			402,948	<u>&amp;</u>	390,703		378,027
19	Transfers	(300,000)	_		•				•
20	Payment In Lieu of Taxes (PILOT)	507,782		507,782	507,782	32	507,782		507,782
21	Miscellaneous	'			•				•
22	Total Non-Operating Expense/(Revenue)	\$ 419,065	↔	719,065	\$ 1,108,521	 \$	1,084,321	↔	1,060,768
23	Net Income - GAAP Basis	\$ 633,160	8	901,072	\$ 624,469	\$ 69	769,356	\$	919,786
24	Cash Basis								
25	Net Income	\$ 633,160	↔	901,072	\$ 624,469	\$ 69	769,356	↔	919,786
56	Plus Depreciation	923,232		950,929	979,457	25	1,008,841		1,039,106
27	Debt Service Principal - Power Plant	800,000		713,245	733,492	32	735,993		751,243
28	Debt Service Principal - Proposed	ı		•	310,000	0	325,000		335,000
59	Less Rate Stabilization	1		٠	•				•
30	Less Capital Expenditures (2)	600,000		000,009	600,000	00	000,009		600,000
31	Net Income - Cash Basis	\$ 156,392	↔	538,756	\$ (39,566)	\$ (99	117,203	ઝ	272,649
32	Rate Change Implemented	0.0%		4.0%		4.0%	4.0%		4.0%



### **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 completed to prepare the cost of service analysis. A FY 2025 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:

 Adjustments to capital improvements were made to reflect normal expenditures and the proposed 10-year capital improvement program provided by the Utility.

The test year budget for FY 2025 was approximately \$7.0 million and is summarized in Table 3 (see page 11). This figure represents the amount that needs to be collected from retail rates. It includes all operating expenses, debt service payments, capital improvements funded from rates, and is reduced for revenue from interest income and other non-retail revenue.



# Table 3 Falls City Utilities 2025 Electric Cost of Service Study Test Year Budget by Function Annual

	Pi	oduction /	Subtrans/	Customer/	
Rate Class	Tra	ansmission	Distribution	Admin	Total
Residential	\$	1,709,458	\$ 1,203,954	\$ 48,705	\$ 2,962,117
Rural Residential		210,521	120,007	5,145	335,673
General Service Commercial		727,791	489,637	14,462	1,231,889
General Service Rural Commecial		119,351	96,849	3,518	219,719
Net Metering - Residential		2,807	2,441	155	5,403
Net Metering - Rural Residential		3,120	1,501	-	4,621
GS Demand		1,132,257	537,251	1,149	1,670,658
GS Demand Rural		239,404	86,107	1,535	327,046
Large Power 3 / Rural Industrial		69,872	48,061	475	118,409
Private Lighting		3,188	8,630	152	11,971
Street Lighting		58,657	25,442	2	84,102
Total	\$	4,276,427	\$ 2,619,881	\$ 75,299	\$ 6,971,608
Percentage		61.34%	37.58%	1.08%	100.00%

#### Functionalization and Classification

Functionalization and classification involved 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:

- 1. Production costs / purchased power
- 2. Transmission and sub-transmission service
- 3. Distribution (primary and secondary)
- 4. Services
- 5. Meter reading
- 6. Billing and customer accounting
- 7. Street lighting
- 8. 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 allocation to the various retail rate classes. Approximately \$630,000 is customer-related, \$1.7 million is energy-related, and \$4.6 million is demand-related expense. Based on this classification, 9% of the Utility's test year budget is customer-related, 25% is energy-related, and 66% is demand-related.

Table 4
Falls City Utilities
2025 Electric Cost of Service Study
Classification of Expenses
Annual

	Custo	mei	•		Energ	ЗУ	D	emand	
Rate Class	(\$)	(\$	/mon)		(\$)	(¢/kWh)	(\$)	¢/kWh	\$/kW
Residential	\$ 396,456	\$	16.72	\$	701,625	3.49	\$ 1,864,036	9.27	
Rural Residential	35,990		20.53		84,449	3.41	215,234	8.70	
General Service Commercial	129,772		29.15		285,620	3.44	816,498	9.84	
General Service Rural Commecial	31,569		29.15		46,729	3.50	141,421	10.58	
Net Metering - Residential	1,181		32.80		1,046	3.30	3,176	10.02	
Net Metering - Rural Residential	-		-		1,163	3.34	3,458	9.93	
GS Demand	19,115		67.07		459,574	3.46	1,191,968		
GS Demand Rural	6,254		88.08		109,924	3.41	210,869		27.99
Large Power 3 / Rural Industrial	1,938		88.08		20,221	3.48	96,250		26.58
Private Lighting	7,359		7.49		1,687	3.43	2,925	5.95	
Street Lighting	20		1.67		30,792	3.42	53,290	5.92	
Total	\$ 629,653			\$ 1	1,742,829		\$ 4,599,126		
Percentage	9.0%				25.0%	)	66.0%	ı	

#### **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 Utility 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 based on coincident or non-coincident demands, depending on the function, and adjusted for losses. Energy-related costs were allocated based on energy sales, adjusted for losses. Customer-related costs were allocated based on 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, and miscellaneous operating revenue. 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 compares the revenue from existing rates to the calculated cost of service. Overall, the cost of service indicated rates would need to increase 4% in FY 2025. The cost of service indicated that among the major rate classes (excluding net metering and lighting), individual rate class revenues vary from the cost service in amounts ranging between -10.7% (over collection) and 8.7% (under collection). Generally, the deviations from cost of service to revenue collected are in a reasonable range, indicating it would be reasonable to impose a similar rate increase across all rate classes.

Table 5
Falls City Utilities
2025 Electric Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates
Annual

		Revenue	Cost of	Differ	ence
Rate Class	Exi	sting Rates	Service	\$	%
Residential	\$	2,771,224	\$ 2,962,117	\$ 190,893	6.9%
Rural Residential		333,422	335,673	2,252	0.7%
General Service Commercial		1,206,638	1,231,889	25,251	2.1%
General Service Rural Commecial		215,522	219,719	4,197	1.9%
Net Metering - Residential		4,238	5,403	1,165	27.5%
Net Metering - Rural Residential		4,212	4,621	408	9.7%
GS Demand		1,613,600	1,670,658	57,058	3.5%
GS Demand Rural		366,381	327,046	(39,335)	-10.7%
Large Power 3 / Rural Industrial		108,892	118,409	9,517	8.7%
Private Lighting		13,634	11,971	(1,663)	-12.2%
Street Lighting		68,335	84,102	15,767	23.1%
Total	\$	6,706,098	\$ 6,971,608	\$ 265,510	4.0%

Table 6 (see page 14) shows the calculated cost of service for the summer and winter season. Summer season rates would require an increase of 7.7% to recover the cost of service, while winter season rates would need to increase 1.7% to reflect the cost of service. In general, this indicates that rate increases should be directed more toward the summer season.



# Table 6 Falls City Utilities 2025 Electric Cost of Service Study Comparison of Cost of Service to Revenue from Existing Rates

#### Summer

		Revenue	Cost of	Differ	ence
Rate Class	Ex	isting Rates	Service	\$	%
Residential	\$	1,079,099	\$ 1,197,231	\$ 118,132	10.9%
Rural Residential		114,698	122,898	8,200	7.1%
General Service Commercial		433,448	486,465	53,018	12.2%
General Service Rural Commecial		85,053	91,946	6,894	8.1%
Net Metering - Residential		1,153	1,755	602	52.2%
Net Metering - Rural Residential		1,224	1,583	360	29.4%
GS Demand		625,484	639,953	14,469	2.3%
GS Demand Rural		130,557	120,689	(9,868)	-7.6%
Large Power 3 / Rural Industrial		38,102	43,554	5,452	14.3%
Private Lighting		4,660	3,636	(1,024)	-22.0%
Street Lighting		22,778	21,135	(1,643)	-7.2%
Total	\$	2,536,255	\$ 2,730,845	\$ 194,590	7.7%

#### Winter

	Revenue			Cost of	Differ	ence
Rate Class	Exis	sting Rates		Service	\$	%
Residential	\$	1,692,125	\$	1,764,886	\$ 72,761	4.3%
Rural Residential		218,724		212,776	(5,948)	-2.7%
General Service Commercial		773,191		745,424	(27,766)	-3.6%
General Service Rural Commecial		130,469		127,772	(2,697)	-2.1%
Net Metering - Residential		3,085		3,648	563	18.2%
Net Metering - Rural Residential		2,989		3,038	49	1.6%
GS Demand		988,116		1,030,705	42,589	4.3%
GS Demand Rural		235,824		206,357	(29,467)	-12.5%
Large Power 3 / Rural Industrial		70,790		74,855	4,065	5.7%
Private Lighting		8,974		8,335	(639)	-7.1%
Street Lighting		45,556		62,966	17,410	38.2%
Total	\$	4,169,843	\$	4,240,762	\$ 70,920	1.7%

# **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 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 rate impacts to customers.

## Summary of Rate Design Changes

The proposed rate ordinance, included in Appendix A, would implement the following rate increases:

October 1, 2025 (FY 2026): 4%
October 1, 2026 (FY 2027): 4%
October 1, 2027 (FY 2028): 4%

The proposed rate increases would be similar for all rate classes and directed toward the PCA base rate and the monthly customer charge. The proposed changes by rate class are shown in Table 7 (see page 16) on an annual basis and Table 8 (see page 17) on a seasonal basis. Table 9 (see page 18) shows the proposed rate increases for FY 2027, effective October 1, 2026. Generally, similar rate increases are being implemented across all rate classes.

# Specific Rate Design Issues

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

- Increase Power Cost Adjustment (PCA) base rate: It is proposed that the PCA
  base rate be increased to \$0.047/kWh. The proposed rate takes into account
  moving cost recovery from the PCA monthly collections to the base rates. A
  corresponding increase in the base energy rate would be implemented.
- 2. Use six-month rolling average for PCA: Currently, the PCA is calculated on a monthly basis. Recently, volatility in the SPP Integrated Marketplace has resulted in significant changes in PCA collections from month to month, which causes significant changes from month to month in customer bills. Using a six-month average would reduce this volatility while enabling full collection of any power supply costs in excess of the base over a six-month period.



3. Implement Infrastructure Fee: As noted previously in this report, a significant driver of future rate increases is the need to fund capital projects. These projects help provide for reliable service and the ability to serve new customers. Since these needs drive a portion of the rate increase, it is recommended to implement an "Infrastructure Fee" equal to 2% of the customer bill. The rate schedule provides that these funds will be segregated and only used for capital projects. This approach will help customers understand that a portion of the rate increase is dedicated to funding capital projects rather than the day-to-day operations of the utility.

As mentioned in the 2022 Cost of Service Study, with cost reductions in metering equipment capable of recording demand data, most utilities have transitioned to collecting peak demand data for commercial customers. Some utilities with Advanced Metering Infrastructure systems have even begun billing peak demand charges to residential customers. Collection of this data serves two purposes: (a) it provides additional information to support engineering design work on the distribution system, and (b) it provides for future opportunities to develop rate structures for smaller customers that incorporate demand billing. Establishing a demand-based rate structure does not necessarily mean higher costs for those customers, but it does provide the opportunity for rates to more closely resemble the cost of service. Since more than 60% of the Utility's costs are demand-based, the ability to develop a demand rate structure can improve ratemaking for the Utility.

Table 7
Falls City Utilities
2025 Electric Cost of Service Study
Proposed Rate Change by Rate Class - October 2025

#### Annual

	Revenue			Revenue	D	iffe	rence	
Rate Class	Exi	sting Rates	Pr	oposed Rates	\$	В	Bill (1)	%
Residential	\$	2,771,224	\$	2,881,101	\$ 109,877	\$	4.63	4.0%
Rural Residential		333,422		348,217	14,795		8.44	4.4%
General Service Commercial		1,206,638		1,255,012	48,374		10.87	4.0%
General Service Rural Commecial		215,522		224,180	8,658		7.99	4.0%
Net Metering - Residential		4,238		4,442	204		5.66	4.8%
Net Metering - Rural Residential		4,212		4,427	215		17.90	5.1%
GS Demand		1,613,600		1,679,622	66,022		231.66	4.1%
GS Demand Rural		366,381		382,889	16,508		232.51	4.5%
Large Power 3 / Rural Industrial		108,892		113,137	4,245		192.96	3.9%
Private Lighting		13,634		14,180	545		0.55	4.0%
Street Lighting		68,335		71,068	2,733		227.78	4.0%
Total	\$	6,706,098	\$	6,978,275	\$ 269,444		•	4.0%

#### Note:

(1) Change in average monthly bill for customers within rate class.



# Table 8 Falls City Utilities 2025 Electric Cost of Service Study Proposed Rate Change by Rate Class - October 2025

#### Summer

	F	Revenue		Revenue	Differe	nce
Rate Class	Exi	sting Rates	Р	roposed Rates	\$	%
Residential	\$	1,079,099	\$	1,114,151	\$ 35,052	3.2%
Rural Residential		114,698		118,440	3,743	3.3%
General Service Commercial		433,448		449,734	16,286	3.8%
General Service Rural Commecial		85,053		88,159	3,106	3.7%
Net Metering - Residential		1,153		1,193	40	3.4%
Net Metering - Rural Residential		1,224		1,264	40	3.3%
GS Demand		625,484		648,974	23,490	3.8%
GS Demand Rural		130,557		135,567	5,010	3.8%
Large Power 3 / Rural Industrial		38,102		39,560	1,458	3.8%
Private Lighting		4,660		4,847	186	4.0%
Street Lighting		22,778		23,689	911	4.0%
Total	\$	2,536,255	\$	2,625,577	\$ 89,322	3.5%

#### Winter

	Revenue	Revenue	Differe	ence
Rate Class	Existing Rates	Proposed Rates	\$	%
Residential	\$ 1,692,125	\$ 1,766,950	\$ 74,825	4.4%
Rural Residential	218,724	229,777	11,053	5.1%
General Service Commercial	773,191	805,278	32,088	4.2%
General Service Rural Commecial	130,469	136,021	5,552	4.3%
Net Metering - Residential	3,085	3,250	164	5.3%
Net Metering - Rural Residential	2,989	3,163	174	5.8%
GS Demand	988,116	1,030,648	42,532	4.3%
GS Demand Rural	235,824	247,322	11,498	4.9%
Large Power 3 / Rural Industrial	70,790	73,577	2,787	3.9%
Private Lighting	8,974	9,333	359	4.0%
Street Lighting	45,556	47,379	1,822	4.0%
Total	\$ 4,169,843	\$ 4,352,698	\$ 182,855	4.4%



# Table 9 Falls City Utilities 2025 Electric Cost of Service Study Proposed Rate Change by Rate Class - October 2026

#### **Annual**

	F	Revenue		Revenue		Diffe	rence	
Rate Class	Exis	sting Rates	Pr	roposed Rates	\$	В	ill (1)	%
Residential	\$	2,881,101	\$	2,995,055	113,954	\$	4.80	4.0%
Rural Residential		348,217		362,392	14,176		8.09	4.1%
General Service Commercial		1,255,012		1,308,664	53,652		12.05	4.3%
General Service Rural Commecial		224,180		233,122	8,942		8.26	4.0%
Net Metering - Residential		4,442		4,632	190		5.27	4.3%
Net Metering - Rural Residential		4,427		4,597	170		14.13	3.8%
GS Demand		1,679,622		1,745,091	65,468		229.71	3.9%
GS Demand Rural		382,889		398,305	15,416		217.12	4.0%
Large Power 3 / Rural Industrial		113,137		117,615	4,478		203.54	4.0%
Private Lighting		14,180		14,747	567		0.58	4.0%
Street Lighting		71,068		73,911	2,843		236.89	4.0%
Total	\$	6,978,275	\$	7,258,129	\$ 277,011			4.0%

#### Note:

(1) Change in average monthly bill for customers within rate class.

# Rate Comparisons

With the proposed rate increases, the Utility's electric rates will still be competitive with neighboring utilities. The Utility's proposed rates for FY 2026 were compared to four neighboring utilities: NPPD, OPPD, NCU, and Auburn. 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.

The proposed rates are generally competitive with neighboring utilities for Residential rates when taking into accounts differences in rates between the summer and winter seasons, even when considering the proposed rate increases. General Service rates tend to be toward the higher end of the peer group. The neighboring utilities shown in Tables 10 and 11 may be experiencing power supply and operating cost increases which may result in retail rate increases in the future.



# Table 10 Falls City Utilities

# 2025 Electric Cost of Service Study

#### Typical Bill Comparison

# Rate Comparisons - October 2025 Proposed Residential

Summer Comparisons					
Utility	500 kWh	Utility	1,000 kWh	Utility	2,500 kWh
Auburn	63.10	Auburn	109.10	Auburn	247.10
NCU	75.40	NCU	129.80	NCU	288.50
Falls City	80.93	Falls City	136.89	Falls City	304.75
NPPD	85.59	NPPD	142.80	NPPD	314.44
OPPD	88.99	OPPD	146.48	OPPD	318.94
		Winter Co	omparisons		
Utility	500 kWh	Utility	1,000 kWh	Utility	2,500 kWh
Auburn	62.10	Auburn	107.10	Auburn	195.60
NCU	72.90	NPPD	118.99	NPPD	249.39
NPPD	74.30	NCU	121.80	NCU	250.50
OPPD	78.70	OPPD	125.16	OPPD	262.82
Falls City	80.93	Falls City	131.19	Falls City	270.58

# Table 11 Falls City Utilities 2025 Electric Cost of Service Study Typical Bill Comparison

### Rate Comparisons - October 2022 Proposed General Service

Summer Comparisons						
Utility	1,000 kWh	Utility	5,000 kWh	Utility	10,000 kWh	
Auburn	121.25	Auburn	509.25	Auburn	994.25	
OPPD	146.16	OPPD	592.20	OPPD	1,149.75	
NPPD	148.12	NPPD	595.53	NPPD	1,154.79	
NCU	159.50	NCU	618.00	NCU	1,180.50	
Falls City	170.68	Falls City	684.48	Falls City	1,326.72	
		Winter Co	omparisons			
Utility	Utility 1,000 kWh Utility 5,000 kWh Utility 10,000 kWh					
Auburn	120.25	OPPD	450.24	Auburn	808.75	
OPPD	122.85	Auburn	463.75	OPPD	827.72	
NPPD	125.78	NPPD	483.80	NPPD	931.32	
NCU	154.50	NCU	570.00	NCU	1,057.50	
Falls City	170.68	Falls City	630.42	Falls City	1,168.70	



Rate comparisons are important but cannot take into account other factors that cause rate differences. For example, transfers and discounted service for street lighting would not be available if NPPD or OPPD served the City's retail customers. The Utility has traditionally transferred between 5% and 10% to the City's general fund and has provided one-time transfers to other City funds in the past. This would not be available if the City's customers were served by a different entity like NPPD or OPPD. Rate comparisons were based on existing rate schedules for neighboring utilities and do not consider future rate changes that may be implemented by those utilities.

#### **Conclusions**

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

- 1. The projected revenue requirement for FY 2025 was approximately \$7 million.
- 2. The largest component of the test year budget was purchased power expense, representing 61% of the projected test year budget.
- 3. Projected revenue from existing rates is approximately \$6.7 million.
- 4. In FY 2025, the projected surplus (cash basis) was approximately \$156,000, decreasing to a deficit of approximately \$866,000 by FY 2029. The deficit is primarily related to issuance of debt to fund a new transmission line.
- 5. Rate increases of 4% in FY 2026, 4% in FY 2027 and 4% FY 2028 would be necessary to ensure sufficient revenue to cover projected expenses.
- 6. An additional rate increase of 4% in FY 2029 may be necessary to provide sufficient revenue to cover projected expenses.
- 7. The current methodology for calculating the PCA, based on a single month calculation, results in rate volatility from month to month.
- 8. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of electric facilities.
- 9. With the proposed rate increases, the projected typical bill for a residential customer would increase approximately \$4.63 per month in FY 2026 and \$4.80 per month in FY 2027.

# Recommendations

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

- 1. The Utility should adopt retail rate increases of 4% on October 1, 2025, 4% on October 1, 2026, and 4% on October 1, 2027. The proposed rate increases would be implemented with the rate ordinance included in Appendix A.
- 2. The Utility should consider implementing another 4% rate increase in FY 2029. The rate increase will be dependent on future purchased power, operating and maintenance, transfers, capital improvement costs and cost of debt service related to the new transmission line.



- 3. Rates should increase a similar amount for all rate classes with increases allocated between base energy and customer charges.
- 4. The Utility should calculate the PCA on a six-month rolling average rather than on a monthly basis.
- 5. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 2% of customer revenue be set aside in the proposed infrastructure fund.
- 6. The Utility should consider collecting demand data for all General Service Commercial customers with a projected peak demand in excess of 25 kW. This data would be helpful for engineering analyses of feeder loading. The data may also be used to establish a demand-based rate for these customers to more closely reflect the cost of service.
- 7. The Utility should review its rates on a regular basis, particularly as purchased power and other operating costs increase.



# Appendix A – Rate Ordinance



AN ORDINANCE TO AMEND ORDINANCE 2022-106, AND TO SET FORTH BASE COST FOR POWER PRODUCTION COST ADJUSTMENTS, TO RESTATE THE CURRENT ELECTRICAL RATES, FEES AND CHARGES, AND COLLECTIONS FOR ELECTRICITY FROM AND IN THE CITY OF FALLS CITY, NEBRASKA; REPEALING ANY PRIOR ORDINANCES IN CONFLICT THEREWITH; AND ORDERING THE PUBLICATION OF THE ORDINANCE IN PAMPHLET FORM AND PROVIDE FOR EFFECTIVE DATE.

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

#### SECTION I

That the rates, fees, charges, and collections for the use of electricity be and hereby are those figures and terms set out in the schedule incorporated as Section II of this Ordinance, which schedule and terms shall be on file in the office of the Municipal Clerk for public inspection at any reasonable time.

#### **SECTION II**

#### A. RESIDENTIAL ELECTRIC RATE

#### 1. Availability.

To all single family residences for all domestic uses within the City limits including lighting, cooking, refrigeration, household appliances, hot water heating, and motors. Individual single-phase motors or heating equipment shall not exceed 10 hp or 10 kW in size without Board of Public Works approval. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Energy will be supplied from the electric department's standard available voltages, 60 Hertz, alternating current, single or three phase if available. New three phase service is not available under this schedule.

#### 3. Residential Rate Schedule.

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$24.49	\$24.49
First 700 kWh, per kWh	0.1097	0.1097
Over 700 kWh, per kWh	0.1097	0.0911

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$26.45	\$26.45
First 700 kWh, per kWh	0.1127	0.1127
Over 700 kWh, per kWh	0.1127	0.0960

#### Rates Effective October 1, 2027

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$27.51	\$27.51
First 700 kWh, per kWh	0.1172	0.1172
Over 700 kWh, per kWh	0.1172	0.0998

#### 4. Minimum Bill.

The Minimum Bill shall be the sum of the Customer Charge and Infrastructure Fee.

#### 5. General Terms and Conditions

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### B. RURAL RESIDENTIAL ELECTRIC RATE

#### 1. Availability.

To all Rural customers served by the Falls City Electric Department for all domestic and agricultural uses including lighting, cooking, refrigeration, appliances, hot water heating, and motors. Individual single-phase motors or heating equipment shall not exceed 10 hp or 10 kW in size without Utility approval. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Services.

Energy will be supplied from the electric department's standard available voltages, 60 Hertz, alternating current, single or three phase if available. New three phase service is not available under this schedule.

#### 3. Rural Residential Rate Schedule.

	<u>Summer</u>	<u>winter</u>
Customer Charge	\$31.36	\$31.36
First 1,200 kWh, per kWh	0.1150	0.1150
Over 1,200 kWh, per kWh	0.1150	0.0955

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$34.30	\$34.30
First 1,200 kWh, per kWh	0.1181	0.1181
Over 1,200 kWh, per kWh	0.1181	0.1006

#### Rates Effective October 1, 2027

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$35.67	\$35.67
First 1,200 kWh, per kWh	0.1228	0.1228
Over 1,200 kWh, per kWh	0.1228	0.1046

#### 4. Minimum Bill.

The Minimum Bill shall be the sum of the Customer Charge and Infrastructure Fee.

#### 5. General Terms and Conditions.

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### C. GENERAL SERVICE ELECTRIC RATE (URBAN)

### 1. Availability.

To any non-Residential Urban customer for lighting, heating, and power purposes where the customer's peak demand does not exceed 100 kW for three (3) consecutive months. Rating of individual single phase motors and other single phase power and heating units shall not exceed 10 horsepower or 10 kW without written approval of the utility superintendent. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Service shall be 60 Hertz, AC single or three phase at the standard secondary voltages in use by the electric department.

#### 3. General Service (Urban) Rate Schedule.

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$41.41	\$41.41
First 2,400 kWh, per kWh	0.1259	0.1259
Over 2,400 kWh, per kWh	0.1259	0.1055

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$45.08	\$45.08
First 2,400 kWh, per kWh	0.1303	0.1303
Over 2,400 kWh, per kWh	0.1303	0.1098

#### Rates Effective October 1, 2027

	Summer	<u>Winter</u>
Customer Charge	\$46.88	\$46.88
First 2,400 kWh, per kWh	0.1356	0.1356
Over 2,400 kWh, per kWh	0.1356	0.1142

#### 4. Minimum Bill.

The Minimum Bill shall be the sum of the Customer Charge and Infrastructure Fee.

### 5. Demand Metering

A demand register meter shall be installed by the electric department if a customer has projected peak integrated 15-minute peak demand exceeding 25 kW.

#### 6. General Terms and Conditions.

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### D. GENERAL SERVICE ELECTRIC RATE (RURAL)

#### 1. Availability.

To any non-Residential customer outside the corporate limits of the City of Falls City for lighting, heating and power purposes where the customer's peak demand does not exceed 100 kW for three (3) consecutive months. Rating of individual single phase motors and other single phase power and heating units shall not exceed 10 horsepower or 10 kW without written approval of the utility superintendent. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Service shall be 60 Hertz, AC single or three phase at the standard secondary voltages in use by the electric department.

#### 3. General Service (Rural) Rate Schedule.

#### Rates Effective October 1, 2025

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$46.31	\$46.31
First 2,400 kWh, per kWh	0.1259	0.1259
Over 2,400 kWh, per kWh	0.1259	0.1055

#### Rates Effective October 1, 2026

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$49.00	\$49.00
First 2,400 kWh, per kWh	0.1303	0.1303
Over 2,400 kWh, per kWh	0.1303	0.1098

#### Rates Effective October 1, 2027

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$50.96	\$50.96
First 2,400 kWh, per kWh	0.1356	0.1356
Over 2,400 kWh, per kWh	0.1356	0.1142

#### 4. Minimum Bill.

The Minimum Bill shall be the sum of the Customer Charge and Infrastructure Fee.

#### 5. Demand Metering

A demand register meter shall be installed by the electric department if a customer has projected peak integrated 15-minute peak demand exceeding 25 kW.

#### 6. General Terms and Conditions.

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### E. GENERAL SERVICE DEMAND ELECTRIC RATE

#### 1. Availability.

To any customer served by the Falls City Electric Department for lighting, heating and power purposes where the customer's peak demand exceeds 100 kW for three (3) consecutive months. Not applicable to resale, supplemental, auxiliary or shared service.

# 2. Character of Service.

Service shall be 60 Hertz, AC single or three phase at the standard primary and secondary voltages in use by the electric department.

# 3. General Service Demand Rate Schedule.

#### a. Urban

## Rates Effective October 1, 2025

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$127.40	\$127.40
Demand Charge (\$/kW)	\$12.23	\$9.17
Energy Charge (per kWh)	0.0852	0.0750

#### Rates Effective October 1, 2026

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$132.30	\$132.30
Demand Charge (\$/kW)	\$12.23	\$9.17
Energy Charge (per kWh)	0.0902	0.0794

### Rates Effective October 1, 2027

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$137.59	\$137.59
Demand Charge (\$/kW)	\$12.72	\$9.54
Energy Charge (per kWh)	0.0938	0.0826

#### b. Rural

#### Rates Effective October 1, 2025

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$147.00	\$147.00
Demand Charge (\$/kW)	\$12.99	\$9.94
Energy Charge (per kWh)	0.0861	0.0780

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$147.00	\$147.00
Demand Charge (\$/kW)	\$12.99	\$9.94
Energy Charge (per kWh)	0.0911	0.0824

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$152.88	\$152.88
Demand Charge (\$/kW)	\$13.51	\$10.33
Energy Charge (per kWh)	0.0948	0.0857

#### 4. Minimum Bill.

Minimum Bill is 70% of the 100 kW demand times the Winter Demand Charge plus the Customer Charge and the Infrastructure Fee.

#### a. Urban

Effective October 1, 2025	\$785.20
Effective October 1, 2026	\$790.20
Effective October 1, 2027	\$821.81

#### b. Rural

Effective October 1, 2025	\$859.80
Effective October 1, 2026	\$859.80
Effective October 1, 2027	\$894.19

#### 5. Billing Demand.

The Billing Demand shall be the maximum integrated 15-minute kW load occurring during the billing period, but not less than 70% of the highest demand established during the preceding eleven (11) months. A demand register meter shall be installed by the electric department if a customer has projected peak integrated 15-minute peak demand exceeding 25 kW.

#### 6. Primary Metering.

Primary Metering may be used at the option of the Municipality.

If the transformation equipment is customer owned, the customer shall receive a 1.5 percent (1.5%) discount on monthly billings.

#### 7. Installation Charge.

The customer shall pay the Municipality a contribution in aid of construction for installing transformation equipment in excess of that required to serve the average monthly demand or because of fluctuating loads. Said contribution shall be equal to the cost of the transformation equipment requested less the estimated cost of transformation equipment needed to serve the average monthly load. The Municipality shall continue to own and maintain the transformation equipment.

#### F. MUNICIPAL SERVICE ELECTRIC RATE

#### 1. Availability.

To the City of Falls City for the various departments of the City for general use in performing municipal services.

#### 2. Character of Service.

Service shall be 60 Hertz, AC single or three phase at the standard primary and secondary voltages in use by the electric department.

#### 3. Municipal Service Rate Schedule.

The rate shall be at the applicable General Service or General Service Demand Rate.

#### G. DUSK TO DAWN LIGHTING SERVICE RATE

#### 1. Availability.

To all consumers, for private outdoor lighting service when such lighting facilities are operated as an extension of the electric department's distribution system.

#### 2. Character of Service.

The single phase, alternating current, 120 volt electric service will be supplied by the Falls City Electric Department for the operation of outdoor type luminaries using incandescent, high pressure sodium vapor, or mercury vapor lamps, mounted on electric department owned luminaries and posts on which overhead or underground secondary conductors exist, or to which such secondary conductors can be extended, except where the extensions of such secondary conductors in impractical. Service taken hereunder will be unmetered and the luminaries will operate automatically each night from dusk to dawn. All facilities necessary for service under this schedule shall be installed, owned and maintained by the electric department; service taken hereunder is for the exclusive use of the consumer for private outdoor lighting as herein specified and shall not be resold to others.

#### 3. <u>Lighting Service Rate Schedule.</u>

The net monthly rate shall be as follows.

Effective October 1, 2025	\$14.14 per fixture
Effective October 1, 2026	\$14.71 per fixture
Effective October 1, 2027	\$15.30 per fixture

#### 4. General Terms and Conditions.

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### H. MUNICIPAL STREET LIGHTING RATE

#### 1. Availability.

To the City of Falls City for municipal street lighting service (dusk to daylight) from the electric department distribution system.

#### 2. Character of Service.

The electric department will construct, operate and maintain the complete system and furnish such lighting services every night from dusk until daylight or approximately 4,000 hours per annum.

#### 3. Street Lighting Rate Schedule.

The rate shall be based on the number and size of units in use times 4,000 hours use per year.

Effective October 1, 2025 \$0.0774 per kWh Effective October 1, 2026 \$0.0805 per kWh Effective October 1, 2027 \$0.0837 per kWh

#### 4. General Terms and Conditions.

All rates are subject to the General Terms and Conditions, as set forth in Section K of this Ordinance.

#### LARGE POWER

#### 1. Availability.

To any Urban or Rural Industrial customer served by the Falls City Electric Department for lighting, heating and power purposes where the customer's peak demand exceeds 500 kW for three (3) consecutive months. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Service shall be 60 Hertz, AC three phase at the standard primary and secondary voltages in use by the electric department.

#### 3. Large Power Rate Schedule.

#### Rates Effective October 1, 2025

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$525.00	\$525.00
Demand Charge (\$/kW)	20.07	17.52
Energy Charge (per kWh)	0.0525	0.0514

#### Rates Effective October 1, 2026

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$535.00	\$535.00
Demand Charge (\$/kW)	20.25	17.75
Energy Charge (per kWh)	0.0590	0.0570

#### Rates Effective October 1, 2027

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$556.40	\$556.40
Demand Charge (\$/kW)	21.06	18.46
Energy Charge (per kWh)	0.0614	0.0593

## 4. Minimum Bill.

Minimum Bill is 70% of the 500 kW demand times the Winter Demand Charge plus the Customer Charge and Infrastructure Fee.

Effective October 1, 2025	\$6,657.00
Effective October 1, 2026	\$6,747.50
Effective October 1, 2027	\$7,017.40

#### 5. Billing Demand.

The Billing Demand shall be the maximum integrated 15-minute kW load occurring during the billing period, but not less than 70% of the highest demand established during the preceding eleven (11) months.

#### 6. Primary Metering.

Primary Metering may be used where at the option of the Municipality. If the transformation equipment is customer owned, the customer shall receive a 1.5 percent (1.5%) discount on monthly billings for operating and maintenance expenses.

#### 7. Installation Charge.

The customer shall pay the Municipality a contribution in aid of construction for installing transformation equipment in excess of that required to serve the average

monthly demand or because of fluctuating loads. Said contribution shall be equal to the cost of the transformation equipment requested less the estimated cost of transformation equipment needed to serve the average monthly load. The Municipality shall continue to own and maintain the transformation equipment.

#### J. **NET METERING RIDER**

#### 1. Available.

To renewable generation with production capacity of 25 kW<sub>AC</sub> or less, in conjunction with a retail load. No single meter may exceed 25 kW<sub>AC</sub>. Renewable generation includes electric generators powered by methane, wind, solar, biomass, hydro or waste technologies. Available until the total generating capacity of all renewable generation using net metering is equal to or exceeds one percent (1%) of the capacity necessary to meet the Falls City Electric Department's average aggregate customer monthly peak demand forecast for that calendar year. As of October 1, 2025, this amount is 105 kW.

#### 2. Character of Service.

Service shall be 60 Hertz, AC three phase at the standard primary and secondary voltages in use by the electric department.

#### 3. Purchase of Output from Renewable Generator Customers.

Owners of renewable generation will be allowed to parallel these facilities with the Falls City Electric Department and use the electrical output of their renewable generation to supply all or a portion of their own load and deliver the surplus to the Falls City Electric Department.

#### 4. Rate.

At the end of the billing period, the Falls City Electric Department will net the metered energy which was delivered to the Falls City Electric Department and the metered energy that was supplied by the Falls City Electric Department.

- a. Net energy supplied by the system to the customer in a billing period will be billed at the applicable retail rate.
- b. Net energy delivered to the system in a billing period will be purchased by the Falls City Electric Department at the applicable Renewable Net Metering Rider Energy Payment rate.
- c. Other applicable fees and charges, including the Customer Charge and the Demand Charge (if any), will be billed to the Customer at the applicable retail rate.

Purchases by the Falls City Electric Department will appear as credits on the bill. Credits which exceed charges for a billing period will roll-over to the following billing period. At the end of each calendar year, any credits remaining will be paid by check from the Falls City Electric Department in the final billing period of the year.

#### 5. Renewable Net Metering Rider Energy Payment Rate.

The energy payment rate will be as follows:

Effective October 1, 2025 \$0.0339/kWh

#### 6. Terms and Conditions.

- a. A signed written agreement between the renewable generator customer and the Falls City Electric Department will be required. The agreement form is available from FCU's office located at 2703 Barada Street.
- b. The renewable generation's connection to the Falls City distribution system must pass an inspection by the Falls City Electric Department and the State Electrical Division for safety and power quality.
- c. The renewable generator customer must supply a meter socket and a disconnect switch between the renewable generation/inverter and the Falls City Electric Department's service drop.
- d. The renewable generator customer must comply with all applicable city, county and state sales tax, laws and regulations.
- e. Service will be furnished subject to the Falls City Electric Department's Service Regulations and the Requirements for the Inverter Based Renewable Generation Systems less than 100 kW<sub>AC</sub> which is available at FCU's office.

#### K. GENERAL TERMS AND CONDITIONS

All sales of electric power and energy by the City of Falls City are subject to the following General Terms and Conditions:

#### 1. Terms of Payment.

All bills rendered are net, due and payable on receipt, and delinquent if not paid by 5:00 p.m. on the fifteenth (15<sup>th</sup>) of the month following the month for which the bill is rendered. Delinquent accounts are subject to a five percent (5%) delayed payment penalty. Unpaid delinquent accounts are subject to disconnection with proper notice. Reconnection may be had during regular working hours upon payment of a non-recoverable fee as established by the Board of Public Works under its service regulations. Reconnection may be had after hours or on weekends and holidays upon receipt of payment of a non-recoverable fee as established by the Board of Public Works under its service regulations.

#### 2. Infrastructure Fee.

All amounts are subject to a two percent (2%) Infrastructure Fee. Amounts collected for the Infrastructure Fee shall be segregated into a separate revenue account. Such amounts shall only be used to fund the construction, rehabilitation or rebuilding of capital assets used in the production and delivery of electricity to customers.

#### 3. Power Cost Adjustment.

The calculated Power Cost Adjustment (PCA) for a given month is the difference between actual cost of energy per kilowatt-hour and the PCA base of \$0.047/kWh, provided that if this amount is negative, the calculated PCA is zero (0). The charge applied to customer bills shall be an average of the calculated PCA for the prior six (6) months, provided that between October 2025 and March 2026 the calculation will transition from using a single month calculated PCA to using the rolling six (6) months average as follows:

October 2025: One-sixth (1/6) of the calculated PCA for September 2025

November 2025: Sum of the calculated PCA for September-October 2025,

divided by six (6)

December 2025: Sum of the calculated PCA for September-November 2025,

divided by six (6)

January 2026: Sum of the calculated PCA for September-December 2025,

divided by six (6)

February 2026: Sum of the calculated PCA for September 2025-January

2026, divided by six (6)

Thereafter: Average of the PCA for prior six (6) months

#### 4. Tax Clause.

This rate may be increased by the amount of any new or increased governmental tax imposed and levied on the transmission, distribution, production or sale of electricity.

#### 5. Special Terms and Conditions.

- a. Special Service requirements, if available, will be negotiated on an actual cost basis with the electric department.
- b. The Municipality shall supply one electric service to a property at one point of delivery designated by the Municipality. For installation of additional electric service to a property, the customer or owner shall pay the Municipality an installation fee equal to the total cost of installing the service equipment except for the meter and meter socket supplied by the Municipality. Distribution from

the point of delivery to points of use on the customer's premises shall be the responsibility of the property owner.

- c. When electric service is measured through more than one meter, the consumption registered on each meter will be billed separately. Meter readings will not be combined for billing purposes.
- d. When a portion of a residential dwelling is used for commercial purposes, the Residential Rate shall apply provided:
  - 1. the service is all taken through one (1) meter;
  - 2. the residential load exceeds the commercial load;
  - 3. the connected commercial load does not exceed 10 kW.

In all other cases, the Residential and Commercial Service will be separately metered and billed under the applicable rate, or all service to the premises will be billed under the applicable General Service Rate.

- e. When no more than two (2) rooms within a dwelling unit are rented out, the Residential Rate shall apply. Where three (3) or more are rented out, the appropriate General Service Rate shall apply.
- f. Two (2) or more flats, apartments, or dwelling units in the same building will be served through one (1) meter and the appropriate General Service Rate shall apply. At the Municipality's option, each individual unit may be separately metered and billed under the Residential Rate where the property owner provided facilities designed to serve each unit individually.

#### 6. Power Factor Adjustment.

All Urban and Rural General Service, General Service Demand, and Large Power customers will be expected to maintain, at customer's expense, a power factor of 95.0 percent (95%) lagging or better and 95.0 percent (95%) leading or better. If the power factor, as measured by the electric department, is lower than 95.0 percent (95%), the customer will be required to correct it. Customers failing to correct to the minimum allowable power factor will have the total amount of each monthly bill increased by the ratio of 0.95/actual power factor expressed as a decimal.

#### 7. Urban/Rural Customers Defined.

Urban refers to any customer with the corporate limits of the City of Falls City. Rural refers to all other customers.

#### **SECTION III**

That the original Ordinance 2022-106 and any other ordinances or sections passed and approved prior to passage, approval and publication or posting of this Ordinance in conflict with the provisions herewith are hereby repealed.

#### **SECTION IV**

This Ordinance shall be in full publication. This Ordinance sha provided by law.		. •	
Passed and approved this	_ day of	, 2025.	
	Mayor		
Attest:			
City Clerk	-		

# 2025 Cost of Service / Rate Design Study

# Falls City Utilities Water Utility

Board of Public Works and City Council
Review Draft

August 8, 2025



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#### **Executive Summary**

This study was prepared by JK Energy Consulting, LLC (JKEC) for the Falls City Utilities Water Utility (Utility). The purpose of the study was to review the Utility's revenues and expenses and ensure water rates are adequate to pay for projected expenses.

Based on the analysis completed, it appears the existing rates do not collect sufficient revenue to cover projected revenue requirements, including debt service payments, in fiscal year (FY) 2025 through FY 2029. Projected retail revenues for FY 2025 were approximately \$1.6 million (Table 4, Line 12), while projected test year expenses were approximately \$1.7 million (Table 4, Line 12). This indicates the cost of service is 6% greater than existing revenues (Table 4, Line 12). By FY 2029, the cost of service is 20.5% (Table 1, Line 26) greater than projected revenue.

The major factor driving the proposed rate increases was the funding for water system capital improvements from the 10-year capital improvement program. Under this program, capital improvements were proposed at a cost averaging \$150,000 per year through FY 2029. As a conservative planning assumption, it was assumed that these improvements would be funded via the existing debt service. It is possible that a portion of the projects would be funded via grants and debt forgiveness, so the calculated rate changes are likely higher than necessary; however, the cash position of the water fund has deteriorated somewhat, so additional cash reserves would be a prudent use of excess revenues.

The proposed rate plan would implement annual rate increases of 6% in FY 2026, FY 2027 and FY 2028. Without implementing the proposed rate increases, the Utility does not collect sufficient revenue to pay projected operating expenses, capital improvements and debt service expenses.

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. The cost of service indicated the majority of rate classes were paying less than the allocated cost of service. Excluding fire protection (which is subsidized as a general fund service), the indicated rate changes varied between 0.8% and 8.2%, depending on the rate class and usage profile (Table 4).

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the Utility. The proposed rates would increase the average monthly residential water bill by \$2.43 in FY 2026, \$2.57 in FY 2027 and \$2.72 in FY 2028.

It is recommended that a portion of the rate change be designated for funding future capital projects. An "Infrastructure Fee" of 2% is proposed, with those funds being placed in a separate fund solely dedicated to funding future capital projects.



The Utility's water rate tends to be on the higher end of its peer group. Much of the rate discrepancy can be attributed to geography and the need for additional treatment costs as a result of the location of the Utility's sources of supply. The Utility has and continues to be proactive about implementing capital improvements before emergency repairs or replacements are necessary. The Utility is also proactive about seeking loan forgiveness and grant funding. To the extent these types of programs fund a portion of the capital improvement program, the rate increases proposed may be mitigated somewhat.

#### **Conclusions**

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

- 1. The projected test year budget for FY 2025 was approximately \$1.7 million.
- 2. Projected revenues from existing rates are approximately \$1.6 million for FY 2025.
- 3. Existing rates would need to increase by approximately \$97,000, or 6%, to provide sufficient revenue to pay projected FY 2025 test year expenses, including projected debt service.
- 4. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of water facilities.
- 5. Existing rates would need to increase by approximately 20.5% by FY 2029 to pay projected operating expenses, capital improvements, and debt service expenses (including 110% debt service coverage).

#### Recommendations

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

- 1. Water rates should be increased 6% on October 1, 2025 (for FY 2026), 6% for FY 2027, and 6% for FY 2028, for a cumulative rate increase over the three-year period of 18%. The rate ordinance included in Appendix A would implement these rate increases.
- 2. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 4% of customer revenue be set aside in the proposed infrastructure fund.
- 3. The Utility should evaluate its rates if an unexpected expense or change in usage occurs between now and FY 2029. Also, if the Utility is successful in obtaining grant funding or loan forgiveness for a portion of the capital improvement program, it may be possible to defer some of the proposed rate increases.



#### **Purpose and Approach**

The purpose of this study was to review the water rates charged by the Utility. The goal of future water rates was to collect sufficient revenue to cover projected expenses, including debt service for water system improvements.

The approach to the study involved completing several tasks. Retail water sales, operating expenses, non-retail revenues, and other financial information were collected. Test year expenses for FY 2025 and future expenses through FY 2029 were projected. A rate plan was developed to meet the financial goals established by the Utility. The allocated cost of service for each rate class was calculated and compared to revenue from existing rates. The existing rate ordinance was reviewed, and new rates were developed. A written report was prepared and presented to the Board of Public Works and City Council on August 18, 2025.

#### **Background**

#### Falls City Utilities - Water Utility

Falls City Utilities, under the supervision of the Board of Public Works, operates the Water Utility, which serves customers located within Falls City and a number of customers in adjacent rural areas. The Utility serves approximately 2,330 customers, approximately 2,050 of which are residential.

#### **Projected Financial Results**

The purpose of preparing projected financial results is to compare projected revenues with expenses and determine the need for future rate increases. Projections were prepared for the period FY 2025 through FY 2029 based on information provided by the Utility.

#### **Parameters**

The following parameters were used to develop the test year budget and the projected financial results.

- 1. Historical and projected results were prepared based on the Utility's fiscal year (October 1 through September 30).
- 2. The FY 2025 water department budget was used as the basis for the FY 2025 test year budget, with normal escalation and adjustments for other known changes.
- 3. Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually.
- 4. Water sales were projected to remain stable (no increase or decrease).



- 5. Projected financial results were presented on an "accrual basis" and "cash basis." Accrual basis accounting is consistent with Generally Accepted Accounting Principles (GAAP) and cash basis results were intended to reflect actual cash flow. Each approach is important for ratemaking purposes, since the Utility's rates should ensure positive cash flow, positive net income.
- 6. The cost of service was prepared on a cash basis, including capital improvements and debt service payments, while excluding depreciation.
- 7. Depreciation expense of \$394,536 in FY 2025 through FY 2029 was included in the accrual-based financial results.
- 8. Existing debt service was included based on the repayment schedule provided by staff.
- 9. Minimum debt service coverage ratio of 110% was included as a constraint for rate-setting purposes.

#### **Projected Financial Results**

Table 1 (see page 6) shows the projected financial results for FY 2026 through FY 2029, along with test year FY 2025 and historical financial results for FY 2022 through FY 2024. The projected financial results do not include any rate changes or use of available funds for rate stabilization. The projected deficit on a cash basis ranges from approximately \$148,000 in FY 2025 to \$333,000 in FY 2029. On an accrual basis, the projected deficit ranges from \$108,000 in FY 2025 to \$270,000 in FY 2029. The cash-flow deficit is almost entirely caused by the increased debt service costs associated with funding the capital improvement program.

The Utility has historically been proactive about seeking alternative funding sources for capital improvement programs, including loan forgiveness and grant funding. To the extent the Utility is successful in using these types of funding sources, the need for future rate increases may be reduced.

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Table 1
Falls City Utilities
2025 Water Cost of Service Study
Projected Financial Results
Existing Rates

			Actu	Actual (1)		Ľ	Test Year			Proie	Projected		
Line	Description	2022	20	2023	2024		2025	2026		2027	2028		2029
_	Operating Revenues												
7	Retail Sales - Existing Rates	\$ 1,408,870	\$ 1,48	36,839 \$	1,408,870 \$ 1,486,839 \$ 1,669,211		\$ 1,621,287	\$ 1,621,28	87 \$ 1	1,621,287	\$1,621,287 \$1,621,287 \$1,621,287 \$1,621,287	. \$ 2	1,621,287
က	Rate Changes	'			•			•			•		
4	Other Operating Revenue	•			•		32,142	32,142	42	32,142	32,142	42	32,142
2	Total Operating Revenue	\$ 1,408,870 \$ 1,486,839 \$ 1,669,211	\$ 1,48	36,839 \$	1,669,211		\$ 1,653,430	\$ 1,653,430	30 \$ 1	\$ 1,653,430	\$ 1,653,430		\$ 1,653,430
9	Operating Expenses												
7	Internal Operating Costs	\$ 565,890	1,00	1,030,848	1,225,980		1,348,878	1,389,345		1,431,025	1,473,956		1,518,174
∞	Depreciation	465,918	4	401,974	394,536		394,536	394,536	36	394,536	394,536	36	394,536
6	Total Operating Expenses	\$ 1,031,808	ઝ	1,432,822 \$	1,620,516		\$ 1,743,414	\$ 1,783,881		\$ 1,825,561	\$ 1,868,492		\$ 1,912,710
10	10 Operating Income - GAAP Basis	\$ 377,062	\$	54,017 \$	48,695	\$	(89,985)	\$ (130,451)	51) \$	(172,131) \$	\$ (215,062)	62) \$	(259, 281)
11	Non-Operating Expense/(Revenue)												
12	Interest Income	(9)	_	\$ (699)	•	↔	(24,157)	(24,157)	22)	(24,157)	(24,157)	27)	(24,157)
13	Other / Transfers	(1,007,091)	_					•			•		
14	Grant Income						(10,000)	•			•		
15	Capital Improvements						•	•			•		
16	Interest Expense		4,	56,075	56,138		51,464	47,058	28	43,068	38,768	98	34,148
17	Miscellaneous Expense/(Revenue)	(172,692)		(188,599)	(653,502)	_	200	ũ	200	200	5	200	200
18	Total Non-Operating Expense/(Revenue)	\$ (1,179,789)	\$	(133,083) \$	(597,364)	\$	17,807	\$ 23,401	01 \$	19,411	\$ 15,111	11 \$	10,491
19	Net Income - GAAP Basis	\$ 1,556,851	\$ 18	187,100 \$	646,059	\$	(107,792)	\$ (153,852)	52) \$	(191,542)	\$ (230,173)	73) \$	(269,771)
20	Cash Basis												
21	Net Income	\$ 1,556,851	\$	187,100 \$	646,059		\$ (107,792) \$	\$ (153,8	52) \$	(191,542)	(153,852) \$ (191,542) \$ (230,173) \$	73) \$	(269,771)
22	Plus Depreciation	465,918	4	401,974	394,536		394,536	394,536	36	394,536	394,536	36	394,536
23	Less Debt Service Principal				(242,531)	_	(285,062)	(291,958)	28)	(297,057)	(302,212)	12)	(307,372)
24	Less Capital Expenditures	(358,228)		(1,308,386)	(459,326)	_	(150,000)	(150,000)	00)	(150,000)	(150,000)	00)	(150,000)
25	Net Income - Cash Basis	\$ 1,664,541	\$ (7)	(719,312) \$	338,738	\$	(148,318)	\$ (201,274)	74) \$	(244,063)	\$ (287,848)	48) \$	(332,607)
26	26 Rate Change for Breakeven Cash Flow	-118.1%		48.4%	-20.3%	\o	9.1%	12.	12.4%	15.1%		17.8%	20.5%

Notes: (1) B

(1) Based on audited financial statements.



Table 1a shows projected debt service coverage based on existing rates. A rate increase of 5.25% would be necessary in FY 2026 to meet the debt service coverage requirements of the 2019 Loan Agreement, with a cumulative rate increase of 13.37% by FY 2029. This is less than the rate increase needed to ensure adequate revenue on a cash basis. The need to maintain adequate debt service coverage formed the basis for the 6% annual rate increase recommendation for FY 2026, FY 2027 and FY 2028.

Table 1a
Falls City Utilities
2025 Water Cost of Service Study
Projected Financial Results - Debt Service Coverage Ratio
Existing Rates

		Test Year			Proje	ecte	ed	
Line	Description	2025	2026	i	2027		2028	2029
1	Retail Revenue	1,621,287	1,621	,287	1,621,287		1,621,287	1,621,287
2	Operating Income - GAAP Basis	(89,985)	(130	,451)	(172,131)		(215,062)	(259,281)
3	Adjustments							
4	Depreciation	394,536	394	,536	394,536		394,536	394,536
5	Interest Income	24,157	24	,157	24,157		24,157	24,157
6	Miscellaneous Revenue	(500)		(500)	(500)		(500)	(500)
7	Net Adjustments	418,193	418	,193	418,193		418,193	418,193
8	Net Revenue for Debt Service Coverage	328,208	\$ 287	,742	\$ 246,061	\$	203,131	\$ 158,912
9	Debt Service	336,526	\$ 339	,015	\$ 340,124	\$	340,979	\$ 341,519
10	Debt Service Coverage	97.53%	84	.88%	72.34%		59.57%	46.53%
11	Minimum DSC Requirement	110.00%	110	.00%	110.00%		110.00%	 110.00%
12	Over / (Under) Collection	(41,970)	(85	,175)	(128,075)		(171,946)	(216,759)
13	Necessary Rate Change for 110% DSC	2.59%	5.	.25%	7.90%		10.61%	 13.37%

#### Future Rate Changes

Table 2 (see page 8) shows the projected operating results with 6% rate increases in FY 2026, FY 2027 and FY 2028. The series of rate increases in FY 2026 through FY 2028 would result in sufficient revenue to cover projected operating expenses, debt service costs, and planned capital improvements. Implementing a series of rate increases would help customers avoid a sudden increase while providing stable financial results for future periods.

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Table 2
Falls City Utilities
2025 Water Cost of Service Study
Projected Financial Results
Proposed Rates - Cash Basis

			Toet Voar				Projected	701			
			631 16a				20-1	200			
Line	Description		2025		2026	• •	2027	20	2028	2029	•
_	Operating Revenues										
7	Retail Sales - Existing Rates	↔	1,621,287	↔	\$ 1,621,287	\$ 1,6	\$1,621,287	\$ 1,621,287	1,287	\$1,621,287	,287
က	Rate Changes		ı		97,277	• •	200,391	30	309,692	309,	309,692
4	Other Operating Revenue		32,142		32,142		32,142	က	32,142	32,	32,142
2	Total Operating Revenue	₩	1,653,430	₩	\$ 1,750,707	\$1,5	\$ 1,853,821	\$ 1,963,121	3,121	\$ 1,963,121	121
9	Operating Expenses										
7	Interal Operating		1,348,878		1,389,345	<u>,,</u>	1,431,025	1,47	1,473,956	1,518,174	174
∞	Depreciation		394,536		394,536	• •	394,536	39	394,536	394,	394,536
ဝ	Total Operating Expenses	4	1,743,414	↔	1,783,881	\$ 1,	\$ 1,825,561	\$ 1,86	\$ 1,868,492	\$1,912,710	710
10	Operating Income - GAAP Basis	8	(89,985)	\$	(33,174)	\$	28,260	\$	94,630	\$ 50,	50,411
11	Non-Operating Expense/(Revenue)										
12	Interest Income		(24,157)		(24,157)		(24,157)	(2	(24, 157)	(24,	(24, 157)
13	Other Income		•								
4	Grant Income		(10,000)								
15	Capital Improvements		•								
16	Interest Expense		51,464		47,058		43,068	က	38,768	34,	34,148
17	Miscellaneous Revenue		200								
18	Total Non-Operating Expense/(Revenue)	\$	17,807	ઝ	22,901	\$	18,911	\$	14,611	\$ 9,	9,991
19	Net Income - GAAP Basis	\$	(107,792)	↔	(56,074)	\$	9,349	\$	80,019	\$ 40,	40,420
20	Rate Change				%00.9		%00.9		%00.9	0.	0.00%
21	Cash Basis										
22	Net Income	↔	(107,792)	↔	(56,074)	\$	9,349	∞	80,019	\$ 40,	40,420
23	Plus Depreciation	↔	394,536	↔	394,536	₩	394,536	\$	394,536	\$ 394,	394,536
24	Less Debt Service Principal	↔	(285,062)	↔	(291,958)	₩	(297,057)	\$ (30	(302,212)	\$ (307,	(307,372)
25	Less Capital Expenditures (2)	\$	(150,000)	ઝ	(150,000)	\$	(150,000)	\$ (15	(150,000)	\$ (150,	(150,000)
26	Net Income - Cash Basis	\$	(148,318)	\$	(103,496)	\$	(43,172)	\$ 2	22,343	\$ (22,	(22,415)
27	Rate Change for Breakeven Cash Flow		9.1%		6.4%		2.7%		-1.4%		1.4%

[Intentionally left blank.]



Table 2a shows the projected debt service ratio if the proposed rate increases are implemented. The series of rate increases would increase debt service coverage to approximately 113% in FY 2026, 131% in FY 2027, and 150% in FY 2028. This approach does not include the effect of any debt forgiveness or use of grant money.

Table 2a
Falls City Utilities
2025 Water Cost of Service Study
Projected Financial Results - Debt Service Coverage Ratio
Proposed Rates

		1	Test Year		Proje	cte	ed	
Line	Description		2025	2026	2027		2028	2029
1	Retail Revenue		1,621,287	1,718,565	1,821,678		1,930,979	1,930,979
2	Operating Income - GAAP Basis		(89,985)	(33,174)	28,260		94,630	50,411
3	Adjustments							
4	Depreciation	\$	394,536	394,536	394,536		394,536	394,536
5	Interest Income		24,157	24,157	24,157		24,157	24,157
6	Miscellaneous Revenue		(500)	(500)	(500)		(500)	(500)
7	Net Adjustments		418,193	418,193	418,193		418,193	418,193
8	Net Revenue for Debt Service Coverage		328,208	\$ 385,019	\$ 446,453	\$	512,823	\$ 468,604
9	Debt Service		336,526	\$ 339,015	\$ 340,124	\$	340,979	\$ 341,519
10	Debt Service Coverage		97.53%	113.57%	131.26%		150.40%	137.21%
11	Minimum DSC Requirement		110.00%	110.00%	110.00%		110.00%	110.00%
12	Over / (Under) Collection		(41,970)	12,102	72,316		137,745	92,933
13	Necessary Rate Change for 110% DSC		2.59%	-0.70%	-3.97%		-7.13%	-4.81%

#### **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 completed 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 base, extra capacity (peak day or peak hour), and customer related expense. This process is called "functionalization" and "classification."

The costs related to each function were allocated to each customer class based on generally accepted cost allocation principles for municipal water 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 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 for FY 2025 included the following adjustments to the FY 2025 operating budget:

- 1. Normalized water sales based on typical historical water sales.
- 2. Exclusion of sales tax revenues and expenses.
- 3. Debt service based on existing loan repayment schedule.
- 4. Rate stabilization adjustment was included to limit the rate increase to 6%.

The test year budget for FY 2025 was approximately \$1.7 million and is summarized in Table 3. The test year budget represents the amount that needs to be collected from retail rates. It includes all operating expenses, debt service payments, capital improvements funded from rates, and is reduced for revenue from interest income and other non-retail revenue.

Table 3
Falls City Utilities
2025 Water Cost of Service Study
Test Year Budget by Function
Annual

		Pr	oduction /	Customer /		
Line	Rate Class	D	istribution	Metering	Other	Total
1	1" or Less Meter	\$	782,956	\$ 371,070	\$ (86,725)	\$ 1,067,301
2	1.5" Meter		14,048	3,659	(855)	16,852
3	2" Meter		133,546	27,951	(6,533)	154,964
4	3" Meter		37,520	5,421	(1,267)	41,675
5	4" Meter		65,335	11,084	(2,590)	73,829
6	6"and Larger Meter		-	-	-	-
7	Rulo		36,867	2,891	(676)	39,083
8	Rural Water 2 WTP		156,971	2,891	(676)	159,186
9	Rural Water 2 from 21st Street		85,310	5,783	(1,352)	89,741
10	Public Fire Hydrant		9,166	62,455	(14,597)	57,025
11	Private Fire Hydrant		2,292	21,686	(5,068)	18,909
12	Total	\$	1,324,011	\$ 514,893	\$ (120,339)	\$ 1,718,565
13	Percentage		77%	30%	-7%	100%

#### Functionalization and Classification

Functionalization and classification involved assigning the expense items to function, and classifying those expenses on the basis of a reasonable allocation method. The following functions were used for the Utility:

- 1. Water Production
- 2. Water Distribution (including storage)
- 3. Customer service
- 4. Meterina
- 5. Other (interest income, other charges)



Production and distribution costs were split between base costs, which vary in proportion to water usage, and extra capacity costs. Extra capacity costs were divided between extra peak day capacity and extra peak hour capacity. These costs vary in proportion to the amount the peak usage exceeds the average usage. Customer and metering costs include those costs associated with serving a particular customer, regardless of the customer's water usage. This would include expenses like customer billing, meter reading, customer accounting expense and maintenance costs related to these functions.

Table 3 (see page 10) summarizes the classification of test year expenses, including the allocation to the various retail rate classes. Approximately \$1.3 million is production and distribution-related, \$515,000 is customer-related and \$(120,000) is related to other expenses. (NOTE: Other expenses is negative because it includes a rate stabilization adjustment to limit the needed rate increase to 6% as well as interest income and other revenue credits.) Based on this classification, 77% of the Utility's test year budget is production and distribution-related, 30% is customer-related, and -7% is considered other expense unrelated to production, distribution or customer expense.

#### **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 that the Utility is required to follow by a regulatory agency. There are a number of guidelines that municipal utilities follow, including publications and guidelines from the American Water Works Association.

The City currently differentiates its rates based only on meter size; all consumption is billed at the same rate while customer charges vary based on the size of the meter. For cost allocation purposes, each meter size was treated as its own rate class. The Village of Rulo, Rural Water District #2 Water Treatment Plant account, and Rural Water District #2 21st Street account were each assigned their own rate class. Fire protection and fire hydrants were each assigned to a separate rate class since their usage profile differs from other rate classes.

One limitation of the methodology used for cost allocation was the inability to allocate costs separately to inside and outside city customers. It is common for municipal utilities to differentiate between rates inside and outside the city, since outside city customers generally require higher customer service costs, distribution costs and pumping costs because of the distance from City facilities and decreased customer density.

#### 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 the 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 4 compares the revenue from existing rates to the calculated cost of service. Overall, the cost of service was 6% more than revenues from existing rates. Excluding fire protection, the cost of service for the major rate classes ranged from 0.8% to 8.2%.

Table 4
Falls City Utilities
2025 Water Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates
Annual

		Revenue	Cost of	Differer	nce
Line	Rate Class	Existing Rates	Service	\$	%
1	1" or Less Meter	\$ 996,429	\$ 1,067,301	\$ 70,873	7.1%
2	1.5" Meter	16,599	16,852	253	1.5%
3	2" Meter	153,734	154,964	1,230	0.8%
4	3" Meter	39,877	41,675	1,797	4.5%
5	4" Meter	69,451	73,829	4,378	6.3%
6	6"and Larger Meter	-	-	-	0.0%
7	Rulo	36,112	39,083	2,971	8.2%
8	Rural Water 2 WTP	151,971	159,186	7,216	4.7%
9	Rural Water 2 from 21st Street	86,756	89,741	2,985	3.4%
10	Public Fire Hydrant	52,768	57,025	4,257	8.1%
11	Private Fire Hydrant	17,591	18,909	1,318	7.5%
12	Total	\$ 1,621,287	\$ 1,718,565	\$ 97,278	6.0%

#### **Rate Design**

The proposed rate plan would increase rates by a cumulative total of 19% through FY 2028. Because of the large scale of the proposed rate increase, an across the board approach to increasing the monthly customer charge and flow-based charge was used. This ensures that no individual customer would receive an increase significantly different than the average because it had a usage profile significantly different than the typical customer. Under this approach, all customers would experience a similar percentage rate increase.

The proposed rate change would increase the average monthly residential water bill by \$2.43 per month in October 2025, \$2.57 in October 2026 and \$2.72 in October 2027. Table 5 (see page 13) shows the revenue from existing rates and the proposed FY 2026 rates by rate class, effective October 2025. Table 6 (see page 13) shows the proposed revenue increases by rate class for FY 2027, effective October 2026.



Table 5
Falls City Utilities
2025 Water Cost of Service Study
Proposed Rate Change by Rate Class - October 2025
Annual

		Revenue	Revenue		Difference	
Line	Rate Class	Existing Rates	Proposed Rates	\$	Bill (1)	%
1	1" or Less Meter	\$ 996,429	\$ 1,056,214	\$ 59,786	\$ 2.43	6.0%
2	1.5" Meter	16,599	17,595	996	9.22	6.0%
3	2" Meter	153,734	162,958	9,224	19.88	6.0%
4	3" Meter	39,877	42,270	2,393	59.82	6.0%
5	4" Meter	69,451	73,618	4,167	90.59	6.0%
6	6"and Larger Meter	-	-	-	-	0.0%
7	Rulo	36,112	38,279	2,167	180.56	6.0%
8	Rural Water 2 WTP	151,971	161,089	9,118	759.85	6.0%
9	Rural Water 2 from 21st Street	86,756	91,961	5,205	216.89	6.0%
10	Public Fire Hydrant	52,768	55,934	3,166	1.22	6.0%
11	Private Fire Hydrant	17,591	18,646	1,055	21.99	6.0%
12	Total	\$ 1,621,287	\$ 1,718,565	\$ 97,277	\$ 3.51	6.0%

#### Note:

1. Change in average monthly bill for customers within rate class.

Table 6
Falls City Utilities
2025 Water Cost of Service Study
Proposed Rate Change by Rate Class - October 2026
Annual

			Revenue		Revenue		Diffe	erence	
Line	Rate Class	Exi	sting Rates	Pı	roposed Rates	\$	I	Bill (1)	%
1	1" or Less Meter	\$	1,056,214	\$	1,119,587	\$ 63,373	\$	2.57	6.0%
2	1.5" Meter		17,595		18,651	1,056		9.78	6.0%
3	2" Meter		162,958		172,736	9,777		21.07	6.0%
4	3" Meter		42,270		44,806	2,536		63.40	6.0%
5	4" Meter		73,618		78,035	4,417		96.02	6.0%
6	6"and Larger Meter		-		-	-		-	0.0%
7	Rulo		38,279		40,575	2,297		191.39	6.0%
8	Rural Water 2 WTP		161,089		170,754	9,665		805.44	6.0%
9	Rural Water 2 from 21st Street		91,961		97,479	5,518		229.90	6.0%
10	Public Fire Hydrant		55,934		59,290	3,356		1.29	6.0%
11	Private Fire Hydrant		18,646		19,765	1,119		23.31	6.0%
12	Total	\$	1,718,565	\$	1,821,678	\$ 103,114	\$	3.68	6.0%

#### Note:

1. Change in average monthly bill for customers within rate class.



The only significant rate design change proposed is to implement an Infrastructure Fee. As noted previously in this report, a significant driver of future rate increases is the need to fund capital projects. These projects help provide for reliable service and the ability to serve new customers. Since these needs drive a portion of the rate increase, it is recommended to implement an "Infrastructure Fee" equal to 4% of the customer bill. The rate schedule provides that these funds will be segregated and only used for capital projects. This approach will help customers understand that a portion of the rate increase is dedicated to funding capital projects rather than the day-to-day operations of the utility.

With the proposed rate increases, the Utility's residential water rates in FY 2026 would still be comparable to or lower than existing water rates for similarly-sized municipal utilities in eastern Nebraska. Table 7 (see page 15) provides a comparison of existing rates for the cities of Auburn, Nebraska City, Seward, and Wahoo to the proposed FY 2026 rates for Falls City. The comparisons were prepared for usage of 5 ccf, 7 ccf, and 10 ccf.

The typical monthly residential water usage for Falls City was 7 ccf. The calculated monthly bill in FY 2026 would be lower than Auburn for the analyzed usage levels and somewhat higher than Nebraska City, Seward and Wahoo. The rate comparison indicates the projected water rates toward the higher end of the selected peer group.

One of the most significant factors in the competitiveness of water rates is geography. The cost of water supply varies significantly based on proximity to surface water sources, groundwater contaminants and quantity and quality of supply in close proximity to the utility's customers. In addition, the Utility has been proactive about constructing capital projects before sudden failures occur, which improves reliability and helps reduce long-term maintenance costs. While this may result in somewhat higher rates in the near-term, in the long-term view it can reduce overall costs and provide better service to customers.

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# Table 7 Falls City Utilities 2025 Water Cost of Service Study Typical Bill Comparison to Comparisons - October 2025 Rate

## Rate Comparisons - October 2025 Rates Residential 1" or Less Meter

F	Rate Compari	sons	
Utility	500 cf	700 cf	1,000 cf
Auburn (1)	48.67	56.59	68.46
Falls City (2)	40.18	51.25	67.85
Nebraska City (3)	22.16	25.28	29.97
Seward (4)	33.23	40.81	52.18
Wahoo (5)	31.03	33.51	37.24

#### Notes:

- 1. Effective January 2025
- 2. Proposed rates, effective October 1, 2025
- 3. Rates effective March 2019
- 4. Rates effective October 2024
- 5. Rates effective February 2025

#### **Conclusions**

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

- 1. The projected test year budget for FY 2025 was approximately \$1.7 million.
- 2. Projected revenues from existing rates are approximately \$1.6 million for FY 2025.
- 3. Existing rates would need to increase by approximately \$97,000, or 6%, to provide sufficient revenue to pay projected FY 2025 test year expenses, including projected debt service.
- 4. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of water facilities.
- 5. Existing rates would need to increase by approximately 20.5% by FY 2029 to pay projected operating expenses, capital improvements, and debt service expenses (including 110% debt service coverage).



#### Recommendations

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

- 1. Water rates should be increased 6% on October 1, 2025 (for FY 2026), 6% for FY 2027, and 6% for FY 2028, for a cumulative rate increase over the three-year period of 18%. The rate ordinance included in Appendix A would implement these rate increases.
- 2. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 4% of customer revenue be set aside in the proposed infrastructure fund.
- 3. The Utility should evaluate its rates if an unexpected expense or change in usage occurs between now and FY 2029. Also, if the Utility is successful in obtaining grant funding or loan forgiveness for a portion of the capital improvement program, it may be possible to defer some of the proposed rate increases.



### **Appendix A – Rate Ordinance**



AN ORDINANCE TO AMEND ORDINANCE NO. 2022-107 TO SET WATER RATES, FEES, CHARGES, AND COLLECTIONS FOR WATER SERVICES FROM AND IN THE CITY OF FALLS CITY, NEBRASKA; REPEALING ANY PRIOR ORDINANCES IN CONFLICT THEREWITH; AND ORDERING THE PUBLICATION OF THE ORDINANCE IN PAMPHLET FORM TO PROVIDE FOR EFFECTIVE DATE.

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

#### **SECTION** I

That the rates, fees, charges, and collections for the use of water be and hereby are those figures and terms set out in the schedule incorporated as Section II of this Ordinance, which schedule and terms shall be on file in the office of the Municipal Clerk for public inspection at any reasonable time.

#### **SECTION II**

#### A. MINIMUM MONTHLY SERVICE CHARGE

All customers will be charged a Minimum Monthly Service Charge based on the size of the meter serving the facility or residence. Customers with more than one meter will be charged the specified rate for each meter serving their facility or residence.

	<u>Mo</u>	nthly Service Cha	<u>rge</u>
	<b>Effective</b>	<b>Effective</b>	<b>Effective</b>
Meter Size	October 1, 2025	October 1, 2026	October 1, 2027
1-inch or less	\$12.04	\$12.76	\$13.52
1½-inch	\$38.10	\$40.38	\$42.81
2-inch	\$62.14	\$65.87	\$69.82
3-inch	\$124.32	\$131.77	\$139.68
4-inch	\$188.48	\$199.78	\$211.77
6-inch and larger	\$374.92	\$397.42	\$421.26

All rates are subject to the General Terms and Conditions, as set forth in Section E of this Ordinance.

#### **B. WATER USE RATES**

#### 1. Water Usage.

Water usage rates will be based per 100 cubic feet of water used each month. All customers will be charged water usage rates on and after the effective date as shown below.

- a. <u>Residential</u>: Available to all Residential customers in the city limits of Falls City in single family residences for all domestic uses including drinking, cooking, washing, and watering lawns and gardens. Not applicable to resale, supplemental, auxiliary or shared service.
- b. <u>Residential (Outside City Limits)</u>: Available to all Rural Residential customers in single family residences for all domestic uses including drinking, cooking, washing, and watering of lawns and gardens. Not applicable to resale, supplemental, auxiliary or shared service.
- c. <u>Commercial/Industrial</u>: Available to Commercial or Industrial customers in the city limits of Falls City for all commercial uses including drinking, cooling, and processing. Not applicable to resale, supplemental, auxiliary or shared service.
- d. <u>Commercial/Industrial (Outside City Limits)</u>: Available to Rural Commercial or Industrial customers for all commercial uses including drinking, cooling, and processing. Not applicable to resale, supplemental, auxiliary or shared service.
- e. <u>Village of Rulo</u>: Available to the Village of Rulo for all resale uses.
- f. <u>Richardson County Rural Water 2 from Water Treatment Plant</u>: Available to Richardson County Rural Water 2 from Water Treatment Plant for all resale uses.
- g. <u>Richardson County Rural Water 2 from 21<sup>st</sup> Street</u>: Available to Rural Water District #2 for contract rate on West 21<sup>st</sup> Street Line for all resale uses.

		<u>Usage Rate</u>	e/100 Cubic F	eet/Month
		Effe	ective Octobe	r 1
	Customer Category	<u>2025</u>	<u> 2026</u>	<u>2027</u>
a.	Residential	\$5.32	\$5.64	\$5.98
b.	Residential (Outside City Limits)	\$5.32	\$5.64	\$5.98
C.	Commercial/Industrial	\$5.32	\$5.64	\$5.98
d.	Commercial/Industrial (Outside City Limits)			
e.	Village of Rulo	\$4.25	\$4.51	\$4.78
f.	Richardson Co. Rural Water 2 from Water	\$4.25	\$4.51	\$4.78
	Treatment Center	φ4.25	φ4.51	φ4.70
g.	Richard Co. Rural Water 2 from 21st Street	\$5.32	\$5.64	\$5.98

All rates are subject to the General Terms and Conditions, as set forth in Section E of this Ordinance.

#### C. FIRE PROTECTION SERVICE CHARGE

Minimum Bill per month:

	<b>Effective</b>	<b>Effective</b>	Effective
<u>Service</u>	October 1, 2025	October 1, 2026	October 1, 2027
2" Service	\$39.30	\$41.66	\$44.16
4" Service	\$69.26	\$73.42	\$77.82
6" Service	\$108.96	\$115.49	\$122.42

All rates are subject to the General Terms and Conditions, as set forth in Section E of this Ordinance.

#### D. FIRE HYDRANT CHARGE (ANNUAL CHARGE)

Service	Effective October 1, 2025	Effective October 1, 2026	Effective October 1, 2027
Public	\$239.78	\$254.17	\$269.42
Private	\$345.86	\$366.61	\$388.60

All rates are subject to the General Terms and Conditions, as set forth in Section E of this Ordinance.

#### E. GENERAL TERMS AND CONDITIONS

#### 1. Terms of Payment.

All bills rendered are net, due and payable on receipt, and delinquent if not paid by 5:00 p.m. on the fifteenth (15<sup>th</sup>) of the month following the month for which the bill is rendered. Delinquent accounts are subject to a five percent (5%) delayed payment penalty. Unpaid delinquent accounts are subject to disconnection with proper notice.

Reconnection may be had during regular working hours upon payment of a non-recoverable fee as established by the Board of Public Works under its service regulations. Reconnection may be had after hours or on weekends and holidays upon receipt of payment of a non-recoverable fee as established by the Board of Public Works under its service regulations.

#### 2. Infrastructure Fee.

All amounts are subject to a four percent (4%) Infrastructure Fee. Amounts collected for the Infrastructure Fee shall be segregated into a separate revenue account. Such amounts shall only be used to fund the construction, rehabilitation or rebuilding of capital assets used in the production and delivery of water to customers.

#### 3. Tax Cause.

This rate may be increased by the amount of any new or increased governmental tax imposed and levied on the distribution or sale of water.

#### 4. Special Terms and Conditions.

- a. Special service requirements, if available, will be negotiated on an actual cost basis with the water department.
- b. The Municipality shall supply one water service to a property at one point of delivery designated by the Municipality. For installation of additional water services to a property, the customer or owner shall pay the Municipality an installation fee equal to the total cost of installing the service equipment except for the meter supplied by the Municipality. Distribution from the point of delivery to points of use on the customer's premises shall be the responsibility of the property owner.
- c. When water service is measured through more than one meter, the consumption registered on each meter will be billed separately. Meter readings will not be combined for billing purposes.
- d. When a portion of a residential dwelling is used for commercial purposes, the Residential rate shall apply provided:
  - (1) the service is all taken through one (1) meter;
  - (2) the residential load exceeds the commercial load.
- e. When no more than two (2) rooms within a dwelling unit are rented, the Residential rate shall apply. Where three (3) or more are rented out, the appropriate general Commercial rate shall apply.
- f. Two (2) or more flats, apartments, or dwellings units in the same building will be served through one meter and the appropriate general Commercial rate shall apply. At the Municipality's option, each individual unit may be separately metered and billed under the Residential rate where property owner provides facilities designed to serve each unit individually.

#### SECTION III

That the original Ordinance No. 2022-107 and any other ordinances or sections passed and approved prior to passage, approval and publication or posting of this ordinance in conflict with the provisions herewith are hereby repealed.

#### SECTION IV

		d after its passage, approval, and later form and take effect as provide	
Passed and approved this	day of	, 2025.	
		Mayor	<del></del>
ATTEST:			
City Clerk	<del></del>		

# 2025 Cost of Service / Rate Design Study

# Falls City Utilities Wastewater Utility

Board of Public Works and City Council
Review Draft

August 8, 2025



John A. Krajewski, P.E. 74408 Road 433 Smithfield, Nebraska 68976 402-440-0227 jk@jkenergyconsulting.com www.jkenergyconsulting.com

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#### **Executive Summary**

This study was prepared by JK Energy Consulting, LLC (JKEC) for the Falls City Utilities Wastewater Utility (Utility), also referred to as sewer utility. The purpose of the study was to review the Utility's revenues and expenses and ensure sewer rates are adequate to pay for projected expenses.

Based on the analysis completed, existing rates do not collect sufficient revenue to cover projected expenses in fiscal year (FY) 2025 through FY 2029. Projected retail revenues for FY 2025 were approximately \$1.2 million, while projected test year expenses were approximately \$1.3 million (Table 6, Line 16). This indicates a rate increase of 4% would be necessary in FY 2025 to ensure sufficient revenue to cover projected expenses (Table 6, Line 16).

If the Utility plans to maintain 110% debt service coverage, a minimum increase of 6.8% by FY 2029 would be necessary (Table 2, Line 7). To maintain positive cash flow, including funding of capital improvements, a series of 4% rate increases through FY 2029 would be necessary (Table 3, Line 19). The proposed rate plan would implement a series of 4% rate increases to maintain sufficient cash flow to cover projected operating, debt service and capital expenditures. Rate increases beyond FY 2029 will be dependent on future expenses and the cost of capital improvements.

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. The cost of service indicated that most rate classes were paying less than the cost of service. The indicated rate increases varied between 0.0% and 13.6%, depending on the rate class and usage profile (Table 6). Historically, the Utility has had a single rate applicable to all customers, varying only based on meter size and estimated wastewater flow estimated from non-consumptive water usage. Since the cost of service was prepared with residential, commercial and industrial customers classified as separate rate classes, wide variances in the difference in cost of service to revenue collected are not unexpected.

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the Utility. The proposed rates would increase the average monthly residential sewer bill from \$44.16 under existing rates to \$45.93 in FY 2026, or approximately \$1.77 (Table 7, Line 1). By FY 2028, the average sewer bill would increase to \$47.77 per month.

The only significant rate design change is that a portion of the rate change be designated for funding future capital projects. An "Infrastructure Fee" of 2% is proposed, with those funds being placed in a separate fund solely dedicated to funding future capital projects



The Utility's sewer rate tends to be higher than its peer group (Table 10); however, the Utility has been proactive with regard to funding needed capital improvements and ensuring that each operating utility under the City's authority is financially self-sufficient. In addition, there are multiple factors affecting rates that are outside the control of the City, including geography and customer base characteristics.

No changes were proposed to the high strength surcharges because existing rates are mid-range when compared with similar utilities. For example, the biochemical oxygen demand (BOD) rate for Auburn is \$0.19 per pound and Nebraska City is \$0.69 per pound while Falls City's rate is \$0.36 per pound. Currently, no customers discharge high strength sewage; however, for the benefit of potential future customers, no increases to this rate were recommended.

#### **Conclusions**

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

- 1. The projected test year budget for FY 2025 was approximately \$1.3 million.
- 2. Projected revenues from existing rates are approximately \$1.2 million for FY 2025.
- 3. Existing rates would need to increase by approximately \$49,000, or 4%, to provide sufficient revenue to pay projected FY 2025 test year expenses.
- 4. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of wastewater facilities.
- 5. Existing high strength surcharges (BOD, TSS, and ammonia) are comparable to similar utilities.

#### Recommendations

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

- 1. Sewer rates should be increased 4% on October 1, 2025 (for FY 2026), 4% for FY 2027, and 4% for FY 2028. The rate ordinance included in Appendix A implements these rate increases.
- 2. The Utility should consider implementing another 4% rate increase in FY 2029.
- 3. The rate increase for flat rate customers should be modified from 7% annually to 4% annually to maintain consistency with the general rate increases being proposed.
- 4. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 2% of customer revenue be set aside in the proposed infrastructure fund.



- 5. The existing rate differential between inside and outside city customers should be kept in place.
- 6. High strength surcharges should be kept in place. No increases should be implemented.
- 7. The Utility should evaluate its rates after FY 2029 or if there are any significant changes to the system, including capital improvement or operating expense increases.

#### **Purpose and Approach**

The purpose of this study was to review the sewer rates charged by the Utility. The goal of future sewer rates was to collect sufficient revenue to cover projected expenses and provide an adequate return on rate base.

The approach to the study involved completing several tasks. Sewer discharges (based on water sales), operating expenses, capital improvement programs, non-retail revenues, and other financial information were collected. Test year expenses for FY 2025 and future expenses through FY 2029 were projected. A rate plan was developed to meet the financial goals established by the Utility. The allocated cost of service for each rate class was calculated and compared to revenue from existing rates. The existing rate ordinance was reviewed, and new rates were developed. A draft written report was prepared and presented to the Board of Public Works and City Council on August 18, 2025.

#### **Background**

#### Falls City Utilities – Sewer Utility

Falls City Utilities, under the supervision of the Board of Public Works, operates the sewer utility, which serves customers located within Falls City and in rural areas adjacent to Falls City. The Utility serves approximately 1,780 residential customers, 250 commercial customers, and 4 industrial customers.

#### **Projected Financial Results**

The purpose of preparing projected financial results is to compare projected revenues with expenses and determine the need for future rate increases. Projections were prepared for the period FY 2025 through FY 2029 based on information provided by the Utility.

#### **Parameters**

The following parameters were used to develop the test year budget and the projected financial results.

1. Historical and projected results were prepared based on the Utility's fiscal year (October 1 through September 30).



- 2. The FY 2025 sewer department budget was used as the basis for the FY 2025 test year budget.
- 3. Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually.
- 4. Sewer discharges, based on water sales, were projected to remain stable (no increase or decrease).
- 5. Projected financial results were presented on an "accrual basis" and "cash basis." Accrual basis accounting is consistent with Generally Accepted Accounting Principles (GAAP) and cash basis results were intended to reflect actual cash flow. Each approach is important for ratemaking purposes, since the Utility's rates should ensure positive cash flow, positive net income, and adequate debt service coverage.
- 6. The cost of service was prepared on a cash basis, including capital improvements and debt service payments, while excluding depreciation.
- 7. Existing debt service requirements were based on the outstanding debt allocated to the wastewater fund, which includes utility revenue bonds and two state revolving fund loans.
- 8. The minimum debt service coverage target was set at 1.10 (110%).
- 9. Capital improvements of \$125,000 per year were included. This was based on the 10-year capital project plan and typical expenditures in recent years.
- 10. Depreciation expense of \$247,723 in FY 2025 through FY 2029 was included in the accrual-based financial results.

#### **Projected Financial Results**

Table 1 (see page 6) shows projected financial results for FY 2025 through FY 2029 without any rate changes. Without a rate change, the Utility does not collect sufficient revenue in FY 2025 to cover projected expenses. The projected deficit on a cash basis ranges from approximately \$7,000 in FY 2025 to \$154,000 in FY 2029. The Utility would have negative net income on an accrual basis during the study period, ranging from approximately \$68,000 in FY 2025 to \$213,000 in FY 2029.

The primary driver for future rate changes is maintaining sufficient cash flow to cover operating expenses, debt service and capital improvements. A secondary driver of required rate increases is the need to maintain adequate debt service coverage as shown in Table 2 (see page 7). The need to maintain sufficient cash flow results in a larger rate increase than the rate increase necessary to maintain adequate debt service coverage.

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2025 Sewer Cost of Service Study Projected Financial Results Falls City Utilities **Existing Rates** Table 1

				Actual (1)			۲	Test Year				Projected	ted			
Line	Description	2022		2023		2024		2025		2026		2027	7	2028	2029	
~	Operating Revenues															
7	Retail Sales - Existing Rates	\$1,150,011		\$ 1,176,308		\$ 1,248,805	\$	1,228,334	s	1,228,334	\$	1,228,334 \$	\$	1,228,334 \$	1,228,334	,334
က	Rate Changes	•		•				•		ı		ı				,
4	Other Operating Revenue	•		•		•		96,838		96,838		96,838		96,838	96	96,838
2	Total Operating Revenue	\$1,150,011		\$ 1,176,308 \$ 1,248,805	<b>.</b>	1,248,805	₩.	1,325,173	s	1,325,173	\$	1,325,173 \$	\$	1,325,173 \$	1,325,173	,173
9	Operating Expenses															
7	Internal Operating	\$ 988,235	↔	1,019,067		943,876		1,168,299		1,203,348	`-	1,239,448	_	1,276,632	1,314,931	,931
∞	Depreciation	226,290		221,799		247,723		247,723		247,723		247,723		247,723	247,	247,723
6	Total Operating Expenses	\$1,214,525	₩	1,240,866	₩	\$ 1,191,599	₩	1,416,022	s	1,451,071	8	1,487,171 \$	\$	1,524,355 \$	1,562,654	,654
10	Operating Income - GAAP Basis	\$ (64,514)	\$	(64,558)	↔	57,206	₩.	(90,849)	s	(125,898)	s	\$ (666,191)	\$	(199,182) \$	(237,	(237,481)
11	Non-Operating Expense/(Revenue)															
12	Interest Income	\$ (941)	_	(2,531)		(21)		(24,157)		(24,157)		(24,157)		(24,157)	(24,	(24,157)
13	Transfers (In)/Out	•		•				•								
4	Interest Expense	•		3,217		480		821								
15	Interest Expense - Proposed	•		•		•				•						
16	Miscellaneous Expense (Revenue)	•		306,457		(5,914)				•						
17	Total Non-Operating Expense/(Revenue)	\$ (941)	\$	307,143	8	(5,455)	s	(23,336)	ક્ક	(24,157)	\$	(24,157)	\$	(24,157) \$	(24,	(24,157)
18	Net Income - GAAP Basis	\$ (63,573)	\$	(371,701)	8	62,661	ક્ક	(67,514)	ક્ર	(101,741)	\$	(137,842) \$	\$	(175,025) \$	(213,	(213,324)
19	Cash Basis															
20	Net Income	\$ (63,573)	*	(371,701)	₩	62,661	₩	(67,514)	s	(101,741)	s	(137,842) \$	€9	(175,025) \$	(213,	(213,324)
21	Plus Depreciation	226,290		221,799		247,723		247,723		247,723		247,723		247,723	247,	247,723
22	Less Principal - Existing	•		•		(84,921)		(61,824)		(63,355)		(63, 243)		(63,130)	(63,	(63,017)
23	Less Principal - Proposed	•		•				•		1						
24	Less Capital Expenditures (3)	(121,177)	_	(381,184)		(138,274)		(125,000)		(125,000)		(125,000)		(125,000)	(125,	(125,000)
25	Net Income - Cash Basis	\$ 41,540	8	(531,086)	\$	87,189	\$	(6,615)	\$	(42,373)	\$	(78,362) \$	\$	(115,433) \$	(153,	(153,618)
26	Rate Change Needed (2)	-3.6%	<b>,</b> 0	45.1%		%0'.		0.5%		3.4%		6.4%		9.4%	1.	12.5%

- Based on audited financial statements.
- Total rate change necessary by given year to ensure positive cash flow. Notes: (1) Bg (2) Tc (3) C;
- Capital improvement plans beyond FY 2025 assumed to be funded through debt financing.



Projected Financial Results - Debt Service Coverage 2025 Sewer Cost of Service Study **Falls City Utilities Existing Rates** Table 2

		Те	Test Year				Projected	cte	þ		
Line	Description		2025		2026		2027		2028		2029
_	Retail Revenue - Existing Rates	1,	228,334	1	1,228,334 1,228,334	`	1,228,334	,	1,228,334 1,228,334		1,228,334
7	Debt Service Coverage										
က	Net Revenue (1)	↔	132,717	\$	132,717 \$ 97,668 \$	\$	61,567	\$	61,567 \$ 24,384 \$ (13,915)	↔	(13,915)
4	Debt Service Expense	\$	62,645	\$	62,645 \$ 63,355 \$	\$	63,243 \$	\$	63,130	\$	63,130 \$ 63,017
2	Debt Service Coverage (2)		2.12		1.54		0.97		0.39		(0.22)
9	Revenue Increase for 1.1x Coverage		(63,807)		(27,977)		8,000		45,059		83,234
7	Rate Increase for 1.1x Coverage (%) (3)		-5.2%		-2.3%		0.7%		3.7%		6.8%

## Note:

- 1. Operating revenue, less operating and maintenance expenses (excluding depreciation).
- Net revenue divided by debt service expense.
   Line 6 divided by Line 1. Represents total cumulative rate change from existing rates required.



#### Future Rate Changes

Tables 3 (see page 9) and 4 (see page 10) show the projected operating results with 4% rate increases in FY 2026 through FY 2029. This results in a cumulative rate increase of 17% over four years. (NOTE: The compounding effect causes the cumulative increase to be greater than the sum of the individual rate increases.) This series of rate increases would increase debt service coverage to 2.32 in FY 2026, 2.56 in FY 2027, 2.82 in FY 2028 and 3.09 in FY 2029.

Rate increases in FY 2026 through FY 2029 result in sufficient revenue to cover projected operating expenses, debt service costs, and a majority of planned capital improvements. Implementing a series of rate increases over this period will help customers avoid sudden increases while providing stable financial results for future periods.

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Table 3
Falls City Utilities
2025 Sewer Cost of Service Study
Projected Financial Results
Proposed Rates - Cash Basis

		Toet Voar	_			Droiord	10			
		201 1601	<u> </u>			201	3			
Line	Description	2025		2026		2027		2028		2029
_	Operating Revenues									
7	Retail Sales - Existing Rates	\$ 1,228,334		\$ 1,228,334	\$	\$ 1,228,334	\$	\$ 1,228,334	\$	\$ 1,228,334
က	Rate Changes	•		49,133		100,232		153,375		208,643
4	Other Operating Revenue	96,838	38	96,838		96,838		96,838		96,838
2	Total Operating Revenue	\$ 1,325,173		\$ 1,374,306		\$ 1,425,405	\$	\$ 1,478,547	8	\$ 1,533,816
9	Operating Expenses									
7	General and Administrative	1,168,299	66	1,203,348	_	1,239,448	_	1,276,632	_	1,314,931
∞	Depreciation	247,723	23	247,723		247,723		247,723		247,723
တ	Total Operating Expenses	\$ 1,416,022		\$ 1,451,071	8	\$ 1,487,171	\$	\$ 1,524,355	8	\$ 1,562,654
10	Operating Income - GAAP Basis	\$ (90,849)	49)	(76,765)	<del>\$</del>	(61,767)	s	(45,807)	↔	(28,838)
11	Non-Operating Expense/(Revenue)									
12	Interest Income	\$ (24,1	27)	(24,157) \$ $(24,157)$ \$ $(24,157)$ \$ $(24,157)$ \$ $(24,157)$	↔	(24,157)	s	(24, 157)	↔	(24,157)
13	Dividends	•		•		•		•		•
4	Interest Expense - Existing	80	821	•		•		•		
15	Interest Expense - Proposed	•		•		•		•		
16	Miscellaneous Expense (Revenue)	•		•						•
17	Total Non-Operating Expense/(Revenue)	\$ (23,336)	36) \$	(24, 157)	\$	(24,157)	\$	(24, 157)	\$	(24,157)
18	Net Income - GAAP Basis	\$ (67,514)	14) \$	(52,608)	\$	(37,610)	\$	(21,651)	\$	(4,681)
19	Future Rate Change			4.00%		4.00%		4.00%		4.00%
20	Cash Basis									
7	Net Income	\$ (67,514)	14)	(52,608)	↔	(37,610)	↔	(21,651)	↔	(4,681)
22	Plus Depreciation	247,723	23	247,723		247,723		247,723	↔	247,723
23	Less Principal - Existing	(61,824)	24)	(63,355)		(63,243)		(63, 130)	₩	(63,017)
24	Less Principal - Proposed	•		•						
25	Less Capital Expenditures	(125,000)	00)	(125,000)		(125,000)		(125,000)	\$	(125,000) \$ (125,000)
26	Net Income - Cash Basis	\$ (6,615)	15) \$	6,760	\$	21,870	\$	37,942	\$	55,025
							l		l	



Table 4
Falls City Utilities
2025 Sewer Cost of Service Study
Projected Financial Results - Debt Service Coverage

		Te	Test Year				Projected	ecte	þ		
Line	Description	,	2025		2026		2027		2028		2029
_	Debt Service Coverage										
7	Net Revenue (1)	\$	132,717 \$	↔	146,801	↔	146,801 \$ 161,799 \$	↔	177,759 \$	<del>\$</del>	194,728
8	Debt Service Expense	\$	62,645	\$	63,355	\$	63,243 \$	\$	63,130	\$	63,017
4	Debt Service Coverage (2)		2.12		2.32		2.56		2.82		3.09
2	Implemented Rate Change		%00.0		4.00%		4.00%		4.00%		4.00%

## Note:

- 1. Operating revenue, less operating and maintenance expenses (excluding depreciation).
  - 2. Net revenue divided by debt service expense.



#### **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 completed to prepare the cost of service analysis. A FY 2025 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 volume or extra capacity (peak day or peak hour), and customer related expense. This process is called "functionalization" and "classification."

The costs related to each function were allocated to customer classes based on generally accepted cost allocation principles for municipal sewer utilities. The allocated costs were compared to revenues collected from 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 for FY 2025 included the following adjustments:

- 1. Normalized sewer discharges based on typical historical water sales.
- 2. Exclusion of sales tax revenues and expenses.
- 3. Debt service was based on outstanding revenue bonds and the two state revolving fund loans that are allocated to the wastewater utility.

The test year budget for FY 2025 was approximately \$1.3 million and is summarized in Table 5 (see page 13). The test year budget represents the amount that needs to be collected from retail rates. It includes all operating expenses, debt service payments, capital improvements funded from rates and is reduced for revenue from interest income and other non-retail revenue.

#### Functionalization and Classification

Functionalization and classification involved assigning the expense items to function, and classifying those expenses on the basis of a reasonable allocation method. The following functions were used for the Utility:

- 1. Sewage collection
- 2. Sewage treatment
- Customer service
- 4. Other (interest income, other charges)



Treatment and collection costs were split between base costs, which vary in proportion to sewer discharge, extra capacity costs, and customer costs that do not vary based on sewage volumes. Extra capacity costs vary in proportion to the amount peak discharge exceeds the average usage. Customer and metering costs include those costs associated with serving a particular customer, regardless of the customer's sewer discharges. Customer-related costs include a portion of collection and treatment expense, customer billing, meter reading, customer accounting expense and maintenance costs related to these functions. Other expenses cannot easily be assigned to the base cost or customer cost category, including administrative expenses. These costs were split between volume-related and customer-related allocations in the cost of service analysis.

Table 5 (see page 13) summarizes the classification of test year expenses and the allocation to the various retail rate classes. Approximately \$678,000 was classified as volume-related, \$678,000 was classified as customer-related, and \$(78,000) was classified as other non-direct revenues and expenses. (NOTE: This amount is a credit due to inclusion of grant funding as a revenue credit.) Based on these classifications, 53.1% of the Utility's test year budget was volume-related, 53.1% was customer-related, and -6.1% was unrelated to either.

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Table 5
Falls City Utilities
2025 Sewer Cost of Service Study
Test Year Budget by Function

		'	/olume	С	ustomer			
Line	Rate Class	F	Related		Related		Other	Total
1	Residential 1"	\$	485,556	\$	569,255	\$	(65,893)	\$ 988,919
2	Rural Residential 1"		470		834		(97)	1,208
3	Commercial 1"		61,547		68,397		(7,917)	122,027
4	Rural Commercial 1"		232		1,251		(145)	1,338
5	Commercial 1.5"		9,806		4,490		(520)	13,776
6	Rural Commercial 2"		622		1,042		(121)	1,544
7	Commercial 2"		57,366		17,306		(2,003)	72,670
8	Commercial 3"		28,380		4,544		(526)	32,398
9	Commercial 4"		18,872		6,949		(804)	25,017
10	Industrial 1"		2,677		641		(74)	3,244
11	Rural Industrial 1"		-		-		-	-
12	Industrial 2"		3,681		802		(93)	4,390
13	Rural Industrial 2"		3,886		1,042		(121)	4,808
14	Flat Charge		4,877		1,417		(164)	6,129
15	Total	\$	677,972	\$	677,972	\$	(78,477)	\$ 1,277,467
16	Percentage		53.1%		53.1%	)	-6.1%	100.0%

#### Cost Allocation

The functionalized costs were allocated to the various rate classes using generally accepted methods for preparing sewer cost of service studies. There is no standard cost of service methodology that the Utility is required to follow, although there are a number of guidelines that municipal utilities follow to establish sewer rates. The Utility currently differentiates its rates based only on meter size and whether the customer is located inside or outside the city limits. The existing outside-city differential is reasonable and was used in this analysis.

#### 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 the 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 6 compares the revenue from existing rates to the calculated cost of service. Overall, the cost of service was 4% more than revenue from existing rates. The cost of service was 5.1% more than existing revenues for residential customers inside the City limits. The cost of service for other rate classes ranged from 2.9% to 13.6% more than existing rates, depending on the usage profile and meter size.

Table 6
Falls City Utilities
2025 Sewer Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates

		R	evenue			
		E	xisting	Cost of	Differe	псе
Line	Rate Class		Rates	Service	\$	%
1	Residential 1"	\$	940,574	\$ 988,919	\$ 48,345	5.1%
2	Rural Residential 1"		1,117	1,208	91	8.1%
3	Commercial 1"		115,554	122,027	6,473	5.6%
4	Rural Commercial 1"		1,195	1,338	144	12.0%
5	Commercial 1.5"		14,347	13,776	(571)	-4.0%
6	Rural Commercial 2"		2,249	1,544	(705)	-31.4%
7	Commercial 2"		79,252	72,670	(6,582)	-8.3%
8	Commercial 3"		31,365	32,398	1,033	3.3%
9	Commercial 4"		25,132	25,017	(116)	-0.5%
10	Industrial 1"		2,855	3,244	389	13.6%
11	Rural Industrial 1"		-	-	-	0.0%
12	Industrial 2"		4,267	4,390	123	2.9%
13	Rural Industrial 2"		4,621	4,808	187	4.0%
14	Flat Charge		5,806	6,129	323	5.6%
16	Total	\$	1,228,334	\$ 1,277,467	\$ 49,133	4.0%

#### **Rate Design**

The proposed rate plan would increase rates by a cumulative total of 17% through FY 2029. An across-the-board approach was used to increase the monthly customer charge and flow-based charge. This helps ensure that no individual customer receives an increase significantly different than the average because it has a usage profile significantly different than the typical customer. Under this approach, all customers will experience a similar percentage rate increase.



The proposed rate change would increase the average monthly residential sewer bill by \$5.52 per month between now and FY 2028. The recommended annual rate increases would be \$1.77 per month in FY 2026, \$1.84 per month in FY 2027, and \$1.91 per month in FY 2028. Tables 7, 8 (see page 15), and 9 (see page 16) show the proposed rate increases by rate class for FY 2026 through FY 2028.

Table 7
Falls City Utilities
2025 Sewer Cost of Service Study
Proposed Rate Change by Rate Class - October 2025

		Revenue Revenue						
		E	xisting	FY 2026		Di	fference	
Line	Rate Class	ı	Rates	Rates	\$		Bill (1)	%
1	Residential 1"	\$	940,574	\$ 978,197	\$ 37,623	\$	1.77	4.0%
2	Rural Residential 1"		1,117	1,162	45		1.86	4.0%
3	Commercial 1"		115,554	120,176	4,622		1.81	4.0%
4	Rural Commercial 1"		1,195	1,243	48		1.33	4.0%
5	Commercial 1.5"		14,347	14,921	574		6.83	4.0%
6	Rural Commercial 2"		2,249	2,339	90		-	4.0%
7	Commercial 2"		79,252	82,422	3,170		12.24	4.0%
8	Commercial 3"		31,365	32,620	1,255		36.90	4.0%
9	Commercial 4"		25,132	26,138	1,005		38.67	4.0%
10	Industrial 1"		2,855	2,969	114		4.76	4.0%
11	Rural Industrial 1"		-	-	-		-	0.0%
12	Industrial 2"		4,267	4,438	171		14.22	4.0%
13	Rural Industrial 2"		4,621	4,806	185		15.40	4.0%
14	Flat Charge		5,806	6,039	232		4.38	4.0%
16	Total	\$ 1	,228,334	\$ 1,277,468	\$ 49,133	\$	2.01	4.0%

#### Note:

1. Change in average monthly bill for customers within rate class.

[Intentionally left blank.]



Table 8
Falls City Utilities
2025 Sewer Cost of Service Study
Proposed Rate Change by Rate Class - October 2026

		Revenue FY 2026		Revenue FY 2027	Difference					
Line	Rate Class	Rates		Rates		\$		Bill (1)	%	
1	Residential 1"	\$ 978,197	\$	1,017,325	\$	39,128	\$	1.84	4.0%	
2	Rural Residential 1"	1,162		1,208		46		1.94	4.0%	
3	Commercial 1"	120,176		124,983		4,807		1.88	4.0%	
4	Rural Commercial 1"	1,243		1,292		50		1.38	4.0%	
5	Commercial 1.5"	14,921		15,518		597		7.11	4.0%	
6	Rural Commercial 2"	2,339		2,433		94		-	4.0%	
7	Commercial 2"	82,422		85,718		3,297		12.73	4.0%	
8	Commercial 3"	32,620		33,925		1,305		38.38	4.0%	
9	Commercial 4"	26,138		27,183		1,046		40.21	4.0%	
10	Industrial 1"	2,969		3,088		119		4.95	4.0%	
11	Rural Industrial 1"	-		-		-		-	0.0%	
12	Industrial 2"	4,438		4,615		178		14.79	4.0%	
13	Rural Industrial 2"	4,806		4,998		192		16.02	4.0%	
14	Flat Charge	6,039		6,280		242		4.56	4.0%	
16	Total	\$ 1,277,468	\$	1,328,566	\$	51,099	\$	2.09	4.0%	

#### Note:

1. Change in average monthly bill for customers within rate class.

[Intentionally left blank.]



# Table 9 Falls City Utilities 2025 Sewer Cost of Service Study Proposed Rate Change by Rate Class - October 2027

		Revenue FY 2027	Revenue FY 2028		Difference	)
Line	Rate Class	Rates	Rates	\$	Bill (1)	%
1	Residential 1"	\$ 1,017,325	\$ 1,058,018	\$ 40,693	\$ 1.91	4.0%
2	Rural Residential 1"	1,208	1,257	48	2.01	4.0%
3	Commercial 1"	124,983	129,982	4,999	1.95	4.0%
4	Rural Commercial 1"	1,292	1,344	52	1.44	4.0%
5	Commercial 1.5"	15,518	16,139	621	7.39	4.0%
6	Rural Commercial 2"	2,433	2,530	97	-	4.0%
7	Commercial 2"	85,718	89,147	3,429	13.24	4.0%
8	Commercial 3"	33,925	35,282	1,357	39.91	4.0%
9	Commercial 4"	27,183	28,271	1,087	41.82	4.0%
10	Industrial 1"	3,088	3,211	124	5.15	4.0%
11	Rural Industrial 1"	-	-	-	-	4.0%
12	Industrial 2"	4,615	4,800	185	15.38	4.0%
13	Rural Industrial 2"	4,998	5,198	200	16.66	4.0%
14	Flat Charge	6,280	6,531	251	4.74	4.0%
16	Total	\$ 1,328,566	\$ 1,381,709	\$ 53,143	\$ 2.18	4.0%

#### Note:

1. Change in average monthly bill for customers within rate class.

Two rate design changes are proposed. The first would be to adjust the rate increase for flat charge customers. It is proposed that the current 7% rate adjustment included in the rate schedule be reduced to 4% to reflect the proposed rate plan for the Utility's other rates.

The second change would be to implement a separate "Infrastructure Fee." As noted previously in this report, a significant driver of future rate increases is the need to fund capital projects. These projects help provide for reliable service and the ability to serve new customers. Since these needs drive a portion of the rate increase, it is recommended to implement an "Infrastructure Fee" equal to 2% of the customer bill. The rate schedule provides that these funds will be segregated and only used for capital projects. This approach will help customers understand that a portion of the rate increase is dedicated to funding capital projects rather than the day-to-day operations of the utility.

The Utility has established surcharges for high strength sewage, including flows with high concentrations of BOD, total suspended solids (TSS) and ammonia. Currently, there are no customers that discharge high strength sewage as defined by the existing rate



ordinance. Existing high strength sewer rates are mid-range when compared to neighboring utilities. For example, the BOD rate for Nebraska City is \$0.69 per pound, which is significantly more than Falls City's rate of \$0.36 per pound. Auburn's rate for BOD is \$0.19 per pound, which is much lower than Falls City's rate. Similar disparities exist for TSS and ammonia rates. Because there is such a significant difference between the Utility's existing surcharges and the comparable rates for neighboring utilities, the existing surcharges should not be increased at this time.

With the proposed rate increases, the Utility's residential sewer rates in FY 2026 tend to be comparable to or higher than the identified peer group. Table 10 provides a comparison of existing rates for the cities of Auburn, Nebraska City, Seward, and Wahoo to the recommended FY 2026 rates for Falls City. The typical monthly residential sewer usage for Falls City was 5 ccf. The comparisons were prepared for usage of 3 ccf, 5 ccf, and 7 ccf.

# Table 10 Falls City Utilities 2025 Sewer Cost of Service Study Typical Bill Comparison Rate Comparisons - October 2025 Rates

#### Residential 1"

	Rate Comparisons								
Utility		3 ccf		5 ccf		7 ccf			
Auburn (1)	\$	33.60	\$	38.84	\$	44.08			
Falls City (2)	\$	38.96	\$	46.84	\$	54.72			
Nebraska City (3)	\$	30.88	\$	35.47	\$	40.06			
Seward (4)	\$	50.71	\$	60.45	\$	70.18			
Wahoo (5)	\$	33.26	\$	38.11	\$	42.96			

- 1. Rates effective January 2025
- 2. Proposed rates, effective October 2025
- 3. Rates effective March 2019
- 4. Rates effective October 2023
- 5. Rates effective February 2025

Rate comparisons do not consider factors such as geography, how proactive a given utility is regarding capital improvement budgets, and differences in customer base. The rate comparison indicates the projected sewer rates are reasonable compared to similarly



situated municipal utilities in eastern Nebraska, even after implementing the proposed rate increases.

#### **Conclusions**

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

- 1. The projected test year budget for FY 2025 was approximately \$1.3 million.
- Projected revenues from existing rates are approximately \$1.2 million for FY 2025.
- 3. Existing rates would need to increase by approximately \$49,000, or 4%, to provide sufficient revenue to pay projected FY 2025 test year expenses.
- 4. Implementing a portion of the proposed rate increase as a separate "Infrastructure Charge" would enable the Utility to designate funds solely to fund construction and rehabilitation of electric facilities.
- 5. Existing high strength surcharges (BOD, TSS, and ammonia) are comparable to similar utilities.

#### Recommendations

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

- Sewer rates should be increased 4% on October 1, 2025 (for FY 2026), 4% for FY 2027, and 4% for FY 2028. The rate ordinance included in Appendix A implements these rate increases.
- 2. The Utility should consider implementing another 4% rate increase in FY 2029.
- 3. The rate increase for flat rate customers should be modified from 7% annually to 4% annually to maintain consistency with the general rate increases being proposed.
- 4. The Utility should designate a portion of the rate increase as an "Infrastructure Fee" with revenue collected from the fee being placed in a separate fund. That fund would be solely used to fund future capital projects. It is recommended that 2% of customer revenue be set aside in the proposed infrastructure fund.
- 5. The existing rate differential between inside and outside city customers should be kept in place.
- 6. High strength surcharges should be kept in place. No increases should be implemented.
- 7. The Utility should evaluate its rates after FY 2029 or if there are any significant changes to the system, including capital improvement or operating expense increases.



### Appendix A – Rate Ordinance



AN ORDINANCE TO AMEND ORDINANCE NO. 2022-109 TO SET SEWER RATES, FEES, CHARGES, AND COLLECTIONS FOR SEWER SERVICES FROM AND IN THE CITY OF FALLS CITY, NEBRASKA; REPEALING ANY PRIOR ORDINANCES IN CONFLICT THEREWITH, AND ORDERING THE PUBLICATION OF THE ORDINANCE IN PAMPHLET FORM TO PROVIDE FOR EFFECTIVE DATE.

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

#### **SECTION I**

That the rates, fees, charges, and collections for the use of the sanitary sewer system be and hereby are those figures and terms set out in the schedule incorporated as Section II of this Ordinance, which schedule and terms shall be on file in the office of the Municipal Clerk for public inspection at any reasonable time.

#### SECTION II

#### RESIDENTIAL AND COMMERCIAL SEWER RATES

#### 1. Availability.

Whereas, the City of Falls City, Nebraska has constructed a wastewater collection and treatment works; and whereas, the City must pay all expenses associated with said treatment works and charge the users of said treatment works accordingly; therefore, the following user charge system is established:

It is determined and declared to be necessary and conductive to the protection of the public health, safety, welfare, and convenience of the City to collect charges from all users who contribute wastewater to the City's treatment works. The proceeds of such charges so derived will be used for the purpose of operating, maintaining, and retiring the debt for such public wastewater treatment works.

#### 2. Terms.

- a. "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20° C, expressed in milligrams per liter (mg/l).
- b. "Normal Domestic Wastewater" shall mean wastewater that has a BOD concentration of not more than 230 mg/l, a suspended solids concentration of not more than 260 mg/l, and ammonia-nitrogen concentration of not more than 25 mg/l.

- c. "Operation and Maintenance" shall mean all expenditures during the useful life of the treatment works for materials, labor, utilities, and other items which are necessary for managing and maintaining the sewage works to achieve the capacity and performance for which such works were designed and constructed.
- d. "Replacement" shall mean expenditures for obtaining and installing equipment, accessories or appurtenances that are necessary during the useful life of the treatment works to maintain the capacity and performance of which such works were designed and constructed. The term "operation and maintenance" includes replacement.
- e. "Residential Contributor" shall mean any contributor to the City's treatment works whose lot, parcel of real estate, or building is used for domestic dwelling purposes only.
- f. "Shall" is mandatory; "May" is permissive.
- g. "SS" (denoting Suspended Solids) shall mean solids that either float on the surface of or are in suspension in water, sewage or other liquids and which are removable by laboratory filtering.
- h. "Treatment Works" shall mean any devices and system for the storage, treatment, recycling, and reclamation of municipal sewage, domestic sewage, or liquid industrial wastes. These include intercepting sewers, outfall sewers, sewage collection systems, individual systems pumping, power and other equipment and their appurtenances; extensions improvement, remodeling, additions and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment (including land for composting sludge, temporary storage of such compost, and land used for the storage of treated wastewater in land treatment systems before land application); or any other method or system for preventing abating, reducing, storing, treating, separating, or disposing of municipal waste or industrial waste.
- i. "Useful Life" shall mean the estimated period during which a treatment works will be operated.
- j. "User Charge" shall mean that portion of the total wastewater service charge that is levied in a proportional and adequate manner for the cost of operation, maintenance, and replacement of the wastewater treatment works.

k. "Water Meter" shall mean a water volume measuring and recording device, furnished and/or installed by a user and approved by the City of Fall City.

#### 3. User Charge.

The user charge system, including the monthly service charge and usage rates, shall generate adequate annual revenues equal to 1.1 times the cost of annual operation and maintenance, including replacement and costs associated with debt retirement of bonded capital associated with financing the treatment works, which the City may designate to be paid by the user charge system.

#### 4. Character of Service.

Each user shall pay for the services provided by the City based on his use of the treatment works as determined by water meter(s) acceptable to the City.

#### 5. Monthly Service Charge.

All customers will be charged a monthly service charge based on the size of the meter serving the facility or residence. Customers with more than one meter will be charged the specified rate for each meter serving their facility or residence.

	<u>Mc</u>	onthly Service Char	<u>ge</u>
	Effective	Effective	Effective
Meter Size	October 1, 2025	October 1, 2026	October 1, 2027
1-inch or less	\$26.60	\$27.67	\$28.77
1½-inch	\$79.79	\$82.99	\$86.31
2-inch	\$132.97	\$138.29	\$143.82
3-inch	\$265.93	\$276.57	\$287.63
4-inch	\$398.92	\$414.88	\$431.47
6-inch and larger	\$562.60	\$585.10	\$608.51

#### 6. Rate Schedule – Usage Rates.

For Residential customers, sewer use rates will be based on the water used during the same month except that sewer use charges for the months of May, June, July, August, September and October shall be based on the customer's average water consumption during the months of November, December, January and February of the same year. If the customer has not established a November, December, January, February average, the monthly charge will be based on the average of all other Residential.

For Industrial and Commercial contributors, user charges shall be based on water used during the current month. If a Commercial or Industrial contributor has a consumptive use of water, or in some other manner uses water which is not returned to the wastewater collection system, the user charge for the contributor

may be based on a wastewater meter(s) or separate water meter(s) installed and maintained at the contributor's expense, and in a manner acceptable to the City.

	<u>Usage R</u>	ates/100 Cubic Fed	et/Month
	Effective	Effective	Effective
<u>Usage Class</u>	October 1, 2025	October 1, 2026	October 1, 2027
Inside City Limits	\$3.86	\$4.02	\$4.18
Outside City Limits	\$5.36	\$5.58	\$5.80

#### 7. Infrastructure Fee.

All amounts are subject to a two percent (2%) Infrastructure Fee. Amounts collected for the Infrastructure Fee shall be segregated into a separate revenue account. Such amounts shall only be used to fund the construction, rehabilitation or rebuilding of capital assets used in the production and delivery of wastewater to customers.

#### 8. Special Conditions.

a. Industrial contributors who may contribute wastewater of greater concentration than normal domestic sewage shall be metered at a sampling manhole that shall be installed and maintained at the contributor's expense.

Billing shall be as follows:

	Monthly Surcharge Rates/100 Cubic						
Wastewater	<u>Feet/Pound abo</u>	ve Threshold Limit					
<u>Component</u>	Threshold Limit	Effective October 1, 2025					
BOD (5 day)	1.43 lbs/100 cubic feet (230 mg/L)	\$0.36					
TSS	1.62 lbs/100 cubic feet (260 mg/L)	\$0.33					
Ammonia-Nitrogen	0.156 lbs/100 cubic feet (25 mg/L)	\$0.87					

- b. Any user that discharges any toxic pollutants which cause an increase in the cost of managing the effluent or the sludge from the City's treatment works, or any user which discharges any substance which singly or by interaction with other substances causes identifiable increases in the cost of operation, maintenance or replacement of the treatment works, shall pay for such increased costs. The charge to each such user shall be determined by the Board of Public Works.
- c. The user charge rates established in this article apply to all users, regardless of their location, of the City's treatment works.

#### 9. Terms of Payment.

All bills rendered are net, due and payable on receipt, and delinquent if not paid by 5:00 p.m. on the fifteenth (15<sup>th</sup>) of the month following the month for which the bill is rendered. Delinquent accounts are subject to a five percent (5%) delayed payment penalty. Unpaid delinquent accounts are subject to disconnection with proper notice. Reconnection may be had during regular working hours upon payment of a non-recoverable fee as established by the Board of Public Works under its service regulations. Reconnection may be had after hours or on weekends and holidays upon receipt of payment of a non-recoverable fee as established by the Board of Public Works under its service regulations.

#### 10. User Charge Review.

The City will review the user charge system every three (3) years, or more frequently if otherwise necessary, and revise user charge rates as necessary to ensure that the system generates adequate revenues to pay the costs of operation and maintenance, including replacement and that the system continues to provide for the proportional distribution of operation and maintenance including replacement costs among users and user classes.

#### **SECTION III**

That the original Ordinance No. 2022-109 and any other ordinances or sections passed and approved prior to passage, approval and publication or posting of this ordinance in conflict with the provisions herewith are hereby repealed.

#### **SECTION IV**

This Ordinance shall be in ful This Ordinance shall be publ			
Passed and approved this	day of	, 2025.	
		Mayor	
ATTEST:			
City Clerk			

# 2025 Cost of Service / Rate Design Study

# Falls City Utilities Natural Gas Utility

Board of Public Works and City Council
Review Draft

August 8, 2025



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#### **Executive Summary**

This study was prepared by JK Energy Consulting, LLC (JKEC) for the Falls City Utilities Natural Gas Utility (Utility). The purpose of the study was to review the Utility's revenues and expenses and ensure natural gas rates are adequate to pay for projected expenses.

Based on the analysis completed, the existing rates do not collect sufficient revenue to cover projected expenses in fiscal year (FY) 2025 through FY 2029 (Table 1, Line 26). Projected retail revenues for FY 2025 were approximately \$2.61 million, while projected test year expenses were approximately \$2.64 million (Table 4, Line 3). This indicates the cost of service is 1.0% more than existing revenues. By FY 2029, a total rate increase of 4.34% is necessary to cover projected expenses (Table 1, Line 27). The proposed rate plan would increase rates 1.0% in FY 2026 through FY 2028 and 2.0% in FY 2029 (Table 2, Line 19).

These projections assume no change in gas cost that would affect the gas cost adjustment and pass-through of any changes from past years to the test year. Cost increases are typical of normal escalation in wages, materials and supplies, and other operating costs.

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. Customers were divided into Retail Sales customers (which includes residential, general service, and industrial), which take natural gas supply service from the Utility, and Transportation customers that purchase gas supply from a third party and use the Utility's distribution system. The analysis showed that Transportation customers would need a 4.2% (Table 4, Line 2) increase while Retail Sales customers would need a 1.0% rate increase (Table 4, Line 1).

The purpose of rate design is to develop rates that reflect the cost of service and accomplish other goals established by the Utility. The proposed rate design includes 1.0% rate increases for both the Retail Sales and Transportation rate classes in October 2025 (FY 2026), October 2026 (FY 2027) and October 2027 (FY 2028) (Tables 5, 6 and 7). The rate increases are almost entirely directed toward the customer charge. For a typical residential customer using 4.55 MCF per month, the proposed rate increase is \$1.00 per month starting in October 2025.

#### **Conclusions**

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

- 1. The test year budget for FY 2025 was approximately \$2.64 million, which includes all operating expenses, and less non-retail revenue.
- 2. Projected revenues from existing rates are approximately \$2.61 million.



- 3. A total rate increase of 4.34% by FY 2029 would be necessary to ensure adequate revenue to pay projected expenses.
- 4. The primary driver of needed rate increases is general cost escalation.
- 5. Rate increases of 1.0% annually in FY 2026 through FY 2028 and 2.0% in FY 2029 would provide sufficient revenue to cover projected expenses.

#### Recommendations

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

- 1. Retail Sales rates should be increased 1.0% in FY 2026 through FY 2028.
- 2. Transportation rates should be increased 1.0% in FY 2026 through FY 2028.
- 3. The City should consider implementing a 2.0% rate increase in FY 2029 for both Retail Sales and Transportation rate classes. This rate increase can be evaluated as part of a future rate study.
- 4. The Utility should evaluate its rates if an unexpected expense or change in usage occurs between now and FY 2029.

#### **Purpose and Approach**

The purpose of this study was to review the natural gas rates charged by the Utility and develop rates that were consistent with a number of goals established by the Utility. The rate goals established by the Utility include having future natural gas rates collect sufficient revenue to cover projected expenses.

The approach to the study involved completing several tasks. Information about the Utility was collected, including revenues, expenses, sales volumes, and customer information. Test year expenses for FY 2025 were projected, and future expenses were projected through FY 2029. A rate plan was developed to meet the financial goals established by the Utility. The allocated cost of service for each rate class was calculated and compared to revenue from existing rates. A rate ordinance was developed, establishing new rates that would increase in October 2025, October 2026, and October 2027. A draft written report was prepared and presented to the Board of Public Works and City Council on August 18, 2025.

#### **Background**

#### Falls City Utilities – Natural Gas Utility

Falls City Utilities, under the supervision of the Board of Public Works, operates the natural gas utility, which serves customers located within Falls City and a number of customers in rural areas adjacent to Falls City. The Utility provides retail natural gas to approximately 1,900 retail customers. There are three transportation-only customers that use the Utility's natural gas facilities to deliver gas purchased from a third party. Natural



gas is supplied by Clayton Energy Corporation (Clayton) and transported to the Utility's Town Border Station by Southern Star Central Gas Pipeline (Southern Star).

#### **Projected Financial Results**

The purpose of preparing projected financial results is to compare projected revenues with expenses and determine the need for future rate increases. Projections were prepared for the period FY 2025 through FY 2029 based on information provided by the Utility.

#### **Parameters**

The following parameters were used to develop the test year budget and the projected financial results.

- 1. Historical and projected results were prepared based on the Utility's fiscal year (October 1 through September 30).
- 2. The FY 2025 natural gas department budget was used as the basis for the FY 2025 test year budget.
- 3. Operating and maintenance expenses, administrative costs, and other internal expenses were projected to increase at a rate of 3% annually.
- 4. Natural gas sales were projected to remain stable (no increase or decrease).
- 5. Projected financial results were presented on an "accrual basis" and "cash basis." Accrual basis accounting is consistent with Generally Accepted Accounting Principles (GAAP) and cash basis results were intended to reflect actual cash flow. Each approach is important for ratemaking purposes, since the Utility's rates should ensure positive cash flow, positive net income, and a reasonable return on rate base.
- 6. The Clayton base commodity average cost included in the test year budget was \$5.00/Mcf and PGA collections were set to zero. Any increase in purchase cost would be passed through to customers.
- 7. Annual transportation costs of \$2.14/Mcf for Southern Star were estimated based on the existing transportation cost base. And transportation cost adjustment collections were set to zero.
- 8. Capital expenditures of \$350,000 in FY 2025 through FY 2029, based on the Utility's capital improvement program, were included in the cash-basis financial results.
- 9. Depreciation expense of \$111,697 in FY 2025 through FY 2029 was included in the accrual based financial results.



#### **Projected Financial Results**

Table 1 (see page 6) shows the projected financial results for FY 2026 through FY 2029, along with test year FY 2025 and historical financial results for FY 2022 through FY 2024. The projected financial results do not include rate increases or use of available funds for rate stabilization.

Without a rate change, the Utility does not collect sufficient revenue in future periods to cover projected expenses on a cash basis. While the test year revenues were relatively close to the projected test year expenses, future cost increases and capital needs indicate a need for future rate changes. The projected surplus on a cash basis would be approximately \$38,000 in FY 2025, decreasing to a deficit of \$113,000 by FY 2029. On an accrual basis, the projected surplus would be approximately \$276,000 in FY 2025, decreasing to \$125,000 by FY 2029. The primary cause of the projected deficit is the capital improvement program with funding needs of \$350,000 per year.

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Table 1
Falls City Utilities
2025 Natural Gas Cost of Service Study
Projected Financial Results
Existing Rates

			Actual (1)		Test Year		Proje	Projected	
Line	Description	2022	2023	2024	2025	2026	2027	2028	2029
-	Operating Revenues								
7	Retail Sales - Existing Rates	\$ 2,944,442	\$ 4,243,608	\$ 3,007,588	\$ 2,611,090	\$ 2,611,090	\$ 2,611,090	\$ 2,611,090	\$ 2,611,090
က	Rate Changes	•		•	•	•	•	•	•
4	Other Operating Revenue	•		•	5,123	5,277	5,435	5,599	5,766
2	Total Operating Revenue	\$ 2,944,442	\$ 4,243,608	\$ 3,007,588	\$ 2,616,213	\$ 2,616,367	\$ 2,616,525	\$ 2,616,688	\$ 2,616,856
9	Operating Expenses								
7	Internal Operating Costs	\$ 1,301,497	\$ 1,675,272	1,146,588	1,207,786	1,244,020	1,281,340	1,319,780	1,359,374
∞	Depreciation	122,544	118,841	111,697	111,697	111,697	111,697	111,697	111,697
6	Production (Gas Supply)	1,738,237	1,704,891	1,340,366	1,105,887	1,105,887	1,105,887	1,105,887	1,105,887
10	Total Operating Expenses	\$ 3,162,278	\$ 3,499,004	\$ 2,598,651	\$ 2,425,371	\$ 2,461,604	\$ 2,498,925	\$ 2,537,365	\$ 2,576,958
11	Operating Income - GAAP Basis	(217,836)	\$ 744,604	\$ 408,937	\$ 190,843	\$ 154,763	\$ 117,600	\$ 79,323	\$ 39,898
12	Non-Operating Expense/(Revenue)								
13	Interest Income	\$ (10,445)	(5,314)	(90,147)	(84,549)	(84,549)	(84,549)	(84,549)	(84,549)
4	Dividend Income	•		•	•	•	•	•	•
15	Other Expenses	996,037	•	•	•	•	•	•	•
16	Miscellaneous Revenue	•	(6,672)	76,442	(293)	(280)	(208)	(616)	(634)
17	Total Non-Operating Expense/(Revenue)	\$ 985,592	\$ (11,986)	\$ (13,705)	\$ (85,113)	\$ (85,130)	\$ (85,147)	\$ (85,165)	\$ (85,183)
18		\$ (1,203,428)	\$ 756,590	\$ 422,642	\$ 275,955	\$ 239,892	\$ 202,747	\$ 164,488	\$ 125,081
22	Cash Basis								
23	Net Income	\$ (1,203,428)	\$ 756,590	\$ 422,642	\$ 275,955	\$ 239,892	\$ 202,747	\$ 164,488	\$ 125,081
54	Plus Depreciation	\$ 122,544	\$ 118,841	\$ 111,697	\$ 111,697	\$ 111,697	\$ 111,697	\$ 111,697	\$ 111,697
22	Less Capital Expenditures (2)	- \$	\$ (298,314)	\$ (491,641)	\$ (350,000)	\$ (350,000)	\$ (350,000)	\$ (350,000)	\$ (350,000)
56	Net Income - Cash Basis	\$ (1,080,884)	\$ 577,117	\$ 42,698	\$ 37,652	\$ 1,589	\$ (35,556)	\$ (73,815)	\$ (113,222)
27	27 Rate Change for Breakeven Cash Flow				-1.44%	%90'0-	1.36%	2.83%	4.34%

Notes: (1) (2)

Based on audited financial statements. Annual capital expenditures based on 10-year capital plan.



With projected cost increases and general expense escalation, the Utility should implement a series of rate increases through FY 2029. Table 2 shows the projected financial results if proposed rate increases of 1.0% in FY 2026 through FY 2028 and 2.0% in FY 2029. The proposed rate increases ensure sufficient revenue to cover projected expenses, including planned capital improvements.

Table 2
Falls City Utilities
2025 Natural Gas Cost of Service Study
Projected Financial Results
Proposed Rates

		Test Year		Proje	ct	ed	
Line	Description	2025	2026	2027		2028	2029
1	Operating Revenues						
2	Retail Sales - Existing Rates	\$ 2,611,090	\$ 2,611,090	\$ 2,611,090	\$	2,611,090	\$ 2,611,090
3	Rate Changes	-	26,300	52,544		78,912	132,712
4	Other Operating Revenue	5,123	5,277	5,435		5,599	5,766
5	Total Operating Revenue	\$ 2,616,213	\$ 2,642,667	\$ 2,669,069	\$	2,695,600	\$ 2,749,568
6	Operating Expenses						
7	Internal Operating Costs	1,207,786	1,244,020	1,281,340		1,319,780	1,359,374
8	Depreciation	111,697	111,697	111,697		111,697	111,697
9	Production	1,105,887	1,105,887	1,105,887		1,105,887	1,105,887
10	Total Operating Expenses	\$ 2,425,371	\$ 2,461,604	\$ 2,498,925	\$	2,537,365	\$ 2,576,958
11	Operating Income - GAAP Basis	\$ 190,843	\$ 181,063	\$ 170,145	\$	158,235	\$ 172,610
12	Non-Operating Expense/(Revenue)						
13	Interest Income	(84,549)	(84,549)	(84,549)		(84,549)	(84,549)
14	Dividends	-	-	-		-	-
15	Other Expenses	-	-	-		-	-
16	Miscellaneous Revenue	(563)	(580)	(598)		(616)	(634)
17	Total Non-Operating Expense/(Revenue)	\$ (85,113)	\$ (85,130)	\$ (85,147)	\$	(85,165)	\$ (85,183)
18	Net Income - GAAP Basis	\$ 275,955	\$ 266,192	\$ 255,291	\$	243,400	\$ 257,793
19	Rate Change		1.0%	1.0%		1.0%	2.0%
20	Cash Basis						
21	Net Income	\$ 275,955	\$ 266,192	\$ 255,291	\$	243,400	\$ 257,793
22	Plus Depreciation	\$ 111,697	\$ 111,697	\$ 111,697	\$	111,697	\$ 111,697
23	Less Capital Expenditures	\$ (350,000)	\$ (350,000)	\$ (350,000)	\$	(350,000)	\$ (350,000)
24	Net Income - Cash Basis	\$ 37,652	\$ 27,889	\$ 16,988	\$	5,097	\$ 19,490
25	Rate Change for Breakeven Cash Flow	-1.44%	-1.07%	-0.65%		-0.20%	-0.75%

#### **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 completed 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 classified as a commodity, distribution, or customer-related expense. This process is called "functionalization" and "classification."

The costs related to each function were allocated to each customer class based on generally accepted cost allocation principles for municipal natural gas 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 FY 2025 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 for FY 2025 included the following adjustments to the FY 2025 operating budget:

- 1. Normalized natural gas sales based on typical historical natural gas sales.
- 2. Exclusion of sales tax revenues and expenses.
- Rates would recover capital expenditures without issuing bond financing, based on the Utility's capital improvement program for FY 2025 through FY 2029.

The test year budget for FY 2025 was approximately \$2.6 million. The test year budget represents the amount that needs to be collected from retail rates. It includes all operating expenses and capital improvements funded from rates. The test year budget is reduced for revenue from interest income and other non-retail revenue.

#### Functionalization and Classification

Functionalization and classification involved assigning the expense items to functions and classifying those expenses on the basis of a reasonable allocation method. The following functions were used for the Utility:

- 1. Commodity
- 2. Transportation (including storage)
- 3. Distribution
- 4. Customer service/ metering
- 5. Other (interest income, other charges)

Commodity and transportation costs from Clayton, PEFA, and Southern Star vary in proportion to natural gas usage. Distribution costs typically are collected from customers in proportion to volume sales. Customer and metering costs include those costs associated with serving a particular customer, regardless of the customer's natural gas usage. Customer costs typically include expenses like customer billing, meter reading, customer accounting expense and operating and maintenance costs related to these functions.

Table 3 (see page 9) summarizes the classification of test year expenses, including the allocation to the various retail rate classes. Approximately \$1.1 million is related to commodity purchases and transportation, \$1.3 million is distribution-related, and



\$240,000 is customer-related. Based on this classification, 42% of the Utility's test year budget is commodity related (including transportation), 49% is distribution-related, and 9% is customer-related.

Table 3
Falls City Utilities
2025 Natural Gas Cost of Service Study
Test Year Budget by Function

		Pr	oduction /					
Line	Rate Class	T	ransport	Di	stribution	(	Customer	Total
1	Retail Sales	\$	1,105,887	\$	1,257,689	\$	234,745	\$ 2,598,321
2	Transportation		-		33,319		5,561	38,880
3	Total	\$	1,105,887	\$	1,291,008	\$	240,306	\$ 2,637,201
4	Percentage		42%		49%		9%	100%

#### 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 that the Utility is required to follow by a regulatory agency. The Utility currently charges the same commodity rate, purchased gas adjustment, and transportation cost adjustment to all retail customers. Customer charges are different for residential service, general service, and industrial customers. For purposes of this rate study, the current rate structure (residential, general service, and industrial) was combined into a single rate class, referred to as Retail Sales. Transportation customers pay a customer charge and usage charges based on the volume of natural gas transported over the Utility's distribution system. Transportation customers were treated as a separate rate schedule for this rate study.

Costs were allocated between Retail Sales and Transportation customers based on the number of customers served, volume of natural gas purchased, and volume of natural gas transported. One limitation of the methodology used for cost allocation was the inability to allocate costs separately to inside and outside city customers. It is common for municipal utilities to differentiate between rates inside and outside the city, since outside city customers generally require higher customer service costs and distribution costs because of the distance from city facilities and decreased customer density.

#### 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 the 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 4 compares the revenue from existing rates to the calculated cost of service. Existing revenues were approximately \$2.61 million, compared to the test year budget of approximately \$2.64 million. The cost of service was 1.0% more than revenues from existing rates. The cost of service for Retail Sales was 1.0% more than revenue from existing rates while the cost of service for Transportation customers was 4.2% more than revenue from existing rates. This indicates that if rate changes were implemented, rates for Transportation customers should increase more than rates for Retail Sales customers.

Table 4
Falls City Utilities
2025 Natural Gas Cost of Service Study
Comparison of Cost of Service
to Revenue from Existing Rates

		Revenue Existing	Cost of	Difference					
Line	Rate Class	Rates	Service		\$	%			
1	Retail Sales	\$ 2,573,769	\$ 2,598,321	\$	24,552	1.0%			
2	Transportation	37,320	38,880		1,559	4.2%			
3	Total	\$ 2,611,090	\$ 2,637,201	\$	26,111	1.0%			

#### **Rate Design**

The existing rate structure is reasonable for the Utility's customer base and does not require any significant changes. Tables 5, 6 and 7 (see page 11) show the impact of the proposed rate plan on each of the rate classes. The proposed rate increases were directed towards customer charges. The typical residential bill would increase by approximately \$1.00 per month with the proposed rate change in October 2025.

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Table 5
Falls City Utilities

#### 2025 Natural Gas Cost of Service Study Proposed Rate Change by Rate Class - October 2025

		Revenue Existing		Revenue Proposed	Differen	ce
Line	Rate Class		Rates	Rates	\$	%
1	Retail Sales	\$	2,573,769	\$ 2,599,696	\$ 25,927	1.0%
2	Transportation		37,320	37,693	373	1.0%
3	Total	\$	2,611,090	\$ 2,637,390	\$ 26,300	1.0%

Table 6
Falls City Utilities
2025 Natural Gas Cost of Service Study
Proposed Rate Change by Rate Class - October 2026

		Revenue Year 1	Revenue Year 2	Differen	ce
Line	Rate Class	Rates	Rates	\$	%
1	Retail Sales	\$ 2,599,696	\$ 2,625,563	\$ 25,867	1.0%
2	Transportation	37,693	38,070	377	1.0%
3	Total	\$ 2,637,390	\$ 2,663,634	\$ 26,244	1.0%

Table 7
Falls City Utilities
2025 Natural Gas Cost of Service Study
Proposed Rate Change by Rate Class - October 2027

		Revenue Year 2	Revenue Year 3	Differen	ce
Line	Rate Class	Rates	Rates	\$	%
1	Retail Sales	\$ 2,625,563	\$ 2,651,550	\$ 25,987	1.0%
2	Transportation	38,070	38,451	381	1.0%
3	Total	\$ 2,663,634	\$ 2,690,002	\$ 26,368	1.0%

#### **Conclusions**

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

- 1. The test year budget for FY 2025 was approximately \$2.64 million, which includes all operating expenses, and less non-retail revenue.
- 2. Projected revenues from existing rates are approximately \$2.61 million.
- 3. A total rate increase of 4.34% by FY 2029 would be necessary to ensure adequate revenue to pay projected expenses.
- 4. The primary driver of needed rate increases is general cost escalation.
- 5. Rate increases of 1.0% annually in FY 2026 through FY 2028 and 2.0% in FY 2029 would provide sufficient revenue to cover projected expenses.

#### Recommendations

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

- 1. Retail Sales rates should be increased 1.0% in FY 2026 through FY 2028.
- 2. Transportation rates should be increased 1.0% in FY 2026 through FY 2028.
- 3. The City should consider implementing a 2.0% rate increase in FY 2029 for both Retail Sales and Transportation rate classes. This rate increase can be evaluated as part of a future rate study.
- 4. The Utility should evaluate its rates if an unexpected expense or change in usage occurs between now and FY 2029.



## Appendix A – Rate Ordinance



AN ORDINANCE TO AMEND ORDINANCE NO. 2022-108; TO SET NATURAL GAS RATES, FEES, CHARGES, AND COLLECTIONS FOR NATURAL GAS FROM AND IN THE CITY OF FALLS CITY, NEBRASKA; REPEALING ANY PRIOR ORDINANCES IN CONFLICT THEREWITH; AND ORDERING THE PUBLICATION OF THE ORDINANCE IN PAMPHLET FORM AND PROVIDE FOR EFFECTIVE DATE.

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

#### SECTION I

That the rates, fees, charges, and collections for the use of natural gas be and hereby are those figures and terms set out in the schedule incorporated as Section II of this Ordinance, which schedule and terms shall be on file in the office of the Municipal Clerk for public inspection at any reasonable time.

#### SECTION II

#### A. RESIDENTIAL NATURAL GAS RATE

#### 1. Availability.

To all Residential customers on the Municipality's existing distribution facilities supplied at one point of delivery for which no other specific schedule is provided. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Natural gas will be supplied at the standard pressures and quality.

#### 3. Residential Natural Gas Rate Schedule.

Customer Charge		
Effective October 1, 2025	\$20.00	per month
Effective October 1, 2026	\$21.00	per month
Effective October 1, 2027	\$22.00	per month
Commodity Charge		
Effective October 1, 2025	\$13.52	per Mcf
Effective October 1, 2026	\$13.52	per Mcf
Effective October 1, 2027	\$13.52	per Mcf

#### 4. Minimum Bill.

The Minimum Bill shall be the Customer Charge.

#### 5. General Terms and Conditions.

All rates are subject to the General Terms and Conditions of the City of Falls City.

#### **B. SMALL GENERAL SERVICE NATURAL GAS RATE**

#### 1. Availability.

To all Non-Residential customers on the Municipality's existing distribution facilities supplied at one point of delivery whose maximum monthly requirement has not exceeded 3000 Mcf in one service month during the most recent twelve (12) month period. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Natural gas will be supplied at the standard pressures and quality.

#### 3. Small General Service Natural Gas Rate Schedule.

Customer Charge		
Effective October 1, 2025	\$35.00	per month
Effective October 1, 2026	\$37.00	per month
Effective October 1, 2027	\$39.00	per month
		•
Commodity Charge		
Effective October 1, 2025	\$13.52	per Mcf
Effective October 1, 2026	\$13.52	per Mcf
Effective October 1, 2027	\$13.52	per Mcf

#### 4. Minimum Bill.

The Minimum Bill shall be the Customer Charge.

#### 5. General Terms and Conditions.

All rates are subject to the General Terms and Conditions of the City of Falls City.

#### C. LARGE GENERAL SERVICE AND INDUSTRIAL NATURAL GAS RATE

#### 1. Availability.

To any General Service or Industrial customer located at points on the Municipality's existing distribution facilities upon election and acceptance by the Municipality where the customer's natural gas consumption exceeds 3,000 Mcf in a minimum of one service month annually. Not applicable to resale, supplemental, auxiliary or shared service.

#### 2. Character of Service.

Natural gas will be supplied at the standard pressures and quality.

#### 3. <u>Large General Service and Industrial Natural Gas Rate Schedule.</u>

Customer Charge		
Effective October 1, 2025	\$275.00	per month
Effective October 1, 2026	\$285.00	per month
Effective October 1, 2027	\$295.00	per month
Commodity Charge		
Effective October 1, 2025	\$13.52	per Mcf
Effective October 1, 2026	\$13.52	per Mcf
Effective October 1, 2027	\$13.52	per Mcf

#### 4. Minimum Bill.

The Minimum Bill shall be the Customer Charge.

#### 5. General Terms and Conditions.

All rates are subject to the General Terms and Conditions of the City of Falls City.

All customers receiving service under this schedule shall be required to specify a level of maximum daily requirements (hereinafter referred to as the "Contract Demand Level") to be satisfied with purchases the Municipality makes from its suppliers. Gas purchase requirement in excess of the Contract Demand Level will be supplied strictly on an as-available basis in accordance with the contract. During the term of the contract, such Contract Demand service and as-available service shall be subject to the charges as specified by the Municipality's gas supplier and transportation provider's tariff or rate schedule as of the effective date of this schedule.

#### D. TRANSPORTATION RATES FOR NATURAL GAS

#### 1. <u>Transportation Natural Gas Rate Schedule.</u>

#### Customer Charge

Effective October 1, 2025	\$503.76	per month
Effective October 1, 2026	\$508.80	per month
Effective October 1, 2027	\$513.88	per month

Commodity Charge		
Effective October 1, 2025	\$3.19	per Mcf
Effective October 1, 2026	\$3.19	per Mcf
Effective October 1, 2027	\$3.22	per Mcf
Retention (Fuel %)	0.8%	•

#### 2. Minimum Bill.

The Minimum Bill shall be the Customer Charge.

All customers receiving service under this schedule shall be required to specify a level of maximum daily requirements (hereinafter referred to as the "Contract Demand Level") to be satisfied with purchases the Municipality makes from its suppliers. Gas purchase requirement in excess of the Contract Demand Level will be supplied strictly on an as-available basis in accordance with the contract. During the term of the contract, such Contract Demand service and as-available service shall be subject to the charges as specified by the Municipality's gas supplier and transportation provider's tariff or rate schedule as of the effective date of this schedule.

During periods of curtailment or other verified periods, the Municipality may assess the daily demand charge based on deliveries made to the customer each day during the billing period.

#### 3. Demand Charge Credit.

If the Municipality fails or is unable to deliver during any one or more days the quantity of natural gas which the customer desires to purchase, up to the Contract Demand Level, the Transportation Charges, as determined herein, shall be reduced by an amount equal to the daily Transportation Charge multiplied by the difference between the volume of natural gas actually delivered on the days involved and the volume of natural gas, up to the Contract Demand Level, which the customer in good faith demanded to receive on such days.

#### 4. Transportation Provisions.

#### a. Delivery Points.

Customer will provide for the delivery of volumes of natural gas to be transported to a mutually agreeable location on Municipality's system which services customer's premises and Municipality shall deliver said volumes of gas, less any retainages as may be set forth by contract, to the outlet side of the Municipality's meters at customer's premises. In cases where customer is served from a pipeline "Main Line Tap" or the Municipality's transmission system, the outlet of the Municipality's meter and the delivery point to customer

may be one and the same. Gas transported hereunder will be delivered to Municipality in the state in which it will ultimately be consumed.

#### b. Quantity.

- If Municipality's system capacity is inadequate to meet all of its demands for sales and transportation service, the services supplied under this schedule will be curtailed in accordance with procedures established by the Municipality. The determination of system capacity limitations shall be in the sole discretion of Municipality reasonably exercised.
- 2) If a supply deficiency occurs in the volume of gas customer's supply delivered to Municipality for transportation continues to be available, then customer may continue to receive full transportation service even though sales gas of the same priority is being curtailed. If capacity limitations restrict the volume of gas which customer desires to be transported, customer may request Municipality to make reasonable enlargements in its existing facilities, which request Municipality shall not unreasonably refused, provided that the actual cost (including indirect costs) of such system enlargement are borne by customer. Title to such expanded facilities shall be and remain in Municipality free and clear of any lien or equity by customer. Nothing herein contained shall be construed as obligating Municipality to construct any extensions of its facilities.
- 3) Should both transported volumes and sales volumes be delivered in a given month, transported volumes shall be considered the first volumes delivered and all other volumes shall be sold to customer under the applicable rate schedule.
- 4) When in a given month transportation volumes delivered to Municipality for customer's account (including any amount carried over from previous month) equals or exceeds the amount taken by customer, all deliveries shall be considered transported deliveries, and the excess, if any, shall be carried forward to customer's account for the subsequent month. Customer will make every effort to assure that transported volumes delivered equal transported volumes taken. The Municipality is not required to transport any excess volume to customer in the subsequent month should the Municipality's supply or capacity be inadequate: however, such gas will be delivered to customer at a later date, Municipality may in its discretion refuse to accept additional deliveries of gas until customer has received all excess transportation volumes delivered in prior periods.

#### 5. Quality and Pressure of Gas Delivered for Transportation.

- a. The gas delivered by a producer or supplier to Municipality for transportation to customer shall at all times be merchantable gas of a quality otherwise required for the system of Municipality to which gas is being delivered as specified by contract and shall be free from any foreign materials such as dirt, dust, gums, iron particles, water, entrained liquids, and other impurities which might render it unmerchantable or interfere with the proper operation of pipelines, meter, regulators or other facilities through which it flows or is used.
- b. Municipality shall have the right to refuse to accept for transportation any gas not meeting its requirements for gas quality herein described and as more fully described in the contract.
- c. If a customer contract for the purchase of gas from a producer or pipeline that is not now delivering gas to Municipality and such gas is to be delivered directly into Municipality facilities, the customer will bear all expenses connected with the determination of the quality of gas being delivered.
- d. The BTU content of the gas delivered to customer by Municipality shall be the BTU content available in its system at the particular point of delivery at the time of delivery. It is recognized that the BTU content at the various delivery points will vary from point to point and from time to time and nothing herein contained shall be construed as obligating Municipality to alter the usual operation of its facilities to achieve deliveries of a prescribed heating value at any point or points.
- e. Customers receiving sales service hereunder may elect to amend their Contract Demand Level effective on each November 1 on at least one hundred eighty (180) days prior written notice to the Municipality by executing and transmitting the Municipality's standard form for such purpose to the Municipality. The customer's Contract Demand Level may be decreased by any amount on each November 1. Such reduction shall relieve the Municipality of the obligation to serve the customer's needs in excess of the Contract Demand Level. Increases in the Contract Demand Level may be made only with approval of the Municipality, which shall not be withheld if the net change by all customers eligible to specify Contract Demand Levels results in a decreased requirement for such gas large enough to accommodate the requested increase or if the net change results in an increased requirement and the Municipality is able to secure a sufficient supply of gas to meet such increased requirement. If the Municipality is unable to secure a sufficient gas supply for this purpose, the added supply, if any, will be allocated among the customers requesting an increase in their Contract Demand Level based on the proportion each customer's requested increase bears to the total increase requested by all customers. The balance of the customer's daily requirements in excess of the sum of the Contract Demand Level and the transportation volumes owned

- by the customer and delivered to the Municipality on the customer's behalf will be met by the Municipality from other sources strictly on an as-available basis.
- f. Whenever the customer expects its daily requirements will be greater by ten percent (10%) or more than the sum of its Contract Demand Level (as may be reduced by curtailment orders of the Municipality) and the amount of transportation gas scheduled to be delivered daily to the Municipality for the customer's account, the customer shall notify the Municipality not less than twenty-four (24) hours in advance of that fact and provide an estimate of its daily requirements to the company. Use of gas in excess of the sum of transportation volumes and the customer's Contract Demand Level without prior approval of the Municipality shall subject the customer to interruption of service and/or overrun penalties in the amounts specified in the Municipality's General Terms and Conditions.
- g. Deliveries of as-available gas will be curtailed before any other category of service on the Municipality's system and may be curtailed by the Municipality when it determines that it has insufficient volumes of such gas to provide for the requirements of all its customers for whom such supplies were acquired or if the Municipality, in its sole discretion, determines the continued purchase and delivery of such gas to be uneconomical. In such event, the Municipality may require the customer to curtail its use of as-available natural gas. The Municipality shall use its best efforts to provide advance notice of such curtailment to the customer. In the event the customer, after such notice, fails to conform its usage to the level specified by the Municipality, it shall be liable for any demand charge, standby charge, reservation charge, overrun penalty or any other charge or penalty attributable to such failure to curtail gas usage in the amounts specified in the Municipality's General Terms and Conditions and as may be billed to the Municipality by its gas supplier(s) and/or transporter(s).
- h. The Municipality shall be found only to sell natural gas to satisfy the customer's Contract Demand Level to the extent a supply of natural gas is available in quantities sufficient to provide such gas without jeopardizing service to higher priority customers according to the Municipality's curtailment schedule contained in its General Terms and Conditions and shall not be liable for loss or damage to the customer in the event of curtailment of gas supply. In such event, Municipality may require the customer to curtail its usage below its Contract Demand Level. In the event that the customer, after such notice, fails to conform its usage to the level specified by the Municipality, it shall be liable for any demand charge, standby charge, reservation charge, overrun penalty or any other charge or penalty attributable to such failure to curtail gas usage in the amounts specified in the Municipality's General Terms and Conditions and as may be billed to the Municipality by its gas supplier(s) and/or transporter(s). The customer shall be responsible for establishing and maintaining alternate fuel burning facilities adequate, in the customer's sole

judgment, to prevent loss or damage to the customer in the event of curtailment of gas supply.

#### 6. Installation Charge.

The customer shall pay the Municipality an installation fee for installing metering equipment in excess of size capacity. Said fee shall be equal to the cost of the metering equipment less the estimated cost of metering equipment with a capacity of 1,000 CFH. The Municipality shall own and maintain the metering equipment thereafter.

## 7. Balancing.

Any Customer under this rate schedule shall be subject to Attachment A, "Customer Balancing Applicable to Transportation Customers," to this rate ordinance.

#### E. MUNICIPAL SERVICE NATURAL GAS RATE

#### 1. Availability.

To the City of Falls City, Nebraska, for the various departments of the City for general use in performing municipal services.

#### 2. Character of Service.

Natural gas will be supplied that meets pressure and quality requirements.

#### 3. Municipal Service Natural Gas Rate Schedule.

All volumes shall be billed at the Small General Service or Large General Service rate based on the nature of the municipal service.

#### F. GENERAL TERMS AND CONDITIONS

The following General Terms and Conditions apply to all gas sales by the Municipality:

#### 1. Terms of Payment.

All bills rendered are net, due and payable on receipt, and delinquent if not paid by 5:00 p.m. on the fifteenth (15th) of the month following the month for which the bill is rendered. Delinquent accounts are subject to a five percent (5%) delayed payment penalty. Unpaid delinquent accounts are subject to disconnection with proper notice. Reconnection may be had during regular working hours upon payment of a non-recoverable fee as established by the Board of Public Works under its service regulations. Reconnection may be had after hours or on

weekends and holidays upon receipt of payment of a non-recoverable fee as established by the Board of Public Works under its service regulations.

#### 2. Purchased Cost Adjustment (PCA).

This rate and the bill for service rendered hereunder may be adjusted from month to month to reflect the cost of "Purchasing Gas" to include but not limited to commodity, transportation and reservation charges, and any other associated costs charged to the Municipality by its natural gas suppliers. The purpose of the PCA is to allow the Municipality to recoup the cost on a monthly basis for gas transported and purchased whenever the cost to the Municipality exceeds the base cost for transported and purchased gas. The base costs for transported and purchased gas under all rates are:

Transported Gas \$2.14 per Mcf Purchased Gas \$5.00 per Mcf

The monthly PCA to apply for purchased gas shall be calculated based on the following formula:

PCA = (Total monthly cost of supply / Monthly Gas Mcf Supplied) – 5.00

The monthly PCA to apply for transported gas shall be calculated based on the following formula:

PCA = (Cost of transportation for previous 12 months / Gas Mcf Supplied for previous 12 months) - 2.14

#### 3. Tax Clause.

This rate may be increased by the amount of any new or increased governmental tax imposed and levied on the transmission, distribution, production, or sale of natural gas.

#### 4. Special Terms and Conditions.

- a. Special service requirements, if available, will be negotiated on an actual cost basis with the utility department.
- b. The Municipality shall supply one natural gas connection to a property at one point of delivery designated by the Municipality. For installation of additional natural gas connections to a property, the customer or owner shall pay the Municipality an installation fee equal to the total cost of installing the service equipment supplied by the Municipality. Distribution from the point of delivery to points of use on the customer's premise shall be the responsibility of the property owner.

- c. When natural gas consumption is measured through more than one meter, the consumption registered on each meter will be billed separately. Meter readings will not be combined for billing purposes.
- d. When a portion of a residential dwelling is used for commercial purposes, the Residential rate shall apply provided:
  - 1) the service is all taken through one (1) meter;
  - 2) the residential load exceeds the commercial load.

In all other cases, residential and commercial consumption of natural gas will be separately metered and billed under the applicable rate.

e. Two (2) or more flats, apartments or dwelling units in the same building will be served through one meter and the appropriate General Service rate shall apply. At the Municipality's option, each individual unit may be separately metered and billed under the Residential rate where the property owner provided facilities designed to serve each unit individually.

#### **SECTION III**

That the original Ordinance No. 2022-108 and any other ordinance or sections passed and approved prior to passage, approval and publication or posting of the ordinance in conflict with the provisions herewith are hereby repealed.

#### **SECTION IV**

		passage, approval, and publication. and take effect as provided by law.
Passed and approved this	day of	, 2025.
	Mayor	
Attest:		
City Clerk		

#### ATTACHMENT A

# CUSTOMER BALANCING APPLICABLE TO TRANSPORTATION CUSTOMERS

- 1. <u>Customer Obligation</u>. The Customer or Agent shall have the obligation to balance on a daily basis the receipt of transportation gas by the Municipality at the Receipt Point, adjusted for Retention, with deliveries of quantities of gas by the Company to the Delivery Point. The Municipality will review the Customer's nomination made to the interstate pipeline. For purposes of determining distribution system imbalances, the Municipality will use the lesser of the volume confirmed on the interstate pipeline or the nomination submitted by the Customer or Agent to the Municipality.
  - a. <u>Daily Balancing Limit</u>. The Customer is permitted to incur a daily Positive or Negative Imbalance up to and including ten percent (10%) of the quantities delivered by the Municipality on the Customer's behalf, except on Critical Days.
  - b. <u>Short Critical Day</u>. The Customer is not permitted to incur a Daily Negative Imbalance but is permitted to incur an unlimited Daily Positive Imbalance.
  - c. <u>Long Critical Day</u>. The Customer is permitted to incur a Daily Positive Imbalance up to and including five percent (5%) and is permitted to incur an unlimited Negative Imbalance.
  - d. Operational Flow Order (OFO). The Municipality may call an OFO on a specific customer or multiple customers. This Customer or group of customers will be subject to the same balancing parameters imposed on a Critical Day as outlined above.
  - e. <u>Notification</u>. The Municipality shall notify Customer of a Short Critical Day, Long Critical Day or OFO using the procedures in the Terms and Conditions Applicable to Transportation Customers (see Attachment B).
- 2. <u>Daily Settlement of Imbalances</u>. On a monthly basis, the Customer will receive an Imbalance Statement from the Municipality that will show the daily quantities received by the Municipality on behalf of the Customer, Deliveries to the Customer's facilities, and any Daily Imbalances resulting from the over or under delivery of gas.
  - a. <u>Applicable Index</u>. For purposes of this Attachment A, the Applicable Index shall be the "Gas Daily" Daily Index price for the Southern Star Pipeline. If the Applicable Index provides a range, the highest or lowest index price will be used as noted herein.
  - b. <u>Municipality Cost of Gas</u>. For purposes of this Attachment A, the Municipality Cost of Gas shall be the average cost, expressed in \$/Mcf, paid by the Municipality to its gas supplier for natural gas supplies not provided by pre-pay contracts.

- d. <u>Imbalance Cash-Out Settlement</u>. Cumulative Daily Positive or Negative Imbalances at a Delivery Point will be deemed to have been sold to or bought from the Municipality at either the Applicable Index or Daily Cost of Gas plus applicable interstate pipeline transportation fees.
- e. <u>Negative Imbalances</u>. On days where the Customer Imbalance volume is negative (Transportation Customer used more gas than it delivered to the Municipality at the Town Border Station) the Negative Imbalance will be settled at the higher of the Applicable Index or the Municipality Cost of Gas for that day.
- f. <u>Positive Imbalances</u>. On days where the Customer Imbalance volume is positive (Transportation Customer used less gas than it delivered to the Municipality at the Town Border Station), all Positive Imbalance will be settled at the lower of the Applicable Index or the Municipality Cost of Gas for that day.
- g. <u>Proration of Missed Meter Readings</u>. Any missed daily meter readings will be calculated by dividing the next available meter reading by the number of days for which the reading is applicable. For example, if a Saturday and Sunday meter reading is unavailable, the Monday meter reading will be divided by three and used in place of the Saturday, Sunday and Monday meter readings.

#### 3. Daily Balancing Charges.

- a. <u>General</u>. Daily Balancing charges shall be assessed in addition to the Daily Settlement of Imbalances as described in this Section 3.
- b. Normal Daily. If the Municipality has not declared a Critical Day, the Transportation Customer is allowed Positive or Negative Imbalances equal to ten percent (10%) without Imbalance charges. Customers with a Positive or Negative Imbalance shall be subject to an additional charge at the rate of \$.10 per Mcf up to thirty percent (30%) Imbalances. For Imbalances greater than thirty percent (30%), the Imbalance charge is \$1.00 per Mcf. These charges apply except for Short Critical or Long Critical Days.
- c. Short Critical Day. Customers with a Negative Imbalance will be charged \$5.00 per Mcf for the first five percent (5%) Negative Imbalance in addition to the settlement of Imbalances. During the months November through March, Customers will be assessed the greater of \$30.00 per Mcf or three (3) times the higher of the Applicable Index or Municipality Cost of Gas for any Negative Imbalance in excess of five percent (5%). During the months of April through October, Customers will be assessed \$10.00 per Mcf for any Negative Imbalance in excess of five percent (5%).

Customers with a Positive Imbalance on any Short Critical Day will not incur the daily \$1.00 per Mcf over delivery charge.

- d. <u>Long Critical Day</u>. Customers with a Positive Imbalance in excess of the first five percent (5%) will be charged \$10.00 per Mcf.
  - Customers with a Negative Imbalance on any Long Critical Day will not incur the daily \$1.00 per Mcf under delivery charge.
- e. <u>Additional Charges</u>. If the Municipality incurs additional charges due to a single or multiple Customer's Imbalance, which are in excess of the balancing charges and penalties recovered from Transportation Customers, such excess costs incurred will be collected on a pro rata basis from all parties that created the additional costs.
- f. Waiver of Penalties. Regardless of Customer circumstances, the Municipality will not waive interstate pipeline Imbalance charges that are incurred due to a Customer imbalance. However, in the event of unanticipated, non-recurring circumstances experienced by the Customer with their natural gas fueled equipment where the Customer, as a result of such circumstances, was unable to use all quantities of gas confirmed for delivery (excluding changes in production levels by the Customer), upon Customer request, the Municipality may at its sole discretion waive its Positive Daily Imbalance charges for the gas day the condition initially occurred.

Any balancing charge paid by the Customer or waived by the Municipality shall not be construed as giving the Customer the right to continue to create an imbalance on the system.

# Preposed Additional Parts From Belleville

Quantity	Part #	Description	Pri	ce	Total	
12		Used Cyl Pack	\$	2,500.00	\$	30,000.00
	Rock	ers,Head,Piston Rod,Liner and every thing hooked to them				
2		Used Cyl Pack (minus rod and piston )	\$	1,500.00	\$	3,000.00
		Rockers, Head, Liner and every thing hooked to them				
16	1A-2600	Fuel Lines	\$	150.00	\$	2,400.00
16		Exhaust Pipes	\$	100.00	\$	1,600.00
2	H724MT	Turbos @ (1000lbs)	\$	0.80	\$	1,600.00
2	216613	Intercoolers @ (500lbs)	\$	0.80	\$	800.00
1		B&A Pump			\$	400.00
1		40ft Conex Container High Cube			\$	4,350.00
		Total			\$	44,150.00
		Share Each			\$	22,075.00



# **QUOTATION**

DATE Quotation # 7/30/2025 072925/6KY

3250 Harvester Road Kansas City, Kansas 66115 (Phone) 913-342-1450 (Fax) 913-342-1377 sales@americanequipment.us

NAM	IE / ADDR	ESS			TO CONFIRM ORDER					
2307	of Falls ( Barada S City, NE	Street				Quote Accepted by         Date         P.O. #				
LEA	D TIME	7	TERMS	REP	FOB		PHONE		FAX	<u> </u>
		Due	on Rece	KAY	KC, K	S	402-245-26	591		
QTY	ITEN	Л		DES	CRIPTION			U/M	COST	Total
	300		box) Reading C Reading Galvani Electron Fully po Slam ac LED Li Partition Reading Classic II S coat, 40" s AA-compa Pooched, r Body power Fuel Fill K Cab Protect 6' Basket E		1201 Classic nges. e floor (A60) Coat") or and interior of installed. p, Tail and Ture Master Loar ordary secur 98", SRW, Rersal understrill front.	r).  Turn, fur ocking it ity lock eading vucture,	nished installed. nstallation. s.		15,146.00	15,146.00T
Quote	d by Ken	t Yah	ine				Tot	al		



# **QUOTATION**

DATE Quotation # 072925/6KY 7/30/2025

3250 Harvester Road Kansas City, Kansas 66115 (Phone) 913-342-1450 (Fax) 913-342-1377 sales@americanequipment.us

TO CONFIRM ORDER

2307 Barada Street Falls City, NE 68355				Date		oted by _					
LEA	O TIME	E TERMS REP FOB PHONE			FAX#						
		Due	on Rece	KAY		KC, KS	40	2-245-26	91	_	
QTY	ITEM	1		DE	SCRIP	TION			U/M	COST	Total
				zy, Kansas (KANWY	()					9.125%	1,382.07
Quoteo	d by Ken	t Yah	ne					Tot	al		\$16,528.07

This quote is valid for 30 days. Applicable taxes not included.

NAME / ADDRESS

City of Falls City



8.15.2025

To: Board of Public Works

Falls City City Council

Subject: Approval Request - SEL Engineering Services (Items 2, 3, and 4) for SCADA & Relay Upgrade Project

Board Members and Council,

The City entered into an agreement with Farris Engineering in December 2024 to provide engineering services that include system surveys, updated one-line diagrams, device specifications, relay settings development, SCADA specification preparation, and construction period services as part of the ongoing SCADA and Relay Upgrade Project. That work has been instrumental in establishing the technical scope for the next phase of the project.

Based on the findings and scope developed by Farris Engineering, SEL Engineering Services, Inc. has provided a detailed proposal dated July 16, 2025. I am requesting authorization to proceed with the following SEL scope items, which will provide the detailed engineering, design, and automation programming necessary for the upgrade:

- Item 2 Protection Settings and ICTR Plan (\$48,418)

  Development of settings for generators, feeders, transformers, and meters; review of existing SEL device settings; preparation of the Isolation, Commissioning, Testing, and Restoration Plan.
- Item 3 Retrofit Design (\$80,199) Modification of existing drawings and creation of approximately 60 updated protection and control design drawings, including one-lines, schematics, wiring diagrams, and panel layouts.
- Item 4 Automation Settings Services (\$102,390)

  Development of Functional Design Specification, SCADA integration programming, HMI screens, RTAC configuration for 39 devices, secure remote access configuration, and creation of up to two custom automated reports.

Total Requested Authorization (Items 2-4): \$231,007.00

#### **Project Recap:**

This relay replacement and SCADA (supervisory control and data acquisition) integration project is the first step to modernizing the control and protection of Falls City's electric system. The ability to record electrical events, troubleshooting electric system issues, and immediately know when a circuit trips offline will be gained. The new PDC (power distribution center) and Wartsila Engine

already have existing SEL equipment, standardizing on SEL equipment is highly recommended for future workability and support. This project was partially budgeted in 2024-25. The remainder of the project will be budgeted in 2025-26 fiscal year. Revenue being brought in from the capacity sales will help offset the impact to the Electric Department's reserve funds. The project timeline below outlines the progress to date and the next steps.

#### **Project Timeline:**

- December 2024 Board and Council approved Farris Engineering agreement to assess system, prepare design documentation, and develop SCADA specifications.
- January–June 2025 Farris conducted field verification, created updated one-line diagrams, identified devices for replacement, and coordinated with City staff on SCADA and relay integration requirements.
- July 2025 SEL Engineering Services proposal completed based on Farrisdeveloped scope.
- August 2025 (Current Request) Approval of SEL Items 2–4 to perform detailed protection, control, and automation design and programming.
- October 2025 Award materials proposed in Item 1 to lowest bidder for procuring new equipment as layed out in Section 1.1.1
- Late 2025–2026 Request approval of Items 5-7 once the new fiscal year begins. Installation and commissioning of new SEL equipment and SCADA integration, with Farris providing construction period oversight.
- Future phases Incorporating existing substations and future transmission line substation.

These SEL items will complete the engineering and automation design foundation for the project, allowing us to move forward to installation and commissioning with a fully coordinated and tested design package.

I recommend the Board of Public Works and City Council approve proceeding with SEL Engineering Services Items 2, 3, and 4 so that we can maintain project schedule and deliver modernized, reliable system protection and SCADA integration for the City of Falls City.

Sincerely,

Trevor Campbell Public Works Director



# SEL Engineering Services, Inc.









# Proposal for Falls City

# Mechanical Relay Replacement

SEL ES Project #: 036053.000.00 (Rev.02)

Submitted: 16 July 2025

Purchase Orders to be made out to SEL Engineering Services, Inc.

#### **Falls City Contact Information**

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Farris Engineering 12700 W. Dodge Road Omaha, NE 68154 Cell: +1.402.414.0598

Email: dhunter@farris-usa.com

#### **SEL ES Contact Information**

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Senior Engineering Manager I

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Email: aprajita\_sant@selinc.com

Kenny Barnett

Project Engineer III - Project Manager

Office: +1.509.338.3790 Cell: +1.720.696.4004

Email: kenny\_barnett@selinc.com

#### **Sales Representative Contact Information**

#### Van Hough Sales Rep

Pro-Tech Power Sales Cell: +1.402.278.6647

Email: vhough@pro-techpower.com

#### **Document Revision Table**

Rev.	<b>Issue Date</b>	Notes
00	06/06/2025	Initial issue
01	06/26/2025	Scope Change - Removal of two (2) IEDs and addition of SEL-3620 (Firewall/VPN connection) in Item 1.
02	07/16/25	Scope Change – Add Extra Control Room Totaling Meter, addition of Custom Automated reports, Change in Test Switch part numbers

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# 1 Scope of Services

SEL Engineering Services, Inc. (SEL ES) is providing this document in response to SEL site visit for finalizing scope development, dated 26 February 2025, by Falls City.

Project Description – Base Scope	Price (USD)
Equipment – Fixed Fee (FF)	
Item 1 – Supply of Equipment	\$101,640.00
SEL ES will supply equipment in the following locations based on the Equipment list in Section 1.1.1	
• PDC	
Control Room	
Wartsila Switchgear	
• U9 Wartsila	
Equipment Total – Fixed Fee	\$101,640.00
Services – Fixed Fee (FF)	
Item 2 – Protection Settings and ICTR Plan:	\$48,418.00
• SEL ES will provide settings for two (2) SEL-700G Generator Protection relays, nine (9) SEL-751 Feeder relays, one (1) SEL-787-2 Transformer Protection relay, and five (5) SEL-735 Power Quality and Revenue meters in ACSELERATOR Quickset software in.rdb format.	
<ul> <li>SEL ES to review all existing settings for SEL devices:         <ul> <li>Twelve (12) SEL relays</li> <li>One (1) SEL-2730M Managed 24-Port Ethernet Switch</li> <li>One (1) SEL-2488 Satellite-Synchronized Network Clock located in the PDC MV Switchgear</li> </ul> </li> </ul>	
<ul> <li>SEL ES will provide an Isolation, Commissioning, Testing and Restoration Plan (ICTR) plan for customer review and approval prior to SEL ES site arrival for the scope of work listed in Items 6 and 7.</li> </ul>	
Item 3 – Retrofit Design  SEL ES will modify existing customer provided drawings to develop protection and control design drawings for the SEL relays listed in Item 1 for Control Room, South Industrial, South/North ring bus, Generator G7 and G8, Bus Tie Transformer Differential, and the 4.16kV feeders. This includes as many as sixty (60) drawings for the following:	\$80,199.00
One-line diagrams.	
<ul> <li>Panel layout/bill of material/nameplate drawing.</li> </ul>	
o AC schematics.	
o DC schematics.	
Wiring diagrams.	

\$102,390.00

#### **Item 4 – Automation Settings Services**

- Functional Design Specification (FDS):
  - SEL ES will provide engineering services to develop an FDS that
    describes the communication architecture and design, representative
    Human-Machine Interface screens (HMI), I/O list, and a network
    communication drawing.

#### • SCADA Integration:

- SEL ES will configure settings for one (1) RTAC (Remote Terminal Unit) to poll data from the specified devices and display it on an HMI at the customer's desired location.
- The RTAC will poll a total of up to thirty-nine (39) Intelligent
   Electronic Devices (IEDs). It will also include control of the breakers
   (Open/Close does not include SEL-735, Shark meters and OPPD
   RTU) See Appendix A for full list of devices.
- RTAC will be configured to communicate with OPPD RTU No controls are included (between OPPD RTU and RTAC). It will be a serial link between the two (2) devices and the protocol used will be DNP 3.0. The RTAC will be programmed to communicate with the plant DCS as well. Controls from the DCS to operate the breakers is not included in this scope.

#### • RTAC HMI Screens:

SEL ES will use RTAC web-based HMI software to monitor the data retrieved from the IEDs. It will also be used to control breaker operations via SEL IEDs. The data displayed on the HMI will be based on the I/O points list and limited to data available from the IEDs.

- Configure the following HMI screens:
  - Five (5) overall one-line screens.
  - One (1) alarm screen to view and acknowledge active alarms.
  - Develop eight (8) faceplates for each SEL relay type for a total of thirty-eight (38) devices (OOPD RTU is not included) being used on the system. Faceplates will include relevant tag information pertaining to each IED as well as controls (Open/Close - if applicable).
- SEL-3620 Ethernet Security Gateway Configuration:
  - SEL ES will configure SEL-3620 as a Firewall/VPN. This will allow the computer from the office at City Hall to access local HMI (Read only). It will also connect the Simple Mail Transport Protocol (SMTP) server (IT world untrusted network) to the RTAC (OT device trusted network) for email notification on the occurrence of major events. The customer supplies the IP address of the SNTP server and list of the email addresses.
- SEL-3622 Security Gateway Configuration:

SEL ES will configure Ethernet Security Gateway (SEL-3622) as a Port Server. This will allow the RTAC to communicate with the IEDs in Wartsila switchgear and U9.	
SEL will build up to two (2) custom automated reports based on the customers requirements	
Services Total (FF) – Items 2, 3 & 4	\$231,007.00
Services – Per Diem (PD)	
Item 5 – Installation	\$76,400.00
SEL ES will provide up to six (6) days of onsite support by three (3) SEL ES Engineers/Technicians for a total of eighteen (18) days at the Customer's facility in Falls City, NE. Support will be provided over one (1) mobilization per SEL ES Engineer. This includes the cost of travel and related expenses.	
SEL ES will also provide and/or complete the following:	
<ul> <li>Demolition of existing electromechanical relays, modification of existing panels, and installation of new SEL equipment and custom panels.</li> </ul>	
Field wiring of all new equipment:	
- Seventeen (17) relays (SEL-735, SEL-751 and SEL-700G, SEL-787).	
- Eleven (11) custom plates with twenty-nine (29) ABB test switches.	
- One (1) RTAC	
- One (1) SEL-2730M Switch.	
- One (1) installation of the SEL-2240 Axion.	
- Two (2) SEL-3622 Security Gateways.	
- One (1) SEL-3620 Security Gateway.	
<ul> <li>All new SIS wire and consumables to support installation (terminals, ferrules, labels, zip ties, etc.)</li> </ul>	
Note: Additional days and mobilizations can be provided on a Per Diem basis.	
Item 6 – Protection Commissioning	\$52,500.00
SEL ES will provide up to six (6) days of onsite commissioning support by two (2) SEL ES Engineers/Technicians for two (2) SEL-700G, nine (9) SEL-751, one (1) SEL-787-2, and five (5) SEL-735 meters at the Customer's facility in Falls City, NE. This includes the cost of travel and related expenses, and the use of two (2) Omicron test sets for six (6) days each. Support will be provided over one (1) mobilization per SEL Engineer/Technician. SEL ES will also provide and/or complete the following:	
o Relay Omicron Test Plans.	
Relay Omicron Test Reports.	
Relay Sequence of Events Summary.	

o Triggered Relay Event Reports after Energization.	
Relay Meter Report after Energization.	
As-left Relay Setting Files.	
o Field Service Report.	
<b>Note:</b> Additional mobilizations, if needed, can be added on a Per Diem basis.	
Item 7 – Automation Commissioning	\$45,700.00
• SEL ES will provide up to five (5) days of onsite support with two (2) SEL ES Engineers / Technicians for a total of ten (10) days at the Customer's facility in Falls City NE. Support will be provided over one (1) mobilization per SEL Engineer/Technician. SEL ES engineers/technicians will work ten (10) hour days. This support includes travel expenses and the use of two (2) Omicron test sets. The primary objectives are to upload settings to the devices, verify communication links between the RTAC and IEDs, validate HMI displays and alarms, test up to 30% of data points with the DCS, and confirm all control operations from the RTAC to the IEDs via the RTAC HMI.	
• The devices to be commissioned include two (2) SEL-700G, nine (9) SEL-751, one (1) SEL-787-2, five (5) SEL-735 meters, one (1) RTAC, one (1) SEL-2730M, one (1) SEL-3400, two (2) SEL-3622, one (1) SEL-3620, and one (1) SEL-2240 ®.	
Services Total (PD) – Items 5, 6 & 7	\$174,600.00
Total Base - Equipment and Services (FF and PD)	\$507,247.00

Option Description	Price (USD)
Services- Fixed Fee	
Item 8 - Maintenance contract to include remote support for HMI	\$6,113.00
Maintenance contract for HMI remote support: five (5) hours per month for six (6)	
months.	
Total Price (FF)	\$6,113.00
Total Base & Optional (FF & PD)	\$513,360.00

All quoted prices are exclusive of any sales, value-added, or similar taxes, which will be added, if applicable, at the statutory rate(s) at the time of invoicing.

The pricing includes project management and administration costs.

#### 1.1 Deliverables to Customer

#### 1.1.1 Equipment

SEL ES will provide the following equipment to Falls City ("Customer")

#### • PDC:

- o One (1) SEL-2240 Axion® Configured with one (1) SEL-2243 Power Coupler, and one (1) SEL-2245-2 DC Analog Input Module (Sales Item Number: 2240#YBXL).
- o One (1) SEL-C276 EIA-232 Serial Cable with IRIG-B (Part Number: C276#6BC9).
- One (1) SEL-C642 Serial Cable for SEL-2890 to PC (4 ft, RS-232, DTE-DCE, DB9 F/DB9 F/5V PS, Pin 1 Power, Hardware Flow Control) (Sales Item Number: C642).
- One (1) BNC Tee (Female/Male/Female, Equipment Mount)
   (Sales Item Number: 240-1799).
- Two (2) SEL-9322 15VDC Power Supplies for SEL-3622 (Sales Item Number: 93226XX).
- Five (5) SEL-C962 Coaxial Cables for IRIG-B distribution (Part Number: C962#KDFC).
- o Three (3) Wire-Lead Terminators, 50 Ohm (Sales Item Number: 915900036).
- Eight (8) SEL-C963 Coaxial Cables for IRIG-B Distribution (Part Number: C963#6N49).

#### Control Room:

- One (1) SEL-3350 Real Time Automation Controller (RTAC) (Sales Item Number: 3350#W98V).
- o One (1) SEL-2730M Managed 24-Port Ethernet Switch (Sales Item Number: 2730M#7G49).
- o One (1) SEL-3620 Ethernet Security Gateway (Sales Item Number: 3620#TVTM).
- One (1) SEL-3400 IRIG-B Distribution Module (Part Number: 3400A300D1).
- Thirteen (13) SEL-C963 Coaxial Cable for IRIG-B distribution (Part Number: C963#6N49).
- One (1) SEL-C963 Coaxial Cable for IRIG-B distribution (Part Number: C963#G6H6).
- Three (3) SEL-C962 Coaxial Cables for IRIG-B distribution (Part Number: C962#KDFC).
- One (1) SEL-C808 62.5/125 μm Multimode Fiber-Optic Cable (Sales Item Number: C808#KJM7).
- One (1) SEL-C478A Serial Cable for SEL-3390 S8 (Sales Item Number: C478A#FJ6H).
- o Eighteen (18) Category 5e Ethernet Cables (Sales Item Number: CA605#2NJN).
- One (1) Category 5e Ethernet Cable (Sales Item Number: CA605#M7K4)
- o Three (3) Wire-Lead Terminators, 50 Ohm (Sales Item Number: 915900036).

- Two (2) SEL-2812 Fiber-Optic Transceivers With IRIG-B (Sales Item Number: 2812MRX0).
- Eleven (11) Fairview Microwave DB9 male connectors (Sales Item Number: FMCN45980).
- o One (1) Dell 24 Monitor P2425H
- Logitech MK270 Wireless Keyboard and Mouse combo for Windows, 2.4 GHz Wireless, Compact Mouse, Black

#### • Control Room - South Industrial:

- o One (1) SEL-751 Feeder Protection Relay (Sales Item Number: 751#8A00).
- Custom Plate with two (2) ABB FT-1 Test switches including one (1) C774B430G20 and one (1) C129A501G01.

#### • Control Room - South/North Ring Bus:

- o Two (2) SEL-751 Feeder Protection Relays (Sales Item Number: 751#8A00)
- Custom Plate with four (4) ABB FT-1 Test switches including two (2) C774B430G20 and two (2) C129A501G01.

#### • Control Room - Generator G7:

- o One (1) SEL-700G-1 Generator and Intertie Protection Relay (Sales Item Number: 700G#7H27).
- One (1) SEL-735 Power Quality and Revenue Meter with Monochromatic Display (Sales Item Number: 735#FW27).
- Custom Plate with four (4) ABB FT-1 Test switches including three (3) C774B430G20 and one (1) C129A501G01.

#### • Control Room - Generator G8:

- One (1) SEL-700G-1 Generator and Intertie Protection Relay (Sales Item Number: 700G#7H27)
- One (1) SEL-735 Power Quality and Revenue Meter with Monochromatic Display (Sales Item Number: 735#FW27).
- Custom Plate with four (4) ABB FT-1 Test switches -three (3) C774B430G20 and one
   (1) C129A501G01.

#### • Control Room - Bus Tie:

- o One (1) SEL-751 Feeder Protection Relay (Sales Item Number: 751#8A00).
- One (1) SEL-735 Power Quality and Revenue Meters with Monochromatic Display (Sales Item Number: 735#FW27).
- Custom Plate with three (3) ABB FT-1 Test switches including two (2) C774B430G20 and one (1) C129A501G01.

#### • Control Room - Totalizing:

- One (1) SEL-735 Power Quality and Revenue Meters with Monochromatic Display (Sales Item Number: 735#FW27).
- O Custom Plate with three (3) ABB FT-1 Test switches including one (1) C774B430G20 and one (1) C129A501G01.

#### **Supply of 4.16kV Bus Feeders for:**

#### Control Room - Old Hospital / West Residential and Station Power:

- o Two (2) SEL-751 Feeder Protection Relays (Sales Item Number: 751#GH74).
- Two (2) SEL-735 Power Quality and Revenue Meters with Monochromatic Display (Sales Item Number: 735#FW27).
- Custom Plate with six (6) ABB FT-1 Test switches including four (4) C774B430G20 and two (2) C129A501G01.

#### • Control Room - N.E Residential:

- o One (1) SEL-751 Feeder Protection Relay (Sales Item Number: 751#GH74).
- Custom Plate with two (2) ABB FT-1 Test switches including one (1) C774B430G20 and one (1) C129A501G01.

#### • Control Room - East Residential and East Commercial:

- o Two (2) SEL-751 Feeder Protection Relays (Sales Item Number: 751#GH74).
- o Custom Plate with four (4) ABB FT-1 Test switches including two (2) C774B430G20 and two (2) C129A501G01.

#### • Upstairs Mezzanine - Bus Tie Transformer:

- o One (1) SEL-787-2 Transformer Protection Relay (Part Number: 787#M5TD).
- o Custom Plate with two (2) ABB FT-1 Test switches including one (1) C774B430G20 and one (1) C129A501G01.

#### • Wartsila Switchgear:

- o One (1) SEL-3622 Security Gateway (Sales Item Number: 3622#H8J6).
- o Four (4) C605A Serial Cables (Sales Item Number: C605A#F7H7).

#### U9 Wartsila:

- o One (1) SEL-3622 Security Gateway (Sales Item Number: 3622#H8J6).
- o Two (2) C605A Serial Cables (Part Number: C605A#F7H7).

#### 1.1.2 Documentation

SEL ES will provide the following documentation to the Customer:

- Isolation, commissioning, testing, and restoration (ICTR) plan.
- Relay Omicron test plans.
- Relay Omicron test reports.
- Relay Sequence of Events summary.
- Triggered relay event reports after energization.
- Relay meter report after energization.
- As-left relay setting files.
- Red-marked P&C drawings.
- Field Service Report.

- One-Line Diagrams.
- Panel layout/bill of material/nameplate drawing.
- AC Schematics.
- DC Schematics.
- Wiring Diagrams.
- Communication Drawings.
- As-left RTAC and other communication settings files and documentation.
- Protection system settings in ACSELERATOR QuickSet® Software database file format.

Note: All drawings will be provided in AutoCAD format (.dwg) version 2013 unless otherwise noted.

#### 1.2 Deliverables to SEL ES

The Customer will provide the following items to SEL ES:

- Customer outage plan.
- Primary equipment switching steps and lockout/tagout procedure with dates.
- Customer example ICTR plans, if available.
- Site-specific/Customer training requirements.
- Required personal protective equipment.
- Site point of contact information and site address.
- Existing relay setting files.
- An approved set of existing overall and relaying drawings for the application and relevant standards.
- All pertinent CT and PT data are required for relay settings.
- Existing as-built ac, dc, and wiring drawings (AutoCAD or MicroStation).
- Any other information needed for the successful completion of this project.

## 1.3 Change in Scope

In the event of a change in scope, the contract amount and schedule shall be equitably adjusted. The party identifying a potential change in scope will request the change of scope to the other in writing (fax, email, or letter). SEL ES will identify any budget or schedule impact and submit it for approval. SEL ES will proceed with the work as soon as SEL ES receives written approval, in accordance with established contract provisions.

# 2 Payment and Work Schedule

#### 2.1 Purchase Order Instructions

We request that the Customer use the following name and address when issuing a Purchase Order (PO).

SEL Engineering Services, Inc.

2350 NE Hopkins Court

Pullman, WA 99163

- Purchase Order must reference SEL standard Terms and Conditions (T&Cs), or previously agreed contract T&Cs.
- Purchase amount must be for full amount of proposed project plus any selected options.
- Purchase Order can be issued to the contact(s) listed in the SEL ES Contact Information section in this proposal.

## 2.2 Payment Milestones

Milestone Activity - Base	Price (USD)
Equipment -FF	
1. Equipment Ordered	\$101,200.00
Services - FF	
2. Receipt of PO	\$90,000.00
3. Submission of Protection Settings	\$28,418.00
4. Submission of Automation Settings	\$62,830.00
5. Submission of Drawing Package	\$50,199.00
Services - PD	
6. Installation & Commissioning (Invoiced Monthly as Per Diem)	\$174,600.00
Total Base Price (FF+PD)	\$507,247.00
Optional Services - FF	
1. Remote Support for HMI five (5) Hours Per Month for two (2) Years	\$6,113.00
Total Base & Optional Price (FF+PD)	\$513,360.00

Unless indicated otherwise in this proposal, the price does not include the cost of any payment, performance, and/or warranty security instrument.

This proposal is valid for 60 days. SEL ES reserves the right to withdraw this offer if mutually accepted credit terms cannot be agreed upon.

# 2.3 Payment and Credit Terms

If your company does not have established credit terms sufficient to cover this purchase, SEL ES reserves the right to require any of the following: credit information, prepayment, letter of credit, or progress payments prior to acceptance.

Work cannot be initiated until adequate credit terms have been established.

Payment Terms: Net 30 days after date of invoice.

#### 2.4 Schedule

SEL will furnish a schedule during the project kickoff meeting after receipt of a purchase order and agreed upon terms.

Failure to supply requested information in a timely manner will affect the schedule and will subject the Customer to additional charges as set forth in Section 2.5. If a project is delayed or suspended, the revised project schedule will be based on present workload and staff availability.

Proposed schedules are based on present workloads and, if applicable, material and equipment deliveries. The schedule may change depending upon the start date and the impact of work that may be awarded to SEL ES between the date of this proposal and the date of the award.

Schedule is subject to acceptable payment and credit terms.

The schedule will be equitably adjusted in the event of changes in scope or in the event of delays attributable to the Customer or Customer's separate contractors, unforeseen conditions, or causes beyond the control of SEL ES.

## 2.5 Suspension, Work Disputes, Termination

- 1. SEL shall proceed with the performance of the Project; provided, however, SEL may suspend its performance of the Project if:
  - a. A dispute arises between the Parties, and the dispute must be resolved to properly proceed with the Project, including, but not limited to, a dispute regarding the scope of SEL's work;
  - b. Customer fails to timely pay SEL all undisputed amounts arising from any contract between SEL and Customer;
  - c. Customer becomes insolvent, is placed into receivership, becomes the subject of proceedings under the laws relating to bankruptcy, or admits in writing to its inability to pay its debts as they become due;
  - d. For thirty (30) days or more the Customer fails to provide information or access necessary for SEL to complete the Project or the Customer has not responded to a request by SEL about such information or access;
  - e. Customer fails to provide a safe work environment; or
  - f. Customer, in writing, directs SEL to suspend performance of the Project.
- 2. If SEL suspends performance of the Project in accordance with this section, then:
  - a. SEL shall have no liability for any damages due to such suspension, including, but not limited to, delay damages;
  - b. The Parties shall, in writing, agree upon a revised schedule for SEL to perform the Project once the suspension ends;
  - Customer shall pay SEL for labor completed prior to the suspension, which shall be based
    on hours incurred and billed at the contracted rates or, if none stated, at current SEL billing
    rates;
  - d. Customer shall pay SEL for all materials procured prior to suspension for panels and products, if applicable, which shall be billed at contracted rates or, if none stated, at actual cost-plus fifteen percent (15%);

- e. Customer shall pay SEL for all other expenses incurred by SEL prior to the suspension, which shall be billed at the contracted rates or, if none stated, at actual cost-plus fifteen percent (15%);
- f. If SEL demobilizes, then Customer shall pay SEL a demobilization fee of the greater of Ten Thousand Dollars (\$10,000) or ten percent (10%) of the Agreement price;
- g. If SEL remobilizes after one hundred eighty (180) days of the initial date of suspension, then SEL shall evaluate the remaining scope of work, and negotiate a change order to account for changes to price and/or the schedule; and
- h. If SEL's performance of the Project is suspended for sixty (60) days or more, then either Party may immediately terminate this Agreement upon written notice to the other party.

# 3 Clarifications and Exceptions

SEL ES developed the scope of work, schedule, and price based on the information provided to us as listed in this proposal. Should additional or changed work be required, including such work resulting from unusual conditions or for any other reasons that are not evident from the information provided, changes to the price or schedule may result.

SEL ES will assign a project manager to the project. The project manager will oversee and maintain the schedule within SEL ES. The project manager will also be the point of contact with the Customer in order to maintain a smooth flow of information.

For safety reasons, SEL ES service personnel will not plan to work more than ten (10) hours per day. Should job requirements dictate work hours in excess of ten (10) hours per day, SEL ES and the Customer must review the requirements and agree on an appropriate plan that addresses safety concerns and the reasonableness of the hardship that the excessive hours place on SEL ES personnel.

#### 3.1 Clarifications

SEL ES provides the following clarifications in a sincere effort to ensure we have a common understanding with our clients. It is not intended to deflect or reduce our commitment to serving the client. On the contrary it is meant to ensure we have a truly common understanding of our scope of supply. Please read the clarifications carefully. SEL ES remains open to working with the client to adjust, should there be a disconnect in our mutual understanding.

- 1. This proposal includes an FDS. The FDS will establish the design basis, equipment part numbers, and document-specific Customer requirements. As a part of this document, SEL ES will determine if additional equipment is needed to fulfil the requirements and may suggest value-engineered solutions. The FDS is a critical design document that must be finalized and approved by all responsible parties early in the design phase. The signed and approved FDS supersedes any proposal, specification, or other preliminary design documents. The programming and configuration of relays will not begin until after the standard FDS is approved by the Customer.
- 2. SEL ES will configure the RTAC to collect up to thirty (30) analog and thirty (30) digital tags per IED. It will also include controls (Open/Close breaker operation) for the applicable SEL relays.
- 3. No training is included in this proposal. The customer's preferred training type must be determined before it can be added to this proposal at additional cost.
- 4. Commissioning schedule will be based on availability of staff at the time the outage dates are confirmed and locked in. Commissioning will not be scheduled on holidays, weekends, or outside standard dayshift work hours.
- 5. Unless otherwise stated above, the SEL ES commissioning scope of work considers testing of SEL equipment only.
- 6. During onsite commissioning support, SEL ES engineers will work under the direction of the Customer's engineer and will assist with technical issues that arise during commissioning.
- 7. The Customer shall provide a senior electrician, or otherwise qualified person, to assist with commissioning activities on site. This would include:
  - a. Assistance with point-to-point testing to verify correctness of wiring
  - b. Assistance with wiring corrections if any errors are encountered

- 8. The Customer will perform all lock-out tag-out (LOTO) switching, grounding operations, and create all required switching orders and LOTO work permits.
- 9. SEL ES has allowed for normal commissioning planning and commissioning plan approval but has not allowed for extra onsite training. It is intended that site orientation will happen on the first visit and is included in the onsite commissioning time. Site-specific training will be provided by the Customer. Training in excess of four (4) hours shall be subject to additional charges covered under a change order.
- 10. The Customer will assist in obtaining all required information and act as the point of contact until all information is received and validated from all equipment vendors.
- 11. SEL ES will perform this project work based on the information and data provided by the Customer. Subsequent design revisions after SEL ES starts the project may require a change order for additional costs and may affect the final deliverables schedule.
- 12. If the Customer does not meet credit requirements, SEL ES will require a letter of credit, a bank guaranty, or a bond in the amount of the project value or prepayments for each milestone. This guaranty or bond will be at the Customer's expense and shall be valid for the life of the project. In the event an unpaid or past due amount exists at 30 days before the expiration of the guaranty or bond, then the Customer shall provide a replacement guaranty or bond prior to the expiration of the original guaranty or bond.
- 13. Hardware and settings development for non-SEL devices, including routers and gateways, are not included in the scope. SEL ES will provide communication parameters for the non-SEL devices to be programmed by third parties.
- 14. Time synchronization for non-SEL devices can be provided if these devices support IRIG-B or SNTP time signals.
- 15. The Customer will provide all protective element set points and/or the existing relay settings. Power system studies or relay coordination studies review are not included in this proposal. This can be provided as an additional service.
- 16. SEL ES assumes that the relay coordination and other protective set points for devices upstream and downstream of this project are correct. The verification of this data is not included in this scope of work.
- 17. Panel products provided in this scope of work are not UL listed. UL listing service is available as an option.
- 18. The customer is responsible for running the IRIG-B cables and Multi-Mode Fiber Optic cables from the Control Room to the PDC, U9 Wartsila, and Wartsila SWGR, as indicated in the attached communication drawings. It may be noted that the maximum distance from the clock SEL-2488 is five hundred (500) feet and the same (maximum distance) for the SEL-3400 is one hundred and thirty (130) feet.
- 19. SEL is dedicated to ensuring that we provide the best overall value to our Customers. We are committed to integrity and transparency. During the project, price differences may arise due to various contributing factors outside of SEL's control. To avoid building in excessive contingency, SEL shall discuss with the client and pass on any price differences in such cases. For example, projects that require design activities to be completed before placement of panel or equipment orders to the SEL panel shop will result in any increase or decrease in product price at the time of order placement to be billed to the Customer, based on the actual price.

20. Our proposal includes pricing for items listed in Sections above. Any other services not listed in this proposal are excluded from the offer.

#### 3.2 Per Diem

SEL ES will perform onsite work on a per diem basis unless the Customer and SEL ES agree on other arrangements. The party identifying a potential change in scope will request the change of scope to the other in writing (fax, email, or letter). SEL ES will identify any budget or schedule impact and submit it for approval. SEL ES will proceed with the work as soon as SEL ES receives written approval, in accordance with established contract provisions. Refer to Table 1 for the per diem rates.

Table 1 Per Diem Rate Table (USD)

Item	Description	Price (USD)	
1	Mobilization fee per U.S. personnel	Distant (requires air travel) = \$5,850	
		Local (within 200 miles) = \$2,950	
2	Daily rate per U.S. personnel	Weekday rate = \$2,950/day	
		Saturday rate = \$4,425/day	
		Sunday and holiday rate = \$5,900/day	

All quoted prices are exclusive of any sales, value-added, or similar taxes, which will be added, if applicable, at the statutory rate(s) at the time of invoicing.

The following details apply to Table 1:

- No receipts will be provided as part of the per diem rates.
- The mobilization fee is defined to include the labor and travel costs associated with transporting one person roundtrip to and from the Customer's site.
- The daily rate is the charge per person, per day. Typical working hours are 8 a.m. to 6 p.m., Monday through Friday. Lunch shall be up to 60 minutes with two 15-minute breaks each day. If all the onsite work cannot be performed during typical working hours, then the daily per diem rate will be billed at 1.5 times the above rate for work performed Monday through Friday. Onsite work performed on Saturday, Sunday, or on a holiday shall be agreed upon between the Customer and SEL ES in advance and be subject to additional charges.
- Time spent by SEL ES personnel on site while waiting standby, training, or traveling to and from the site will be considered billable time.
- Per diem rates are valid for work performed within one year of the proposal date.
- Holidays observed for U.S. Offices include New Year's Day (observed), Civil Rights Day, Memorial Day, Juneteenth, Independence Day (observed), Labor Day, Veterans Day, Thanksgiving Day, Thanksgiving Friday, and Christmas Day (observed).

# 3.3 On-Site Commissioning Services

SEL ES personnel performing onsite commissioning and testing support will:

 Adhere to both Customer- and SEL ES-required operational and safety processes and procedures. SEL ES personnel will execute safety expectations to the more rigorous of either the Customer or SEL ES safety requirements. The minimum SEL ES safety expectations include:

- Use personal protective equipment (PPE), including Category 2 arc-rated (AR) flame-resistant (FR) clothing, safety glasses, ear plugs, hard hat, and safety toe protective footwear.
- Perform daily tailboard meetings. If site conditions change unexpectedly, a subsequent tailboard meeting shall be performed.
- Limit SEL ES employees' arc-flash energy exposure to 8 cal/cm<sup>2</sup> (see Note 1).
- Prohibit SEL ES employees from working with asbestos-containing material (see Note 2).
- Follow Customer notifications to SEL ES personnel concerning any special safety training, prior to onsite commissioning and testing activities (training time shall apply to onsite support time).
- Perform all work activities using the SEL human performance tools, as applicable. The SEL human performance tools will include, but are not limited to:
  - Stop-work authorization. Initiate a stop-work and/or time-out when conditions change or abnormal situations or discrepancies arise.
  - Three-part communications.
  - Flagging, taping, signage, and barriers.
  - Independent verifications and/or reviews of critical steps in the evolution of work.
  - Performance of place-keeping methods to maintain tracking of critical steps.
  - Performance of pre-job briefing and walkdown before working on active control schemes, including breaker failure, local and remote breaker backup, transfer trip schemes, remedial action scheme activation, etc.
- Participate in and execute energy control processes as required by the Customer and as stipulated in the SEL ES commissioning procedures. The minimum energy control expectations include:
  - Development of an SEL ES-written testing and commissioning plan, according to the scope of this proposal.
  - Review and perform a walkdown inspection of applicable energy control boundaries (lockout/tagout [LOTO]). Verify the installation and/or closure of any installed safety grounds and/or switches and open points. Ensure that tagging is in place and/or controlled by the Customer's designated authority (dispatch) (see Note 3).
  - Sign on to the Customer's clearance order or permitting processes and subsequent release from clearance when the work evolution ends.
- Provide **site leadership**, direction, and Customer collaboration and communications during the job-site work execution, equipment testing, wiring verifications, and equipment energizing. The site leadership will encompass the following:
  - Verification and/or validity of "Issue for Construction" engineering documentation.
  - Technical supervision of crews performing demolition and wiring activities.
  - Management of sequencing of testing activities according to the preapproved testing and commissioning plan.
  - Performance of wire checks and circuit verifications.
  - Execution of primary current injection testing.

22.01

- Execution of secondary current injection testing.
- Management of the energization and testing of control schemes and protective relays.
- Performance of the verification of settings and configuration files.
- Preparation of documentation of commissioning events.
- Communication of regular/daily Customer updates regarding the site status and/or progress and the equipment configuration.
- Assumption of responsibility for all work activities performed under the SEL ES scope of this proposal. Unexpected outcomes including equipment issues, product defects, and safety or human performance issues will immediately initiate a stop-work time-out and the Customer and SEL ES leadership must be engaged.
- Responsibility to provide Customer support for emergent or emergency situations not directly associated under the SEL ES scope of this contract.

If an emergent or emergency situation arises with the Customer's equipment (e.g., load at risk or load lost), and Customer assistance is needed, SEL ES personnel will assist and/or advise the Customer with respect to the remediation of the emergent or emergency situation without a preapproved testing plan. During the emergent or emergency situation, SEL ES personnel will work under the direction of the Customer and will be available in a technical support role only.

**Note 1:** Electrical outages (controlled through LOTO or other clearance processes) should be considered to eliminate risk of employee exposure to arc-flash incident energy. If the normal incident energy is above 8 cal/cm<sup>2</sup>, SEL ES will work with the Customer to evaluate the options to reduce fault current and fault current clearing times, including creating temporary settings changes to speed up protection, opening tie breakers, and other incident energy reduction techniques. If an arc-flash study is required to determine the incident energy level, SEL ES will provide a proposal to do this work under a separate contract.

**Note 2:** SEL ES employees will not perform any work activities on asbestos-containing material or presumed asbestos-containing material within the work zone that will be disturbed during normal work activities or material that is already in a friable state, until a negative test result is received from a certified laboratory verifying the absence of asbestos in the workplace. If a positive result is confirmed indicating that any hazardous material is present, no work activities shall commence or resume without complete remediation by qualified contractors. It will be the responsibility of the equipment and/or asset owner to mitigate any identified and verified asbestos hazards.

**Note 3:** SEL ES personnel do not provide services for switching of the Customer's primary equipment to establish LOTO and/or clearance orders. The Customer must provide qualified personnel for switching primary equipment to establish primary LOTO and/or clearance zones for commissioning and testing activities.

# 3.4 Relay Setting Service

Relay settings will be selected to maintain coordination, to the extent that it is practical to do so. If system coordination cannot be maintained, SEL ES will work with the Customer to determine the best course of action. Any fault study developed or performed will be limited to that as defined under Section 1: Scope of Services. Adjacent substations and equivalent systems within one line segment of the study area will be included to verify coordination. All pertinent fault and relay data are to be provided by the Customer in a timely manner. Remote substation relay settings, evaluation, and recommendations are beyond the scope of this project.

Relay settings and supporting documentation are provided by electronic means. The documents include relay settings, supporting calculations, pertinent fault study results, and overcurrent coordination curves, as required in Microsoft Word or Adobe Acrobat format. In addition, these documents will also include

settings for all SEL relays in an ACSELERATOR QuickSet® SEL-5030 Software database to facilitate setting the relays.

## 3.5 Cyber Security - Project Passwords

To maintain security during the processes of engineering, fabrication, factory tests, shipment, delivery, onsite testing, and commissioning, the electronic devices in this system are assigned project passwords. They are specific to this project and are controlled at SEL ES on a strict need-to-know basis.

As part of the final deliverables from SEL ES, the Customer will receive documentation identifying the project passwords in each of the delivered products. SEL ES recommends that the Customer change the project passwords to Customer-defined passwords upon receipt of their products.

SEL ES policy is to change passwords; however, SEL ES will follow the Customer policy regarding passwords as advised.

## 3.6 Expense Overhead

## 3.6.1 Test Equipment

The following test equipment will be billed at the rate of \$450 per day for bench testing and/or Customer-witnessed testing at an SEL ES facility or for any testing performed at the Customer's site. This fee includes ground shipping costs. Air or other expedited shipment is available for an additional fee.

Omicron or Doble

# 4 SEL ES Safety Program

## 4.1 Safety

SEL ES is committed to the safety of its employees and Customers, and our employees practice work rules to ensure compliance with industry standard safety methods and federally mandated requirements.

SEL ES safety metrics include:

- ORIR (OSHA Recordable Incident Rate): 0.33 year-ending 2023.
- DART (Days Away [from work], Restricted, and Transfer): 0.00 year-ending 2023.

#### 4.1.1 SEL Human Performance

SEL ES project procedures are designed to highlight human performance improvement (HPI) error precursors and implement tools to place barriers against hazards encountered in engineering work and in the field. HPI tools that are built into the daily work of SEL ES engineers include, but are not limited to:

- Peer-check requirements
- Questioning attitude
- Stop work
- Policy adherence
- Effective communication strategies
- Documentation of good catches and near misses
- Participation in surveys and questionnaires to obtain feedback

# 4.1.2 Qualified Electrical Worker Training

Employees shall complete SEL Qualified Electrical Worker (SQEW) training to work in the field. The two-day course is comprised of section competencies measured through quizzes. The second day, employees collaborate, respond to real-life scenarios encountered in the field, and teach the class their evaluation. SQEW training covers:

- National Fire Protection Association (NFPA) 70E®
- Shock and arc-flash hazards and approach boundaries
- Risk assessment
- HPI tools and applications
- PPE in accordance with the Occupational Safety and Health Administration (OSHA) and NFPA 70E
- Substation equipment, entry, and protocols
- Step and touch potential
- Control of hazardous energy (LOTO)
- Electrically safe work conditions
- Situational awareness

- Project Safety Plan
- Daily Tailboard
- Energized Electrical Work Permit
- Stop Work Procedure
- Other electrical safety topics

## 4.1.3 SEL Field Safety Manual Training

The scope includes all SEL employees who visit Customers' sites to perform work in which the job may expose them to physical, mechanical, electrical, chemical, or radiological hazards. SEL ES complies with all local, state, and federal laws, as well as with other regulations relative to the methods of performing work. The contents meet or exceed the requirements of OSHA regulations and NFPA 70E.

## 4.1.4 Commissioning Qualification

Commissioning personnel are qualified within their area of expertise (i.e., automation, protection) and progress with greater levels of authority based on hands-on performance, demonstration of knowledge in each competency, and by final qualification via a review panel process and supervisory evaluation.

## 4.1.5 Event Reporting and Investigation

SEL ES has a robust event reporting and investigation program to collect safety data from employees when hazards or potential hazards are encountered while working. The goal is to proactively educate employees, create awareness, and put barriers against hazards in place to improve safety performance. A communication program provides information to employees regarding the good catch/near miss and allows discussion as to why they are important to safety performance.

# **5 Project Quality Plan**

SEL maintains a documented quality system that meets the requirements of ISO 9001.

SEL ES strives to design, develop, and deliver dependable, quality solutions that exceed Customer expectations by applying the example SEL ES Project Procedure illustrated in Figure 1. The procedure and subordinate work instructions encompass a sequential, phase-gate design process that is tailored to the specific scope of the project. The primary goal is to design in quality from the beginning of the project. Time spent early on to ensure that the Customer's project requirements and the design basis are correct saves time and effort in later phases for the Customer, the project team, and others involved.

The SEL ES Project Procedure for a typical project has phases for planning, definition, development, testing/validation, commissioning, and close out. Detailed design reviews of requirements and deliverables by competent technical reviewers from SEL ES authorized reviewer lists ensure the quality of deliverables. Testing and validation processes prove the performance of the solution for the Customer's application.

The Customer has an important role in the process. Throughout the project, SEL ES will communicate project status and provide opportunities to define requirements, review deliverables, and provide feedback on SEL ES performance. Additionally, when Customers define hold/witness points or approval requirements, SEL ES will include the requirements in its detailed project plans to guarantee compliance.

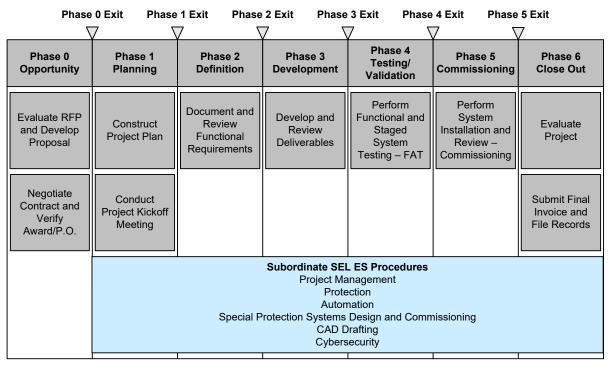


Figure 1: Example SEL ES Project Procedure Diagram

# **6 SEL ES Terms and Conditions**

To accept this proposal, please return this sheet, signed and dated. All purchase orders shall be issued to **SEL Engineering Services, Inc.** 

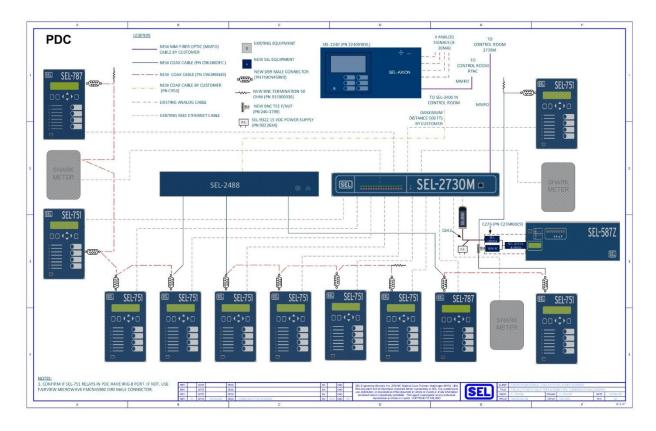
Falls City ("Customer")	SEL Engineering Services, Inc. ("SEL ES")			
2307 Barada Street	2350 NE Hopkins Court			
Falls City, NE 68355	Pullman, WA 99163			
USA	USA			
Signature:	Signature:			
Print Name:	Print Name:			
Title:	Title:			
Date:	Date:			
Contract Information (to be completed by client):				
	Client PO/			
Contract Amount: \$	Reference/Contract#:			
Ship To Address:				
Bill To Street Address:				
Bill To Email Address:				

# Attachment 1 - RTAC IED LIST

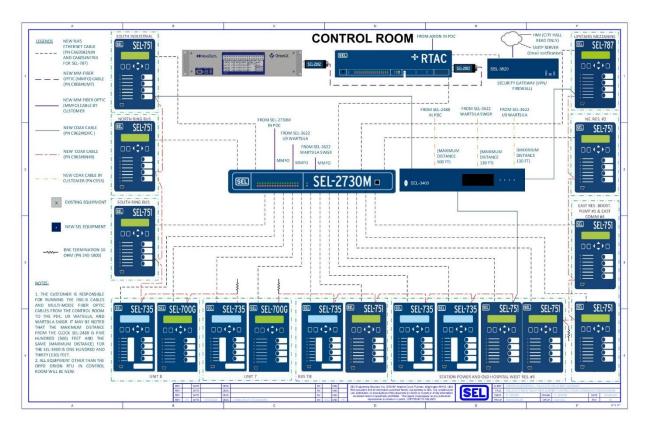
Description	Equipment Part#	Quantity	Location
SEL-700G-0,-1,-T,-W Generator and Intertie Protection Relay	700G#7H27	2	Control Room
SEL-751 Feeder Protection Relay	751#GH74	5	Control Room
SEL-751 Feeder Protection Relay	751#8A00	4	Control Room
SEL-735 With Monochromatic Display	735#FW27	6	Control Room
SEL-787 Transformer Protection Relay	787#M5TD	1	Control Room
OPPD RTU	N/A	1	Control Room
SEL-787	-	2	PDC
SEL-751	-	9	PDC
SEL-587Z	-	1	PDC
Shark Meter	-	3	PDC
SEL-487E	-	1	Wartsila SWGR
SEL-751A	-	2	Wartsila SWGR
SEL-734	-	1	Wartsila SWGR
SEL-700G	-	2	U9 Wartsila

# **Attachment 2 – Communication Drawings**

## **PDC**

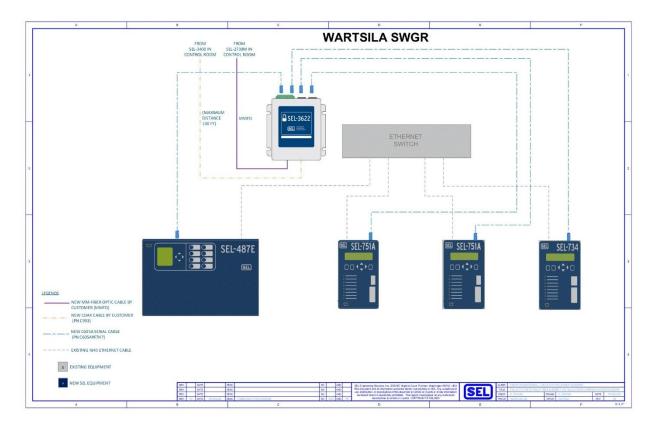


# **CONTROL ROOM\***

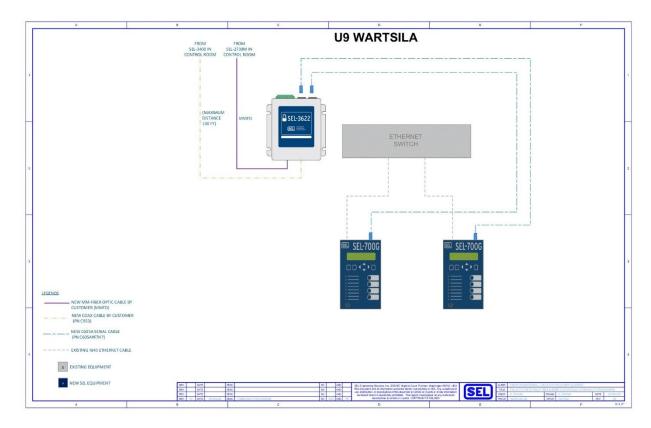


<sup>\*</sup> To be updated after project kickoff to add Control Room – Totalizing: SEL-735

# **WARTSILA SWITCHGEAR**



# **U9 WARTSILA**



# **OVERALL COMMUNICATION DRAWING**

