## Village of Haskins Electric Rate Study Results

Mike Johnson<br>Manager<br>Utility Financial Solutions<br>616-393-9722

## Objectives

- Review Electric Department
- Financial Projections \& Targets
- Debt Coverage Ratios
- Minimum Cash Reserves
- Target Operating Income
- Review Cost of service results
- Cost to service each class of customers
- Monthly Customer Charges


## Assumptions

- Purchase Power
- 2019 - o.1\% decrease
- 2020 - 0.4\% decrease
- 2021-2.4\% decrease
- 2022 - $3 \%$ increase
- Annual Inflation 2.5\%
- Annual Growth 1.3\%
- Plant \$1250/customer
- Meters - A \$150, B \$500, C \$1000
- Depreciated Plant (6o\%)
- Capital Plan
- $10 \%$ of plant


## Projection without Rate Change



## Projection with Recommended Rate Change

|  |  |  |  |  | Adjusted |  |  | Target |  | Projected Cash |  | Recommended |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal | Rate | Debt Coverage |  |  | Projected |  | Operating Income | Operating Income |  |  |  |  |  |
| Year | Adjustments | Ratio | ProjectedExpenses |  |  | Revenues |  |  |  |  | ances |  | um Cash |
| 2018 | 3.5\% | (1.15) | \$ | 722,391 | \$ | 670,324 | \$ $(52,067)$ | \$ | 16,331 | \$ | 310,689 | \$ | 177,139 |
| 2019 | 3.5\% | 1.54 |  | 734,213 |  | 702,805 | $(31,408)$ |  | 18,398 |  | 249,671 |  | 180,396 |
| 2020 | 3.5\% | 4.63 |  | 745,841 |  | 736,859 | $(8,982)$ |  | 20,460 |  | 213,389 |  | 183,469 |
| 2021 | 3.5\% | 9.18 |  | 747,545 |  | 772,564 | 25,019 |  | 22,523 |  | 213,541 |  | 185,318 |
| 2022 | 3.5\% | 10.23 |  | 772,815 |  | 803,602 | 30,787 |  | 24,593 |  | 222,077 |  | 190,072 |

## Target One

## Debt Coverage Ratio (No Change)

| Description | Projected 2018 |  | Projected 2019 |  | Projected 2020 |  | Projected 2021 |  | Projected 2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Coverage Ratio |  |  |  |  |  |  |  |  |  |  |
| Net Income | \$ | $(73,016)$ | \$ | $(76,786)$ | \$ | $(80,264)$ | \$ | $(73,708)$ | \$ | $(95,846)$ |
| Add Depreciation/Amortization Expense |  | 39,914 |  | 41,222 |  | 43,837 |  | 46,452 |  | 49,067 |
| Add Interest Expense |  | 2,874 |  | 2,746 |  | 2,614 |  | 2,479 |  | 2,341 |
| Cash Available for Debt Service | \$ | $(30,227)$ | \$ | $(32,819)$ | \$ | $(33,813)$ | \$ | $(24,776)$ | \$ | $(44,438)$ |
| Debt Principal and Interest | \$ | 8,010 | \$ | 8,010 | \$ | 8,010 | \$ | 8,010 | \$ | 8,010 |
| Projected Debt Coverage Ratio (Covenants) |  | (3.77) |  | (4.10) |  | (4.22) |  | (3.09) |  | (5.55) |
| Minimum Debt Coverage Ratio |  | 1.4 |  | 1.4 |  | 1.4 |  | 1.4 |  | 1.4 |

## Target Two

## Minimum Cash Reserve

| Description | Projected 2018 |  | Projected 2019 |  | Projected 2020 |  | Projected 2021 |  | Projected 2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minimum Cash Reserve Allocation |  |  |  |  |  |  |  |  |  |  |
| Operation \& Maintenance Less Depreciation Expense |  | 12.3\% |  | 12.3\% |  | 12.3\% |  | 12.3\% |  | 12.3\% |
| Purchase Power Expense |  | 12.3\% |  | 12.3\% |  | 12.3\% |  | 12.3\% |  | 12.3\% |
| Historical Rate Base |  | 3\% |  | 3\% |  | 3\% |  | 3\% |  | 3\% |
| Current Portion of Debt Service Payment |  | 100\% |  | 100\% |  | 100\% |  | 100\% |  | 100\% |
| Five Year Capital Improvements - Net of bond proceeds |  | 20\% |  | 20\% |  | 20\% |  | 20\% |  | 20\% |
| Calculated Minimum Cash Level |  |  |  |  |  |  |  |  |  |  |
| Operation \& Maintenance Less Depreciation Expense | \$ | 22,431 | \$ | 22,992 | \$ | 23,567 | \$ | 24,156 | \$ | 24,760 |
| Purchase Power Expense |  | 61,710 |  | 62,445 |  | 62,981 |  | 62,280 |  | 64,469 |
| Historical Rate Base |  | 19,613 |  | 21,574 |  | 23,535 |  | 25,496 |  | 27,458 |
| Current Portion of Debt Service Reserve |  | 8,010 |  | 8,010 |  | 8,010 |  | 8,010 |  | 8,010 |
| Next Years Capital Improvements - Net of bond proceeds |  | - |  | - |  | - |  | - |  | - |
| Five Year Capital Improvements - Net of bond proceeds |  | 65,375 |  | 65,375 |  | 65,375 |  | 65,375 |  | 65,375 |
| Minimum Cash Reserve Levels | \$ | 177,139 | \$ | 180,396 | \$ | 183,469 | \$ | 185,318 | \$ | 190,072 |
| Projected Cash Reserves | \$ | 289,648 | \$ | 183,444 | \$ | 76,246 | \$ | $(21,916)$ | \$ | $(139,739)$ |

## Target Three

## Target Operating Income

| Description | Projected 2018 |  | Projected 2019 |  | Projected 2020 |  | Projected 2021 |  | Projected 2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| Net Book Value/Working Capital | \$ | 326,875 | \$ | 351,028 | \$ | 372,567 | \$ | 391,490 | \$ | 407,798 |
| Outstanding Principal on Debt |  | 109,840 |  | 104,575 |  | 99,179 |  | 93,649 |  | 87,979 |
| System Equity | \$ | 217,035 | \$ | 246,453 | \$ | 273,387 | \$ | 297,841 | \$ | 319,819 |
| Target Operating Income Allocation |  |  |  |  |  |  |  |  |  |  |
| Interest on Debt |  | 2.62\% |  | 2.63\% |  | 2.64\% |  | 2.65\% |  | 2.66\% |
| System Equity |  | 6.20\% |  | 6.35\% |  | 6.53\% |  | 6.73\% |  | 6.96\% |
| Target Operating Income |  |  |  |  |  |  |  |  |  |  |
| Interest on Debt | \$ | 2,874 | \$ | 2,746 | \$ | 2,614 | \$ | 2,479 | \$ | 2,341 |
| System Equity | \$ | 13,456 | \$ | 15,652 | \$ | 17,846 | \$ | 20,044 | \$ | 22,252 |
| Target Operating Income | \$ | 16,331 | \$ | 18,398 | \$ | 20,460 | \$ | 22,523 | \$ | 24,593 |
| Projected Operating Income | \$ | $(73,108)$ | \$ | $(76,489)$ | \$ | $(79,567)$ | \$ | $(72,609)$ | \$ | $(94,504)$ |
| Rate of Return in \% |  | 5.0\% |  | 5.2\% |  | 5.5\% |  | 5.8\% |  | 6.0\% |

## Electric Cost of Service Results

|  |  | Projected |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Customer Class | Cost of Service | Revenues | \% Change |  |  |
| Schedule A | $\$$ | 560,964 | $\$$ | 468,882 | $19.6 \%$ |
| Schedule B |  | 85,574 | 86,809 | $-1.4 \%$ |  |
| Schedule C | 44,073 |  | 45,482 | $-3.1 \%$ |  |
| Total | $\$$ | 690,611 | $\$$ | 601,173 | $14.9 \%$ |

## Monthly Charge

|  | COS Customer <br> Charge | Current Average <br> Customer Charge |  |
| :--- | ---: | ---: | ---: |
| Customer Class | $\$$ | 12.00 | $\$$ |

## Summary of Recommendations

Electric Department

- $3.5 \%$ Rate increase in 2018-2020 annually
- Increase Residential Customer Charge annually by \$2
- Continue to move toward Cost of Service


## Questions?

