



Portion For Your Records

BILL DATE	Apr 3, 2012
TOTAL AMOUNT DUE BY	Apr 24, 2012
AMOUNT PAYABLE AFTER DUE DATE	\$93.66
	\$95.06
Total Electric Charges	\$74.78
Total Lighting Charges	\$20.31
Total Miscellaneous Charges	-\$1.43
Current Amount Due	\$93.66
Prior Amount Due	\$0.00
Total Amount Due	\$93.66

Electric and Water Cost of Service and Rate Design Study

New Prague Utilities Commission



David A. Berg, PE
Principal – Dave Berg Consulting
Sept. 25, 2023



Water Rates

Water Capital Improvements

Water Capital Improvements by Year

Capital Item	2023	2024	2025	2026	2027
Water Capital	\$1,000,000	\$885,000	\$916,000	\$491,000	\$500,380

Assumed Water Bond Issues

Water Bond Issues by Year					
Capital Item	2023	2024	2025	2026	2027
Total Capital	\$460,000	\$750,000	\$830,000	\$400,000	\$420,000

Water Sales Projections

- 2023 – 260 million gallons
- 2024 – 230 million gallons
- 1% annual growth after 2024

Projected Operating Results – Existing Rates

Projected Operating Results-Water Existing Rates

Year	2023	2024	2025	2026	2027
Operating Revenues	\$1,931,263	\$1,745,211	\$1,760,922	\$1,776,733	\$1,792,647
Less Operating Expenses	(1,475,228)	(1,545,175)	(1,617,773)	(1,677,888)	(1,740,064)
Plus Non -Operating Revenue (Expenses)	(74,696)	(69,543)	(79,241)	(88,189)	(111,236)
Plus Capital Contributions	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
Change in Net Position	\$401,338	\$150,493	\$83,907	\$30,656	\$(38,653)
Net Position as Percent of Revenues	20.8%	8.6%	4.8%	1.7%	-2.2%

Projected Cash Reserves – Existing Rates

Projected Cash Reserves-Water Existing Rates

Year	2023	2024	2025	2026	2027
Beginning of Year	\$2,460,038	\$2,550,721	\$2,768,791	\$2,965,101	\$3,087,062
<u>Plus</u> Change in Net Position	401,338	150,493	83,907	30,656	(38,653)
<u>Plus</u> Depreciation	464,054	493,554	524,088	540,454	557,134
<u>Plus</u> Bond Proceeds	460,000	750,000	830,000	400,000	420,000
Less Principal Pmts	(234,710)	(290,977)	(325,684)	(358,150)	(319,970)
Less Capital Improvements	<u>(1,000,000)</u>	<u>(885,000)</u>	<u>(916,000)</u>	<u>(491,000)</u>	<u>(500,380)</u>
End of Year	\$2,550,721	\$2,768,791	\$2,965,101	\$3,087,062	\$3,205,193
As a percent of Operating Revenue	132%	159%	168%	174%	179%

Water Cost of Service Results

Water Cost of Service Results Comparison of % Cost and Revenues 2022 Test Year

Customer Classification	Allocated Cost to Serve	Revenues	Increase/ (Decrease)
Commodity	65.7%	60.6%	8.4%
Customer	<u>34.3%</u>	<u>39.4%</u>	<u>-13.0%</u>
Total	100.0%	100.0%	0.0%

Water Rate Recommendations

- Increase reserves to approach 200% of annual operating revenues
- 5% annual overall rate increases
- Water increase strategy
 - Per cost-of-service results, do not increase customer charges
 - Commodity increase options
 - Across the board increase (maintain single rate)
 - Tiered rates (higher rate for increased usage)
 - Summer rates (recommended)
- Four-year rate plan to achieve goals

Proposed Rates

New Prague Utilities Existing and Proposed Water Rates

<u>Class</u>	<u>Current Rate</u>	<u>2024 Proposed Rate</u>	<u>2025 Proposed Rate</u>	<u>2026 Proposed Rate</u>	<u>2027 Proposed Rate</u>
Customer Charges					
Residential 5/8 3/4	\$ 16.10	\$ 16.10	\$ 16.10	\$ 16.10	\$ 16.10
Residential 1	\$ 16.81	\$ 16.81	\$ 16.81	\$ 16.81	\$ 16.81
Residential 1.5	\$ 16.96	\$ 16.96	\$ 16.96	\$ 16.96	\$ 16.96
Commercial 5/8 3/4	\$ 16.10	\$ 16.10	\$ 16.10	\$ 16.10	\$ 16.10
Commercial 1	\$ 16.81	\$ 16.81	\$ 16.81	\$ 16.81	\$ 16.81
Commercial 1.5	\$ 16.96	\$ 16.96	\$ 16.96	\$ 16.96	\$ 16.96
Commercial 2	\$ 37.17	\$ 37.17	\$ 37.17	\$ 37.17	\$ 37.17
Commercial 3	\$ 42.46	\$ 42.46	\$ 42.46	\$ 42.46	\$ 42.46
Commercial 4	\$ 62.83	\$ 62.83	\$ 62.83	\$ 62.83	\$ 62.83
Commercial 6	\$ 93.66	\$ 93.66	\$ 93.66	\$ 93.66	\$ 93.66
Commercial 6 no base fee	\$ -	\$ -	\$ -	\$ -	\$ -
Residential Multi	\$ 11.27	\$ 11.27	\$ 11.27	\$ 11.27	\$ 11.27
Commercial Multi	\$ 11.27	\$ 11.27	\$ 11.27	\$ 11.27	\$ 11.27
Water Charges					
per 1000 gallons (June 1-Sept 30)	\$ 4.39	\$ 5.38	\$ 6.36	\$ 7.33	\$ 8.30
per 1000 gallons (nonsummer)	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39
golf course per 1000 gallons (all months)	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39	\$ 4.39

Water Rate Residential Impacts

		Monthly Bill			
		2024	2025	2026	2027
<u>Residential Bill Impact</u>	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>Proposed Rate</u>	<u>Proposed Rate</u>	<u>Proposed Rate</u>
Residential 4000 gallons nonsummer	\$ 33.66	\$ 33.66	\$ 33.66	\$ 33.66	\$ 33.66
Residential 4000 gallons summer	\$ 33.66	\$ 37.62	\$ 41.54	\$ 45.42	\$ 49.30
Residential 8000 gallons nonsummer	\$ 51.22	\$ 51.22	\$ 51.22	\$ 51.22	\$ 51.22
Residential 8000 gallons summer	\$ 51.22	\$ 59.14	\$ 66.98	\$ 74.74	\$ 82.50

<u>Annual Increase</u>	<u>2024</u>
Residential 4000 gallons \$	\$ 15.84
Residential 4000 gallons %	3.9%
Residential 8000 gallons \$	\$ 31.68
Residential 8000 gallons %	5.2%

Projected Results – Proposed Rates

Projected Operating Results-Water Proposed Rates

Year	2023	2024	2025	2026	2027
Operating Revenues	\$1,931,263	\$1,840,320	\$1,952,298	\$2,065,536	\$2,181,026
Less Operating Expenses	(1,475,228)	(1,545,175)	(1,617,773)	(1,677,888)	(1,740,064)
Plus Non -Operating Revenue (Expenses)	(74,696)	(69,543)	(79,241)	(88,189)	(111,236)
Plus Capital Contributions	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
Change in Net Position	\$401,338	\$245,602	\$275,283	\$319,459	\$349,726
Net Position as Percent of Revenues	20.8%	13.3%	14.1%	15.5%	16.0%

Projected Cash Reserves – Proposed Rates

Projected Cash Reserves-Water Proposed Rates

Year	2023	2024	2025	2026	2027
Beginning of Year	\$2,460,038	\$2,550,721	\$2,863,899	\$3,251,586	\$3,662,349
<u>Plus</u> Change in Net Position	401,338	245,602	275,283	319,459	349,726
<u>Plus</u> Depreciation	464,054	493,554	524,088	540,454	557,134
<u>Plus</u> Bond Proceeds	460,000	750,000	830,000	400,000	420,000
Less Principal <u>Pmts</u>	(234,710)	(290,977)	(325,684)	(358,150)	(319,970)
Less Capital Improvements	<u>(1,000,000)</u>	<u>(885,000)</u>	<u>(916,000)</u>	<u>(491,000)</u>	<u>(500,380)</u>
End of Year	\$2,550,721	\$2,863,899	\$3,251,586	\$3,662,349	\$4,168,859
As a percent of Operating Revenue	132%	156%	167%	177%	191%

Electric Rates

Electric Capital Improvements

Electric Capital Improvements by Year

Capital Item	2023	2024	2025	2026	2027
Electric Capital	\$795,000	\$890,000	\$1,462,000	\$582,000	\$538,000

Projected Operating Results – Existing Rates

Projected Operating Results-Electric Existing Rates

Fiscal Year	2023	2024	2025	2026	2027
Operating Revenues	\$9,588,205	\$9,708,943	\$9,820,359	\$9,933,566	\$10,048,803
Less Operating Expenses	(9,712,306)	(9,890,077)	(10,091,069)	(10,267,032)	(10,445,986)
Plus Non -Operating Revenue (Expenses)	91,400	91,400	91,400	91,400	91,400
Less Transfer Out	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>
Change in Net Position	(72,701)	(129,734)	(219,310)	(282,065)	(345,782)
Net Position as Percent of Revenues	-0.8%	-1.3%	-2.2%	-2.8%	-3.4%

Projected Cash Reserves – Existing Rates

Projected Cash Reserves-Electric Existing Rates

Fiscal Year	2023	2024	2025	2026	2027
Beginning of Year	\$5,052,993	\$4,850,320	\$4,525,281	\$3,587,399	\$3,486,162
<u>Plus</u> Change in Net Position	(72,701)	(129,734)	(219,310)	(282,065)	(345,782)
<u>Plus</u> Depreciation	665,028	694,695	743,428	762,828	780,761
Less Capital Improvements	(795,000)	(890,000)	(1,462,000)	(582,000)	(538,000)
End of Year	\$4,850,320	\$4,525,281	\$3,587,399	\$3,486,162	\$3,383,141
As a percent of Operating Revenue	51%	47%	37%	35%	34%

Electric Cost of Service Results

Electric Cost of Service Results Comparison of % Cost and Revenues 2022 Test Year

Customer Classification	Allocated Cost to Serve	Revenues	Increase/ (Decrease)
Residential	46.0%	47.6%	-3.5%
Commercial	6.4%	6.9%	-8.3%
Small Industrial	19.8%	20.1%	-1.3%
Industrial	<u>27.8%</u>	<u>25.3%</u>	<u>9.9%</u>
Total	100.0%	100.0%	0.0%

Electric Rate Recommendations

- Increase reserves to reach \$5 million or 50% of revenue at end of study period
- Implement 2% increases each year 2024-2027
 - Residential and Small Industrial – 2% per year
 - Commercial – 1% per year
 - Industrial – 2.3% per year
- Electric increase strategy
 - no increase in customer charges (except Industrial)

Proposed Rates – pg. 1

Existing and Proposed Electric Rates

<u>Class</u>	<u>Current Rate</u>	<u>2024 Proposed Rate</u>	<u>2025 Proposed Rate</u>	<u>2026 Proposed Rate</u>	<u>2027 Proposed Rate</u>
Residential Service					
Customer (per month)	\$ 15.82	\$ 15.82	\$ 15.82	\$ 15.82	\$ 15.82
Energy - all kWh	\$ 0.1306	\$ 0.1337	\$ 0.1369	\$ 0.1400	\$ 0.1433
Off Peak Control Credit (per month)	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00
Off Peak Summer Energy - all kWh	\$ 0.0807	\$ 0.0823	\$ 0.0839	\$ 0.0856	\$ 0.0873
Off Peak Winter Energy - all kWh	\$ 0.0682	\$ 0.0696	\$ 0.0710	\$ 0.0724	\$ 0.0738
Commercial Service					
Customer (per month)	\$ 30.85	\$ 30.85	\$ 30.85	\$ 30.85	\$ 30.85
Energy - all kWh	\$ 0.1261	\$ 0.1276	\$ 0.1292	\$ 0.1308	\$ 0.1324
Interruptible - all kWh	\$ 0.0917	\$ 0.0926	\$ 0.0935	\$ 0.0944	\$ 0.0953
Small Industrial					
Customer (per month)	\$ 66.04	\$ 66.04	\$ 66.04	\$ 66.04	\$ 66.04
Demand - all kW	\$ 13.17	\$ 13.45	\$ 13.72	\$ 13.99	\$ 14.27
Energy - all kWh	\$ 0.0721	\$ 0.0736	\$ 0.0752	\$ 0.0768	\$ 0.0784
Industrial					
Customer (per month)	\$ 66.04	\$ 91.00	\$ 120.00	\$ 140.00	\$ 150.00
Demand - all kW	\$ 13.50	\$ 13.82	\$ 14.10	\$ 14.44	\$ 14.82
Energy - all kWh	\$ 0.0721	\$ 0.0736	\$ 0.0752	\$ 0.0768	\$ 0.0784

Proposed Rates – pg. 2

<u>Class</u>	<u>Current Rate</u>	<u>2024 Proposed Rate</u>	<u>2025 Proposed Rate</u>	<u>2026 Proposed Rate</u>	<u>2027 Proposed Rate</u>
Large Industrial					
Customer (per month)	\$ 66.04	\$ 100.00	\$ 140.00	\$ 170.00	\$ 200.00
Demand - all kW	\$ 16.61	\$ 16.91	\$ 17.20	\$ 17.50	\$ 17.85
Energy - all kWh	\$ 0.0721	\$ 0.0736	\$ 0.0752	\$ 0.0768	\$ 0.0784
Peak Alert					
Customer (per month)	\$ 136.60	\$ 136.60	\$ 136.60	\$ 136.60	\$ 136.60
Demand - all kW	\$ 3.18	\$ 3.81	\$ 4.41	\$ 5.06	\$ 5.72
Energy - all kWh	\$ 0.0779	\$ 0.0779	\$ 0.0779	\$ 0.0779	\$ 0.0779
Interruptible					
Customer (per month)	\$ 30.86	\$ 30.86	\$ 30.86	\$ 30.86	\$ 30.86
Energy - all kWh	\$ 0.0917	\$ 0.0926	\$ 0.0935	\$ 0.0944	\$ 0.0953
Street Lighting (current fixtures)					
Customer (per month)	\$ 11.07	\$ 11.29	\$ 11.52	\$ 11.75	\$ 11.98
Energy - all kWh	\$ 0.1440	\$ 0.1469	\$ 0.1498	\$ 0.1528	\$ 0.1559
Street Lighting (LED fixtures)					
Energy - all kWh	\$ 0.1440	\$ 0.2000	\$ 0.2500	\$ 0.3000	\$ 0.3500
Unmetered Lighting (per month)					
Residential LED	\$ 21.72	\$ 22.15	\$ 22.60	\$ 23.05	\$ 23.51
Commercial LED	\$ 30.23	\$ 30.83	\$ 31.45	\$ 32.08	\$ 32.72
Security lights	\$ 12.11	\$ 12.35	\$ 12.60	\$ 12.85	\$ 13.11
City LED less than 100 W	\$ 12.11	\$ 12.35	\$ 12.60	\$ 12.85	\$ 13.11
City LED more than 100 W	\$ 15.62	\$ 15.93	\$ 16.25	\$ 16.58	\$ 16.91
EV Charging					
On Peak (10 am - 10 pm) per kWh	\$ 0.2274	\$ 0.2388	\$ 0.2507	\$ 0.2632	\$ 0.2764
Off Peak (10 pm - 10 am) per kWh	\$ 0.0806	\$ 0.0806	\$ 0.0806	\$ 0.0806	\$ 0.0806

Electric Rate Residential Impacts

		Monthly Bill			
		2024	2025	2026	2027
<u>Residential Bill Impact</u>	<u>Current</u> <u>Rate</u>	<u>Proposed</u> <u>Rate</u>	<u>Proposed</u> <u>Rate</u>	<u>Proposed</u> <u>Rate</u>	<u>Proposed</u> <u>Rate</u>
Residential 650 kWh (avg customer)	\$ 100.71	\$ 102.73	\$ 104.81	\$ 106.82	\$ 108.97
Increase over previous year (\$)		\$ 2.02	\$ 2.08	\$ 2.02	\$ 2.14
Increase over previous year (%)		2.0%	2.0%	1.9%	2.0%
Residential 1200 kWh	\$ 172.54	\$ 176.26	\$ 180.10	\$ 183.82	\$ 187.78
Increase over previous year (\$)		\$ 3.72	\$ 3.84	\$ 3.72	\$ 3.96
Increase over previous year (%)		2.2%	2.2%	2.1%	2.2%

Projected Operating Results – Proposed Rates

Projected Operating Results-Electric Proposed Rates

Fiscal Year	2023	2024	2025	2026	2027
Operating Revenues	\$9,588,205	\$9,902,460	\$10,216,461	\$10,535,281	\$10,866,825
Less Operating Expenses	(9,712,306)	(9,890,077)	(10,091,069)	(10,267,032)	(10,445,986)
Plus Non -Operating Revenue (Expenses)	91,400	91,400	91,400	91,400	91,400
Less Transfer Out	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>	<u>(40,000)</u>
Change in Net Position	(72,701)	63,783	176,792	319,649	472,239
Net Position as Percent of Revenues	-0.8%	0.6%	1.7%	3.0%	4.3%

Projected Cash Reserves – Proposed Rates

Projected Cash Reserves-Electric Proposed Rates

Fiscal Year	2023	2024	2025	2026	2027
Beginning of Year	\$5,052,993	\$4,850,320	\$4,718,798	\$4,177,019	\$4,677,496
<u>Plus</u> Change in Net Position	(72,701)	63,783	176,792	319,649	472,239
<u>Plus</u> Depreciation	665,028	694,695	743,428	762,828	780,761
Less Capital Improvements	<u>(795,000)</u>	<u>(890,000)</u>	<u>(1,462,000)</u>	<u>(582,000)</u>	<u>(538,000)</u>
End of Year	\$4,850,320	\$4,718,798	\$4,177,019	\$4,677,496	\$5,392,496
As a percent of Operating Revenue	51%	48%	41%	44%	50%

Other Rate Considerations

- **Stand alone EV charging at commercial locations**
 - Separately metered
 - Customer pays for infrastructure
 - Same TOU rates as current EV charging rates
- **Whole house TOU rate**
 - On peak (10 am – 10 pm) - \$0.1650/kWh
 - Off peak (10 pm – 10 am) - \$0.0823/kWh
 - Customer charge - \$15.82/month
- **Solar Grid Access Charge**
 - Based on kW size of solar array
 - No charge for first 3 kW
 - Access charge - \$4.50/kW/month

Questions/Discussion