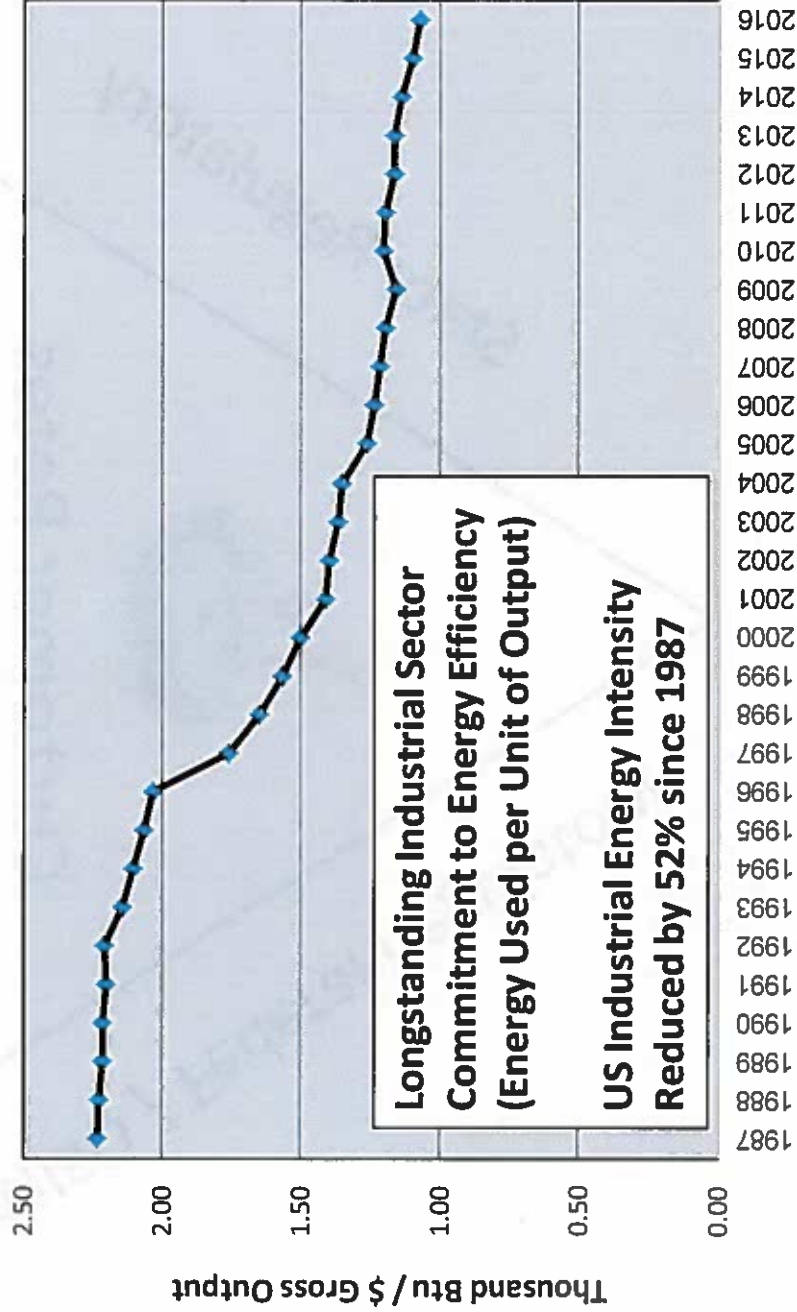




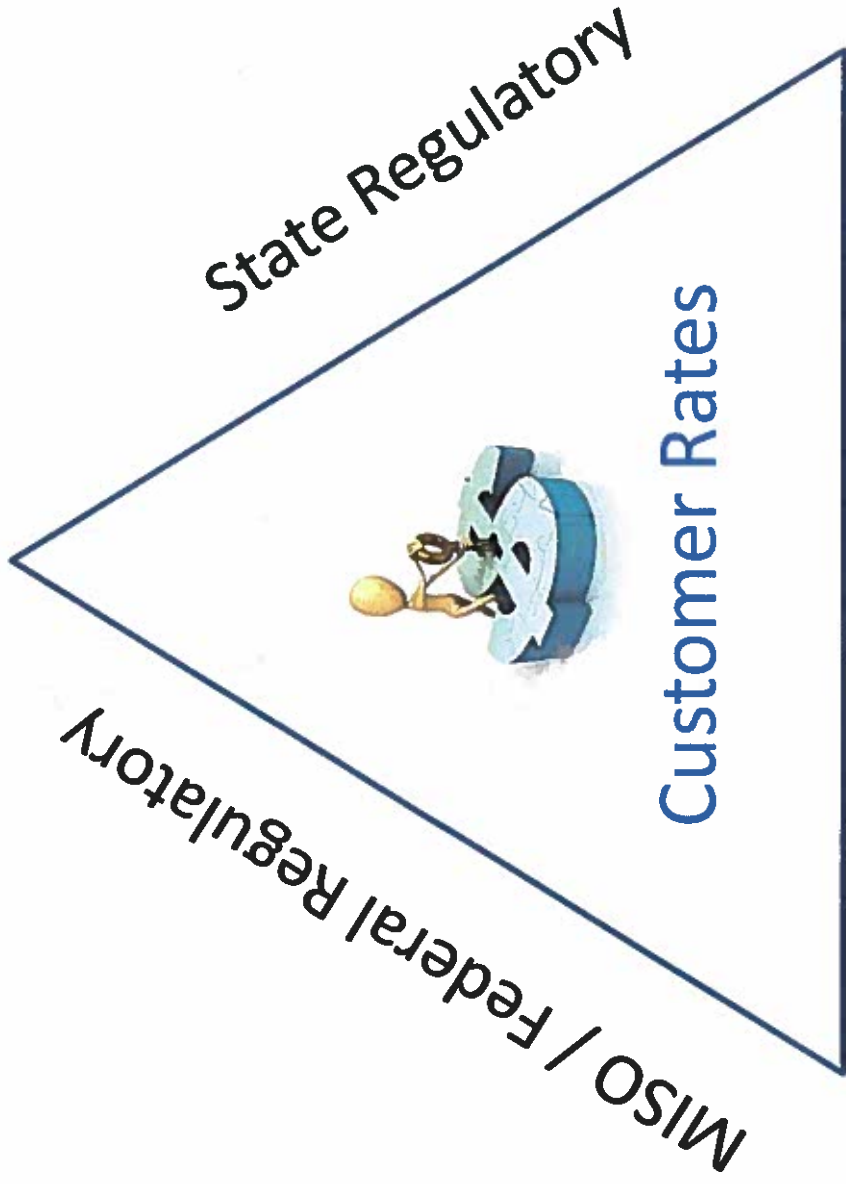
A B T T E

ASSOCIATION OF BUSINESSES ADVOCATING TARIFF EQUITY

Industrials' Commitment to Energy Efficiency



Source: U.S. Energy Information Administration (EIA), U.S. Bureau of Economic Analysis (BEA)



Energy Policy / Legislative

Electricity

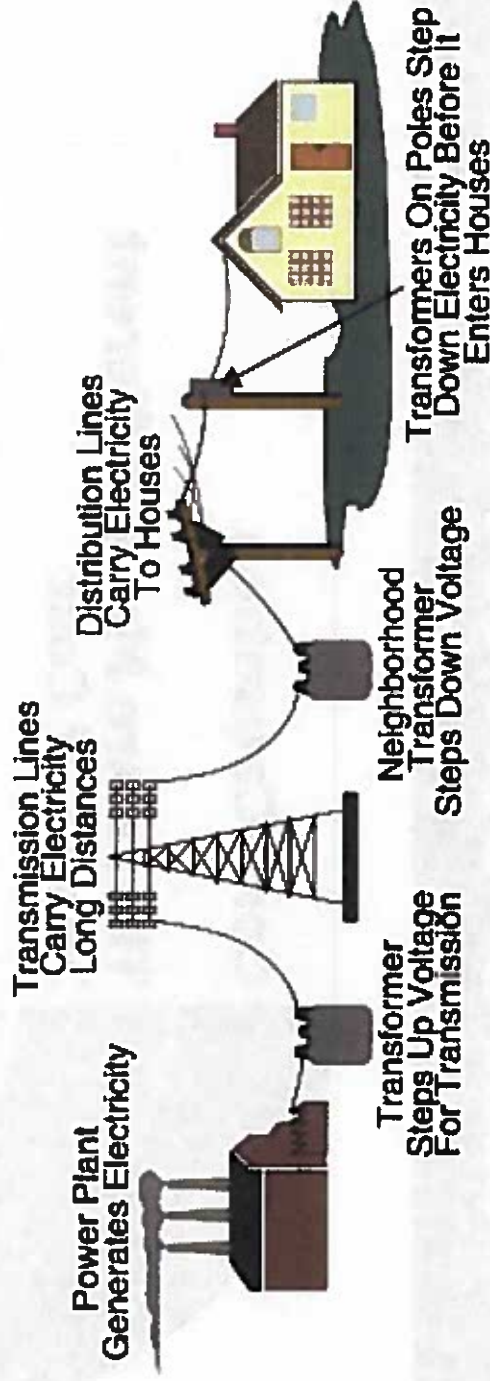
Electricity supply has 3 main components:

1) Generation approx. 60% of total cost

Capacity – kW Demand
Energy – kWh Usage

2) Transmission approx. 6% of total cost

3) Distribution approx. 34% of total cost



Source: EIA

Customers do not all use the system the same!

Cost-of-Service Principles

Cost-Causation

There Are Many Different Types Of Cost

Some Customers Do Not Use Parts of the Utility System

Usage Patterns Affect Cost Incurrence



Demand vs. Energy



Energy: 500 watts x 2 hours = 1000 watt-hours = 1.0 kWh
Demand: 500 watts



Energy: 200 watts x 5 hours = 1000 watt-hours = 1.0 kWh
Demand: 200 watts

Why Rates Differ Between Customer Classes?

Size

Delivery Voltage

Load Factor

Seasonality

Firmness

Cost Basis

Basic Ratemaking Formula

$$\text{Revenue Requirement} = \text{Operating Costs} + (\text{Rate Base} \times \text{Rate of Return})$$

- Rate Base = Capital investment
- Rate of Return:
 - 1) Interest on debt
 - 2) Authorized return on equity (ROE) = profit / compensation to shareholders

Capital Investment

Reliable Operation - Operating the elements of the [Bulk-Power System] within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.
(North American Electric Reliability Corporation – NERC)

- Demand response and interruptible supply are part of a Reliable Operation. Not all customers require firm supply. Some customers are willing to accept and be compensated for interruptions.
- Reliable Operation should consist of contingency plans and key failure response plans, etc. It does not require 100% redundant equipment system.
- Redundancy has capital costs that impact rates. This needs to be reviewed carefully.

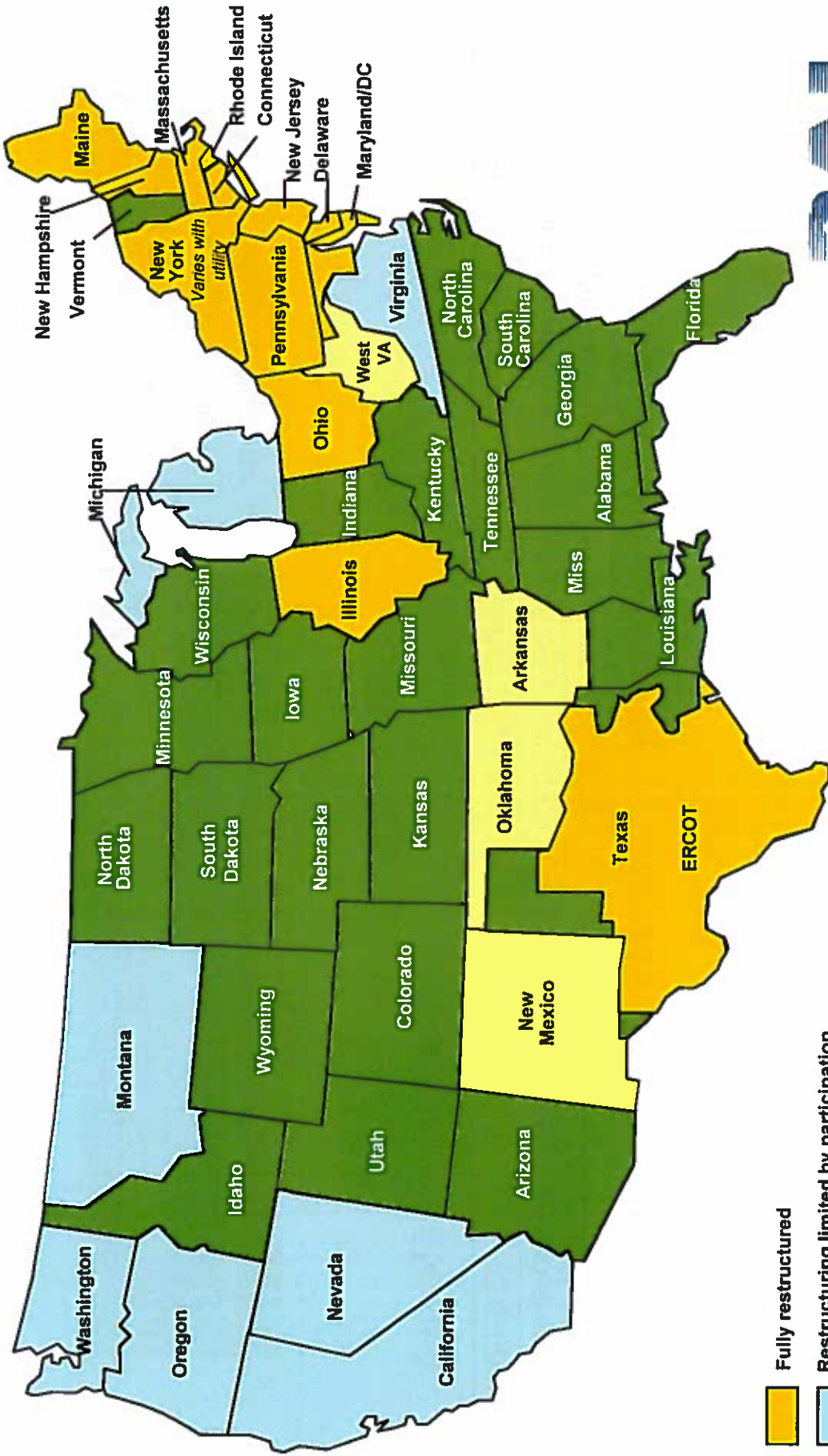
Electricity Rates

Electricity	Michigan	U.S. Average	Ranking
Residential	\$155.60	\$128.90	40th Most Expensive (Only 10 states have higher rates)
Commercial	\$111.70	\$106.60	38th Most Expensive (Only 12 states have higher rates)
Industrial	\$72.80	\$69.30	31st Most Expensive (Only 19 states have higher rates)

\$/MWh; EIA 2018 Data

- While many residential customers use natural gas for heating in Michigan, Industrial / Manufacturing customers run their operations on electricity all year.
 - Electricity rates are important for industrial customers.

Electric Restructuring Status

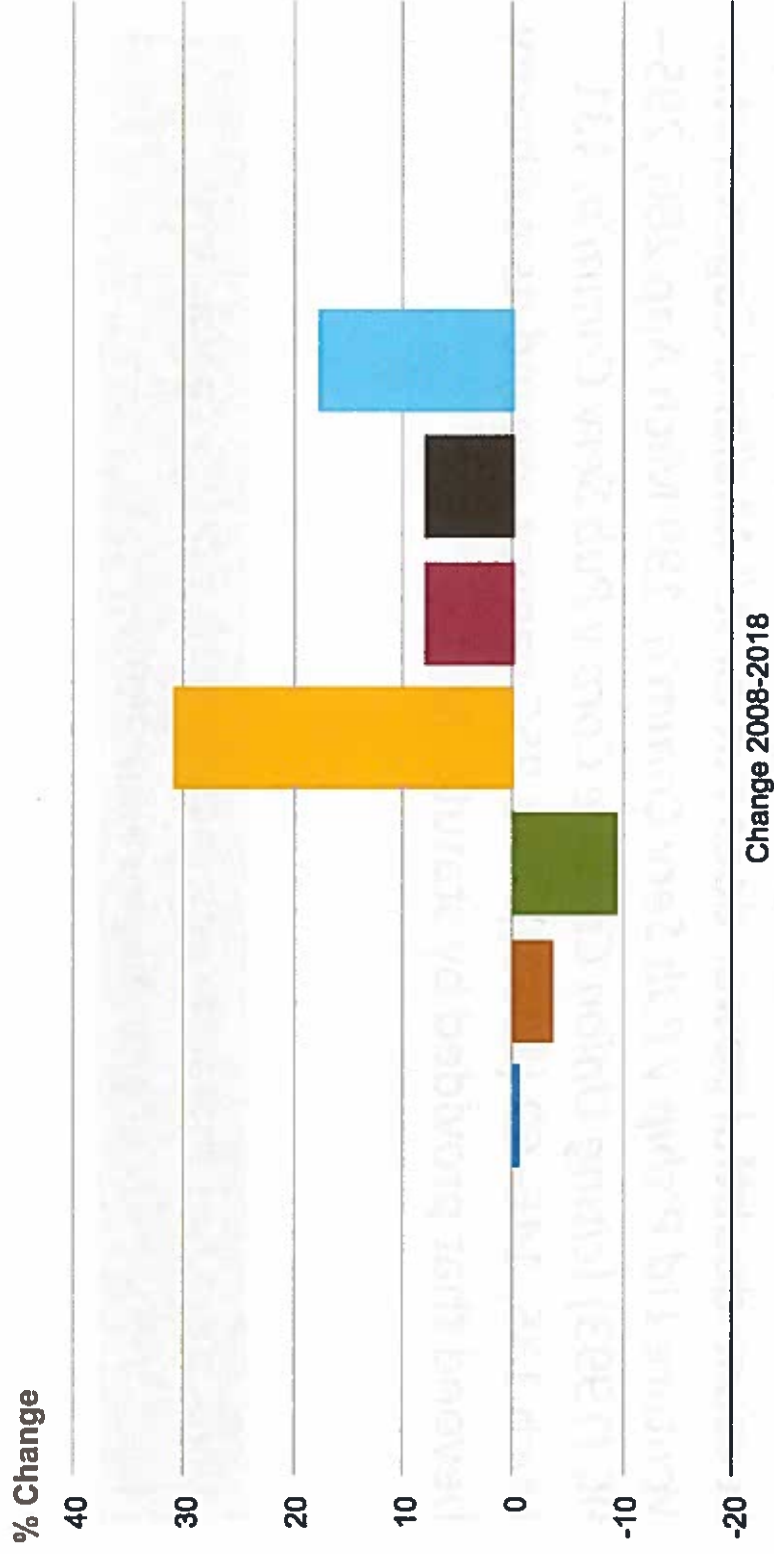


- Fully restructured
- Restructuring limited by participation cap, customer size, or service territory
- Restructuring is repealed or suspended
- Traditional regulation

BRBA
 BRUMAKER & ASSOCIATES, INC.
 Phone: (636) 898-6725
 E-mail: brb@consultbrb.com
 Web page: www.consultbrb.com

May 2018

Average retail price of electricity, Annual



■ Industrial : United States
 ■ Industrial : Michigan
 ■ Industrial : Pennsylvania
 ■ Industrial : Ohio
 ■ Industrial : Illinois
 ■ Industrial : Wisconsin
 ■ Industrial : Indiana

Data source: U.S. Energy Information Administration

Industrial Rates in monopoly utility states have increased while rates in the electric choice states have DECREASED

Category	U.S.	PA	IL	IN	MI	OH	WI
2018	\$69.30	\$67.80	\$66.50	\$71.60	\$72.80	\$67.00	\$76.60

\$/MWh

Legislature's Role

Michigan appellate courts have long held that the Commission “possesses no common-law powers but is a creature of the Legislature, and all of its authority must be conferred by **clear and unmistakable language** in specific statutory enactments, because doubtful power does not exist.” *Midland Cogeneration Venture Ltd P’ship v Pub Serv Comm’n*, 199 Mich App 286, 295–96 (1993) (citing *Union Carbide Corp v Pub Serv Comm’n*, 431 Mich 135, 146–62 (1988)). The PSC cannot expand its authority beyond that provided by statute. *Id.*

Legislature has the authority to direct the MPSC in a way that supports jobs & economic development.

Issues On Which ABATE And The Utilities Agree

- 1) Utility rates should be based upon a utility's actual cost of providing service to each class – cost of service based rates.
- 2) PURPA facility payments should be based on pricing set through a competitive bid process.
- 3) Energy efficiency is generally the lowest cost energy resource.
- 4) The use of demand response should be increased.
- 5) Innovative renewable energy supply options for large energy users.
- 6) Rate cases should be completed within 12 months.

Issues On Which ABATE And The Utilities Do Not Agree

- 1) Utility's use of projected costs in rate making with no claw back.
- 2) Retail Choice should not be limited to 10%.

Utility Rates should be based on the utilities actual costs not fully projected costs.

- **Historical Test Year**

- Easy to understand.
- Based on actual costs.

- **Projected Test Year**

- Difficult to understand. Requires countless assumptions.
- Based on projected costs.
- Shift risk from utility to customers.

Public Service Commission does NOT have the authority to retroactively reduce rates

MPSC cannot force utilities to return money that was collected in rates based on projections but never spent.

Michigan first adopted the rule against retroactive ratemaking in *Michigan Bell Telephone Co v Michigan Pub Serv Comm*, 315 Mich 533; 24 NW2d 200 (1946). In *Michigan Bell*, the Michigan Supreme Court established its prohibition on retroactive ratemaking based on the grounds that the Michigan Legislature had not delegated power to the Commission to give its rate orders retroactive effect. The Court also recognized that there may also be a constitutional concern that such retroactive ratemaking would deprive a utility of its property without due process of law. In light of its review of the case law in this and other jurisdictions, the Michigan Supreme Court held,

“[W]e cannot find that the commission has either express or implied statutory power to retroactively reduce appellee's rates or its accrued earnings. Instead the commission's rate-fixing orders are effective only prospectively.”

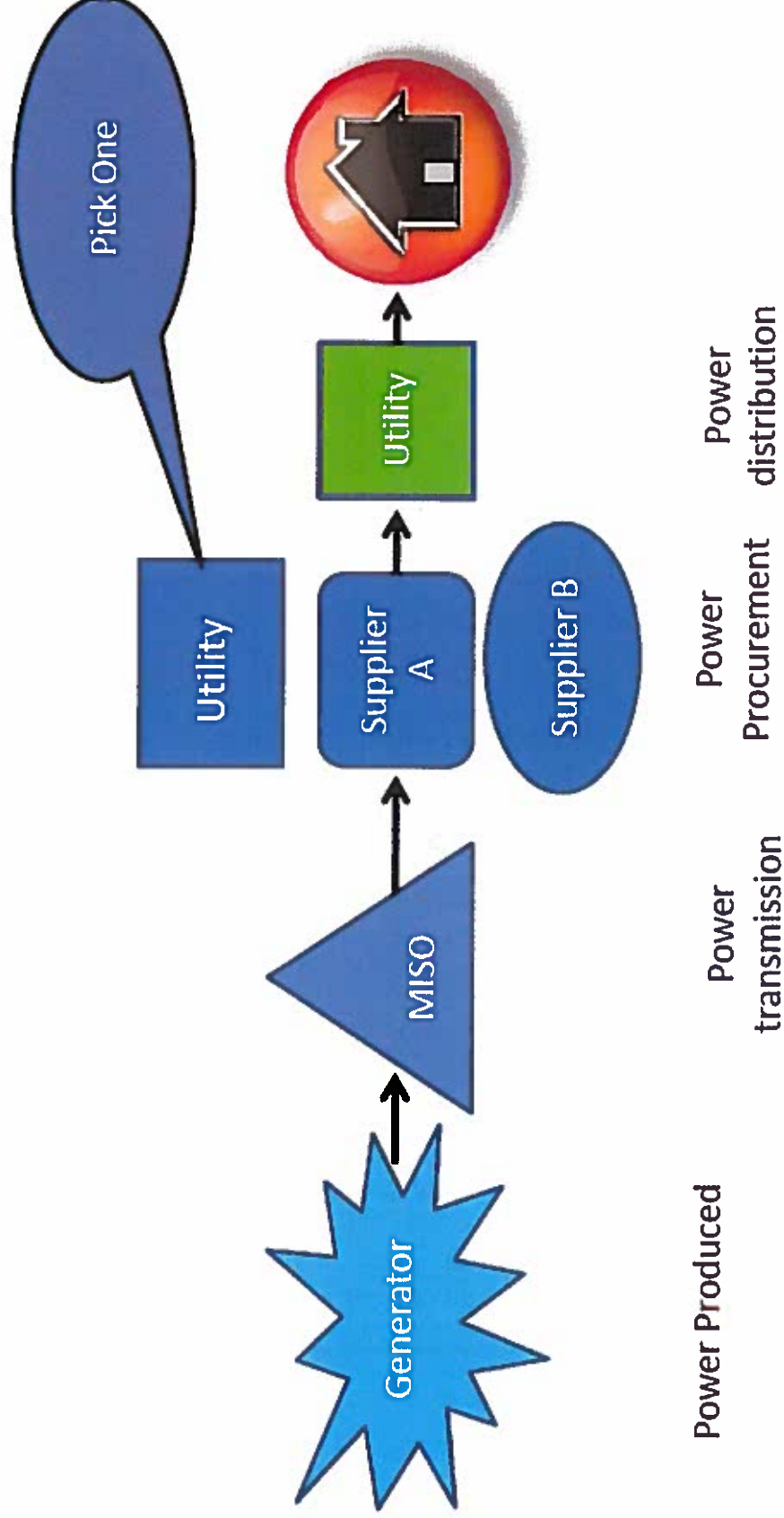
Projected Cost vs Actual Cost

(a)	(b)	(c)	(d)	(e)
Utility	Case	Projected Revenue Deficiency (Sufficiency)	Historical Revenue Deficiency (Sufficiency)	Difference
CECo Electric	U-17990	\$225,000,000	(\$13,967,000)	\$238,967,000
	U-18322	\$173,000,000	(\$26,118,000)	\$199,118,000
	U-20134	\$58,000,000	(\$17,354,000)	\$75,354,000
CECo Gas	U-18124	\$90,500,000	(\$264,000)	\$90,764,000
	U-18424	\$178,200,000	(\$35,283,000)	\$213,483,000
	U-20322	\$229,000,000	(\$33,458,000)	\$262,458,000
DTE Electric	U-18014	\$344,000,000	(\$33,404,000)	\$377,404,000
	U-18255	\$231,000,000	\$50,009,000	\$180,991,000
	U-20162	\$328,000,000	\$18,335,000	\$309,665,000
DTE Gas	U-16999	\$76,700,000	(\$6,551,000)	\$83,251,000
	U-17999	\$182,900,000	(\$56,000,000)	\$238,900,000
	U-18999	\$85,100,000	(\$61,829,000)	\$146,929,000

In all, the use of projected test years has allowed the utilities to seek ≈ \$2.5 billion more in recent years than would have been possible if they based their requests on historical data.

Retail Choice should not be limited to just 10% of a utilities sales.

How Power Moves **With** Competition

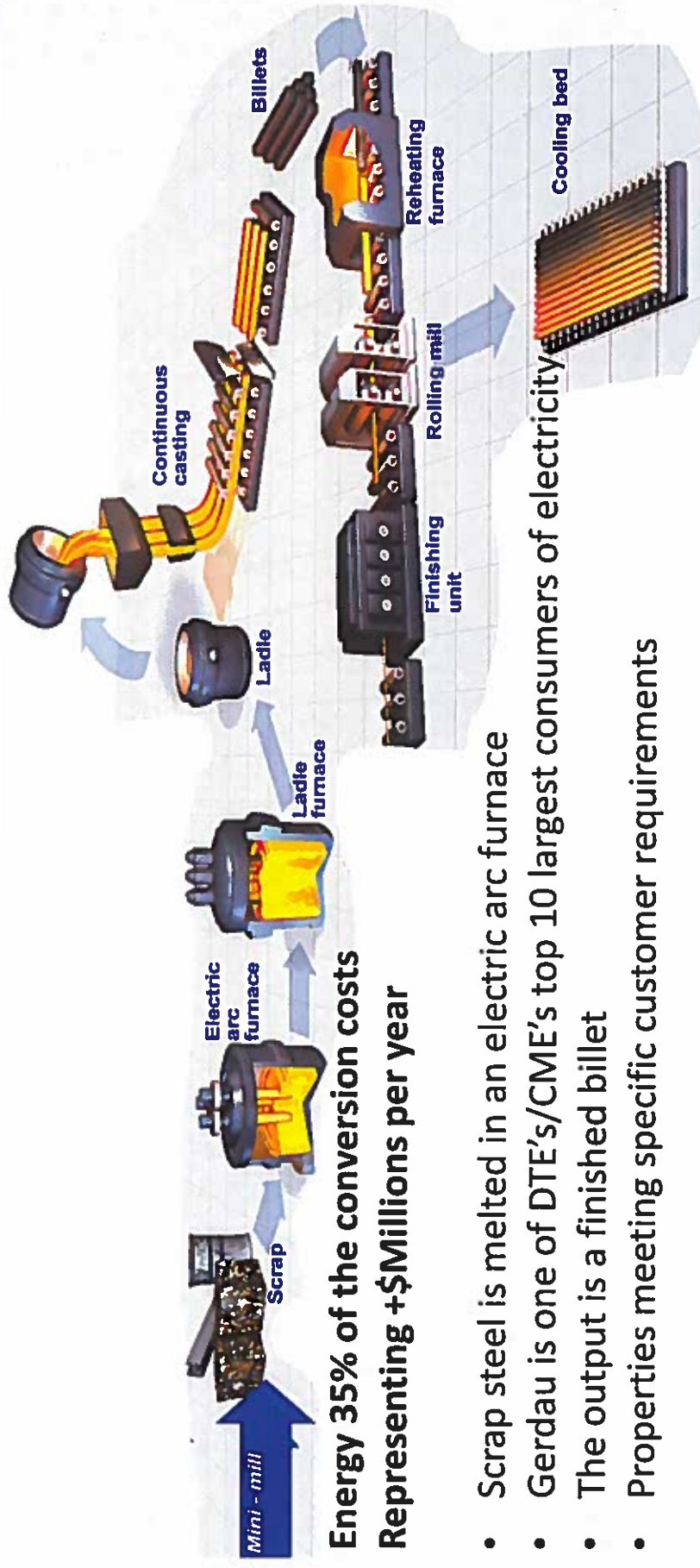




Gerdau Special Steel North America

**Michigan House Energy Committee
March 20, 2019**

Energy Intensive Process



- Scrap steel is melted in an electric arc furnace
- Gerdau is one of DTE's/CME's top 10 largest consumers of electricity
- The output is a finished billet
- Properties meeting specific customer requirements
- The rolling process is natural gas dependent
- Large furnaces heat the billets to make them pliable
- Rolled to specific shapes and dimensions
- High tolerance finishing specific to the auto industry

All metric



GERDAU

Gerdau in Michigan

Jackson Mill

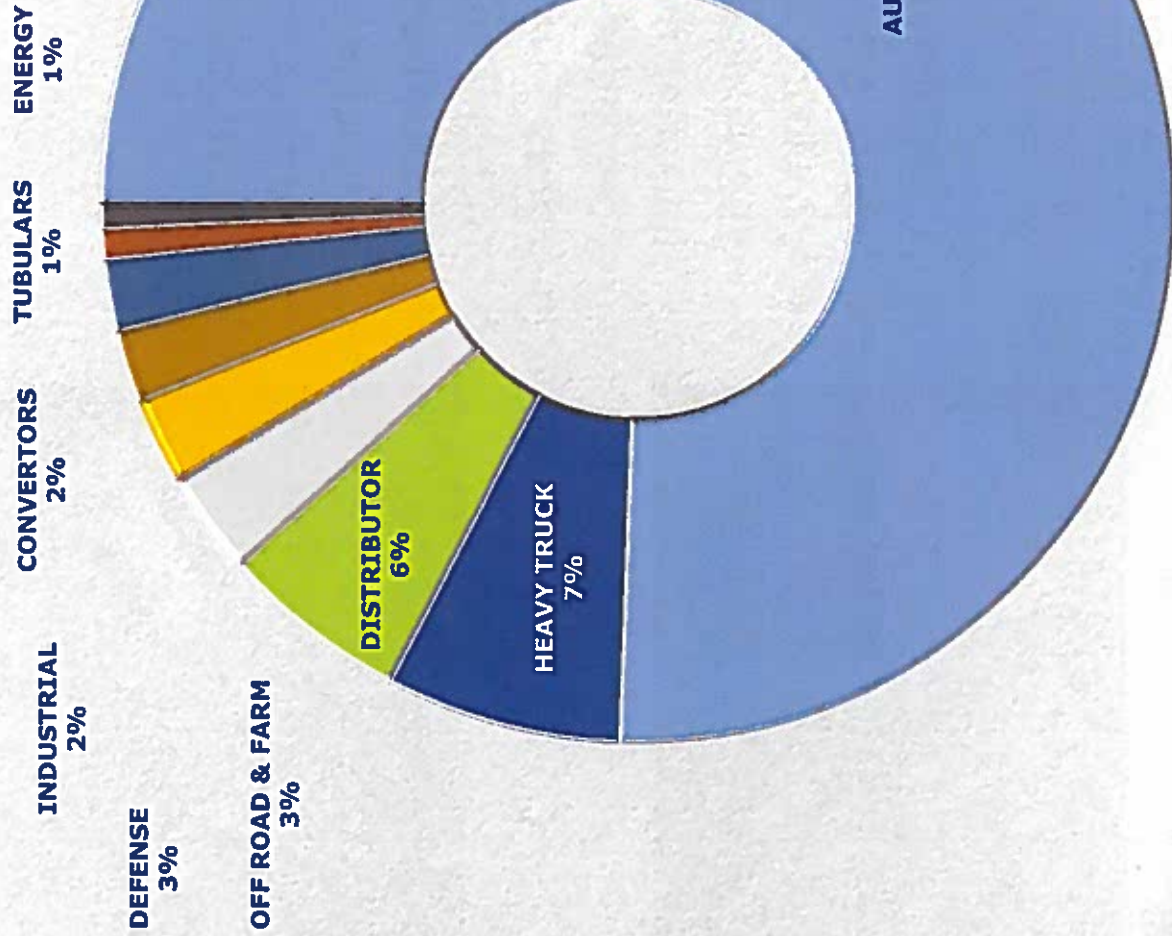


- 1.1 Million tons annually
- 910 direct (4,550 indirect) employees
- \$2 Million property tax
- \$92.3 Million wages and benefits
- Investing millions in Monroe & Jackson
- Competitive rates are essential
- Focus on reducing operating costs down
- Facilities compete against sister plants
- Employ both energy managers/efficiency
- Gerdau competes globally
- Electric rates in MI are not competitive

Monroe Mill



Where Does The Steel Go



GERDAU

Here Is How The Steel Used

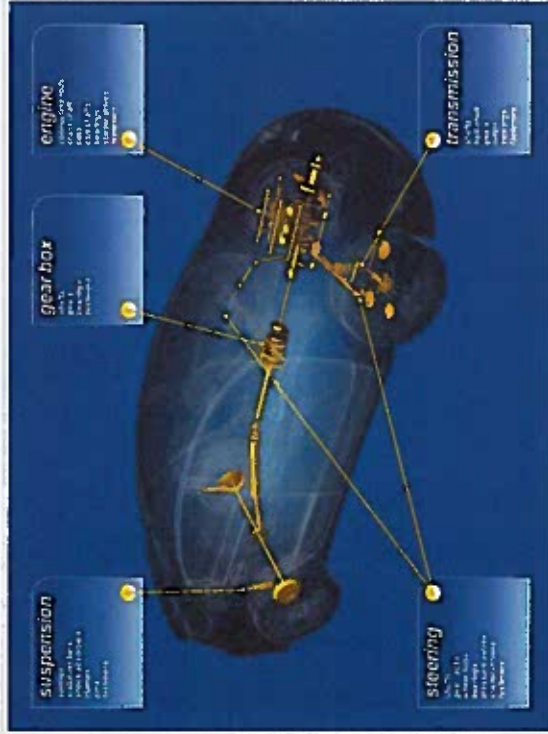
HEAVY TRUCKS



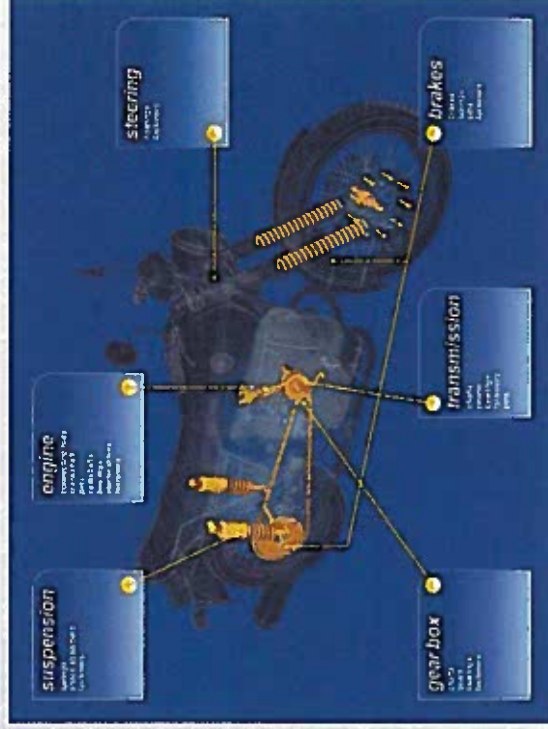
OFF-ROAD & FARM



AUTOMOTIVE



MOTORCYCLES



Some Valued GSN Customers



Some Valued GSN End Use Customers



Remington.



SUBARU.



NSK



GETRAG



NAVISTAR



TOYOTA



BOSCH



HYUNDAI



BALON

JTEKT



HINO



SCANIA



FIAT CHRYSLER AUTOMOBILES

FCA



Making Rate Design Work To Grow Business

- **EITE** (energy intensive and trade exposed) consumers need competitive rates. 100% Demand allocators help to achieve this goal.
- **Demand Response**
 - MI industrial rates should provide an opportunity for consumers to manage their costs by the way they operate/respond to market signals.
 - To achieve results, rate design must pass the signal/benefits through to the customer, not just the rate class.
 - Customers that can respond will – without a formal DR program and with benefits to all consumers
 - (lower energy costs, less need for generation)
- **Rate design should reflect system utilization**
 - Capacity costs - 4-Coincident Peak (4CP) charge program provides as signal to curtail usage when the system is reaching its peak.
 - Transmission Costs – use the same 4 CP method, increasing the incentive to respond.
 - The result is reduced strain/need for new resources

Gerdau And The Community

- We are a green business. Recycling scrap lessens our need for natural resources and reduces landfill
- Our processes utilize the latest technologies in steel making
- During Consumers Energy's compressor fire, Gerdau responded to emergency requests to cut gas usage

Community Investments:

- United Way
- American Cancer Society
- JAMA
- Interfaith Shelter
- Habitat for Humanity
- AWARE, Inc.
- Junior Achievement
- Jackson Friendly Home
- Family Service and Children's Aid
- American Red Cross
- First Robotics
- Salvation Army

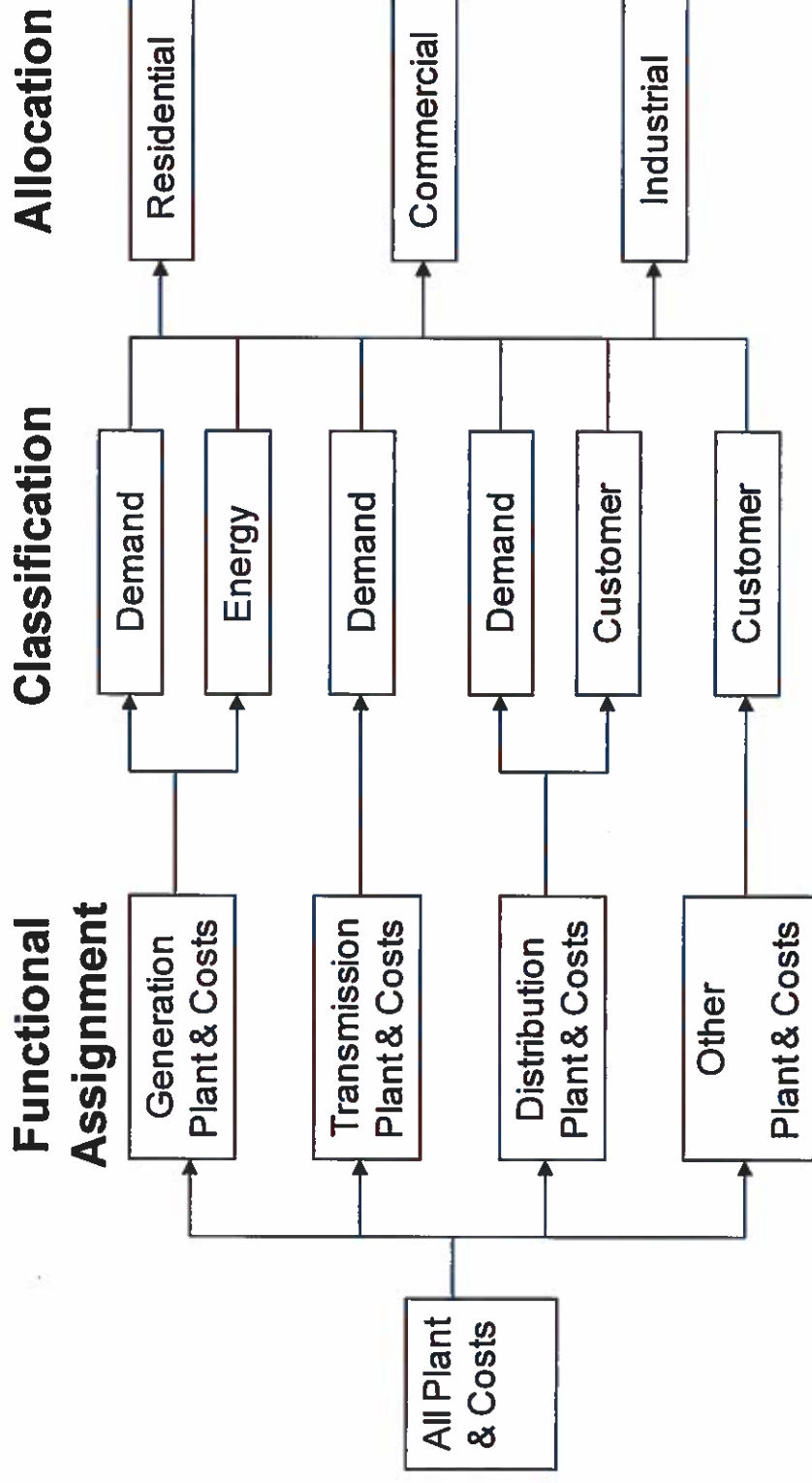


Questions

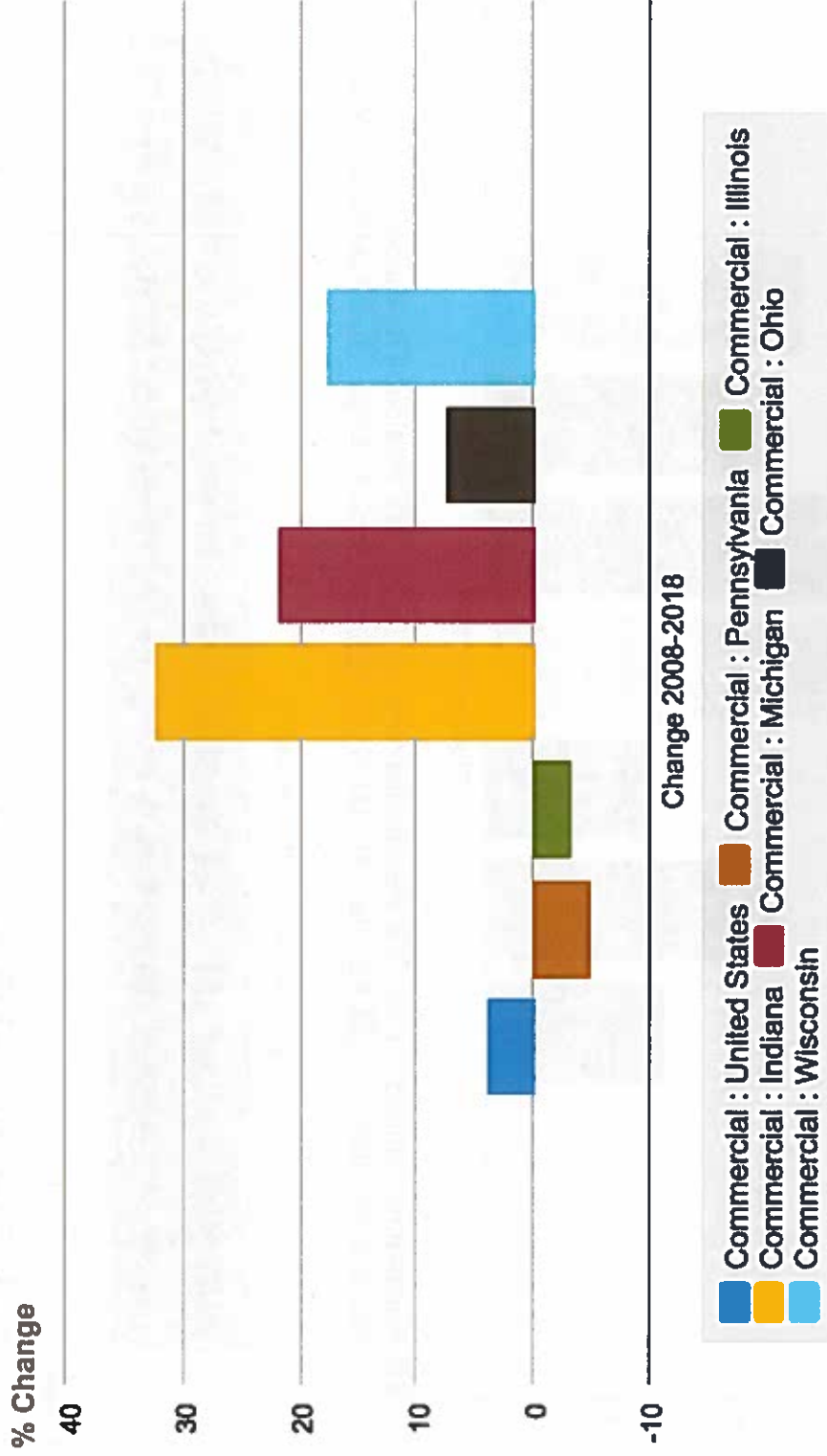


APPENDIX

Cost of Service / Rate Design



Average retail price of electricity, Annual



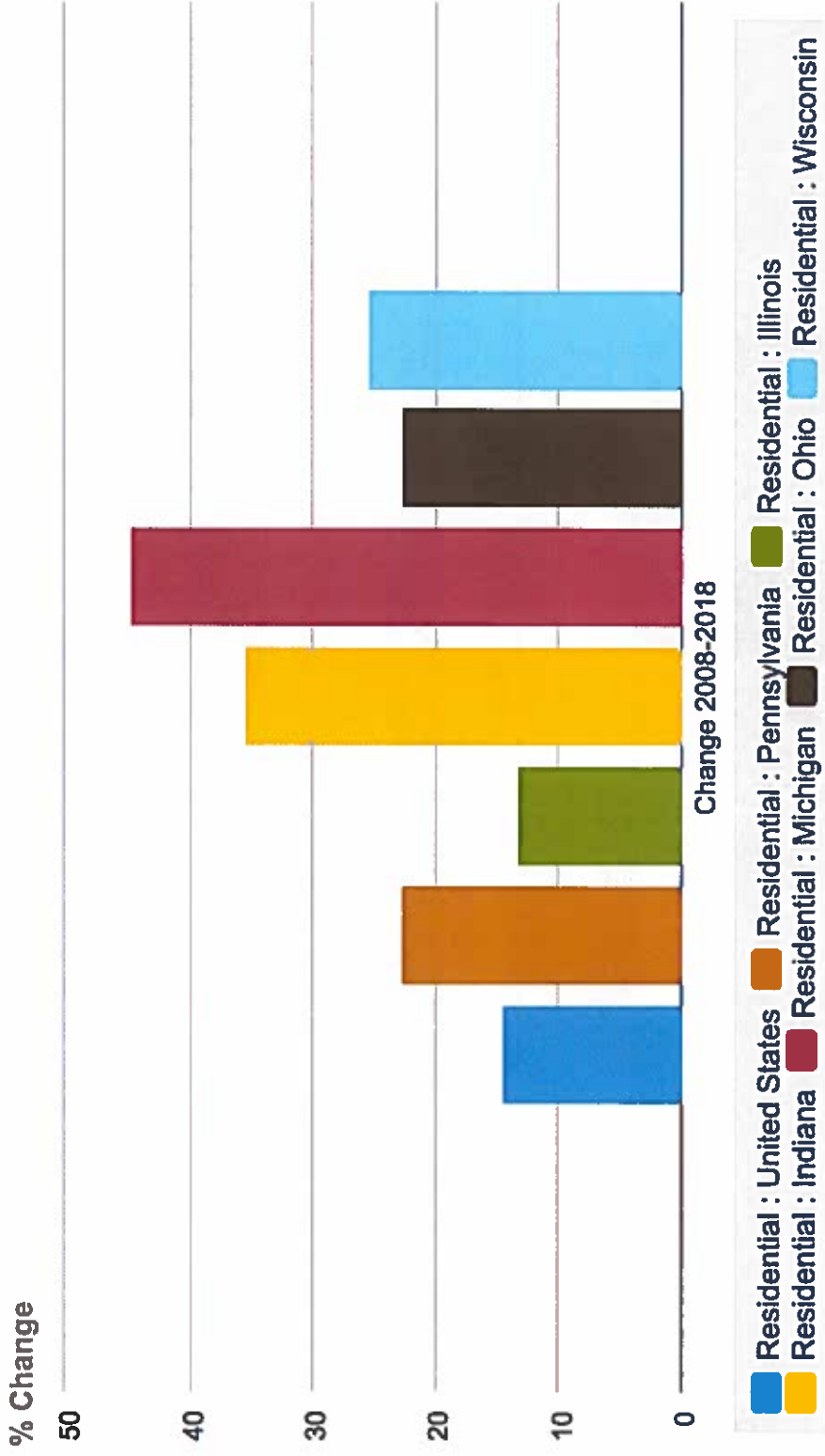
Data source: U.S. Energy Information Administration

Commercial Rates in monopoly utility states have increased significantly more than rates in the electric choice states.

Category	U.S.	PA	IL	IN	MI	OH	WI
2018	\$106.60	\$89.30	\$89.50	\$103.60	\$111.70	\$99.30	\$109.20

\$/MWh

Average retail price of electricity, Annual



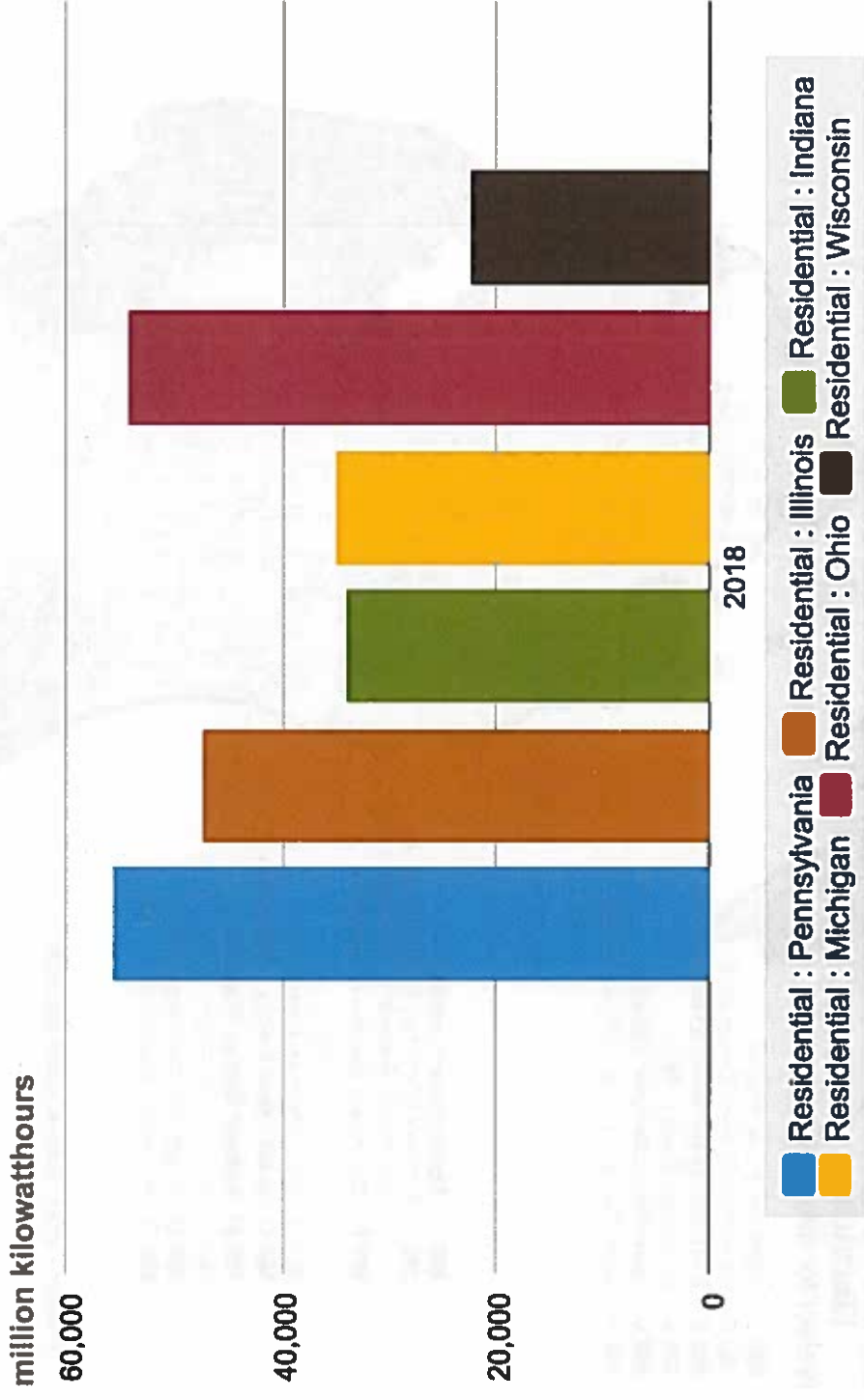
Data source: U.S. Energy Information Administration

Not just Industrial - Residential Rates in monopoly utility states have increased more than rates in the electric choice states.

Category	U.S.	PA	IL	IN	MI	OH	WI
2018	\$128.90	\$139.30	\$125.50	\$120.20	\$155.60	\$123.50	\$144.40

\$/MWh

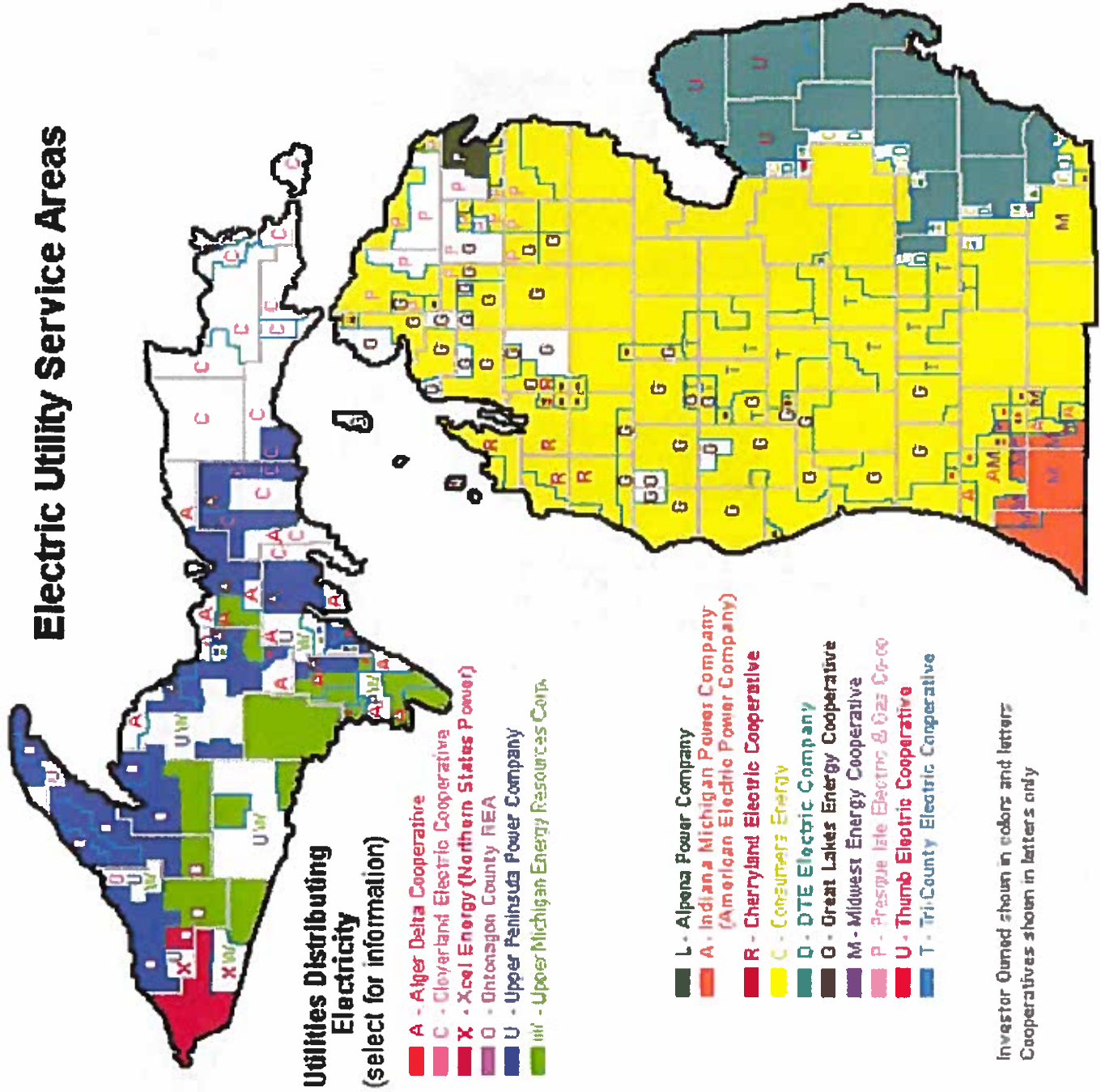
Retail sales of electricity, Annual



Data source: U.S. Energy Information Administration

Electricity rates are not just impacted by the sales level of the utility. It goes back to the Rate Making formula of Operating Costs + (Rate Base x Rate of Return).

Electric Utility Service Areas



Investor Owned shown in colors and letters
 Cooperatives shown in letters only

History of Retail Choice in Michigan

- Customer Choice and Reliability Act was signed into law on June 3, 2000 (Act 141).
- Act 141 was tie-barred to Act 142, which allowed utilities the ability to issue securitization bonds to recover the above-market cost of their generating plants or “stranded costs.”
- Act 141 provided:
 - All customers had the ability to purchase their electricity requirements from a licensed Alternative Electric Supplier (AES).
 - Required the Michigan Public Service Commission (“MPSC”) to enter the orders necessary to implement Choice in Michigan.

History of Retail Choice in Michigan

- Choice was available for customers beginning January 1, 2002.
- By the end of 2004, approximately 15% of load participated in the Choice programs for both Consumers Energy Company and DTE Electric Company.
- On October 6, 2008, PA 286 was signed into law which placed a cap on the amount of electricity that could be supplied to utility customers by Alternative Electric Suppliers.
- Act 286:
 - Re-monopolized 90% of the market.
 - Act 286 capped the amount of Choice participation at 10% of an electric utility's average weather-adjusted retail sales for the preceding calendar year.