

Lewes Board of Public Works

Electric, Water, Wastewater, Storm Water Cost of Service Study January 5, 2023



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January 5, 2023

Austin Calaman General Manager Lewes Board of Public Works 107 Franklin Avenue Lewes, DE 19958

Utility Financial Solutions, LLC (UFS) is pleased to submit a proposal to provide an electric, water, wastewater, and storm water cost of service, financial projection, and rate design study for the Lewes Department of Public Works (BPW). Our proposal is based on our prior experience with completing cost of service studies for municipal utilities around the nation.

UFS will provide you with the highest quality service within an agreed-upon timeframe and has the personnel available to meet your needs. The study will take approximately 12 weeks to complete after receipt of requested information.

UFS is an internationally known firm with a long standing relationship and history of assisting municipalities with financial analysis and are recognized experts in the utility field. Our group and the project team assigned to this engagement are composed of highly qualified, experienced, and knowledgeable professionals who remain current on industry issues. We are regularly requested speakers for seminars at the regional and national level for the American Public Power Association, and the Institute of Public Utilities.

UFS would like to be a resource to you for many years. Our success is dependent upon the quality and timeliness of the services provided. We are committed to our client's complete satisfaction. Our prior experience in providing the requested services allows us to conduct a cost efficient rate study.

We appreciate the opportunity to submit this proposal and look forward to discussing it with you. If you have questions or need additional information, please contact me at 231-218-9664.

Sincerely,

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Understanding of Project Requirements

Summary of Services for Electric, Water, Wastewater, and Storm Water Utilities

- 1. Five Year Financial Projection that includes the following:
 - a. Determination of Revenue Requirements for each year
 - b. Development and identification of financial targets related to the following:
 - i. Debt Coverage Ratio
 - ii. Minimum Cash Reserves
 - iii. Operating Income
 - c. Identification of long-term rate track to maintain financial stability of utility and minimize the potential rate impacts on customers
- 2. Development of Cost of Service Study that identifies the following:
 - a. Comparison of cost to provide service to each class with projected revenues
 - b. Identification of potential new rate classes based on load characteristics
 - c. Monthly customer charges for each class of customers
 - d. Transmission delivery charges (Electric)
 - e. Distribution delivery charges (Electric)
 - f. Power supply charges (Electric)
 - g. Seasonality of costs
 - h. Identification of fixed and variable costs including the following broken out by season:
 - i. Total demand related costs (Electric)
 - ii. Total energy related costs (Electric)
 - iii. Monthly customer related costs
 - i. Identification of costs based on voltage level of customers (Electric)
 - i. Transmission level customer
 - ii. Primary metered customer
 - iii. Secondary metered customer
- 3. Rate Design (One Year for Each Utility)
 - a. Development of rates to move classes closer to cost of service
 - b. Development of rates to move components of rates closer to cost of service
 - c. Identification of Impacts of rate changes by classes considering the following:
 - i. Percentage impacts at various usage levels
 - ii. Dollar impacts at various usage levels
 - iii. Percentage impacts for demand rate classes based on load factors
 - d. Identification of overall rate impacts on customers
 - i. Proposed rate design for each rate class
 - ii. Rate impacts on each customer class
 - iii. Rate impacts at various levels of usage for each rate class



- 4. Presentation to Staff & BPW Management
 - a. Review results and assumptions
 - b. Development of appropriate financial targets
 - c. Obtain input and feedback on rate track and rate designs including:
 - i. Overall rate change for each year
 - ii. Customer charges
 - iii. Review of seasonality of rates
 - d. Discussion of overall goals and objectives of management and Council including:
 - i. Energy conservation
 - ii. Economic development
 - iii. Distributed generation customers
 - iv. Other considerations in rate design
- 5. Reports
 - a. Executive summary report discussing the following:
 - i. Financial projection results and rate adjustment to achieve financial targets
 - ii. Cost of service results for each rate class
 - iii. Cost based rate structures
 - iv. Assumptions used in development of study
 - v. Recommendations on rate track, movement toward cost of service, financial targets, others as identified



Proposed Work Plan and Project Approach

Our approach to this project was developed to meet the objectives of the BPW and is based on the scope of services and UFS prior experience in completing cost of service studies around the nation. Listed below are more detailed descriptions of the services provided, our process and sample outputs from our studies. Our proposed work plan is designed to meet the requirements and methodologies established in the industry.

Preliminary Tasks

Listed below are tasks to develop the financial projection and cost of service portion of the study.

1. Review of Relevant Reports

Review of certain reports is necessary to ensure the analysis is established to fit the specific requirements of the BPW. Listed below are examples of reports to obtain and review.

- Yearly financial, operating and maintenance reports including fixed assets reports
- Outstanding bond issues and specific bond covenants
- Rate schedules and any special contracts
- 2. Collect and Verify Data

Conference call with utility management is critical to ensuring the final reports will meet the objectives of the BPW and the information request prepared by Utility Financial Solutions, LLC is understood. The specific objectives of the discussion will be to:

- Identify and clarify the scope of services and specific expectations of management
- Review billing system capabilities for providing the information necessary for the cost of service analysis. *We will complete one revenue proof to reconcile revenues received compared with calculated revenues from billing system.*
- Review chart of accounts and determine strengths and weaknesses and its consistency with utility accounting practices
- Availability of load research data and develop a plan to obtain information needed by cost of service study
- Discuss with management the strengths and weaknesses of determining utility revenue requirements using a utility basis vs. cash basis
- Discuss power supply and recent or anticipated changes in rates or operations
- Review of transmission charges
- Additions or losses of major customers



3. Preparation of Data Request

After completion of the preliminary tasks UFS will prepare an information request that will include the necessary information to complete the study. Listed below are specific reports that will be requested:

Electric

- Customer billing and usage statistics by month for latest fiscal year
- Monthly production statistics or power supply purchases
- Power supply rates for upcoming years
- System hourly load information
- Trial balances for latest two years
- Audited financial statements for the latest three years
- Debt service schedules
- Current work-in-process
- Future capital improvement plan
- Power Supply costs
- System load data (if available for example through a SCADA system)

Water, Wastewater, Stormwater (data as applicable)

- Detailed trial balance for water and wastewater departments for latest fiscal years
- Audited financial statements for past three years (CAFR)
- Fixed Assets of system and include historical investments, accumulated depreciation, and annual depreciation expense
- Water and wastewater budgets for current and next fiscal year
- Outstanding bond amortizations schedules for water and wastewater departments
- Capital improvement plans
- Water system plan
- Wastewater system plan
- System usage statistics
 - Water purchases/treatment by month from the BPW
 - Wastewater discharged to the BPW by month
- Billing statistics
 - Number of Water and Wastewater customers
 - Monthly (Quarterly) billed usage by customer class
 - Fire protection accounts
 - o Number of hydrants
 - o GPM fire protection requirements of the BPW



Development of Five-Year Financial Projection and Financial Targets

Development of Sales Projection

Customer usages will be projected based on historical growth rates adjusted for high or low usages on a yearly basis. Sales can fluctuate substantially based on weather and has varying effects on each customer classes' usage. Customer growth rates and usage patterns will be normalized and projected for future years. We will discuss with the BPW internal growth projections used and compare to determine appropriate growth rates. Through review of historical sales and discussion with utility staff we will develop a projection of the following:

- 1. Future energy sales
- 2. Future water sales
- 3. Number of customers
- 4. Billing demands
- 5. Miscellaneous revenues
- 6. If a power cost adjustment mechanism is approved as an optional service, this will be incorporated into the financial projection

Development of Utility Revenue Requirements

Revenue requirements are developed through review of historical expenses and discussions with the utility on changes in costs and the utility's budget. Completion of this tasks is summarized below:

• Operating Expense Projection

Operating expenses often include expenses related to operation, maintenance and administration of the utility and the distribution system. Operating expense projections are often based on historical expenses adjusted for changes in costs and includes adjustments for changes that management anticipates will occur in the future.

• Power Supply Projection

Power supply costs typically represent over 70% of an electric utility's total revenue requirement. The magnitude of this expenditure requires this projection to be based on reasonable assumptions that are documented and reviewed with management. To project power supply expenses, we often review the latest twelve months of detail power supply invoices and develop a power supply projection model where we can include growth of the system and changes in power supply costs. We will work with utility staff to estimate power supply costs based on the projected monthly loads.



• Transmission Cost Projection

Transmission costs are often included as part of the power supply bill or may be in a separate invoice. As part of the power supply projection, we will include changes in demand rates for transmission and review the transmission cost projection with utility staff.

Debt Service

The amortization schedules for outstanding debt service will be incorporated into the financial projection. The corresponding principal and interest expense are appropriately classified into the income statement and cash flow sections of the long-term financial projection. Any potential future bonding requirements will be identified and incorporated into the projection with the debt coverage ratios compared with the bond ordinance requirements adjusted for certain safety factors to adjust for changes in weather and subsequent sales.

• Capital Improvement Plan

A critical part of the financial projection is the capital improvement plan received from the utility. Often the capital improvement plan UFS receives is reviewed with utility staff for reasonableness and capabilities of the utility to complete the projects as stated. The financial projection analysis can easily incorporate sensitivity analysis for changes in capital, but it is preferred that the report includes a reasonable approximation of the annual expense. The financial model will incorporate the capital plan and identify the sources of funding either from existing cash reserves, the annual rate funded capital or through the issuance of bonds.

UFS financial analysis and the subsequent cost of service studies are unique in their ability to easily change from cash basis revenue requirements to accrual basis (Utility Basis) revenue requirements. The financial analysis includes both cash basis targets such as cash reserves and debt coverage; and accrual basis targets such as rate of return. Listed below are discussion of the development of the three main financial targets for utilities. UFS studies also include a review of secondary financial matrices such as debt/equity ratios, age of system, days cash on hand and working capital requirements as part of the overall assessment of the financial health of the utility.



Target One: Debt Coverage Ratio

Based on review of bond issues and debt service schedules, the principal and interest expense will be identified and incorporated into the analysis. We will provide a table as shown below to compare projected Debt Service Ratios with requirements in the Bond Ordinance.



Sample Report Table: Debt Coverage Ratio graph and calculation:

Description	Projected Y1		Projected Y2		Projected Y3		Projected Y4		Projected Y5	
Net Income	\$	996,826	\$	997,462	\$	945,213	\$	826,113	\$	758,497
Add Depreciation/Amortization Expense		2,565,601		2,609,101		2,732,859		2,921,523		3,057,531
Add Interest Expense		764,408		726,408		688,408		648,408		606,408
Cash Generated from Operations	\$	4,326,835	\$	4,332,972	\$	4,366,480	\$	4,396,044	\$	4,422,435
Debt Principal and Interest	\$	1,714,408	\$	1,676,408	\$	1,688,408	\$	1,698,408	\$	1,706,408
Projected Debt Coverage Ratio (Covenants)		2.52		2.58		2.59		2.59		2.59
Minimum Debt Coverage Ratio		1.4		1.4		1.4		1.4		1.4



Target Two: Minimum Cash Reserve Calculation

To help ensure timely completion of capital improvements and enable the utility to meet requirements for large, unexpected expenditures and risk factors, the recommended minimum level of cash reserves will be identified. Development of the minimum cash reserves considers several factors. A sample list is below:

- Working capital
- Variations in expenses
- Capital improvement programs
- Annual bond payments
- Exposure to catastrophic events such as extreme weather

Sample Report Table: Minimum Cash Reserves



	Projected	Projected	Projected	Projected	Projected
Description	Y1	Y2	Y3	Y4	Y5
Minimum Cash Reserve Allocation					
Operation & Maintenance Less Depreciation Expense	25.0%	25.0%	25.0%	25.0%	25.0%
Purchase Power Expense	25.0%	25.0%	25.0%	25.0%	25.0%
Historical Rate Base	2.0%	2.0%	2.0%	2.0%	2.0%
Current Portion of Debt Service Payment	83%	83%	83%	83%	83%
Five Year Capital Improvements - Net of bond proceeds	20%	20%	20%	20%	20%
% Plant Depreciated	56%	54%	55%	55%	59%
Calculated Minimum Cash Level					
Operation & Maintenance Less Depreciation Expense	\$ 6,589,952	\$ 6,762,400	\$ 6,941,318	\$ 7,153,036	\$ 7,281,393
Purchase Power Expense	8,381,482	9,722,132	9,982,984	10,548,544	9,731,911
Historical Rate Base	1,527,454	1,689,254	1,769,511	1,877,918	1,877,918
Current Portion of Debt Service Reserve	1,391,419	1,401,379	1,409,679	1,416,319	1,462,799
Five Year Capital Improvements - Net of bond proceeds	3,939,646	3,939,646	3,939,646	3,939,646	3,939,646
Minimum Cash Reserve Levels	\$21,829,952	\$23,514,810	\$24,043,138	\$24,935,462	\$24,293,667
Projected Cash Reserves	\$24,692,803	\$19,224,903	\$17,829,253	\$15,047,239	\$17,559,446



Target Three: Operating Income

The optimal target for setting rates is the establishment of a target operating income to consistently fund capital improvements and replacements. Development of this target considers the following:

- Interest expense on the outstanding debt
- Inflationary increase on asset replacement costs
- Assets contributed by customers to the Utility

Sample Report Table: Target Operating Income



	Projected	Projected	Projected	Projected	Projected
Description	Y1	Y2	Y3	Y4	Y5
Target Operating Income Determinants					
Net Book Value/Working Capital	\$33,525,928	\$38,888,526	\$39,931,938	\$42,194,174	\$38,927,644
Outstanding Principal on Debt	18,160,200	17,210,200	16,210,200	15,160,200	14,060,200
System Equity	\$15,365,728	\$21,678,326	\$23,721,738	\$27,033,974	\$24,867,444
Target Operating Income Allocation					
Interest on Debt	4.21%	4.22%	4.25%	4.28%	4.31%
System Equity	7.06%	6.73%	6.87%	6.90%	7.48%
Target Operating Income					
System Equity	\$ 1,085,106	\$ 1,459,590	\$ 1,629,338	\$ 1,864,944	\$ 1,859,437
Target Operating Income	\$ 1,849,514	\$ 2,185,998	\$ 2,317,746	\$ 2,513,352	\$ 2,465,845
Projected Operating Income	\$ 2,728,770	\$ 2,599,641	\$ 2,394,956	\$ 2,247,337	\$ 2,037,669
Rate of Return in %	5.5%	5.6%	5.8%	6.0%	6.3%



Five-Year Projection Summary

The projections will be summarized, and development of alternative rate tracks will be reviewed and compared to each financial target to help ensure the future financial stability of the utility. We will work with Management and the Governing body in review and development of five-year strategies and rate track. All adjustments are tied to the cost of service study for the test year, so results can easily be updated, and sensitivities run within the same model.

Projected Summary Financial before Rate Adjustments

	Adjusted			Target				Capital	
Fiscal P	rojected Rate	Operating	(Operating	Projected Cash	Recommended	Im	provements	Debt Coverage
Year	Adjustments	Income		Income	Balances	Minimum Cash		Plan	Ratio
Year 1	0.0%	\$ 2,728,770	\$	3,038,480	\$ 16,392,621	\$ 18,099,160	\$	6,065,000	1.10
Year 2	0.0%	2,711,845		3,019,772	14,592,541	19,169,551		2,175,000	1.11
Year 3	0.0%	2,622,411		3,061,319	10,964,992	19,674,886		4,012,870	1.11
Year 4	0.0%	2,473,225		3,149,568	5,938,354	20,516,844		5,420,360	1.12
Year 5	0.0%	2,380,491		3,098,229	4,959,247	20,862,261		1,380,000	1.12

Projected Summary Financials with Rate Adjustment and \$5.0 million bond issuance

		Adjusted		Target						Capital		
Fiscal	Projected Rate	Operating	(Operating	Projec	ted Cash	Re	commended	Im	provements	Debt Co	verage
Year	Adjustments	Income		Income	Bal	ances	Mi	inimum Cash		Plan	Rat	io
Year	1 2.0%	\$ 3,350,054	\$	3,038,480	\$ 17,	013,904	\$	18,099,160	\$	6,065,000		1.26
Year	2 2.0%	3,972,613		3,019,772	22,	477,689		19,169,551		2,175,000		1.44
Year	3 1.0%	4,216,200		3,061,319	21,	453,355		19,674,886		4,012,870		1.53
Year	4 1.0%	4,407,444		3,149,568	21,	578,377		20,516,844		5,420,360		1.62
Year	5 1.0%	4,662,614		3,098,229	21,	908,593		20,862,261		1,380,000		1.71



Electric Cost of Service Study

The development of the cost of service study incorporates the revenue requirement identified as part of the financial projection. This section describes the additional procedures used in development of the cost of service study and sample outputs from previous studies.

Development of customer class demands, and allocation factors used to allocate revenue requirements Load Profile Information

Load profile information identifies how customers use electricity at various times of the day and is critical to ensure the cost of service study is accurate and defensible. UFS works with utility staff in identification of the appropriate sources of load research information. We will analyze information from the following sources:

- Electronic meters installed on time of use and other customers
- Load research information available from other sources
- Analysis of substation feeders
- Utilize our data base of existing load research obtained from other utilities

The load research information identifies the monthly load factors for each class, how much is being used by the class at the peak time of the day when power supply demand or transmission demand charges are determined. The load research information is compared with the hourly system hourly load data to determine the class contributions. The information is then used to determine the class share of transmission and power supply costs.

System Losses

Losses can vary substantially depending on system loading and temperature. We will identify the system loss at the various voltage levels of service to customers. To determine the overall system losses, we typically use a three-year average of losses to reduce the impact of changing weather patterns between the last and first month of each year. The losses are then allocated between voltage level such as transmission, substations, primary service, and secondary voltage levels.

Development of Allocators

The load profile information for each class is used to determine the allocation factors used to allocate expenses based on cost-causation. Examples of cost causation include the identification of the date and time power supply demand charges are determined and each class usage at the time of the peak demands. There are over 40 allocation factors often developed as part of a UFS cost of service study. Allocation factors are developed for each season and developed for specific expenses. A summary of the costs where specific allocation factors need to be developed are listed below.

- Power supply demand cost by time of day and season
- Power supply energy cost by time of day and season
- Distribution related costs for sub-transmission or transmission service
- Distribution related costs for primary metered customers
- Distribution related costs for secondary metered customers
- Customer related costs for each class of customers



Prepare Cost of Service Analysis

Customer classes are typically established based on differences in load and usage patterns. How customers use electricity dictates the cost of providing many of the utility services. The cost of service portion of the model will determine the following:

• Rate adjustment necessary to meet rate of return requirements of the utility

- Cost to serve each class compared with projected revenues
- Rate adjustment necessary for class to meet cost of service requirements
- Monthly customer charge by class
- Energy charge for each customer class
- Demand charge for demand metered customers

A summary of the cost of service analysis is developed similar to the table below:

	Cost of	Projected	
Customer Class	Service	Revenues	% Change
Residential	\$ 47,326,833	\$ 43,615,239	9%
Residential Dual Fuel	21,403	10,081	112%
Residential High Efficiency HVAC	176,818	128,097	38%
Small General Service	17,795,064	16,519,937	8%
SGS - High Efficiency HVAC	59,308	50,427	18%
City Street Lighting	1,639,666	1,194,127	37%
Traffic Signals	127,158	105,392	21%
Security Lighting	198,138	209,386	-5%
Civil Defense Sirens	8,357	8,834	-5%
Medium General Service	30,370,455	30,157,753	1%
MGS - High Efficiency HVAC	194,666	171,438	14%
MGS - Time-of-Use	1,879,529	1,904,024	-1%
Large General Service	10,445,537	10,669,838	-2%
Large Industrial Service	22,575,880	20,755,543	9%
Interruptible Service	5,467,792	4,683,595	17%
Cogen and Small Power Prod	12,203	10,183	20%
Interdepartmental	929,722	946,527	-2%
Total	\$ 139,228,527	\$ 131,140,420	6.2%

The cost of service column from the table above identifies the cost to provide service to each class of customers and is compared with the projected revenues from each class. The percent change is the rate adjustment necessary for each class to achieve cost of service. We typically do not recommend rates move fully to cost of service, but as part of the discussions with staff and Council we develop a plan to move classes toward cost of service to minimize rate impacts on any specific customer class.



Development of new rate classes

As part of the initial discussions with management and review of the existing rate tariffs, we will discuss with utility staff if new rate classes should be considered or if existing rate classes should be combined. Rate classes are created based on similarity in usage patterns, but often utilities will develop new rate classes to create incentives for customers to shift usage to periods of time where power supply costs are lower such as on and off peak time periods for time of use rates. Examples of new rate class developments are listed below.

- Standby charges Cost isolated by investment in facilities to serve customers on a standby basis.
- Interruptible Loads Rates to promote interruptible loads that reflect the savings to the BPW. Our study will isolate costs by power supply demand, energy, and transmission to identify the potential cost savings of an interruptible customer.
- Seasonal Rates The cost of service study allocates costs to each rate class based on seasonal time period. The time periods will be identified through review of system loads and power supply and transmission costs.
- **Time of Use** For time of use rates to be effective in sending the proper price signal, the cost of service analysis is supplemented with marginal costs to identify and recommend appropriate charges on a time of use basis.
- Economic Development Rates
- Rates can be developed to promote economic development by attracting new customers or expansion
 of existing customers. It is important economic development rates be developed using a marginal cost
 approach to ensure existing customers are not unduly subsidizing any reduce rates or fees charged
 under an economic development program.
 - Other Potential Rates are listed below:
 - 1. Public education rates
 - 2. Green Rates
 - 3. Net Metering Rates
 - 4. Aggregation Rates

New rate designs may result in additional charges for the services provided by UFS. As part of the initial kick off conference call we should discuss if any potential new rate classes are being considered.

UTILITY FINANCIAL SOLUTIONS, LLC

Breakdown of cost of service rate structure by type of expense for each class of customers

UFS cost of service studies identify cost in a summary and a detail cost breakdown for each class of customers. For example, the summary of costs identifies the class cost breakdown by customer charge, power supply demand, transmission demand, distribution demand and energy costs. An example is listed below:

					Power	Supply	
				Summe	r Rates	Winter	r Rates
	Monthly						
	Customer	Distribution	Transmission	Demand	Energy	Demand	Energy
Customer Class	Charge	Rate	Rate	Rate	Rate	Rate	Rate
Residential	\$ 21.25	\$ 0.02085	0.0057	\$ 0.0334	\$ 0.0441	\$ 0.0303	\$ 0.04647
Small General Service	43.25	0.0224	0.0057	0.0370	0.0441	0.0300	0.0465
City Street Lighting	-	0.2066	0.0040	0.0197	0.0440	0.0191	0.0465
Traffic Signals	41.02	0.0164	0.0067	0.0293	0.0440	0.0280	0.0465
Security Lighting	7.86	0.0198	0.0125	0.0197	0.0440	0.0191	0.0465
Medium General Service	134.50	2.39	1.13	12.04	0.0440	10.17	0.0465
MGS - High Efficiency HVAC	129.04	2.63	1.26	10.49	0.0425	10.93	0.0451
MGS - Time-of-Use	135.22	3.04	1.44	9.85	0.0428	8.40	0.0451
Large General Service	306.92	2.79	1.30	13.06	0.0428	10.46	0.0451
Large Industrial Service	1,810.78	2.95	1.37	14.50	0.0428	13.76	0.0451
Interruptible Service	176.12	2.59	1.38	10.05	0.0428	9.17	0.0451
Interdepartmental	83.83	2.39	1.19	12.50	0.0428	7.96	0.0451

In addition, further breakdowns are available in the studies depending on the needs of each utility. A sample detailed breakdown of distribution costs is listed below:

Cost Breakdown	Residential	Sr	nall General Service	Medium General Service	M	GS - High Efficiency HVAC	MG	S - Time-of- Use	La	rge General Service	Ir	Large ndustrial Service
Distribution	\$ 0.0079	\$	0.0092	\$ 1.96	\$	2.15	\$	2.49	\$	2.29	\$	2.41
Transmission	0.0057		0.0057	1.13		1.26		1.44		1.30		1.37
Transformer	0.0012		0.0014	0.29		0.32		0.37		0.34		0.36
Substation	0.0006		0.0007	0.14		0.15		0.18		0.16		0.17
Direct	 -		-	-		-		-		-		-
Subtotal - kWh or kW Charge	\$ 0.0154	\$	0.0169	\$ 3.5204	\$	3.8866	\$	4.4820	\$	4.0891	\$	4.3110
Contribution to City	\$ 0.0112	\$	0.0112	\$ 0.0112	\$	0.0112	\$	0.0112	\$	0.0112	\$	0.0112
Distribution Customer Costs	\$ 10.56	\$	21.31	\$ 59.42	\$	59.42	\$	61.24	\$	90.12	\$	151.94
Transformer Customer Costs	1.17	•	2.33	7.00		7.00		7.00		10.49	•	10.49
Substation Customer Costs	0.09		0.18	0.55		0.55		0.55		0.83		0.83
Meter O&M	0.27		0.59	0.48		0.48		1.01		1.01		18.83
Meter Reading	0.25		0.50	1.49		1.49		1.49		2.24		2.24
Services	0.34		1.17	14.09		8.63		12.47		125.04		1,549.26
Customer Service	 8.58		17.15	51.46		51.46		51.46		77.18		77.18
Customer Charge	\$ 21.25	\$	43.25	\$ 134.50	\$	129.04	\$	135.22	\$	306.92	\$	1,810.78



Water Cost of Service

Water Allocation Factors

A critical part of the cost of service study is the development of allocators from customer classes' usage patterns. The allocators are used to allocate the fixed capacity costs, semi-variable operating costs, variable chemicals and power, and customer-related costs. The characteristics modeled will include total water used, peak day, peak hour and customer billing, metering, and services requirements. To obtain peak use ratios by meter size we will perform the following:

- Review internal usage patterns available and supplement with peak ratio information on customer classes developed from generic sources
- Review peak loadings on water production readings
- Review peak month loadings from billing statistics

Identification of Peak Day/Peak Hour Allocation Factors

Peak usage ratios will be established for each customer class using the following information:

- Review of pumping statistics of the wells over the past five years
- Review of peak loadings on water production wells for each month
- Review of monthly usage for each customer class and meter size (billing statistics)

The peak day and peak hour usage factors will be estimated based on average monthly usage compared to peak monthly usage with adjustments made for the monthly billing cycles. The calculated peak is compared with the actual peaks from the production statistics and adjusted to balance. Listed below is an example table that will be developed for the BPW.

Year 1 Peak Factor Year 2 Peak Factor Two Year Average Average Average Average Average CCF Usage Monthly Peak to CCF Usage Monthly Peak to during peak Usage per year - CCF Atverage Month year - CCF Ratio Month year - CCF										
Average Average Average Average Average Average Monthly Peak to CCF Usage Monthly Peak to Average		Yea	ar 1 Peak Fact	tor	Yea	ar 2 Peak Fac	tor	Tw	o Year Avera	ge
CCF Usage during peak Month Monthly Usage per year - CCF Peak to Average Ratio Monthly Usage per year - CCF Peak to Average Ratio CCF Usage during peak year - CCF Monthly Peak to Average Ratio Peak to Average Ratio 5/8" Meter 4,277 2,350 1.82 3,210 2,177 1.47 3,744 2,264 1.66 3/4" Meter 2.68 1.62 1.66 200 120 1.67 234 141 1.66 1" Meter 2.897 1,422 2.04 2,411 1,191 2.02 2,654 1,307 2.0 1-1/2" Meter 1,149 525 2.19 1,059 521 2.03 1,104 523 2.1 2" Meter 3,348 1,704 1.96 2,780 1,661 1.67 3,064 1,682 1.8 3" Meter 873 510 1.71 654 370 1.77 763 440 1.7 4" Meter 839 602 2.87 1,918 1,203 1.59 1,852 91			Average			Average			Average	
during peak Month Usage per year - CCF Average Ratio during peak Month Usage per year - CCF Average Ratio during peak Month Usage per year - CCF Average Month during peak year - CCF Month Usage per Month Average year - CCF Average Month Average year - CCF Average Mather Average Month Average year - CCF Average Mather Average Average mather 3'4" Meter 2,857 1,422 2,04 2,411 1,191 2,02 2,654 1,307 2,0 1-1/2" Meter 3,348 1,704 1,96 2,780 1,661 1.67 3,064 1,682 1.8 3" Meter		CCF Usage	Monthly	Peak to	CCF Usage	Monthly	Peak to	CCF Usage	Monthly	Peak to
Month year - CCF Ratio Month year - CCF Ratio Month year - CCF Ratio 5/8" Meter 4,277 2,350 1.82 3,210 2,177 1.47 3,744 2,264 1.66 3/4" Meter 268 162 1.66 200 120 1.67 234 141 1.66 1" Meter 2,897 1,422 2.04 2,411 1,191 2.02 2,654 1,307 2.0 1-1/2" Meter 1,149 525 2.19 1,059 521 2.03 1,104 523 2.11 2" Meter 3,348 1,704 1.96 2,780 1,661 1.67 3,064 1,682 1.88 3" Meter 873 510 1.71 654 370 1.77 763 440 1.7 4" Meter 839 602 1.39 636 516 1.23 737 559 1.33 6" Meter 1,786 622 2.87<		during peak	Usage per	Average	during peak	Usage per	Average	during peak	Usage per	Average
5/8" Meter4,2772,3501.823,2102,1771.473,7442,2641.63/4" Meter2681621.662001201.672341411.61" Meter2,8971,4222.042,4111,1912.022,6541,3072.01-1/2" Meter1,1495252.191,0595212.031,1045232.12" Meter3,3481,7041.962,7801,6611.673,0641,6821.83" Meter8735101.716543701.777634401.74" Meter8396021.396365161.237375591.36" Meter1,7866222.871,9181,2031.591,8529122.2		Month	year - CCF	Ratio	Month	year - CCF	Ratio	Month	year - CCF	Ratio
3/4" Meter2681621.662001201.672341411.61" Meter2,8971,4222.042,4111,1912.022,6541,3072.01-1/2" Meter1,1495252.191,0595212.031,1045232.12" Meter3,3481,7041.962,7801,6611.673,0641,6821.83" Meter8735101.716543701.777634401.74" Meter8396021.396365161.237375591.36" Meter1,7866222.871,9181,2031.591,8529122.2	5/8" Meter	4,277	2,350	1.82	3,210	2,177	1.47	3,744	2,264	1.65
1" Meter2,8971,4222.042,4111,1912.022,6541,3072.0I-1/2" Meter1,1495252.191,0595212.031,1045232.12" Meter3,3481,7041.962,7801,6611.673,0641,6821.83" Meter8735101.716543701.777634401.74" Meter8396021.396365161.237375591.36" Meter1,7866222.871,9181,2031.591,8529122.2	3/4" Meter	268	162	1.66	200	120	1.67	234	141	1.66
I-1/2" Meter1,1495252.191,0595212.031,1045232.12" Meter3,3481,7041.962,7801,6611.673,0641,6821.83" Meter8735101.716543701.777634401.74" Meter8396021.396365161.237375591.36" Meter1,7866222.871,9181,2031.591,8529122.2	1" Meter	2,897	1,422	2.04	2,411	1,191	2.02	2,654	1,307	2.03
2" Meter 3,348 1,704 1.96 2,780 1,661 1.67 3,064 1,682 1.8 3" Meter 873 510 1.71 654 370 1.77 763 440 1.7 4" Meter 839 602 1.39 636 516 1.23 737 559 1.3 6" Meter 1,786 622 2.87 1,918 1,203 1.59 1,852 912 2.2	1-1/2" Meter	1,149	525	2.19	1,059	521	2.03	1,104	523	2.11
3" Meter 873 510 1.71 654 370 1.77 763 440 1.7 4" Meter 839 602 1.39 636 516 1.23 737 559 1.3 6" Meter 1,786 622 2.87 1,918 1,203 1.59 1,852 912 2.2	2" Meter	3,348	1,704	1.96	2,780	1,661	1.67	3,064	1,682	1.82
4" Meter 839 602 1.39 636 516 1.23 737 559 1.3 6" Meter 1,786 622 2.87 1,918 1,203 1.59 1,852 912 2.2	3" Meter	873	510	1.71	654	370	1.77	763	440	1.74
6" Meter 1,786 622 2.87 1,918 1,203 1.59 1,852 912 2.2	4" Meter	839	602	1.39	636	516	1.23	737	559	1.31
	6" Meter	1,786	622	2.87	1,918	1,203	1.59	1,852	912	2.23

Determination of Peak to Average Ratio using Two Year Average



Application of Peak to Average Ratio to Customer Classes

	Bas	ie i	N	laximum Da	у	I	Maximum Hour Zapacity Total Extra Factor Capacity Capacity 1.47 2.4 0.7 1.67 0.1 0.0 2.02 1.8 0.9 2.03 0.8 0.4			
Customer Class	Annual Use	Average Rate	Capacity Factor	Total Capacity	Extra Capacity	Capacity Factor	Total Capacity	Extra Capacity		
5/8" Meter	794.576	1.6	1.47	2.4	0.8	1.47	2.4	0.77		
3/4" Meter	43,620	0.1	1.67	0.1	0.1	1.67	0.1	0.06		
1" Meter	434,796	0.9	2.02	1.8	0.9	2.02	1.8	0.91		
1-1/2" Meter	190,019	0.4	2.03	0.8	0.4	2.03	0.8	0.40		
2" Meter	606,089	1.2	1.67	2.1	0.8	1.67	2.1	0.84		
3" Meter	135,166	0.3	1.77	0.5	0.2	1.77	0.5	0.21		
4" Meter	188,509	0.4	1.23	0.5	0.1	1.23	0.5	0.09		
6" Meter	439,040	0.9	1.59	1.4	0.5	1.59	1.4	0.54		
Total System	2,831,815	5.80		9.63	3.82		9.63	3.82		

Expense Projection

Revenue requirements will be projected for future years based on actual data adjusted for anticipated capital improvements and changes in labor, benefits, and supplies. We will project the utility's revenue requirements for a five-year period based on certain assumptions such as inflation, anticipated changes in costs, additional debt issuances, capital improvements, and additional costs related to sales growth. A detailed cost projection will be completed balancing water purchases with retail sales and system losses.

Water Rate Design and Revenue Proof

We will work with utility management and the governing Council in design of water rates for customers. We will proof the revenues based on projected billing parameters to help ensure the rates are sufficient to meet utility revenue requirements. We will identify the potential rate impact to utility customers at various usage levels.



Wastewater Cost of Service

Wastewater Allocation Factors

Expense categories will be analyzed and reviewed to determine an appropriate allocation factor. The allocation factor will be developed based on cost causation and allocated to each billing parameter. The allocation factors developed include peaking factors, flow characteristics, and customer related costs. Industrial pre-treatment costs will be reviewed, and allocation factors developed to determine the charges for Industrial Waste Discharge Fees. A sample list of allocators is listed below:

Account Name	Volume	BOD	TSS	Phos	G&O	Cust	Total
Generation							
Salary & Benefits	53%	29%	14%	4%	0%	0%	100%
Production Electricity	58%	25%	13%	4%	0%	0%	100%
Production Water	53%	28%	12%	7%	0%	0%	100%
Gas Heating	53%	28%	12%	7%	0%	0%	100%
Oper Permits & Fees	53%	28%	12%	7%	0%	0%	100%
Other Expenses	53%	28%	12%	7%	0%	0%	100%
<u>Operations</u>							
Salary & Benefits	53%	29%	14%	4%	0%	0%	100%
Production/Treatment Chemicals	27%	32%	15%	27%	0%	0%	100%
Sludge Disposal	0%	75%	25%	1%	0%	0%	100%
Other Expenses	53%	28%	12%	7%	0%	0%	100%
Pollution Control	27%	32%	15%	27%	0%	0%	100%
Plant Maintenance	40%	40%	19%	0%	0%	0%	100%
Operations Allocation	40%	40%	19%	0%	0%	0%	100%
Technology Director Allocation	53%	29%	14%	4%	0%	0%	100%
Administration & General							
Insurance	54%	16%	12%	2%	0%	16%	100%
W/WW Engineering Allocation	0%	0%	0%	0%	0%	100%	100%
IT Allocation	0%	0%	0%	0%	0%	100%	100%
Other	54%	16%	12%	2%	0%	16%	100%
Facilities & Warehouse	0%	0%	0%	0%	0%	100%	100%
Accounting & Collecting							
Finance Allocation	54%	16%	12%	2%	0%	16%	100%
Accounting Allocation	54%	16%	12%	2%	0%	16%	100%
Corporate Allocation	54%	16%	12%	2%	0%	16%	100%
Personnel Allocation	54%	16%	12%	2%	0%	16%	100%
Other	54%	16%	12%	2%	0%	16%	100%
<u>Collection</u>							
Services / Maintenance	0%	0%	0%	0%	0%	100%	100%
Lift Station Maintenance	0%	0%	0%	0%	0%	100%	100%
Customer Service Allocation	0%	0%	0%	0%	0%	100%	100%
Meter Reading Allocation	0%	0%	0%	0%	0%	100%	100%
Billing Allocation	0%	0%	0%	0%	0%	100%	100%
Other	0%	0%	0%	0%	0%	100%	100%

We will review the cost of service results with Management to obtain input and direction prior to development of the water and wastewater rate structures. As part of this we will prepare a power point presentation of the results and have the Excel model to develop other alternative rate tracks if requested.



Customer Type	Cos	t of Service Rates	Projected Revenues	Percentage Adjustment
5/8"	\$	3,543,212	\$3,045,073	16%
3/4"		100,929	93,713	8%
1"		813,759	770,611	6%
1-1/2"		432,333	371,866	16%
2"		1,457,418	1,265,868	15%
3"		270,158	245,673	10%
4"		412,630	370,115	11%
6"		303,145	300,426	1%
Flat Rate		190,341	171,035	11%
Total	\$	7,523,925	\$6,634,380	13.4%

Example COS Summary Table

Example Monthly Customer Charge Cost of Service Results

	Current								
		U I	Jnit				COS		
	 Current	CI	narge	Cu	rrent	Monthly			
	Monthly	1s	t and	Chrg 3rd		Customer		COS Unit	
	Charge	2nd	Block	В	lock	Charge		Charge	
In-City									
5/8"	\$ 9.45	\$	2.18	\$	2.05	\$	10.53	\$	2.08
1"	16.00		2.18		2.05		22.34		2.08
2"	52.25		2.18		2.05		72.16		2.08
3"	106.00		2.18		2.05		150.68		2.08
4"	168.00		2.18		2.05		270.92		2.08
6"	240.00		2.18		2.05		586.42		2.08
Outside City									
5/8"	\$ 14.50	\$	3.68	\$	2.89	\$	17.15	\$	2.93
1"	26.00		3.68		2.89		34.77		2.93
2"	78.25		3.68		2.89		105.06		2.93
4''	158.00		3.68		2.89		385.31		2.93
6"	248.00		3.68		2.89		821.48		2.93

Storm Water Cost of Service

Storm Water Allocation Factors

Expense categories will be analyzed and reviewed to determine an appropriate allocation factor. The allocation factor will be developed based on cost causation and allocated to each billing parameter.

Example COS Summary Table

Storm Water-Cost of Service Study	
Total Revenue Requirements	\$ 679,334
NBV used in study	6,224,138
Rate of Return	5.40%
Principal Outstanding on Debt	470,000
Projected Revenue	620,000
% Adjustment	9.60%

Example of Revenue Requirements

Description	Ut	ility Basis
Salaries	\$	62,035
Professional Services		4,618
Maintenance		14,643
Insurance and Other		3,527
Capital Plans		
Debt Payments (P+I)		
Depreciation		253,221
Supplies		2,500
Other		-
Miscellaneous		1,012
Other Revenues		-
Rate of Return		337,779
Total Revenue Requirements	\$	679,334



Rate Design

Design of utility rates uses input from the cost of service study as guidance on changes to rate classes and the rate components for each rate class. Cost of service results are one factor in design of rates for customers. Other factors must be considered such as impact on customers, social and environmental issues, and philosophy of the utility's governing body.

UFS will develop and recommend a schedule of electric, water, wastewater, and solid waste rates designed to generate adequate revenues, and reflect or move toward the recommended rate adjustment. A five-year rate track will be provided with the financial projection. Rate designs for the existing rate structure will consist of:

- One Year Electric Rate Design
- One Year Water Rate Design
- One Year Wastewater Rate Design
- One Year Storm Water Rate Design

Additional years' rate design may be added at additional cost. The rate design model identifies the impacts on customers at various usage levels similar to the tables below and is listed by rate class, meter size and usage level.

Please note that all rate designs outside of the current rate structure will be charged hourly.



Summary of overall rate adjustments for each class - Electric

Customer Class	Class Cades	20	015 Revenue less	20	15 Revenue with	Percent
	Class Codes		Adjustments		Adjustments	Increase
ResidentialRate RES	RES	\$	43,615,239	\$	45,197,813	3.6%
Residential Dual FuelRate RES-DF	RES-DF	\$	10,081	\$	10,784	7.0%
Residential High Efficiency HVACRate RESELGEO	RESELGEO	\$	128,097	\$	137,070	7.0%
Small General ServiceRate GS	GS	\$	16,519,937	\$	17,219,208	4.2%
SGS - High Efficiency HVACRate GS-HEF	GS-HEF	\$	50,427	\$	52,950	5.0%
Medium General ServiceRate MGS	MGS	\$	30,157,753	\$	31,118,228	3.2%
MGS - High Efficiency HVACRate MGS-HEF	MGS-HEF	\$	171,438	\$	179,115	4.5%
MGS - Time-of-UseRate MGS-TOU	MGS-TOU	\$	1,904,024	\$	1,975,005	3.7%
Large General ServiceRate LGS	LGS	\$	10,669,838	\$	10,771,426	1.0%
Large Industrial ServiceRate LIS	LIS	\$	20,755,543	\$	21,602,500	4.1%
Interruptible ServiceRate INTR	INTR	\$	4,683,595	\$	4,917,673	5.0%
Cogen and Small Power ProdRate COGEN	COGEN	\$	10,183	\$	10,602	4.1%
InterdepartmentalRate MUNI	MUNI	\$	946,527	\$	984,040	4.0%
Civil Defense Sirens25	CDS	\$	8,834	\$	9,049	2.4%
City Street Lighting27	CSL	\$	1,185,625	\$	1,209,774	2.0%
Security Lightingvarious	SL	\$	209,386	\$	212,364	1.4%
Traffic Signalsvarious	TS	\$	105,392	\$	110,373	4.7%
Total		\$	131,131,917	\$	135,717,975	3.50%

Summary of overall rate adjustments for each class – Water/Wastewater

		# of	Cust Chrg	Volume			
Meter Size	Base Rate	Customers	Rev	Rate	Volume	Volume \$	Total Revs
In-City							
5/8	\$ 10.78	9,715	\$1,256,732	\$2.80	583,022	\$ 1,632,462	\$ 2,889,194
3/4	\$ 10.78	322	41,654	\$2.80	29,126	81,553	123,207
1	\$ 23.74	2,183	621,893	\$2.80	219,972	615,922	1,237,815
1 1/4	-	-	-	\$2.80	-	-	-
1 1/2	41.20	314	155,242	\$2.80	101,203	283,368	438,610
2	63.27	393	298,381	\$2.80	373,189	1,044,929	1,343,311
3	122.04	23	33,683	\$2.80	78,849	220,777	254,460
4	217.83	29	75,805	\$2.80	117,247	328,292	404,096
6	456.88	4	21,930	\$2.80	103,379	289,461	311,391
Total Revenues		12,983	2,505,320		1,605,987	4,496,764	7,002,084
		# of	Cust Chrg	Volume			
Meter Size	Base Rate	Customers	Rev	Rate	Volume	Volume \$	Total Revs
In-City							
5/8	11.65	9,715	1,358,157	\$2.80	583,022	1,632,462	2,990,619
3/4	11.65	322	45,016	2.80	29,126	81,553	126,568
1	25.50	2,183	667,998	2.80	219,972	615,922	1,283,920
1 1/4	-	-	-	2.80	-	-	-
1 1/2	43.00	314	162,024	2.80	101,203	283,368	445,392
2	68.00	393	320,688	2.80	373,189	1,044,929	1,365,617
3	130.00	23	35,880	2.80	78,849	220,777	256,657
4	235.00	29	81,780	2.80	117,247	328,292	410,072
6	480.00	4	23,040	2.80	103,379	289,461	312,501
Total Revenues		12,983	2,694,583	25	1,605,987	4,496,764	7,191,346
Proposed Rate Cha	ange					l	2.7%



Sample Report Table 1:

<u>5/8</u>	Cur	rent Rates	Pro	posed Rates
Customer Service Charge	\$	10.36	\$	11.00
Commdity Rate	\$	1.72	\$	1.72

Usage Level in CCF	Current Rates	Proposed Rates	Dollar Impact	Percent Change
4	\$ 17.24	\$ 17.88	\$ 0.64	3.71%
6	20.68	21.32	0.64	3.09%
9	25.84	26.48	0.64	2.48%
12	31.00	31.64	0.64	2.06%
15	36.16	36.80	0.64	1.77%





Sample Report Table 2:

<u>4</u>	Cur	rent Rates	Pro	posed Rates
Customer Service Charge	\$	210.14	\$	220.00
Commodity Rate		1.72		1.72

Usage Level in CCF	Current Rates	Proposed Rates	Dollar Impact	Percent Change
175	\$ 511.14	\$ 521.00	\$ 9.86	1.93%
275	683.14	693.00	9.86	1.44%
375	855.14	865.00	9.86	1.15%
475	1,027.14	1,037.00	9.86	0.96%
575	1,199.14	1,209.00	9.86	0.82%





Proposed rates and percentage impacts at various levels of usage

	•	• •		0				
	C	urrent Rates	2015 PROPOSED RATE	2015 PROPOSED RATE DESIGNS			ervice Ra	tes
Monthly Customer Charge:			Monthly Customer Charge:			Monthly Customer	Charge:	
Customers #1	\$	14.90	Customers #1	\$	16.40	Customers #1	\$	21.44
Winter Block 1 (0 - All kWh)	\$	0.09483	Winter Block 1 (0 - All kWh)	\$	0.09740	Winter Energy	\$	0.10369
Summer Block 1 (0 - All kWh)	\$	0.11475	Summer Block 1 (0 - All kWh)	\$	0.11650	Summer Energy	\$	0.10448
Revenues from Current Rates	\$	43,615,239	Revenues from Proposed Rates	\$	45,197,813			
			Percentage Change from Current		3.63%			



Residential dollar impacts of customers at various usage levels

	Current Bill			Current Bill Proposed Bill		Dollar Change	Percent Change	% Customers Ending
Usage (KWII)		(\$)		(\$)		(\$)	(%)	in Block
230	\$	39.00	\$	41.00	\$	2.00	5.12%	4.01%
330	\$	49.48	\$	51.69	\$	2.21	4.47%	10.50%
430	\$	59.96	\$	62.39	\$	2.43	4.05%	12.13%
530	\$	70.44	\$	73.08	\$	2.64	3.75%	13.04%
630	\$	80.92	\$	83.78	\$	2.86	3.54%	12.98%
730	\$	91.40	\$	94.47	\$	3.08	3.37%	11.38%
830	\$	101.88	\$	105.17	\$	3.29	3.23%	9.56%
930	\$	112.35	\$	115.86	\$	3.51	3.12%	7.57%
1030	\$	122.83	\$	126.56	\$	3.72	3.03%	5.53%



Meetings, Reports and Deliverables

Meetings

The following meetings are anticipated by conference call:

- Kick-off meeting Clarify scope of services and expectations of management
- Fieldwork Verify data collected
- Review draft reports with management
- Presentation as requested by management such as review report with Governing body

Format of Reports

UFS reports are typically separated into two reports listed below. Separate reports will be issued for each utility.

- **Executive Summary Report** An overview that identifies the objectives, process, and results of the rate study in a clear and concise format, the report includes graphs, charts, tables, and recommendations.
- Rate Design Recommendation Report The rate design report includes the following:
 - Comparison of the current and proposed rates
 - Expected revenues generated from proposed rates
 - Impact on customer classes at various usage levels or load factors within each rate class

Presentation of Cost of Service and Rate Design Study

A critical aspect of the study is the clear and concise presentation to the governing body of the utility. UFS professionals are skilled at explaining and working with advisory and governing bodies to ensure decisions are based on information they can understand and apply to their community.



Firm Qualifications

Qualifications Introduction

UFS has a long-standing relationship and history, since 2001, in assisting municipalities with cost of service and financial analysis for utilities and are recognized experts in the utility field. Our group and the project team assigned to this engagement is composed of highly qualified, experienced, and knowledgeable professionals who remain current on all issues facing utilities. UFS' reputation has resulted in an industry leading status shown by our frequent request to instruct classes and speak at conferences around the nation, the number of rate studies we have completed.

UFS provides consulting services to assist publicly owned utilities in meeting their strategic and financial objectives. Services are designed to ensure complete client satisfaction and a commitment that:

- Services will be completed in the agreed upon timeframe
- Services are delivered within budget for services requested
- Services provided will meet or exceed client expectations
- Services will be unbiased and independent recommendations provided to the utility

The Project Manager for the BPW will be Dawn Lund and staff as listed in this proposal. The resume of each individual is included in the resume section below. This section includes:

- 1. A summary of our experience and qualifications
- 2. Name of Contact Person for UFS
- 3. Proposed Team Members and Locations
- 4. Resumes of UFS personnel

Our experience and commitment to publicly owned utilities ensures that we understand the issues they face and can assist in providing a variety of services including:

- Cost of service and rate design
- Review of indirect cost allocations
- Fee and ancillary service charges
- Benchmarking analysis for utilities
- Financial analysis and feasibility studies for offering telecommunication services
- Evaluating and developing policies and procedures
- Econometric forecasts of sales and load growth
- Power supply negotiation and financial analysis



Summary of Qualifications and Experience

Industry Leading Status

Utility Financial Solutions, LLC (UFS) are recognized experts in the utility field assisting utilities with cost of service and financial analysis. UFS is an industry leader and frequently requested to teach classes and present at utility conferences around the nation.

Training for Utility Management and Governing Bodies

UFS teaches a series of cost of service, rate design and financial training courses for utility management and governing bodies through American Public Power (APPA) education institutes, on-site training, and webinars. We are instructors for their training courses to assist with their certification program. Additionally, UFS teaches Water Cost of Service and Rate Design for EUCI, an industry leader in conferences and courses around the nation.

Training for Utility Staff

UFS personnel are the instructors on cost of service and financial planning courses offered through the American Public Power Association (APPA) and the National Association of Regulatory Utility Commissioners (NARUC). These courses include the following:

- Basic Cost of Service
- Intermediate Cost of Service
- Advanced Cost of Service
- Financial Planning
- Utility Financial Check-up
- Cost of Service and Rate Design for Distributed Generation
- Development of Line Extension Policies
- Rate Structures to promote Energy Conservation
- Rate Structures to create Revenue Stability
- Advanced issues in Rate Design
- Advanced issues in Cost Allocations

Conference Presentations

UFS staff are frequently requested to present special topics at regional conferences around the nation including the APPA's National Conference, Educational Institutes, E&O Workshop and the Business and Financial Workshop. A sample of recent presentations are listed below:

- Development of Avoided Cost and Rate Designs for Distributed Generation
- Appropriate levels of Contributions to BPW (Payment in lieu of Tax)
- Information provided by Cost of Service Studies
- Cash Reserve Policies for Electric Utilities
- Development of Utility Extension Policies
- Development of Key Financial Targets
- Cost of Service Challenges and Solutions

UFS' industry leading status has allowed us to present courses on distributed generation to the US Department of Energy and provide them with proper pricing methods to recover costs and promote renewable generation.



Quality Control

Proper quality control and management includes help ensure the accomplished work is in alignment with the project scope, is completed timely, within budget and the results are accurate and defensible. UFS implements several quality controls to achieve these desired goals, including a three-level review of the financial projection, cost of service studies and that rate designs achieve the desired revenue requirements. The quality controls developed by UFS are specific to utility rate studies and are based on our prior experience working with utilities in the USA, Guam, the Caribbean, and Canada. All portions of our studies include the following at a minimum:

- 1. Development of a detailed work plan based on scope of services and discussion with management
- 2. Establish work plan with projected milestones and timelines
- 3. Proof and Balance historical usage, expenses, and revenues with audited financial statements
- 4. Compare UFS financial projections with utility budgets
- 5. Review by Project Manager of projections and cost of service study
- 6. Review by UFS President or Vice-President of study results
- 7. Presentation of results by UFS with Utility Staff prior to finalizing study

Timeliness of Studies

Part of the quality control includes the timely completion of the rate studies. UFS experience in completing studies provides us the ability to complete the studies as requested and discussed in the initial kick-off conference call.

Experience:

UFS extensive experience includes completion of rate studies in 43 states, including Illinois and Guam, the Caribbean and Canada. We have worked with small utilities as well as some of the largest public power systems around the Country. A small sample includes Nashville TN, Rochester MN, Danville VA, Naperville IL, Cedar Falls IA, Palo Alto CA, and Imperial Irrigation District CA.

UFS works with the utilities governing bodies to obtain rate approvals and develops rates to assist utilities in meeting the community's objectives. We have become the nation's leader in rate development and a sample of some of our services is listed below:

- Development of power cost adjustments
- Time of use rates
- Economic Development Rates
- Standby rates
- Distributed Generation Rates
- Line extension policies
- Street lighting rates
- Combining or expanding rate classes



Financial Strength

UFS commenced business in 2001 and has the highest financial rating by Dunn and Bradstreet.

Independence

UFS maintains its independence throughout its engagements to help ensure unbiased recommendations to the governing bodies. We do not provide services that could impair our independence such as engineering, accounting, or auditing services. UFS only provides financial services related to Financial Planning, Cost of Service and Rate Designs for Utilities.

Diversity of UFS Staff

The proper development of rate study requires knowledge in accounting, finance, economics, and engineering. Utility staff has diverse backgrounds that include degrees in accounting (CPA), engineering, finance, economics, and information technology.

Name and title of primary contact person

Dawn Lund Vice President, Utility Financial Solutions, LLC E-mail - dlund@ufsweb.com Cell - (231) 218-9664 Date firm established - UFS was established in September 2001

Proposed service team including titles and responsibilities

Mark Beauchamp - President Dawn Lund – Vice President Dan Kasbohm – Manager Mike Johnson – Manager Chris Lund – Business and Technology Manager Joan Bakenhus – Senior Financial Analyst Jillian Jurczyk – Financial Analyst Robert Blank – Financial Analyst Carolyn Ragusett – Administrative Assistant



Project Team Qualifications

Proposed team members

UFS has put together a project team with the knowledge and experience to successfully meet your requirements and to deliver the report by the agreed upon timeframe. The team has over 100 years of combined experience performing similar studies for utilities. This provides the BPW with the experience to creatively solve financial and operational issues and help ensure financial stability in future years. The project team assigned has six team members located in Michigan plus support services out of Wisconsin and Nebraska. This team has completed cost of service, financial plans, and rate design studies in 43 states, Guam, and the Caribbean.

The office locations of UFS are listed below:

Full Time Staff and Office Locations		
Main Office and Contact, authorized to	Authorized to negotiate and bind contract:	
negotiate and bind contract:		
Title: President	Title: Vice President	
Mark Beauchamp	Dawn Lund	
185 Sun Meadow Ct	P. O. Box 582	
Holland MI 49424	Leland MI 49654	
UFS since 2001	UFS since 2006	
Industry Experience since 1981	Industry Experience since 1996	
Phone 616-393-9722	Cell 231-218-9664	
Fax 888-501-0998	Fax 888-566-4430	
Cell 616-403-5450	dlund@ufsweb.com	
mbeauchamp@ufsweb.com		
Title: Senior Analyst	Title: Senior Analyst	
Dan Kasbohm	Mike Johnson	
14986 Sandstone Road	4901 Hermsmeier Road	
Grand Haven MI 49417	Madison WI 53714	
UFS since 2008	UFS since 2011	
Industry Experience since 2008	Industry Experience since 1995	
Cell 616-402-7045	Phone 608-230-5849	
Fax 888-499-6609	Fax 888-809-9640	
dkasbohm@ufsweb.com	Cell 608-609-6279	
	mjohnson@ufsweb.com	



Staff Availability

UFS has adequate staff available to complete the tasks in the timeline requested.

Resumes

The next section consists of resumes of the team members of UFS.





Mark Beauchamp, CPA, CMA, MBA

President, Utility Financial Solutions, LLC

Email:mbeauchamp@ufsweb.comCellular:616-403-5450Location:Holland, MI

Education

- AAS Water Purification Technology
- ABA Business Administration
- BBA Major Accounting
- MBA Master's Degree in Business

Course Instructor

American Public Power Association (APPA)

- Advanced Cost of Service Course (Cash Basis & Utility Basis of Ratemaking)
- Intermediate Cost of Service (Cash Basis & Utility Basis of Ratemaking)
- Basic Cost of Service (Cash Basis and Utility Basis of Ratemaking)
- Financial Planning for Municipal Utilities
- Financial Planning for Board & Councils
- Financial Planning and Rate Setting for Managers (Part of Managers Certificate Program)

American Municipal Power (AMP)

• Financial Planning and Rate Designs for Electric Utilities

Expert Witness Service

- Detroit Edison vs. Ameritech Provided expert witness services for Detroit Edison on development of Pole Attachment Rates for Ameritech
- Nebraska State Unicameral Served as an expert witness before the state of Nebraska Unicameral on Proper rate setting and credits to provide customer installed renewable generation
- Dayton Power & Light Provided expert witness services on pole attachment rates. Case was resolved prior to Court appearance
- Coldwater Board of Public Works Provide expert witness services on rate challenge by large industrial customer. Case was dropped after deposition was provided
- Smethport PA Provided deposition and responses to Pennsylvania Public Service Commission on Rate Filing for Smethport

License and Qualifications

- Class "A" license in wastewater treatment from the State of Michigan
- (CPA) Certified Public Accountant Wisconsin
- (CMA) Certified Management Accountant Institute Certified Management Accountants

Course Instructor

Michigan State University

- Advanced Issues in Cost Allocation (Utility Basis of Rate Making)
- Retail Costing and Pricing of Electricity
- Wholesale Costing and Pricing of Electricity

Southwest American Water Works Association Michigan Rural Water Association

• Cost of Service & Rate Making for Water Utilities

Michigan Finance Government Officers Association

 Cost of Service & Rate Making for Water & Wastewater Utilities

Industry Involvement

- Member of the American Public Power Association
- Member of the American Water Works Association
- Member of the Institute of Management Accountants
- Speaker at national conferences on Financial Planning for Municipal Utilities, Pricing for Water Utilities, Pricing Fiber Optic backbone systems, Unbundling Electric Rates, and Ways to Attract and Retain Customers
- Author of articles appearing in national magazines and newsletters regarding pricing fiber optics, training electric rates, and designing water rates



Dawn Lund

Vice-President, Utility Financial Solutions, LLC



Dawn has utility energy experience pricing and marketing utility services for electric, water and wastewater beginning in 1996. Dawn has worked with UFS since 2006 and previously worked with a large utility and held positions as Cost and Rate Specialist and Marketing and Communications Specialist. Dawn works with utilities across the country teaching financial concepts and is also the instructor for Financial Planning courses for the American Public Power Association. She is also a regularly requested speaker for various regional and national organizations.

Email: dlund@ufsweb.com *Cellular:* 231-218-9664 *Location:* Traverse City, MI

Cost of Service (COS)

- Completed electric water and wastewater cost of service and rate design studies for utilities across the country, Guam, and the Caribbean
- Determining appropriate allocations of overhead costs between utility services

Long-term financial analysis

- Development of long-term sales and expense projections for electric, water, and wastewater utilities
- Development of long-term financial plan and rate track for electric, water, and wastewater

Presentation/Training

- Presentations to City Councils and Boards for approval of utility rates and proposed rate tracks
- Instructor for APPA's Financial Planning courses
- Monthly presentations to various organizations on topics such as: financial planning, key financial targets, cash policies and how to explain rate increases to the end user, cost of services challenges/solutions, and Introduction to allocation studies

Rate Design

- Development of electric rate designs to meet financial and social objectives of utility
- Development of special rates for electric utilities including Net Metering, Economic Development and Time of Use

Other Utility Tools

- Development of power (fuel) cost adjustments for electric utilities
- Development of connection charges for water and wastewater utilities
- Review and recommend changes to ordinances related to utility operations
- Development of fees for utility services
- Business plan development for telecommunications and pricing of fiber services to customers
- Determining high strength surcharge rates for wastewater treatment plants consistent with EPA requirements
- Development of marketing plans for utilities
- Experienced in pricing electric line extension fees and system development charges



Mike Johnson

Manager, Utility Financial Solutions, LLC



Mike joined Utility Financial Solutions, LLC in 2011 and has experience assisting utilities since 1995. He has a Higher National Diploma in Mechatronics (Combined Electrical/Mechanical Engineering). Mike is experienced in cost of service, rate making, financial/operational modeling, automation, electric utility operations, and power supply.

Email: mjohnson@ufsweb.com *Cellular:* 608-230-5849 *Location:* Madison, WI

Cost of Service

- Development of cost of service studies for electric, communication, gas, water, and Wastewater utilities
- Forecasts utility revenue requirements
- Cost allocation model development

Rate Design

- Provides cost of services class allocations and rate making
- Designs time of use rates
- Identify effects for different usage patterns within the same class
- Development of rates for alternative fuels and vehicles
- Evaluate marginal costs and development of line extension policies and economic development rates

Expert Witness Services

 Prepared and testified on filings to Public Utility Commission

Long Term Financial Analysis

- Develops utility financial analysis models
- Identifies growth and load forecasting
- Models rate and revenue effect for customer change within utilities (loss of customers/additional load)
- Develops target metrics for utilities including cash policies, operating income, debt coverage

Other Utility Tools

- Computes cost functionalization and allocation systems for designing and managing complex changes
- Evaluates data and system integration issues associated with new software implementations
- Provides market analysis, bidding, and settlement processes analysis
- Identification and valuation of fixed assets
- Assessment of utility value for sales/purchase
- Development of risk mitigation tools, power/fuel cost adjustment mechanisms



Dan Kasbohm

Manager, Utility Financial Solutions, LLC



Dan joined Utility Financial Solutions, LLC in 2007 and has experience in conducting cost of service and financial analysis for electric, water, wastewater, and cable utilities around the nation. He has a Bachelor of Science degree in Engineering and was employed in the automotive industry. Dan is a co-instructor for the Basic and Intermediate Cost of Service courses for the American Public Power Association.

Email: dkasbohm@ufsweb.com *Cellular*: 616-402-7045 *Location*: Grand Haven, MI

Cost of Service (COS)

- Identification of fixed/variable costs related to:
 - Customer availability to be served
 - Commodity based costs
 - Demand based costs
- Identification of class to class subsidization
- Utility cost breakdown by function
- Detailed cost unbundling

Long-term financial analysis & identification of:

- Utility revenue requirements (utility and cash-based methods)
- Debt Coverage conformance
- Minimum cash requirements
- Optimal operating income targets
- Optional rate adjustments in projected years

Presentation/Training

- Presenting study results to management and governing body of utility
- Provide utility training on use of projection & COS models
- Co-Instructor for the American Public Power Association Academy
 - Basic & Intermediate Cost of Service

Rate Design

- Current Utility rate structure updates
 - Utility revenue impact
 - Customer bill impacts at various usage levels
 - Identify revenue stability of rates
 - Rate survey analysis
 - Development of new rates including:
 - Time of Use (seasonal, daily, hourly)
 - Power Cost Adjustment (PCA)
 - Coincidental-Peak Rates
 - Economic Development rates
 - Street lighting rates

Other Utility Tools

- Power Cost Adjustment mechanisms based on utility cash position, objectives, and dispatch profile
- Street Light Cost of Service by light and pole types
- Load Profile Analysis to identify utility and customer usage patterns
- Power supply forecasting
- Implementation of a justified minimum cash policy
- Calculation of fees for standard utility work
- Development of line extension policies



Joan Bakenhus

Senior Financial Analyst, Utility Financial Solutions, LLC



Joan has experience working with municipal utilities from 1986-1996 and came back to industry in 2006. Joan has a degree in Business Administration. Joan has worked as a Rate Analyst for one of the largest public power systems in the nation (Lincoln Electric System) and for Utility Financial Solutions, LLC since 2006. Joan is experienced in development of long-term financial plans, rate design models and cost of service studies for electric, water, and wastewater utilities.

Email: jbakenhus@ufsweb.com *Cellular:* 402-483-2542 *Location:* Nebraska

Cost of Service (COS)

- Working with Utilities to identify information requirements to complete cost of service and financial plans
- Set up and develop utility revenue requirements, cost of service program and utility revenue proof
- Balancing and set up of models for development of cost of service for water, wastewater, and electric utilities to determine commodity and customer charges
- Responsible for analysis, preparation and updating cost of service models for several electric, water utilities

Long Term Financial Analysis

 Development of long-term financial forecasts for water, wastewater, and electric utilities to determine the amount and timing of rate adjustments

Rate Design

- Balancing and set up of models for development rate design for water, wastewater, and electric utilities to determine commodity and customer charges
- Development of rate design models for electric, Water utilities
- Development of rate surveys

Other Utility Tools

 Balancing of sales with revenue to help ensure proper billing statistics are used in cost of service models



Chris Lund

Business & Technology Manager, Utility Financial Solutions, LLC



Chris has a bachelor's degree in Business Administration with concentration in Computer Science and Speech Communications. He has been a technology and management consultant since 1992 and has utility experience since 2005. Chris is an employee of UFS since 2012 and has also sub-consulted on a variety of technology projects for UFS since 2003.

Email: clund@ufsweb.com *Cellular:* 231-342-9798 *Location:* Traverse City, MI

Financial Consulting

- Completed cost of service and rate design studies for electric, water, wastewater, telecommunications and refuse utilities
- Designed, wrote, and implemented long term financial projection model including revenue requirements and rate track
- Determined avoided cost for solar (photovoltaic - PV) and wind for renewable energy rates
- Lead consultant for electric vehicle (EV) rates and service study
- Conducted multiple fiber optic cost of service and rate design studies
- Presentations to City Councils and Boards for approval of utility rates and proposed rate tracks

Data Analytics

- Data mining and analysis specialist for electric load data research
- Specialist with data mining, data conversion and custom reporting
- Experienced with various ODBC (database connectivity)
- Implemented job costing solution for manufacturing companies
- Designed, written, implemented, supported multiple, custom bar coding and data collection systems for wholesale distribution and manufacturing organizations
- Data collection systems pushed data to payroll for time and attendance, automated inventory tracking and job costing

Technology Experience

- Experienced in Microsoft Excel automation including payroll data, job costing and automated billing (office automation)
- Experienced in Microsoft Access custom database, programming, and reporting – including electronic data interchange (EDI) mapping using Microsoft VBA
- Lead consultant for multiple mission critical, corporate wide enterprise resource planning (ERP) technology solutions
- Implemented, trained, and supported multiple telecommunications projects
- Implemented and supported some of the first voice over internet protocol (VOIP) telecommuting systems
- Guide management with technology related strategy and business integration
- Modification and complete custom program solutions on midrange and PC
- Wrote automated bill of material (BOM) purchasing forecasting system
- Specify, install, and maintain mission critical PC network infrastructure, servers, workstation, and related software
- Experienced in network security and virtual private network (VPN) technology
- Implemented and supported web storefronts integrated with corporate backend database solution for inventory management, order processing, billing, and account status



Jillian Jurczyk, MEc.

Financial Analyst, Utility Financial Solutions, LLC

Jill has been with UFS since 2013. She has a Bachelor's degree in Mathematics and a Master's degree in Applied Economics from Johns Hopkins University. Jill has populated and analyzed cost of service models, developed long-term financial projections, and designed rates for utilities. Jill specializes in econometric modeling and statistical analysis to project sales and usage. She has worked with a variety of econometric software packages and is competent in handling seasonality, trend, heteroscedasticity, and other economic inefficiencies that arise in data analysis.

E-mail: jjurczyk@ufsweb.com *Cellular:* 616-283-8502 *Location:* Holland, MI

Jill's experience includes:

- Forecasting Utility revenue requirements
- Projecting revenues and expenses, asset depreciation, and net book value
- Designing rates based on Cost of Service results
- Analyzing rate payer impacts and sensitivities
- Working with Utility Staff to identify study goals and understand organization
- Keeping up to date on the current economic impacts of renewable energy, the relationship to the Clean Power Plan legislation, and potential effects on the Electric Industry

Robert Blank

Financial Analyst, Utility Financial Solutions, LLC

Robert has been working for Utility Financial Solutions, LLC since May of 2014 and has a Bachelor of Business Administration with a major in Finance from Davenport University. Over his time at UFS he has conducted Utility rate surveys as well as developed rate designs. Robert has experience with long term financial projections and cost of service studies for Electric, Water, Wastewater, and Gas utilities.

E-mail: bblank@ufsweb.com *Cellular:* 616-403-9926 *Location:* Holland, MI

Robert's experience includes:

- Developing rate design models for electric utilities
- Conducting Rate Surveys
- Responsible for analysis of financial statements and preparation of cost of service models
- Working with utilities to identify the information needed to conduct an accurate cost of service study
- Calculating Minimum Cash Reserve levels, Target Operating Income, and Debt Coverage Ratios

Carolyn Ragusett

Administrative Assistant, Utility Financial Solutions, LLC

Carolyn has been working for Utility Financial Solutions, LLC since May 2018 and has 47 years of office industry experience. For 27 years Carolyn was the Office Administrator for a large accounting firm in Wisconsin where she supervised office support staff. She additionally served 9 years as the tax department administrative officer and maintained the tax library.

E-mail: cragusett@ufsweb.com *Cellular:* 920-450-0577 *Location:* Neenah, WI

Carolyn is skilled in the following:

- Managing and organizing workflow scheduling
- Performance reviews
- Office support and coordinating office activities
- Client correspondence
- Billing, Invoicing, and Collections
- Communication Review of office correspondence and materials
- Valuation Reports

References

Knoxville Utilities Board, Knoxville, Tennessee

Client Contact: Sherri Ottinger, Manager, Rates & Analytical

Service

Phone: 865-594-7274

Email: sherri.ottinger@kub.org

Study Overview

UFS completed the gas, electric, water, and wastewater cost of service models for Knoxville Utilities Board between 2017 and 2019. UFS recently completed development of residential demand and time of use pilot rates for all customer classes.

Electric & Gas Study Specifics

- Analysis of Residential and Commercial customer classes
- Analysis of "non-standard" customers with pass through power supply cost or pass through gas supply cost
 - Non-standard customers were Primary served
 - Allocations reflected in Cost of Service
- Accounted for a reclassification of non-standard customers during cost of service analysis that took place through the power provider in the interim year
- Data analytics on electric and gas usage patterns for use in the cost of service models
- UFS provided on-site Cost of Service training
- UFS staff worked closely with KUB staff on assistance with model throughout the project
- Incorporated wholesale gas rates for services to governmental units outside the city of Knoxville
- UFS reviewed each portion of the studies with KUB staff using a web-based application
- UFS and KUB staff worked closely on design of electric and natural gas rates including development of a PILOT residential time of use rate
- UFS provided responses to intervenors on rate recommendations

Cedar Falls Utilities, Iowa

Client Contact: Wynette Froehner, Finance Director Phone: 319-268-5209 Email: wynette.froehner@cfunet.net

Study Overview

UFS completed cost of service studies in 2013, 2017 and 2020 for gas, electric, water, and wastewater for Cedar Falls Utilities

Electric Study Specifics

- Five-year financial projection to determine revenue requirements, identify financial targets, identify long-term rate track
- Review current ECA methodology
- Develop a cost-of-service study to identify the comparison of cost to provide services to each customer class, identify potential new rate classes, transportation and distribution delivery charges, power supply charges.
- Evaluate current time of use rate structure
- Review solar and net-metering charges
- Review non-profit rates and justification
- One-year rate design
- Rate survey
- Reports and presentation to governing body

Gas & Water Study Specifics

- Five-year financial projection for each utility to determine revenue requirements, identify financial targets, and develop long-term rate track
- Develop a cost-of-service study to identify the comparison of cost to provide services to each customer class, identify potential new rate classes, identify monthly customer charges, transportation delivery charges (gas), distribution delivery charges (water/gas), supply charges (gas), seasonality of costs
- One-year rate design for each utility
- Identify overall rate impacts on customers
- Reports and presentation to governing body

City of Cuyahoga Falls, OH

Client Contact:Michael Dougherty, Electric SuperintendentPhone330-971-8060Email:doughertymd@cityofcf.com

Study Overview

UFS completed a water, wastewater and storm water cost of service, financial projection, and rate design for Cuyahoga Falls Utilities in 2018. Cuyahoga Falls Utilities asked for a comprehensive cost of service study and to independently assess and evaluate existing water, wastewater, and storm water rates to provide recommendations on the amount and structure of future rate designs. The financial objectives of the study were to adequately fund water, wastewater, and storm water utility operations, capital costs, bonded debt, and develop a strategy to ensure the current and future financial stability of the utility while minimizing rate impacts on customers.

Study Specifics

- Perform cost of service analysis Perform cost of service analysis and recommend changes to any or all of the following: customer classes; base charge; commodity charge
- Review the cost of service allocations/results with The City staff
- Complete a long term financial model that includes key financial targets
 - o Debt Coverage Ratio
 - o Minimum Cash Reserve
 - Target Operating income
- Deliverables
 - o A draft report will be presented via WebEx to The City Staff for comment
 - The final report on the cost of service study will include discussion and analysis of the items listed above and an electronic copy of the final report will be provided.
- Final Presentation
 - Present the findings and recommendations from the cost of service study in separate meetings with Management and with City Council, in either a work session or City Council meeting
 - Consultant will be available for additional presentations if requested
- One Year Rate Design Design rates for customer to move toward cost of service and maintain the financial health of the Water, Wastewater, and Storm Water Department. Rates will be design for one-year, additional years upon request.

Project Schedule

Our experience with municipal cost of service and rate design studies, allows us to conduct a cost effective and efficient study. The following is the tentative project schedule for completion of the cost of service and rate design. This schedule will be finalized during the initial project kick-off meeting with management.

Task	Expected Completion – Twelve Weeks
Initial Meeting – Preparation of Information Request	Week One
Completion of Information Request by Client	Week Two
Planning/Set-up Study	Week Three – Five
Review and Development of Revenue Requirements	Week Six – Seven
Fieldwork	Week Eight
Cost of Service Analysis Component/Functional Costs	Week Nine
Cost based Rate Design and alternatives	Week Ten
Report, Recommendations & Presentation of Draft	Week Eleven
Final Report	Week Twelve

THE COMPLETION OF THE PROJECT ON THE PROPOSED SCHEDULE IS DEPENDENT ON THE COOPERATION OF VARIOUS DEPARTMENTS WITHIN THE UTILITY TO PREPARE THE INFORMATION REQUEST IN A TIMELY MANNER.

Project Fees

Prices, terms, and conditions are good for a period of 90 days from this proposal date of January 5, 2023. Payment will be made through submission of invoice which itemizes the work performed. Pricing does not include on-site or travel expenses.

Total project fees for Scope of Services are \$ 78,600

Electric Cost of Service Study, Financial Projection and One-Year Rate Design\$28,900Water Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900Wastewater Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900Stormwater Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900\$16,900\$16,900\$16,900

(*Total above does not include onsite presentations, out of pocket travel expenses or travel time)

Out of Scope Services

Out of Scope services will be billed at the hourly rates listed below. Any out of pocket expenses will be billed at cost. All rate designs outside of the current rate structure will be charged hourly.

Name	Title	Hourly Rate
Mark Beauchamp	President	\$330.00
Dawn Lund	Vice President	\$290.00
Dan Kasbohm	Manager	\$255.00
Mike Johnson	Manager	\$255.00
Chris Lund	Business and Technology Manager	\$255.00
Jillian Jurczyk	Financial Analyst	\$175.00
Joan Bakenhus	Senior Financial Analyst	\$155.00
Robert Blank	Financial Analyst	\$120.00

In addition, travel time will be billed at 50% off regular rates.

Proposed Professional Services Agreement

Prices, terms, and conditions are good for a period of 90 days from this proposal date of January 5, 2023. Payment will be made through submission of invoice which itemizes the work performed.

Total project fees for Scope of Services are \$78,600

Electric Cost of Service Study, Financial Projection and One-Year Rate Design\$28,900Water Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900Wastewater Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900Stormwater Cost of Service Study, Financial Projection and One-Year Rate Design\$16,900

(*Total above does not include onsite presentations, out of pocket travel expenses or travel time)

Anticipated Meetings:

Initial meeting – Conference call to clarify

- scope of services, expectations of
- management and preliminary information
- request

Fieldwork – Conference call to verify

data provided

Draft Report with management - Conference call Final Report with management – Conference call

Hourly Rates (travel is discounted at 50%)

Mark Beauchamp	\$ 330.00
Dawn Lund	\$ 290.00
Dan Kasbohm	\$ 255.00
Mike Johnson	\$ 255.00
Chris Lund	\$ 255.00
Jillian Jurczyk	\$ 175.00
Joan Bakenhus	\$ 155.00
Support Staff	\$ 65.00 – 120.00

Deliverables (for all utilities):

- 1) Long-term financial projection and rate track
- 2) Cost of Service Analysis
- 3) Minimum cash reserve determination
- 4) Debt Service Ratio
- 5) Target operating income (rate of return)
- 6) One Year Electric Rate Design
- 7) One Year Water Rate Design
- 8) One Year Wastewater Rate Design
- 9) One Year Storm Water Rate Design

Onsite Meetings

Any requested and approved onsite presentation will be billed at hourly rates with a 50% discount on related travel time. Out of pocket travel expenses are billed at cost. All costs incurred from schedule changes initiated by client after booking will be considered out of pocket.

Out of Scope Pricing

Out of scope items and work hours will be billed at the hourly rates listed on this page. All rate designs outside of the current rate structure will be charged hourly.

We look forward to exceeding your expectations. Please sign, date, and return to <u>clund@ufsweb.com</u> at your earliest convenience.

Sincerely,

Dawn Lund, Vice-President Utility Financial Solutions, LLC

Date:

Accepted By: Lewes Board of Public Works