

SAN MIGUEL POWER ASSOCIATION
Town of Mountain Village Council Meeting 11.21.2024

SMPA Rates: Cost Management and the Energy Transition



Extraordinary Service Territory



Wholesale Rate Increase

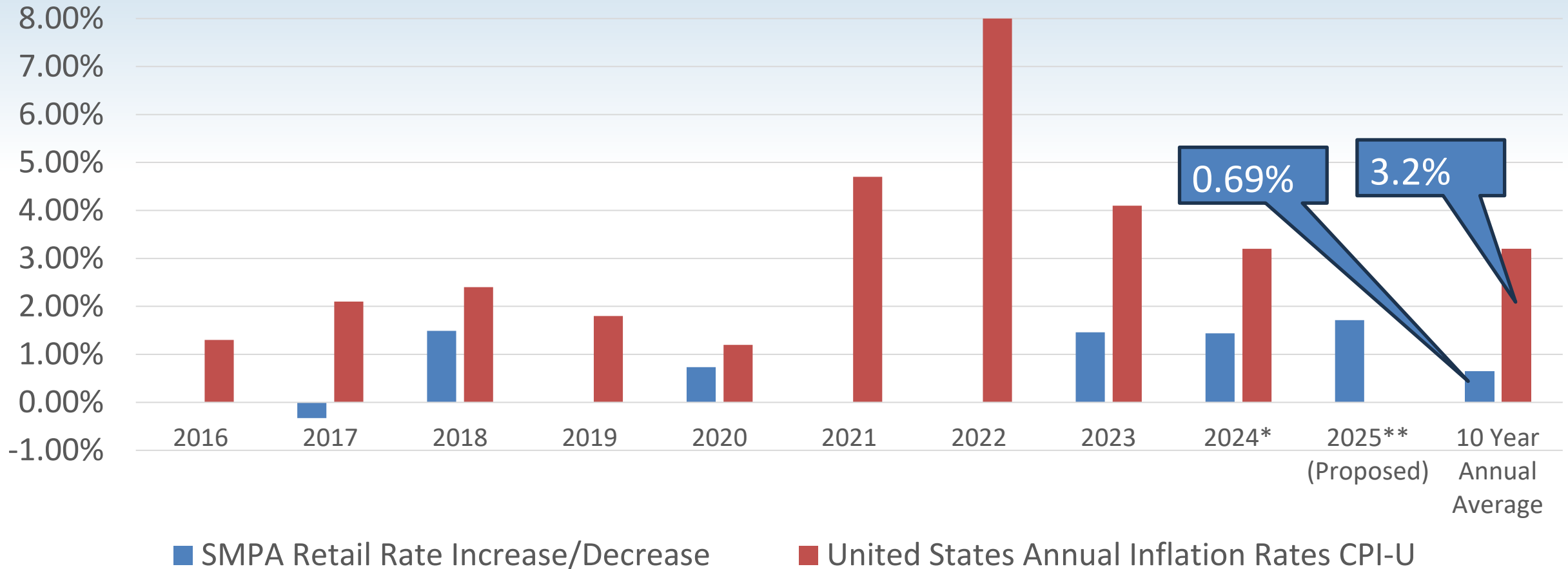
- 6.2 % Tri-State rate increase: \$1,060,000 year over year additional expense.
- In 2024, the \$2/mo. Access Charge increase amounted to a \$354,000 *pro forma* increase in revenue, leaving the rate stabilization funds to make up the difference.
- In 2025, the recommended \$3/mo. Access Charge increase is projected to be a \$540,000 *budgeted* increase in revenue, once again leaving the rate stabilization funds to make up the difference.

2024/2025 combined increase (\$5) to access charge = \$900,000 annually

Wholesale power cost increase = \$1,060,000 annually

2024 Tri-State increase was not effective until August 1st.

SMPA Average Retail Rates Compared to U.S. Inflation




*Based on latest CPI data from Bureau of Labor and Statistics.

**Based on recommended \$3/Mo. Access Charge increase; No inflation data for 2025

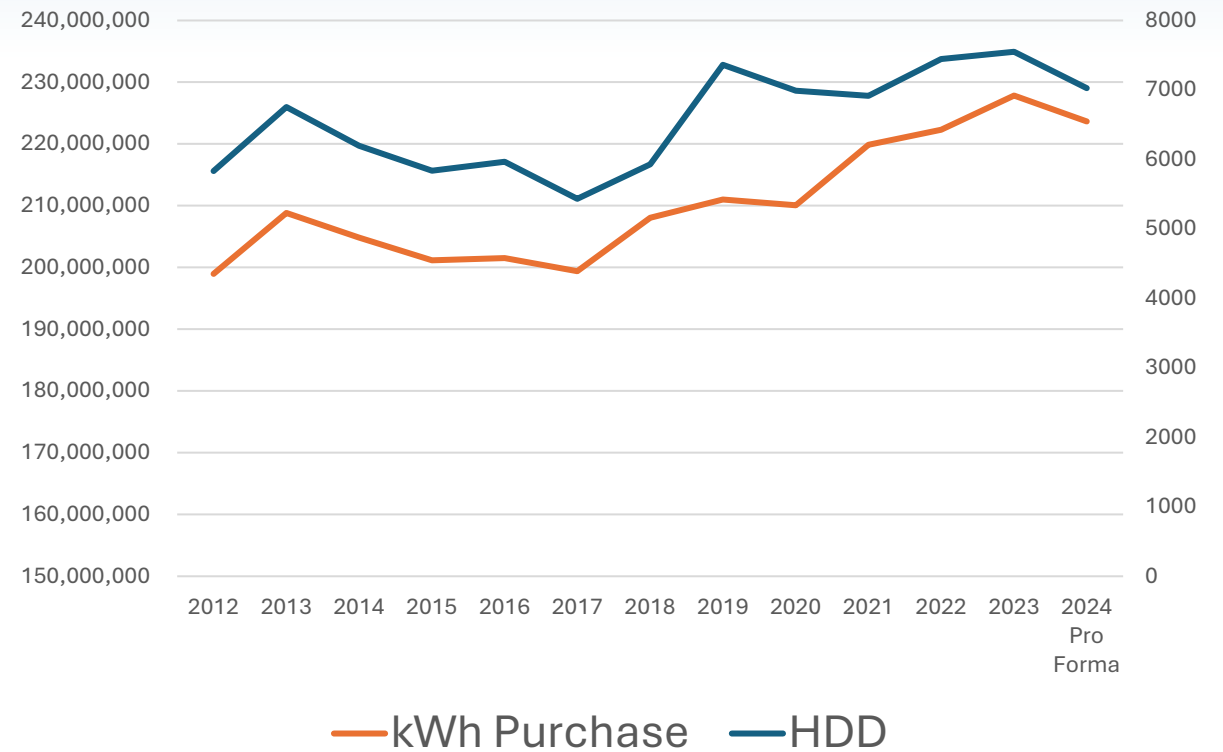
Access Charge

Rate Class	Current Access Charge	Customer Cost, Based on COS*	Proposed Access Charge	As Percent Recovery
Single Phase	\$ 25.00	\$ 51.01	\$ 28.00	55%
Three Phase	\$ 35.50	\$ 56.30	\$ 38.50	68%
Single Phase Demand	\$ 46.00	\$ 95.09	\$ 49.00	52%
Three Phase Demand	\$ 51.25	\$ 132.99	\$ 67.00	50%

*Source: Power Systems Engineering 

Residential Single-Phase Base Charges	
SMPA	\$25.00 / mo.
Grand Valley Power	\$31.50 / mo.
Delta-Montrose Electric Association	\$29.50 / mo.
Empire Electric Association	\$45.00 / mo. (All energy) \$32.40 / mo. (TOU Demand)
Gunnison County Electric Association	\$38.00 / mo.
La Plata Electric Association	\$23.00 / mo. (Peak Power @ \$3.30 per KW)
San Luis Valley Rural Electric Association	\$40.00 / mo.

Annual Heating Degree Day (HDD) and KWh Purchase Totals



Reliable and Cost-effective

Significant Transformation:

- Renewable Energy Policy
- New Energy Management Technology
- Consumer Change

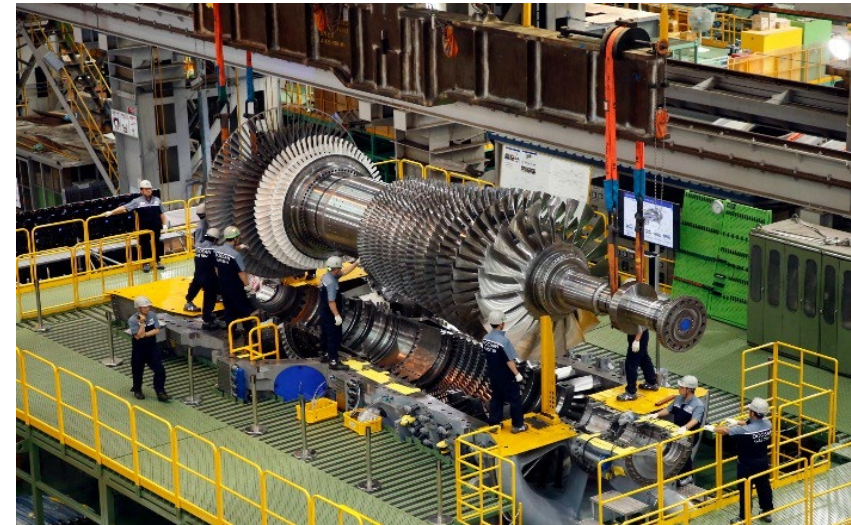
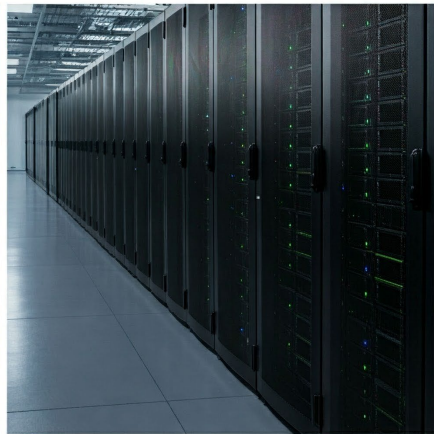
Opportunities:

- Grid modernization
- Rate design
- Customer engagement

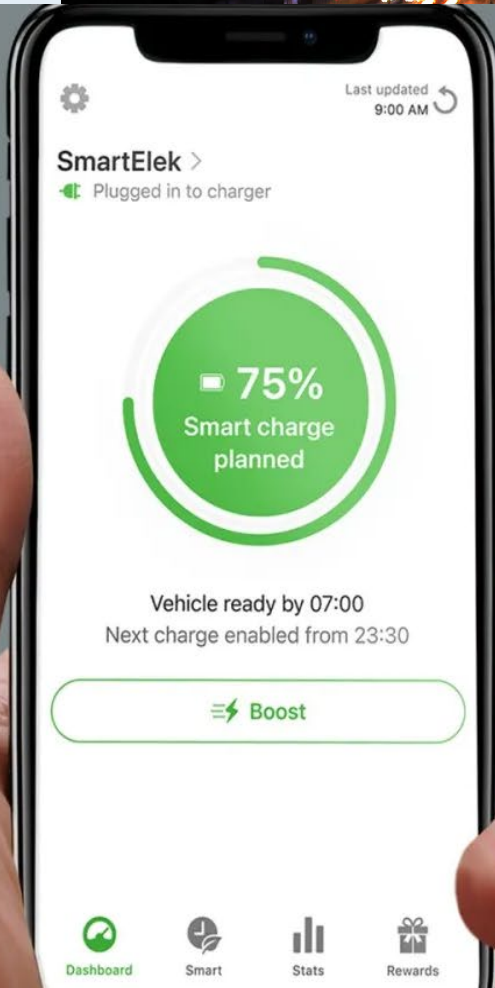


The Energy Transition and Storage

- Battery Energy Storage System (BESS)
- Thermal Storage (water, earth, bricks)
- Electric Vehicles



Load Management



- Staggering loads.
- Automatic load shedding.
- Dispatchable load, EVs energy storage.
- Suite of energy management tools and rebates.



NON-DEMAND & DEMAND

	Historic kWh Sales	kWh Percentage	Number of Accounts	Accounts Percentage
1PH	122,012,064	57%	14,120	94%
3PH	12,043,232	6%	577	4%
1PH Demand	14,313,924	7%	168	1%
3PH Demand	65,520,151	31%	224	1%
	213,889,371		15,089	

No structure change, already recovering capacity costs with a separate rate component.

Structure change needed, NOT already recovering capacity costs with a separate price signal.

2025 Time-Based Rate Recommendation

- 2x Peak to Off-Peak ratio.
- Low impact, based on bill impact analysis.
- No change to existing Demand accounts (other than access charge).
- Sends a retail price signal to consumers that encourages increasing energy use during off-peak and lowering peak demand.
- Consumers are likely to expand the use of energy storage (BESS and thermal).
- Electric vehicles: charging off-peak, bi-directional grid connectivity.
- Supports SMPA's suite of member energy programs.

SINGLE-PHASE NON-DEMAND : 94% of accounts

Time-of-Use Energy (Default)

Access Charge	\$28/Month
Peak Energy 4-9PM	\$0.22/kWh
Off-Peak Energy	\$0.11/kWh

Time-of-Day Demand (Optional)

Access Charge	\$30/Month
Flat Energy	\$0.1196/kWh
Demand (4-9PM)	\$3.50/kW

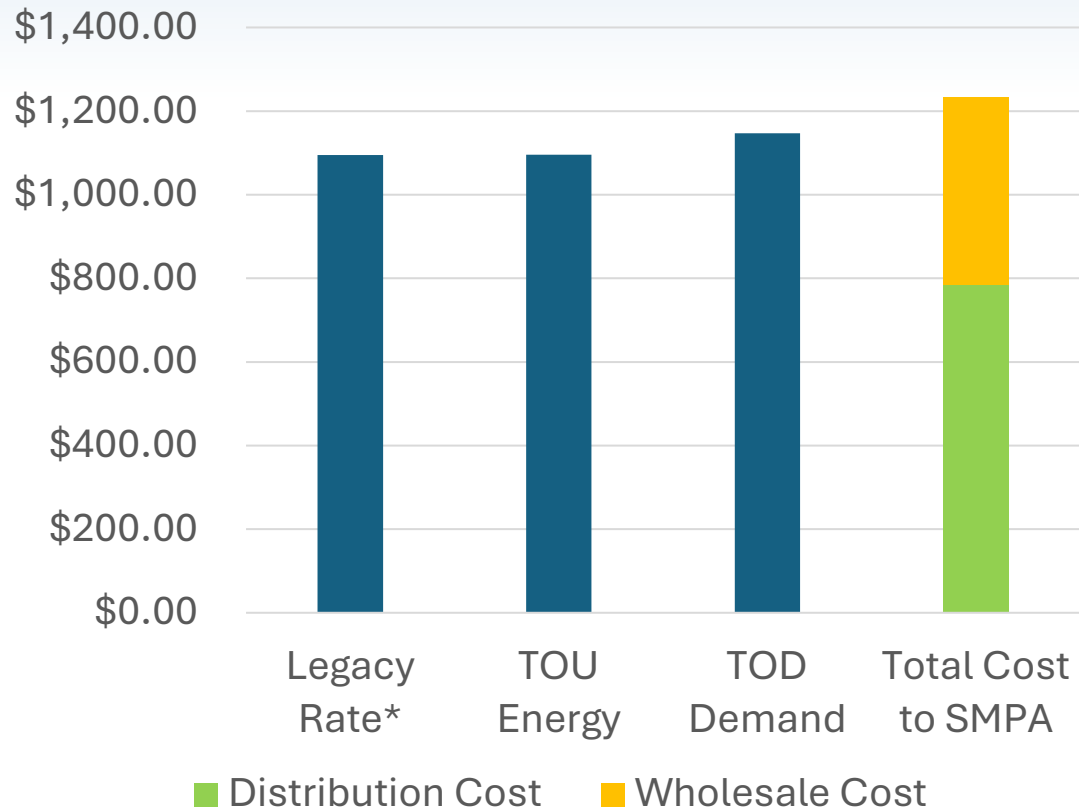
HISTORIC USAGE: 77% of the average home's energy use is off-peak. Only 23% is on-peak.

Peak 4-9pm

Median Monthly Demand: 3.7kW *
\$3.50 = \$12.95 per Month.

Rates Comparison Example

Annual Cost Comparison

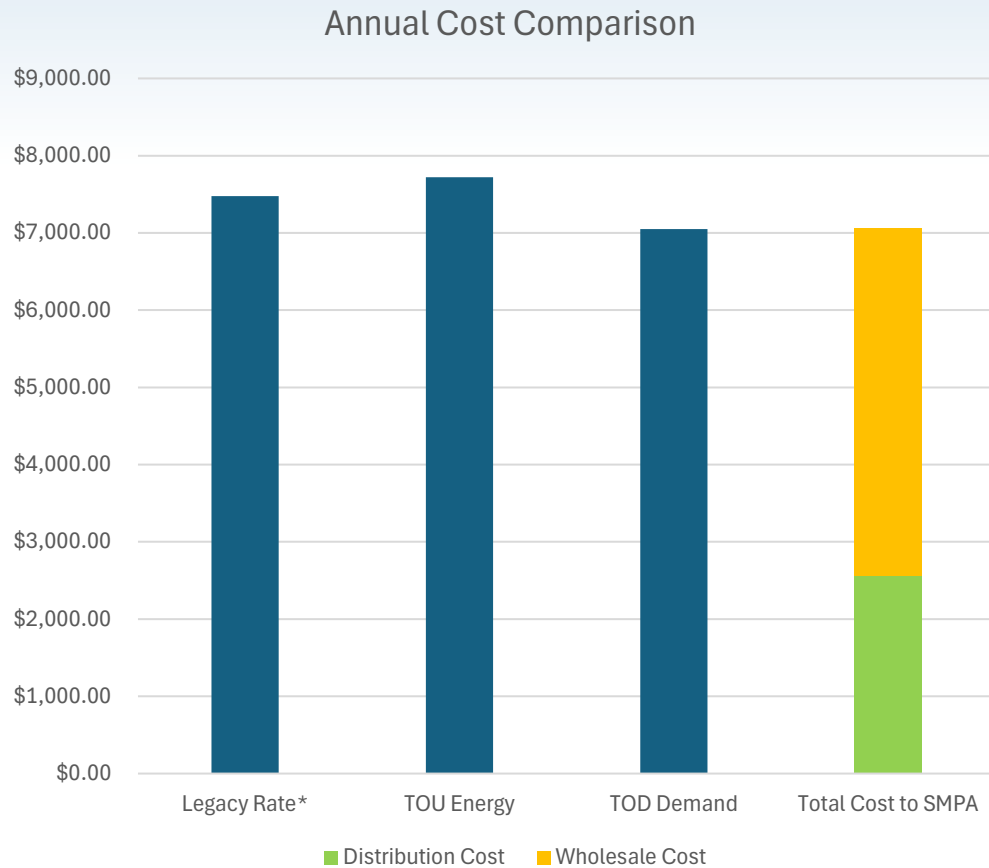


Usage Summary			% of kWh Use
Peak Energy	1,275	kWh	22.6%
Off-Peak Energy	4,355	kWh	77.4%
Total Energy	5,630	kWh	
Average Peak Power	2.70	kW	

Rate Revenue	Annual Cost	% Revenue Recovery	Ave Monthly Increase / Decrease	%
Legacy Rate*	\$1,094.50	89%		
TOU Energy	\$1,095.55	89%	\$ 0.09	0.1%
TOD Demand	\$1,146.73	93%	\$ 4.27	4.8%

*Using \$28/mo. access charge.

Rates Comparison Example



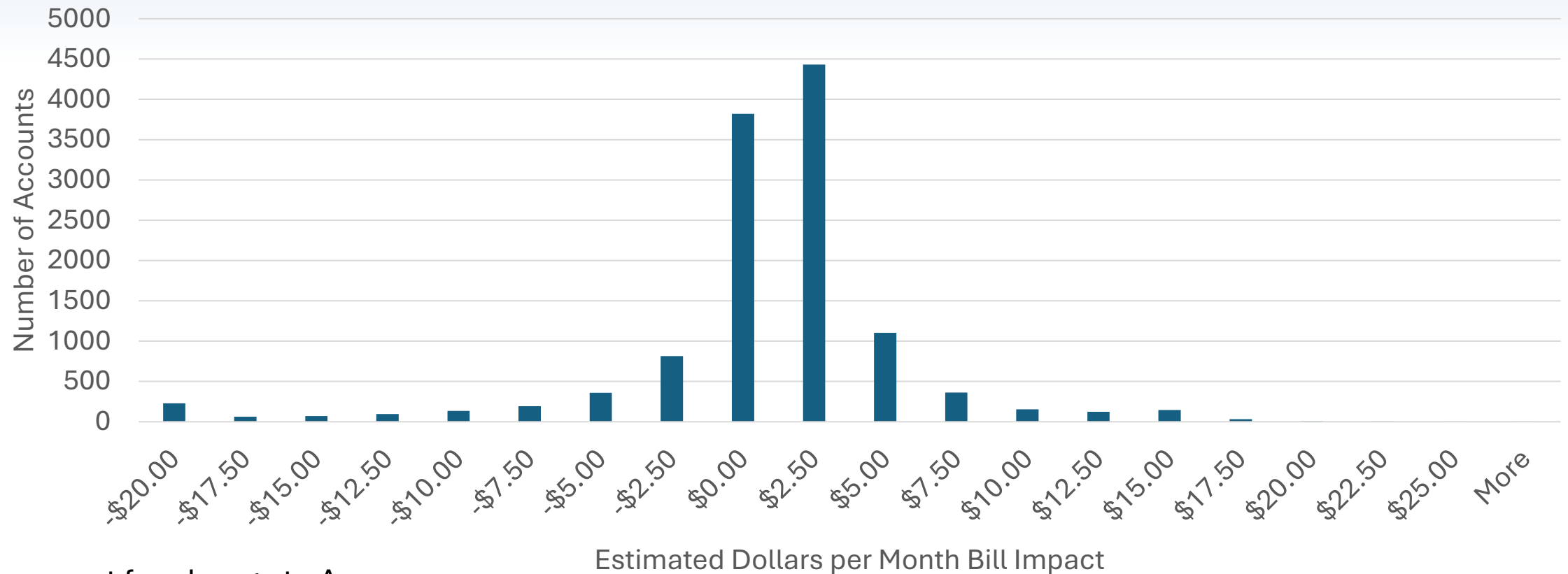
Usage Summary			% of kWh Use
Peak Energy	14,277	kWh	26.6%
Off-Peak Energy	39,383	kWh	73.4%
Total Energy	53,660	kWh	
Average Peak Power	9.67	kW	

Rate Revenue	Annual Cost	% Revenue Recovery	Ave Monthly Increase / Decrease	%
Energy Only	\$7,475.05	106%		
TOU Energy	\$7,721.39	109%	\$ 20.53	3.3%
TOD Demand	\$7,050.71	100%	\$(35.36)	-5.7%

*Using \$49/mo. access charge for 3PH service.

TOU Energy, TOD Demand Bill Impact

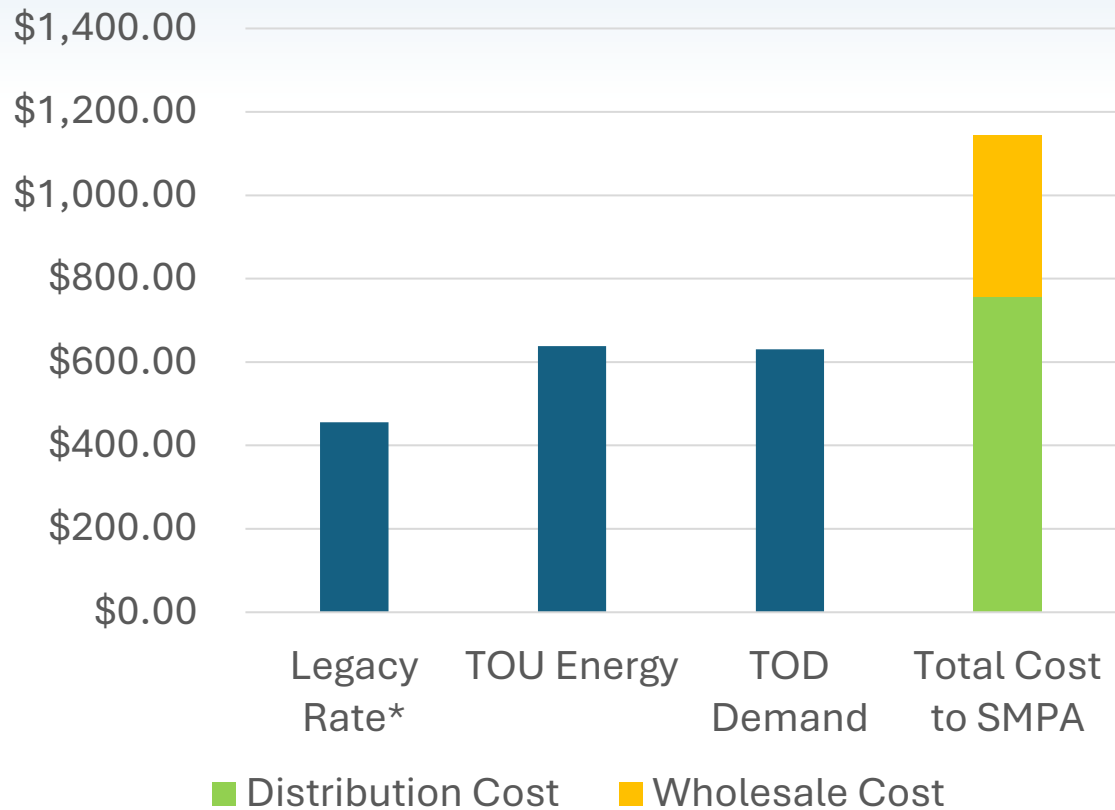
Number of Accounts In Each Monthly Bill Impact Category for Non-Demand, Non-Net Meter Accounts



To account for change to Access Charge, add \$3

Rates Comparison Example (Single Phase, Net Meter)

Annual Cost Comparison



Usage Summary			% of kWh Use
Net Peak Energy	1,378	kWh	100%
Net Off-Peak Energy	(974)	kWh	0%
Total Energy	404	kWh	
Average Peak Power	3.90	kW	

Rate Revenue	Annual Cost	% Revenue Recovery	Ave Monthly Increase / Decrease	%
Legacy Rate*	\$455.77	40%		
TOU Energy	\$638.53	56%	\$ 15.23	40%
TOD Demand	\$630.29	55%	\$ 14.54	38%

*Using \$28/mo. access charge.

TOU Energy, TOD Demand Bill Impact Net Meter

Number of Accounts In Each Monthly Bill Impact Category for Non-Demand, Net Meter Accounts



To account for change to Access Charge, add \$3.

THREE-PHASE NON-DEMAND : 4% of accounts

Time-of-Use Energy (Default)

Access Charge	\$49/Month
Peak Energy 4-9PM	\$0.21/kWh
Off-Peak Energy	\$0.105/kWh

HISTORIC USAGE: 77% of the average home's energy use is off-peak. Only 23% is on-peak.

Peak 4-9pm

Time-of-Day Demand (Optional)

Access Charge	\$50/Month
Flat Energy	\$0.1094/kWh
Demand (4-9PM)	\$5.00/kW

Median Monthly Demand: 6.2kW *
\$5.00 = \$31.0 per Month.

SINGLE-PHASE DEMAND : >1% of accounts

Access Charge	\$38.50
Flat Energy	\$0.065375
Demand	\$17.00

Increase in Access Charge from \$35.5 to \$38.50 per month

Member maximum kW (NCP)
No Change in Demand, no change in Energy

THREE-PHASE DEMAND : 1.5% of accounts

Access Charge

\$67.00

Flat Energy

\$0.070926

Demand

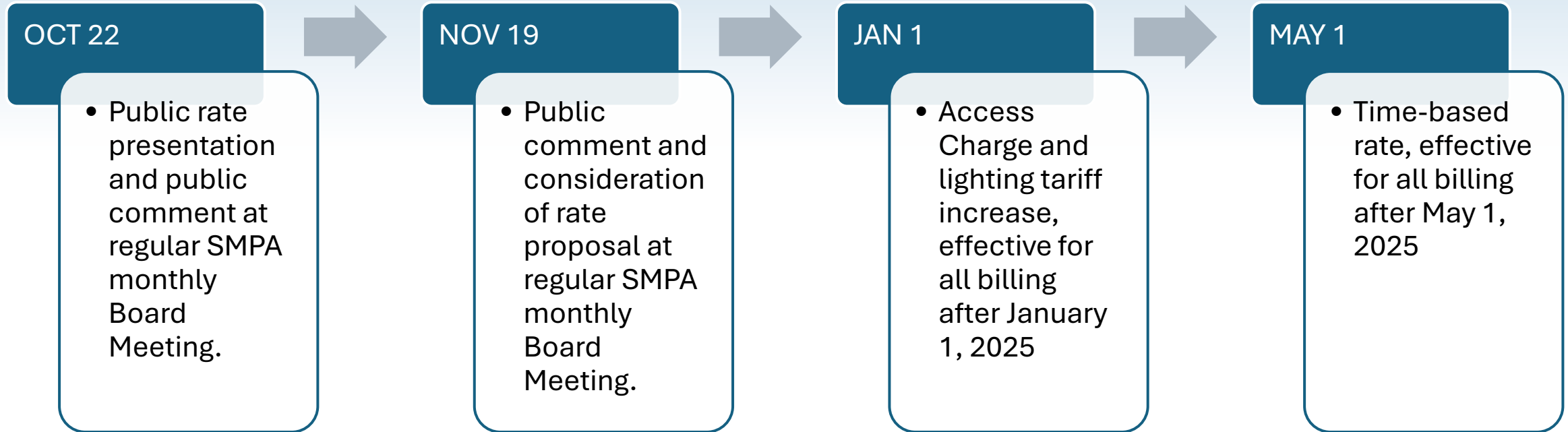
\$17.00

Increase in Access
Charge from \$51.25 to
\$67.00 per month

Member maximum kW (NCP)

No Change in Demand, no change in Energy

Rates Timeline



Time-based rate:

TOU Time of Use energy, Peak energy rate is between 4-9pm

TOD- Time of Day demand, Highest hourly demand between 4-9pm

Thank You!



A Touchstone Energy[®] Cooperative

