CITY COUNCIL AGENDA

Work Session

February 20, 2024 at 6:00 PM

1) **CALL TO ORDER**

2) **ROLL CALL**

3) **PUBLIC COMMENT ON AGENDA ITEMS** Persons addressing City Council are required to give their name and address for the record when called upon by the Mayor. Members of the public shall be limited to speaking for a maximum of three (3) minutes. Comments shall address AGENDA ITEM topics. Public Hearing items should be addressed during the PUBLIC HEARING portion (Item 10) of the meeting agenda. Non-Agenda items shall be addressed during the PUBLIC COMMENT-NON-AGENDA ITEMS (Item 14) portion of the meeting agenda.

4) **DISCUSSION ITEMS**

   A. **ELECTRIC RATE AND COST OF SERVICE STUDY**

5) **PUBLIC COMMENT ON NON-AGENDA ITEMS** Persons addressing City Council are required to give their name and address for the record when called upon by the Mayor. Members of the public shall be limited to speaking for a maximum of two (2) minutes. Comments shall address NON-AGENDA ITEM topics. Public Hearing items shall be addressed during the PUBLIC HEARING portion (Item 10) of the meeting agenda. Agenda items should be addressed during the PUBLIC COMMENT-AGENDA ITEMS (Item 6) portion of the meeting agenda.

6) **ADJOURNMENT**

MAYOR: Jim Schwartz CITY MANAGER: Derek N. Perry
COUNCIL MEMBERS: Joe Caron, Theresa Chaney-Huggett, Jacob Gates,
Ryan Traver, Ryan Underhill, Scott Wolfersberger
Training Room, 323 W Michigan Ave, Marshall, MI 49068

City of Marshall, Michigan

2023
ELECTRIC RATE
AND
COST OF SERVICE
STUDY

SCOPE OF SERVICES

- Revenue Requirements Analysis
- Cost of Service Analysis
- Rate Review
- Develop New Rates
- Present Results

REVENUE REQUIREMENT ANALYSIS

REVENUE REQUIREMENTS ANALYSIS

1. Project Energy Sales
2. Project Power Supply Requirements and Costs
3. Project Revenues at Current Rates
4. Project Revenue Requirements
5. Determine Overall Revenue Adjustment

PROJECTED ENERGY SALES (kWh)

	FY' 2024	FY' 2025	FY' 2026	FY' 2027	FY' 2028
Residential	26,168,400	26,168,400	26,168,400	26,168,400	26,168,400
Commercial	15,092,400	15,092,400	15,092,400	15,092,400	15,092,400
General Service	18,600,000	18,600,000	18,600,000	18,600,000	18,600.000
Large Power	60,060,000	60,060,000	60,060,000	60,060,000	60,060,000
Economic Dev	16,800,000	16,800,000	16,800,000	16,800,000	16,800,000
Security/Street Lights	30,000	30,000	30,000	30,000	30,000
Total	136,750,800	136,750,800	136,750,800	136,750,800	136,750,800

PROJECTED POWER SUPPLY REQUIREMENTS & COSTS

Year	kWh(1)	Amount(2)	$/kWh
FY' 24	147,044,000	$ 11,279,700	$ 0.0767
FY' 25	147,044,000	11,569,400	0.0787
FY' 26	147,044,000	11,692,900	0.0795
FY' 27	147,044,000	11,932,600	0.0812
FY' 28	147,044,000	11,932,600	0.0812

(1) Includes unbilled losses of 7%.
(2) Based on projections provided by AMP.

PROJECTED REVENUES AT CURRENT RATES *

	kWh	$/kWh*	Amount
Residential	26,168,400	$ 0.1648	$ 4,313,600
Commercial	15,092,400	0.1606	2,423,000
General Service	18,600,000	0.1417	2,634,700
Large Power	60,060,000	0.1364	8,192,400
Economic Dev	16,800,000	0.0760	1,276,800
Security/Street Lights	30,000	n/a	111,700
Totals	136,750,800	$ 0.1386	$ 18,952,400

* Includes a PSCA Charge = $0.03966 per kWh.

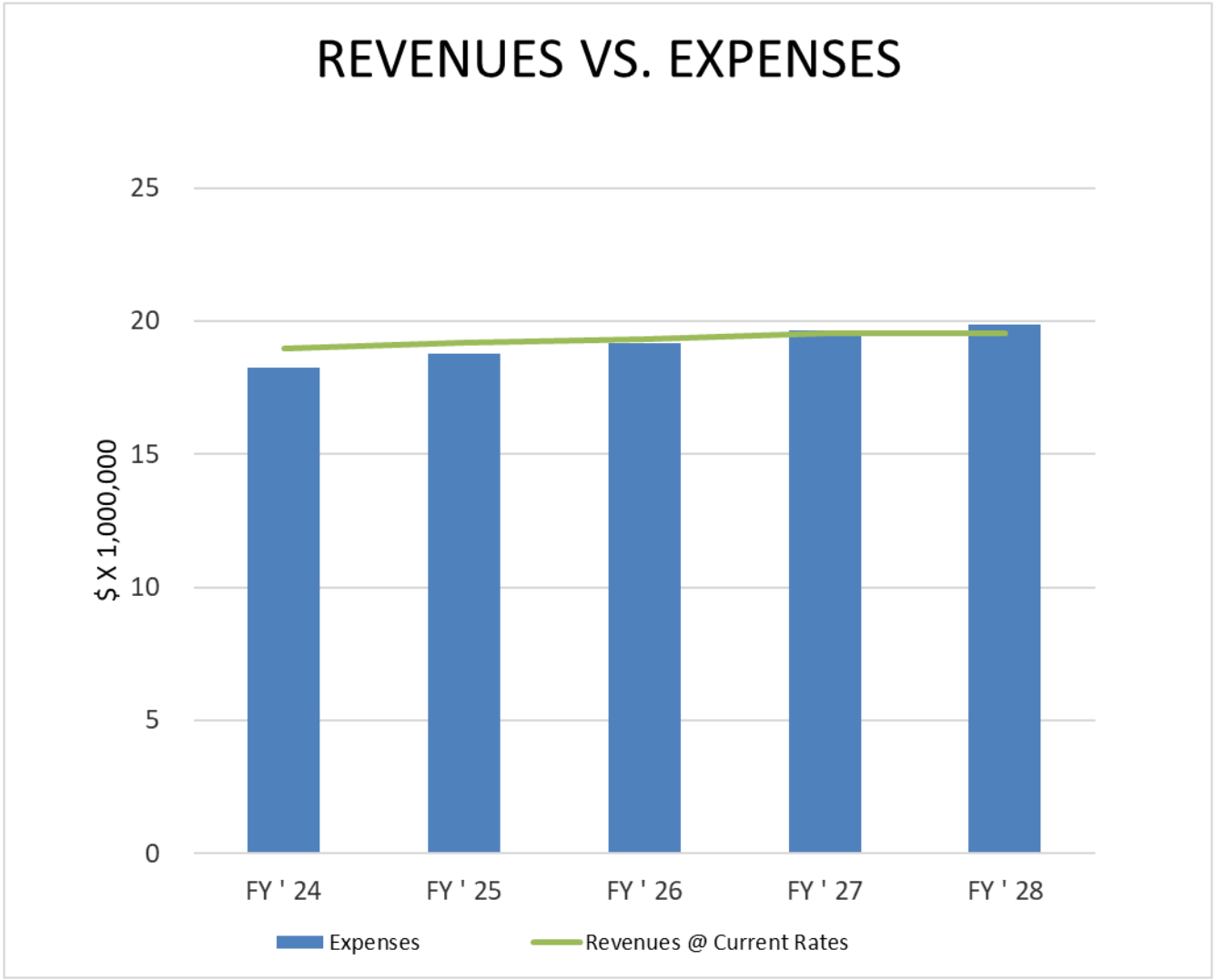
PROJECTED REVENUE REQUIREMENTS*

	FY' 2024	FY' 2025	FY' 2026	FY' 2027	FY' 2028
Administration	$ 1,914,037	$ 1,987,192	$ 2,064,627	$ 2,149,803	$ 2,239,907
Power House /Power Supply	12,069,548	12,386,817	12,539,269	12,809,314	12,841,197
Line Distribution	2,799,455	2,899,391	2,983,220	3,081,168	3,183,479
Debt Service/Principal Retirement	295,000	310,000	320,000	330,000	280,000
Capital Outlay	2,000,000	2,060000	2,121,800	2,185,454	2,251,018
Deficit Elimination	0	0	0	0	0
Depreciation	(593,210)	(611,006)	(629,336)	(648,217)	(667,663)
Other Income	(254,887)	(254,887)	(254,887)	(254,887)	(254,887)
NET REVENUE REQUIREMENT	$ 18,299,944	$ 18,767,507	$ 19,144,692	$ 19,652,635	$ 19,873,050

* Reflects Cash Basis.

DETERMINATION OF OVERALL REVENUE ADJUSTMENT

	Revenues at Current Rates	Revenue Requirement	Revenue Adjustment Amount	Revenue Adjustment %
FY '24	$ 18,952,225	$ 18,229,944	$ (722,282)	(4.09%)
FY '25	19,207,433	18,767,507	(439,926)	(2.45%)
FY '26	19,316,252	19,144,692	(171,560)	(0.95%)
FY '27	19,527,413	19,652,635	125,222	0.69%
FY '28	19,527,413	19,873,050	345,735	1.89%


REVENUES VS. EXPENSES
25
20
15
10
5
0
$ X 1,000,000
FY ' 24
FY ' 25
FY ' 26
FY ' 27
FY ' 28
Expenses
Revenues @ Current Rates

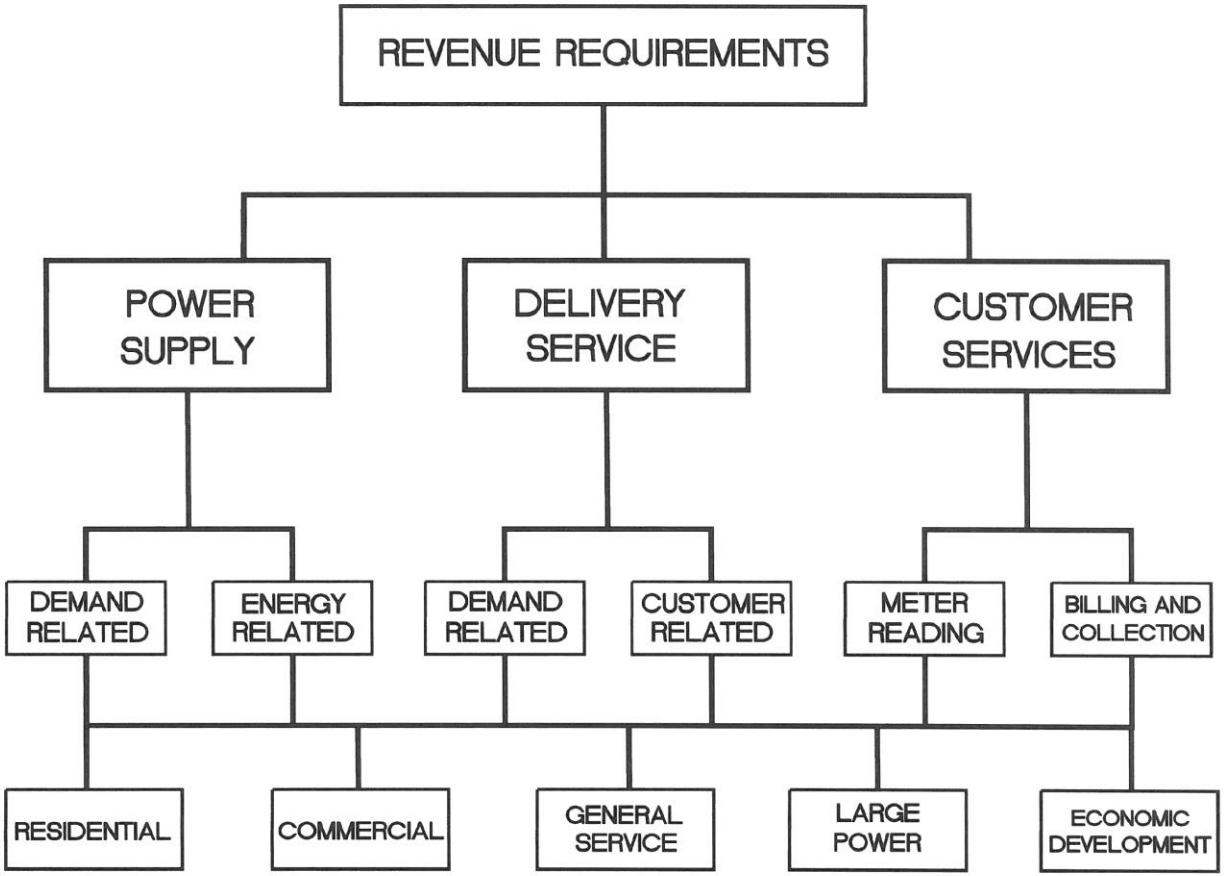
CONCLUSIONS & RECOMMENDATIONS

- Revenues at Current Rates are Sufficient to Meet Future Revenue Requirements

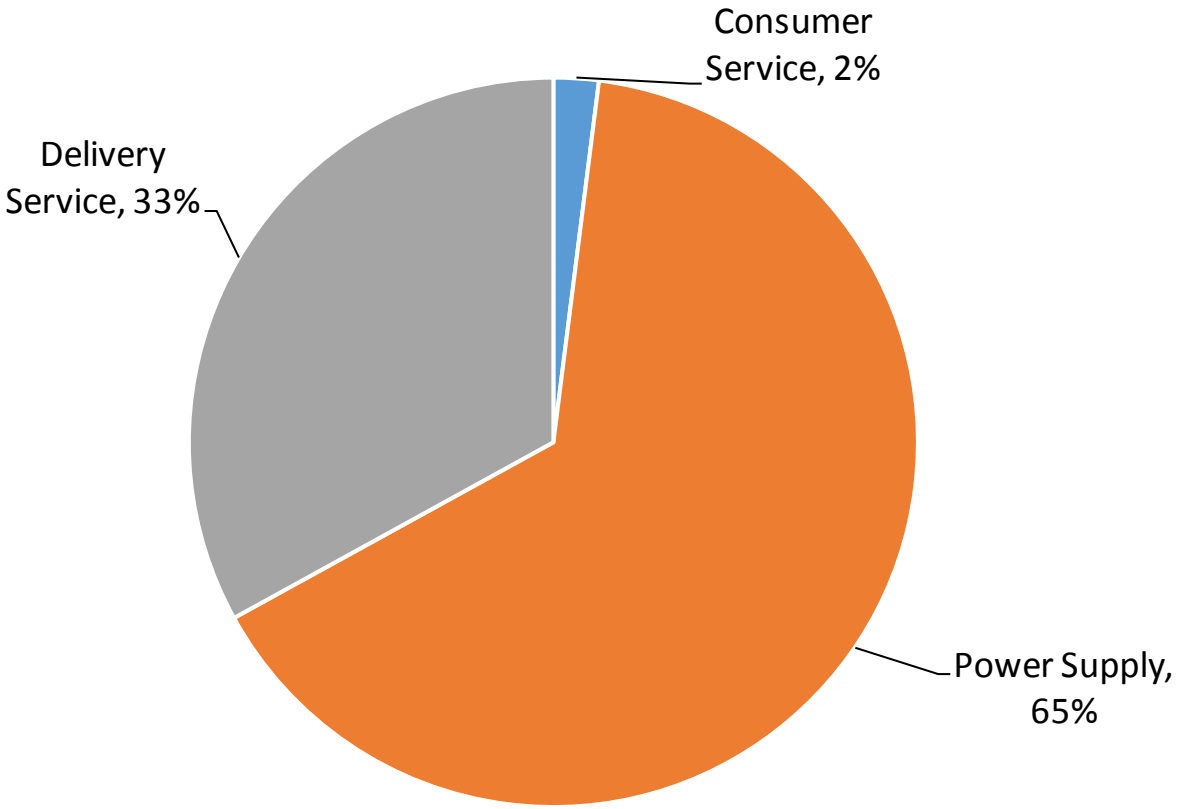
- Revenues Do Not Need to be Increased in Order to Meet the Projected Near-Term Revenue Requirements.

COST OF SERVICE ANALYSIS

"UNBUNDLED" COST OF SERVICE ANALYSIS



FUNCTIONALIZATION OF REVENUE REQUIREMENTS
FY'2028 TEST YEAR



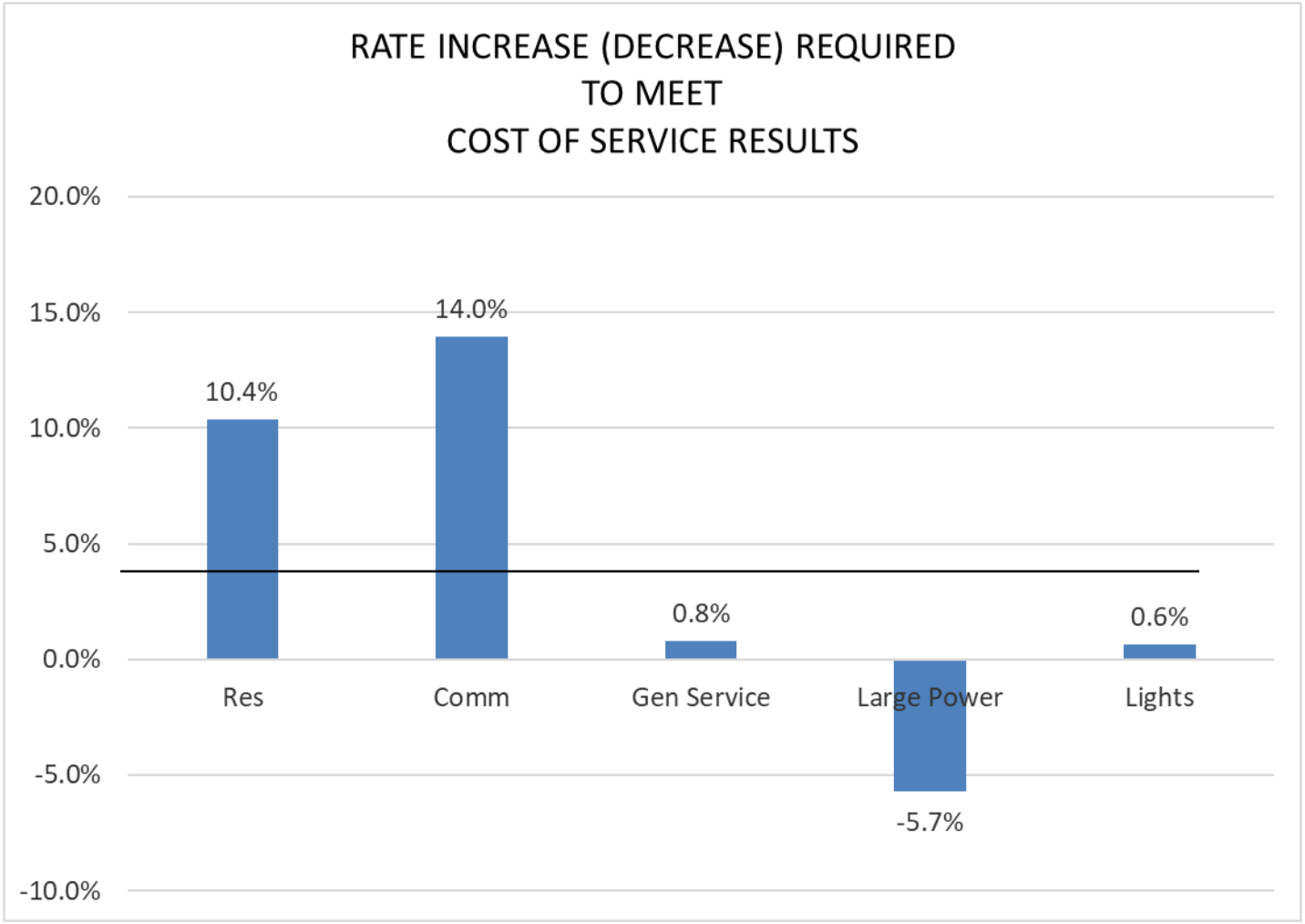
UNIT COST OF SERVICE

- Divide Funtionalized Costs by Units of Service
- Power Supply - Demand - $ 19.18 / kW-Mo.
- Power Supply - Energy - $ 0.0402 / kWh.
- Delivery Service - Demand - $ 12.02 / Delivered kW-Mo.
- Delivery Service - Customer - $ 19.54 / Wt. Customer/Mo.
- Consumer Service - Meter reading - $ 3.55 / Wt. Meter/Mo.
- Consumer Service - Billing - $ 3.43 / Customer/Mo.

COS vs. CURRENT RATES (1)

Line No.	Rate Group	Revenues @ Current Rates (a)	Cost of Service Results (b)	Under(Over) Recovery $ (c)	Under(Over) Recovery % (d)
1	**Residential**	$ 4,439,094	$ 4,898,879	$ 459,785	10.4%
2	**Commercial**	$ 2,495,541	$ 2,844,296	$ 348,755	14.0%
3	**General Service**	$ 2,723,896	$ 2,745,276	$ 21,379	0.8%
4	**Large Power**	$ 8,480,214	$ 7,995,221	$ (484,993)	-5.7%
4	**Economic Development**	$ 1,276,800	$ 1,276,800	$ 0	0.0%
5	**Street Light/Security Light**	$ 111,868	$ 112,578	$ 710	0.6%
	TOTAL SYSTEM	**$ 19,527,413**	**$ 19,873,050**	**$ 345,636**	**1.8%**

(1) Reflects FY'2028 Revenues and Test Year.



Overall Increase ≈ 1.8%

CONCLUSIONS

- Large Power Class is Subsidizing the Residential and Commercial Classes
- Future Rate Adjustment Should Move the Revenue Distribution Towards the Cost of Service Results

ELECTRIC RATE REVIEW

RESIDENTIAL RATE “A”

• Service Charge:	$ 7.25/Month
• Energy Charge: All kWh	$ 0.1141/kWh
• PSCA Charge: All kWh	$ *

* Adjusted Monthly Based on Actual Power Supply Costs.

RESIDENTIAL RATE “A-1”(1)

• Service Charge:	$ 7.25/Month
• Energy Charge:	
Winter (October thru April)	
First 600 kWh	$ 0.1141/kWh
Over 600 kWh	$ 0.0741/kWh
Summer (May thru Sept)	
All kWh	$ 0.1141/kWh
• PSCA Charge:	
All kWh	$ *

(1) Electric Heat as Primary Heating Source

* Adjusted Monthly Based on Actual Power Supply Costs.

RESIDENTIAL RATE “LS”(1)

- Service Charge: $ 4.25/Month
- Energy Charge:
  All kWh $ 0.1041/kWh
- PSCA Charge:
  All kWh $ *

(1) Life Support System Use
* Adjusted Monthly Based on Actual Power Supply Costs.

COMMERCIAL/INDUSTRIAL RATE “B”

• Service Charge:	$ 15.50/Month
• Energy Charge: All kWh	$ 0.1124/kWh
• PSCA Charge: All kWh	$ *

* Adjusted Monthly Based on Actual Power Supply Costs.

COMMERCIAL/INDUSTRIAL RATE “B-1”(1)

• Service Charge:	$ 15.50/Month
• Energy Charge:	
Winter (October thru April)	
All kWh	$ 0.0724/kWh
Summer (May thru Sept)	
All kWh	$ 0.1124/kWh
• PSCA Charge:	
All kWh	$ *

(1) Electric Heating Service

* Adjusted Monthly Based on Actual Power Supply Costs.

GENERAL SERVICE RATE “C”

• Service Charge:	$ 15.50/Month
• Capacity Charge: All kW	$ 10.87/kW
• Energy Charge: All kWh	$ 0.0706/kWh
• PSCA Charge: All kWh	$ *

* Adjusted Monthly Based on Actual Power Supply Costs.

INDUSTRIAL PRIMARY RATES “D” & “D-2”

• Service Charge:	$ 100.00/Month
• Capacity Charge: All kW	$ 9.15/kW
• Energy Charge: All kWh	$ 0.076/kWh
• PSCA Charge: All kWh	$ *

* Adjusted Monthly Based on Actual Power Supply Costs.

RATE CONCERNS

- Rates Not Reflective of Cost of Service Results
- Customer Charges are Substantially Lower Than Customer Related Costs
- Customer Charges Do Not Recognize Higher Cost of Serving Three-Phase Customers
- Demand Rates are Lower Than Demand Related Costs
- No Cost Justification for Electric Heat and Life Support Rates

RECOMMENDATIONS

- Phase–In Rate Adjustments Over Five Steps
- Increase All Customer Charges
- Increase Demand Rates
- Close the Residential Rates “A-1” & “LS” and Commercial/Industrial Rates “B” & “B-1” Effective Immediately and Phase Them Out by FY2028

PROPOSED RATE ADJUSTMENTS

City of Marshall, Michigan

PROPOSED ELECTRIC RATES
FIVE-STEP PHASE-IN

	Existing Rates*	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
RESIDENTIAL						
Monthly Service Charge: (Per Month)	$ 7.25	**$ 9.00**	**$ 10.50**	**$ 12.00**	**13.50**	**15.00**
Energy Charges: (Per kWh)						
All kWh	$ 0.15855	**$ 0.160**	**$ 0.160**	**$ 0.160**	**0.160**	**0.160**
COMMERCIAL						
Monthly Service Charge: (Per Month)						
	$ 15.50	**$ 16.00**	**$ 17.00**	**$ 18.00**	**19.00**	**20.00**
	15.50	**17.00**	**19.00**	**21.00**	**23.00**	**25.00**
Energy Charges: (Per kWh)						
All kWh	$ 0.15685	**$ 0.161**	**$ 0.166**	**$ 0.171**	**0.175**	**0.180**
GENERAL SERVICE						
Monthly Service Charge: (Per Month)						
Single-Phase	$ 15.50	**$ 17.00**	**$ 19.00**	**$ 21.00**	**23.00**	**25.00**
Three-Phase	15.50	**18.00**	**21.00**	**24.00**	**27.00**	**30.00**
Demand Charge: (Per kW)						
All kW	$ 10.87	**$ 11.20**	**$ 11.52**	**$ 11.85**	**12.17**	**12.50**
Energy Charges: (Per kWh)						
All kWh	$ 0.11505	**$ 0.1141**	**$ 0.1131**	**$ 0.1121**	**0.1111**	**0.1100**
LARGE POWER						
Monthly Service Charge: (Per Month)	$ 100.00	**$ 120.00**	**$ 140.00**	**$ 160.00**	**180.00**	**200.00**
Demand Charge: (Per kW)	$ 9.15	**$ 9.32**	**$ 9.49**	**$ 9.66**	**9.83**	**10.00**
Reactive Demand Charge: (Per kVar)	$ n/a	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**
Energy Charges: (Per kWh)	$ 0.1205	**$ 0.1185**	**$ 0.1165**	**$ 0.1145**	**0.1125**	**0.1100**

* Energy Rates include PSCA = $0.04445 per kWh.

TYPICAL ELECTRIC BILL COMPARISONS
MARSHALL VS. CONSUMERS ENERGY VS. DTE

Line No.	Description/Monthly Usage	Existing Marshall (a)	Proposed Marshall (b)	Consumers Energy (c)	DTE (d)	Percent Comparison: Existing Marshall (e)	Proposed Marshall (f)	Consumers Energy (g)	DTE (h)
	Residential (A)								
1	500 kWh	$ 86.53	$ 95.00	$ 94.48	$ 99.22	100%	110%	109%	115%
2	750 kWh	126.16	135.00	137.27	148.79	100%	107%	109%	118%
3	1,000 kWh	165.80	175.00	180.06	198.86	100%	106%	109%	120%
	Commercial (B)								
4	1,000 kWh	$ 172.35	$ 200.00	$ 170.77	$ 225.00	100%	116%	99%	131%
5	2,500 kWh	407.63	470.00	431.05	440.39	100%	115%	106%	108%
	General Service (C)								
6	10KW/3,000 kWh	$ 469.35	$ 480.00	$ 494.61	$ 622.72	100%	102%	105%	133%
7	25KW/7,500 kWh	1,150.13	1,162.50	1,173.06	1,432.41	100%	101%	102%	125%
8	50KW/15,000 kWh	2,284.75	2,300.00	2,361.70	2,781.88	100%	101%	103%	122%
	Large Power (D)								
9	500KW/100,000 kWh	$ 16,720.00	$ 16,200.00	$ 20,891.79	$ 18,195.68	100%	97%	125%	109%
10	1,000KW/300,000 kWh	45,385.00	43,200.00	44,464.26	40,609.68	100%	95%	98%	89%
11	2,000KW/800,000 kWh	114,760.00	108,200.00	93,086.72	91,209.68	100%	94%	81%	79%

(a) Reflects current Marshall rates effective 7/21/21. PSCA = $0.04445 per kWh. Excludes Low Income Energy Assistance Fund and Sales Tax.
(b) Reflects proposed Marshall Step 5 rates effective 7/1/28. PSCA = $0.00000 per kWh. Excludes Low Income Energy Assistance Fund and Sales Tax.
(c) Reflects Consumers Energy's comparable current rates. Excludes Low Income Energy Assistance Fund and Sales Tax.
(d) Reflects DTE Energy's comparable current rates. Excludes Low Income Energy Assistance Fund and Sales Tax.
(e) Column (a) divided by Column (a).
(f) Column (b) divided by Column (a).
(g) Column (c) divided by Column (a).
(h) Column (d) divided by Column (a).

01/30/24

SUMMARY

- Revenues Do Not Need to be Increased In Order to Meet The Projected Near-Term Revenue Requirements.
- Large Power Class is Subsidizing the Residential and Commercial Rate Classes.
- Current Rates are Not Reflective of Cost of Service Results.
- Recommend Adoption of Proposed Rate Adjustments, Which Move Rates and Revenue Distribution Towards Cost of Service Results

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