

**Executive Report**

**LEWES BOARD OF PUBLIC WORKS  
Electric Financial Projection**

July 14, 2021



**Specializing in Cost of Service,  
Rate Design, and Financial Analysis**

Rate Design and Financial Analysis



July 14, 2021

Mr. Darrin Edward Gordon  
General Manager  
Lewes Board of Public Works

Dear Mr. Gordon,

We are pleased to present this executive summary report for a financial projection in the Electric Department completed for the Lewes Board of Public Works. This report was prepared to provide the utility with a comprehensive examination of its existing financials by an outside party.

The specific purposes of this long-term financial projection study are:

- 1) Determine electric utility's revenue requirements for fiscal year 2022,
- 2) Project rate adjustments needed to work toward targeted revenue requirements,
- 3) Develop retail rates to be implemented in 2023 (after board approval).

This report includes results of the financial projection and identifies future rate adjustments of the Electric Department. Specific findings included in this report are:

- 1) Proposed rate tracks are based on the utilities ability to meet or work toward three factors listed below:
  - a. Debt Coverage Ratio
  - b. Minimum Cash Reserves
  - c. Optimal Net Income
- 2) Rate adjustments are designed to work toward the cost of service study results performed in 2016.

This report is intended for information and use by management and the Board of Directors for purposes stated above and is not intended to be used by anyone except the specified parties.

Sincerely,

*Dawn Lund*

Utility Financial Solutions, LLC  
Dawn Lund  
Vice-President

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## **INTRODUCTION**

This report was prepared to provide the Lewes Board of Public Works with a long-term financial projection and rate track. The specific purposes of the financial plan are identified below:

- 1) ***Determine electric utility's revenue requirements for fiscal year 2022.*** The Electric Utility's revenue requirements were projected for the period from 2022 – 2026 and included adjustments for the following:
  - a. Anticipated power costs,
  - b. Capital improvements currently underway and scheduled over next five years. The Utility provided capital improvement information.
  
- 2) ***Projected rate adjustments needed to meet targeted revenue requirements.*** The primary purpose of this study is to identify appropriate revenue requirements and the rate adjustments needed to work toward requirements. The report includes a long-term rate track for the Lewes Board of Public Works to help ensure the financial stability of the utility in future years. The rate track was designed after discussions with management to work towards targets, while keeping rate adjustments to a certain threshold to minimized rate impact to customers.

The Lewes Board of Public Works retained Utility Financial Solutions, LLC to review the above items and report on findings on the appropriate course of action. This report includes results of the long-term financial projection.



# Electric Operations

## Utility Revenue Requirements

Revenue requirements for the Lewes Board of Public Works were projected for 2022 based on 2020 actual and 2021 Budget expenses. Revenues and expenses were analyzed with adjustments made to actual expenses to reflect projected operating characteristics.

Table One is the projected financial summary for the Electric Department from 2022 – 2026 without rate adjustments.

Projections indicate an operating income of \$433,191 in 2022 and is projected to decrease to an operating loss of (\$173,678) in 2026. Cash balances meet the minimum targets throughout the period.

**Table One – Projected Financial Summary – (Without Rate Adjustments)**

Fiscal Year	Projected Revenue Adjustments	Projected Revenues	Projected Expenses	Operating Income	Projected Cash Balances	Cash (\$1.283 Million Restricted)	Total Cash	Projected Bond Issues	Projected Capital Improvements	Debt Coverage Ratio
2022	0.00%	9,543,714	9,110,523	433,191	3,955,090	1,283,913	5,239,003	-	155,000	n/a
2023	0.00%	9,296,912	9,268,021	28,892	3,992,756	1,283,913	5,276,669	-	495,000	n/a
2024	0.00%	9,385,331	9,426,416	(41,085)	4,081,016	1,283,913	5,364,929	-	400,000	n/a
2025	0.00%	9,453,836	9,561,138	(107,302)	4,192,936	1,283,913	5,476,849	-	325,000	n/a
2026	0.00%	9,518,358	9,692,036	(173,678)	4,215,123	1,283,913	5,499,036	-	363,000	n/a
<b>Targeted in FY2022</b>				<b>\$ 471,679</b>						<b>1.45</b>
<b>Targeted in FY2026</b>				<b>\$ 522,335</b>						<b>1.45</b>
<b>MINIMUM Cash Policy in FY2022</b>					<b>\$ 2,903,693</b>					
<b>MINIMUM Cash Policy in FY2026</b>					<b>\$ 3,097,141</b>					

1. The five-year capital improvement plan was provided by the Utility.
2. Financial projections should be updated during the budgeting process each year as expenses and capital expenditures change from projections.

**DEVELOPMENT OF FINANCIAL TARGETS**

When evaluating rates to charge customers, three key factors must be considered:

1. Debt Coverage Ratio
2. Minimum Cash Reserves
3. Optimal Net Income

Each of these factors is discussed below:

1. **Debt Coverage Ratio** - The Lewes Board of Public Works does not currently hold debt in the electric department; the following is for informational purposes. Typical revenue bonds require a debt coverage ratio of 1.25. We recommend a minimum debt coverage ratio of 1.45 to allow for fluctuation in sales and help to achieve the following:
  - a. Helps to ensure adequate funds are available to meet debt service payments in years when sales are low due to cold summers or loss of a major customer(s).
  - b. Obtain higher bond rating, if revenue bonds are sold in the future, to lower interest cost.

Table Two below indicates no projected debt from 2022-2026.

**Table Two – Current Debt Coverage Ratio – (Without Rate Adjustments)**

	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026
Net Income, Plus Depr. and Int. Exp.	\$ 922,039	\$ 532,666	\$ 488,260	\$ 436,920	\$ 385,187
Debt Service	-	-	-	-	-
Projected Debt Coverage Ratio	n/a	n/a	n/a	n/a	n/a
<b>Minimum Debt Coverage Ratio</b>	<b>1.45</b>	<b>1.45</b>	<b>1.45</b>	<b>1.45</b>	<b>1.45</b>

**2. Minimum Cash Reserve Target** - To help ensure timely completion of capital improvements and enable the utility to meet requirements for large unexpected expenditures, a minimum cash reserve policy should be established. Minimum cash reserves attempt to quantify the minimum amount of cash the utility should keep in reserve, actual cash reserves may vary substantially above the minimum and is dependent on the life cycle of assets that are currently in service. The methodology used in this report is based on certain assumptions related to percent of operation and maintenance, rate base, capital improvements, and debt service. The establishment of minimum cash reserves should consider a number of factors including:

- **Working Capital Lag** - Timing differences between when expenses are incurred, and revenues received from customers. Establishing a minimum cash reserve helps to ensure cash exists to pay expenses in a timely manner.
- **Investment in assets** – Catastrophic events may occur that require substantial amounts of cash reserves to replace damaged assets. Some examples of catastrophic events include ice storms, earthquakes, wind storms, floods, or tornadoes. Many of these catastrophic events may allow the utility to recover the cost of damages from FEMA; however, FEMA reimbursements can take between 6 months to 2 years to recover. The utility should ensure adequate cash reserves exist to replace the assets in a timely fashion. The minimum reserve levels are often combined with emergency funding from banks or bonding agencies.
- **Annual debt service** – Debt service payments do not occur evenly throughout the year and often occurs at periodic times typically every six months. The utility has to ensure adequate cash reserves exist to fund the debt service payment when the payment is due.
- **Capital improvement program** – Some capital improvements are funded through bond issuances and some through cash reserves. The establishment of a minimum cash reserve level helps to ensure timely replacement or construction of assets.

The minimum targeted cash reserves for the Electric Department are \$3.0 million. The projected cash reserves meet targets throughout the period. Table Three provides the minimum cash reserve calculation.

**Table Three – Minimum Cash Reserves – 2022–2026 (Without Rate Adjustments)**

	Percent Allocated	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026
Working Capital Lag	25%	\$ 2,168,590	\$ 2,204,714	\$ 2,239,838	\$ 2,269,893	\$ 2,299,178
Historical Rate Base	2%	294,799	304,699	312,699	319,199	326,459
Current Year Capital	15%	23,250	74,250	60,000	48,750	54,450
Five Year Capital	15%	283,416	283,416	283,416	283,416	283,416
Customer Deposits	100%	109,238	109,238	109,238	109,238	109,238
Self-Insurance deductibles	100%	24,400	24,400	24,400	24,400	24,400
<b>Minimum Cash Reserve Levels</b>		<b>\$ 2,903,693</b>	<b>\$ 3,000,717</b>	<b>\$ 3,029,591</b>	<b>\$ 3,054,896</b>	<b>\$ 3,097,141</b>
<b>Projected Cash Reserves</b>		<b>\$ 3,955,090</b>	<b>\$ 3,992,756</b>	<b>\$ 4,081,016</b>	<b>\$ 4,192,936</b>	<b>\$ 4,215,123</b>

**Projected Cash Reserves meet minimum targets throughout the projection period.**

Notes:

1. Working Capital Lag expenses exclude depreciation expense.
2. Historical Rate Base is historical investment in plant and equipment.
3. Five Year CIP includes total sum of budgeted capital improvements for the next five years and excludes capital improvements funded through debt issuances.

- 3. Optimal operating income targets** - The optimal target for setting rates is the establishment of a target operating income to help ensure the following:
1. Funding of Interest Expense on the outstanding principal on debt. Interest expense is below the operating income line and needs to be recouped through the operating income balance.
  2. Funding of the inflationary increase on the assets invested in the system. The inflation on the replacement of assets invested in the utility should be recouped through the Operating Income
  3. Adequate rate of return on investment to help ensure current customers are paying their fair share of the use of the infrastructure and not deferring the charge to future generations.

As improvements are made to the system, the optimal operating income target will increase unless annual depreciation expense is greater than yearly capital improvements. The target established for the projection period is approximately \$490,000. Rate of return falls below the targeted minimum throughout the projection period; operating at losses starting in 2024.

**Table Four - Optimal Operating Income Targets Compared to Projected**

	Percent Allocated	Projected 2022	Projected 2023	Projected 2024	Projected 2025	Projected 2026
Interest Owed on Debt	0%	\$ -	\$ -	\$ -	\$ -	\$ -
System Equity	7.2%	\$ 471,679	\$ 487,519	\$ 500,319	\$ 510,719	\$ 522,335
<b>Target Operating Income</b>		<b>\$ 471,679</b>	<b>\$ 487,519</b>	<b>\$ 500,319</b>	<b>\$ 510,719</b>	<b>\$ 522,335</b>
Projected Operating Income		\$ 433,191	\$ 28,892	\$ (41,085)	\$ (107,302)	\$ (173,678)

**The projected operating income is below optimal targeted operating income throughout the period.**



## SUMMARY OF FINANCIAL POSITION

### PROPOSED RATE TRACK

Increasing rates requires balancing the financial health of the utility with the financial impact on customers. Table Five below is the five-year financial projection with proposed rate increases of 1.5% in 2023 and 2025. The rate track was developed to work toward healthy financial targets. The rate track should be reviewed with the budget process as changes in expenses and capital can impact the rate track.

**Table Five – Projected Financial Summary (With Rate Adjustments)**

Fiscal Year	Projected Revenue Adjustments	Projected Revenues	Projected Expenses	Operating Income	Projected Cash Balances	Cash (\$1.283 Million Restricted)	Total Cash	Projected Bond Issues	Projected Capital Improvements	Debt Coverage Ratio
2022	0.00%	9,543,714	9,110,523	433,191	3,955,090	1,283,913	5,239,003	-	155,000	n/a
2023	1.50%	9,441,932	9,275,272	166,661	4,130,525	1,283,913	5,414,438	-	495,000	n/a
2024	0.00%	9,530,351	9,433,667	96,684	4,356,554	1,283,913	5,640,467	-	400,000	n/a
2025	1.50%	9,746,051	9,575,748	170,303	4,747,456	1,283,913	6,031,369	-	325,000	n/a
2026	0.00%	9,810,573	9,706,646	103,927	5,050,003	1,283,913	6,333,916	-	363,000	n/a
<b>Targeted in FY2022</b>				<b>\$ 471,679</b>						<b>1.45</b>
<b>Targeted in FY2026</b>				<b>\$ 522,335</b>						<b>1.45</b>
<b>MINIMUM Cash Policy in FY2022</b>					<b>\$ 2,903,693</b>					
<b>MINIMUM Cash Policy in FY2026</b>					<b>\$ 3,100,794</b>					

## **Significant Assumptions**

This section outlines the significant assumptions for the Lewes Board of Public Works electric study.

### **Forecasted Operating Expenses**

Forecasted expenses were based on 2020 adjusted for power supply costs and inflation. Inflation for the period is expected to be 2.6%

### **Power Supply**

Power supply costs were provided by the Utility.

### **Sales Forecast**

Growth rates were projected to be 0.0%.

### **Revenue Forecast**

The revenue forecast was based on 2020 usages adjusted for growth and rate change assumptions.

### **Capital Improvement Program**

The capital improvement program was provided by the Utility and is listed below.

<b>Fiscal Year</b>	<b>Projected Capital Improvement</b>
2022	155,000
2023	495,000
2024	400,000
2025	325,000
2026	295,000

SUMMARY OF FINDINGS

**Electric Department Findings**

- 1) The projection indicates current revenues are not adequate to maintain the long-term financial health of the Utility. The proposed rate track indicates 1.5% in 2023 and 2025 should be considered to maintain the financial position. The rate track should be reviewed closely as part of the annual budget process as costs, revenues and capital may vary from projections. To ensure the utility meets financial targets and remains financially healthy, the following rate track should be considered. UFS should help develop future rate designs as they incur to ensure the utility is moving customer and kWh charges according to cost of service and toward needed revenue requirements.

Fiscal Year	Projected Revenue Adjustments	Projected Revenues	Projected Expenses	Operating Income	Projected Cash Balances	Cash (\$1.283 Million Restricted)	Total Cash	Projected Bond Issues	Projected Capital Improvements	Debt Coverage Ratio
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