# 2018 Electric Rate Study 

## PUAB Presentation

## Past Rate Study 2015

- Where we were starting off at in 2016...
- Negative cash balance
- Rate increases of 8.3\%, 2.4\%, 2.4\% (2016 through 2018 respectively)
- Capital spending stair stepped at $\$ 8.3, \$ 8.3, \$ 10.1$ million per year
- Implementation of PPA (Purchase Power Adjustment)


## Between Then and Now

'Plan the Work and Work the Plan'

Cash Balance

| CY | Rate study | Actual |
| :---: | :---: | :---: |
| 2016 | $\$ 3,000,000$ | $\$ 6,627,256$ |
| 2017 | $\$ 11,782,000$ | $\$ 16,898,469$ |
| 2018 | $\$ 22,533,000$ | $\$ 25,200,000$ |

Conservative approach on Capital spending in 2016

## Present Rate Study 2018

- Where we are...
- Positive cash balance in line with the 2015 rate study
- Rate decreases of $-2.0 \%,-2.0 \%,-2.0 \%$
- Realignment of base PPA
- 2015 internal water loan repaid in full by 12/31/2018
- Capital spending returned to $\$ 12$ million per year with $\$ 2$ million additional for 3 years (2019-2021)
- Anticipated cash balance at end of 2021, \$30.3 million (~60 days)


## How We Get There...

2019 Electric Financial Projection and Cost of Service Review
09/11/2018

50 Naperville

## Assumptions

- Growth rate of $0 \%$ in all three years (purchase $=1,409,355 \mathrm{MWh} /$ year)
- Power Supply annual rates:
- 2019-1.7\% \$81.89/MWh
- $2020+0.8 \%$ \$82.94/MWh
- 2021-4.7\% \$78.94/MWh (IMEA Debt Service)
- Inflationary increases of 2.0\%
- 2015 Water Utility loan repaid in full by December 31, 2018
- Adjust current base PPA from $\$ 83.00 / \mathrm{MWh}$ to $\$ 85.51 / \mathrm{MWh}$ without adjusting rates to realign with power supply cost
- Currently use a 6 month rolling PPA
- Capital plan at $\$ 14$ million/year


## Projection of Financials

## Projection with no rate adjustments (w/PPA adjustment)

| PPA Charged (cost less base) | \$ |  | 0.0008 | \$ | 0.0019 | \$ | (0.0023) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual 2017 |  | Projected 2019 |  | Projected 2020 |  | Projected 2021 |
| Charges for Services | \$152,849,899 | \$ | 157,092,293 | \$ | 157,092,293 | \$ | 157,092,293 |
| Purchased Pow er Adjustment | 2,166,038 |  | 1,040,672 |  | 2,520,474 |  | $(3,116,867)$ |
| Sales for Resale | 2,301,111 |  | 2,488,916 |  | 2,520,829 |  | 2,399,256 |
| Miscellaneous | 1,816,816 |  | 1,000,000 |  | 1,000,000 |  | 1,000,000 |
| Total Operating Revenue | \$159,133,864 | \$ | 161,621,881 | \$ | 163,133,596 | \$ | 157,374,681 |
| Purchased Pow er Cost | \$109,005,955 | \$ | 112,921,540 | \$ | 114,369,429 | \$ | 108,853,662 |
| Operations | 5,813,862 |  | 6,048,742 |  | 6,169,717 |  | 6,293,111 |
| Distribution | 6,567,000 |  | 6,832,307 |  | 6,968,953 |  | 7,108,332 |
| Other Operating Expenses | 13,418,665 |  | 12,178,916 |  | 12,404,629 |  | 12,480,732 |
| Depreciation | 14,253,884 |  | 14,920,544 |  | 14,920,544 |  | 14,920,544 |
| Total O\&M | \$149,059,366 | \$ | 152,902,049 | \$ | 154,833,272 | \$ | 149,656,381 |
| Operating Income(Loss) | \$ 10,074,498 | \$ | 8,719,832 | \$ | 8,300,324 | \$ | 7,718,301 |
| Net investment income(loss) | 166,432 | \$ | 98,876 | \$ | 148,540 | \$ | 198,240 |
| Capital Fees | 4,070,120 |  | 1,425,000 |  | 1,425,000 |  | 1,425,000 |
| Interest Expense - Bonds | $(1,089,005)$ |  | $(688,732)$ |  | $(591,696)$ |  | $(509,195)$ |
| Total Other Income \& Expenses | \$ 3,147,547 | \$ | 835,144 | \$ | 981,844 | \$ | 1,114,045 |
| Net Income (Loss) | \$ 13,222,045 | \$ | 9,554,976 | \$ | 9,282,168 | \$ | 8,832,346 |

## Projection of Financials

Projection with no rate adjustments(w/PPA adjustment)

| Projected Cash Flows |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Actual } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { Projected } \\ 2019 \end{gathered}$ |  | $\begin{aligned} & \text { Projected } \\ & 2020 \end{aligned}$ |  | $\begin{gathered} \text { Projected } \\ 2021 \end{gathered}$ |  |
| Add Net Income | \$ | 13,222,045 | \$ | 9,554,976 | \$ | 9,282,168 | \$ | 8,832,346 |
| Add Back Depreciation Expense |  | 14,253,884 |  | 14,920,544 |  | 14,920,544 |  | 14,920,544 |
| LESS Debt Principal |  | 2,702,519 |  | 3,142,900 |  | 2,674,650 |  | 2,587,300 |
| LESS Water Loan Principal |  | 2,570,490 |  | - |  | - |  |  |
| LESS Repayment to GF |  | 5,710,794 |  | - |  | - |  | - |
| LESS Working Capital |  | 4,202,077 |  | - |  | - |  | - |
| Add Bond Sale Proceeds |  | 0 |  | 0 |  | 0 |  | 0 |
| Cash Available from Operations | \$ | 12,290,049 | \$ | 21,332,620 | \$ | 21,528,062 | \$ | 21,165,590 |
| Estimated Annual Capital Additions |  | 7,729,630 |  | 11,400,000 |  | 11,588,000 |  | 11,779,760 |
| Net Cash From Operations | \$ | 4,560,419 | \$ | 9,932,620 | \$ | 9,940,062 | \$ | 9,385,830 |
| Beginning Cash Balance |  | 12,338,050 |  | 19,775,294 |  | 29,707,914 |  | 39,647,976 |
| Ending Cash Balance | \$ | 16,898,469 | \$ | 29,707,914 | \$ | 39,647,976 | \$ | 49,033,806 |

## 2019 Projection Summary

## Projection with no rate adjustments (w/PPA adjustment)

| Calandar Year | Projected Revenue Adjustments | Projected Revenues |  | Projected Expenses |  | Adjusted Operating come(Loss) |  | Projected Cash Balances | Capital Improvement Plan | Debt Coverage Ratio | Debt to Equity Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | 0.0\% | \$ 161,621,881 | \$ | 152,902,049 | \$ | 8,719,832 | \$ | 29,707,914 | \$11,400,000 | 6.57 | 8.3\% |
| 2020 | 0.0\% | 163,133,596 |  | 154,833,272 |  | 8,300,324 |  | 39,647,976 | 11,588,000 | 7.59 | 7.0\% |
| 2021 | 0.0\% | 157,374,681 |  | 149,656,381 |  | 7,718,301 |  | 49,033,806 | 11,779,760 | 7.84 | 5.7\% |
| Recommended Target in 2019 Recommended Target in 2021 |  |  |  |  | \$ | 14,565,085 |  |  |  | 1.40 |  |
|  |  |  |  |  | \$ | 15,429,176 |  |  |  | 1.40 |  |
| Recommended MINIMUM Target in 2019 Recommended MINIMUM Target in 2021 |  |  |  |  |  |  | \$ | 29,961,028 |  |  |  |
|  |  |  |  |  |  |  | \$ | 29,602,442 |  |  |  |

## 2019 Projection Summary

Rate impacts related to PPA base change from \$83.00/MWh to $\$ 85.51 / \mathrm{MWh}$

| Customer Class | Code | Revenue with Current Rates (PPA Base \$0.0830) | Revenue from PPA |  |  | evenue with 2019 Rates (PPA Base \$0.0855) | Dollar Adjustment |  | Percent Increase |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential Rate-RES | RES | \$ 69,401,820 | \$ | 404,019 | \$ | 68,128,086 | \$ | $(1,273,735)$ | -1.8\% |
| General Service GS1Rate-GS1 | GS1 | 19,892,804 |  | 120,299 |  | 19,513,542 | \$ | $(379,262)$ | -1.9\% |
| General Service Demand GS2Rate-GS2 | GS2 | 52,129,010 |  | 367,658 |  | 50,969,908 | \$ | $(1,159,102)$ | -2.2\% |
| Primary PRIMRate-PRIM | PRIM | 19,350,244 |  | 162,585 |  | 18,837,667 | \$ | $(512,577)$ | -2.6\% |
| Transmission TRANRate-TRAN | TRAN | 414,598 |  | 2,604 |  | 406,388 | \$ | $(8,210)$ | -2.0\% |
| Metered Outdoor Lighting OLRRate-PtL | PtL | 297,190 |  | - |  | 297,190 | \$ | - | 0.0\% |
| TOTAL Revenue from Rates |  | \$ 161,485,667 | \$ | 1,057,165 |  | 158,152,782 | \$ | $(3,332,885)$ | -2.1\% |

## Residential Rate Class:

Published rates unchanged, PPA base increased by $\$ 0.0025$


## 2019 Projection Summary

## Projection with rate adjustments as noted below

| Calandar Year | Projected Revenue Adjustments | Projected Revenues |  | Projected <br> Expenses |  | Adjusted Operating come(Loss) |  | Projected Cash Balances | Capital Improvement Plan | Debt Coverage Ratio | Debt to Equity Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | -2.0\% | \$ 158,459,221 | \$ | 152,902,049 | \$ | 5,557,173 | \$ | 26,545,255 | \$11,400,000 | 5.74 | 8.3\% |
| 2020 | -2.0\% | 156,862,331 |  | 154,833,272 |  | 2,029,060 |  | 30,198,239 | 11,588,000 | 5.67 | 7.0\% |
| 2021 | -2.0\% | 148,198,735 |  | 149,656,381 |  | $(1,457,645)$ |  | 30,360,874 | 11,779,760 | 4.86 | 5.7\% |
| Recommended Target in 2019 Recommended Target in 2021 |  |  |  |  | \$ | 14,565,085 |  |  |  | 1.40 |  |
|  |  |  |  |  | \$ | 15,429,176 |  |  |  | 1.40 |  |
| Recommended MINIMUM Target in 2019 Recommended MINIMUM Target in 2021 |  |  |  |  |  |  |  | 29,961,028 |  |  |  |
|  |  |  |  |  |  |  |  | 29,602,442 |  |  |  |

## 2019 Projection Summary

## Projection with no rate adjustments(w/PPA adjustment)

| Debt Coverage Ratio |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Projected 2019 | Projected 2020 | Projected 2021 |
| Add Net Income | \$ 9,554,976 | \$ 9,282,168 | \$ 8,832,346 |
| Add Depreciation Expense | 14,920,544 | 14,920,544 | 14,920,544 |
| Add Interest Expense | 688,732 | 591,696 | 509,195 |
| Cash Available for Debt Service | \$ 25,164,252 | \$ 24,794,408 | \$ 24,262,085 |
| Debt Principal and Interest | \$ 3,831,632 | \$ 3,266,346 | \$ 3,096,495 |
| Projected Debt Coverage Ratio (Covenants) | 6.57 | 7.59 | 7.84 |
| Minimum Debt Coverage Ratio | 1.40 | 1.40 | 1.40 |

## 2019 Projection Summary

## Projection with no rate adjustments(w/PPA adjustment)

## Recommended Minimum Cash Reserve

O\&M Less Depreciation \& P/S Expense
Annual Pow er Supply Expense
Historical Rate Base (less IMEA Participation)
Current Portion of Debt Service
Five Year Capital Improvements - Net of bond proceeds

| \$ 22,571,049 | \$ 23,022,470 | \$ 23,482,919 |
| ---: | ---: | ---: |
| $115,410,456$ | $116,890,258$ | $111,252,917$ |
| $469,680,327$ | $481,268,327$ | $493,048,087$ |
| $3,266,346$ | $3,096,495$ | $2,775,703$ |
| $58,917,978$ | $58,917,978$ | $58,917,978$ |

O\&M Less Depreciation \& P/S Expense
Annual Pow er Supply Expense
Historical Rate Base (less IMEA Participation)
Current Portion of Debt Service
Five Year Capital Improvements - Net of bond proceeds
Recommended Minimum Cash Reserve
Projected Cash Reserves

| Percent <br> Allocated | Projected <br> $\mathbf{2 0 1 9}$ | Projected <br> $\mathbf{2 0 2 0}$ | Projected <br> $\mathbf{2 0 2 1}$ |  |
| :---: | ---: | ---: | ---: | ---: |
| $\mathbf{1 2 . 3 \%}$ | $\$ 22,782,732$ | $\$$ | $2,838,387$ | $\$$ |
| $\mathbf{6 . 8} \%$ | $7,901,576$ | $8,002,890$ | $7,616,930$ |  |
| $\mathbf{1 \%}$ | $4,696,803$ | $4,812,683$ | $4,930,481$ |  |
| $\mathbf{8 6 \%}$ | $2,796,321$ | $2,650,912$ | $2,376,281$ |  |
| $\mathbf{2 0 \%}$ | $11,783,596$ | $11,783,596$ | $11,783,596$ |  |
|  | $\$ \mathbf{2 9 , 9 6 1 , 0 2 8}$ | $\mathbf{\$ 3 0 , 0 8 8 , 4 6 7}$ | $\$ \mathbf{2 9 , 6 0 2 , 4 4 2}$ |  |
|  | $\mathbf{2 9 , 7 0 7 , 9 1 4}$ | $\mathbf{\$ 3 9 , 6 4 7 , 9 7 6}$ | $\mathbf{\$ 4 9 , 0 3 3 , 8 0 6}$ |  |

## 2019 Cost of Service

## Cost of service results

| Customer Class | Cost of Service |  | Projected <br> Revenues |  | \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | \$ | 73,023,370 | \$ | 68,120,512 | 7\% |
| General Service GS1 |  | 21,819,369 |  | 19,511,287 | 12\% |
| Street Lights SL |  | 644,108 |  | - |  |
| Metered Outdoor Lighting OLR |  | 265,502 |  | 297,190 | -11\% |
| General Service Demand GS2 |  | 49,398,304 |  | 50,963,016 | -3\% |
| Primary PRIM |  | 18,377,316 |  | 18,834,619 | -2\% |
| Transmission TRAN |  | 450,247 |  | 406,339 | 11\% |
| Total | \$ | 163,978,217 | \$ | 158,132,965 | 3.7\% |

## 2019 Cost of Service

## Cost of service customer charges

Total Cost of Service Rates - Annual

|  |  |  |  |  | Annual |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer Class | Current Customer Charge |  | COS <br> Customer Charge |  | Demand |  | Energy |  |
| Residential | \$ | 15.60 | \$ | 18.75 | \$ | - | \$ | 0.1212 |
| General Service GS1 |  | 30.65 |  | 37.71 |  | - |  | 0.1284 |
| Street Lights SL |  |  |  | 1.65 |  | - |  | 0.1020 |
| Metered Outdoor Lighting OLR |  | 30.65 |  | 13.53 |  | - |  | 0.1055 |
| General Service Demand GS2 |  | 30.65 |  | 120.08 |  | 18.08 |  | 0.0584 |
| Primary PRIM |  | 127.35 |  | 147.18 |  | 19.09 |  | 0.0557 |
| Transmission TRAN |  | 127.35 |  | 586.58 |  | 21.60 |  | 0.0539 |

## The Future

- We control our destiny (to a certain extent)...
- Continue to monitor cash balance
- Complete a 2021 Rate Study
- Cost of Service Analysis
- Rate Design
- Base PPA
- Capital spending returned to $\$ 12$ million per year
- Evaluate 'catch-up' spending
- Evaluate aging system integrity needs
- Continue to monitor legislation and its impacts on power supply cost


## Recommendation

- Decrease rates by 2.0\% per year for 3 years (2019-2021)
- Realignment of base PPA from $\$ 83.00$ to $\$ 85.51 / \mathrm{MWh}$
- Pay off the 2015 internal water loan by 12/31/2018
- Increase Capital spending to $\$ 14$ million per year for 3 years (2019-2021)


## QUESTIONS?? and THANK YOU!!

