Agenda

City of Charlevoix City Council Work Session Meeting

Monday, April 17, 2023 - 5:00 PM

Council Chambers, 210 State Street, Charlevoix, MI

1. **Roll Call**
2. **Presentations**
   A. MPPA BMRA Presentation
3. **Public Comment**
4. **Adjourn**

Persons with disabilities who need an accommodation to fully participate in these meetings should contact the City Clerk's Office at 231-547-3250 or by email clerk@charlevoixmi.gov. A 24-hour notice may be needed for certain accommodations. An attempt will be made to grant all reasonable accommodations requests.

Charlevoix City Council

Presentations

Title: MPPA BMRA Presentation
Date: April 17, 2023

Presented By:

Background:
In its 2020 – 2024 Strategic Plan, the Michigan Public Power Agency (MPPA) identified the need for a Business Model Risk Assessment (BMRA) tool. The first step was the development of a Member Report Card for its members. The Report Card is used to evaluate each member's financial profile under national credit rating agency metrics and identifies challenges and opportunities for members to manage financial aspects of their operation. The next step was to develop the BMRA to focus on each members' retail rate competitiveness, customer concentration, and Distributed Energy Resource (DER) readiness.

Retail Rate Competitiveness:
Charlevoix's retail electric rates were competitive. Considerations going forward include the development and implementation of a five (5) year Rate Strategy to educate customers on the value of the utility, and regular, incremental rate increases to invest in system improvements.

Customer Concentration:
Charlevoix's customer concentration risk was identified as medium. Recommendations from the BMRA include the development of a Key Customer Accounts Program and, again, a Rate Strategy.

Distributed Energy Resource Readiness:
Charlevoix's current DER program was adopted in 2018. Since then, there have been advancements and changes in energy resources (wind, solar, EV, etc.), customer perspectives, and regulations. In particular, the BMRA evaluated three areas needing further consideration. The first is the implementation of an Advanced Metering Infrastructure system. Charlevoix has selected Aclara for its AMI project.

The second area is Charlevoix's interconnection policy. A draft to update the current program has been developed and will be reviewed by MPPA staff before being presented for City Council consideration.

The third area is the design of Charlevoix's retail rates. The BMRA is recommending the unbundling of electric rates. This would structure rates to reflect the transmission, distribution, capacity, and energy costs and make Charlevoix financially indifferent toward Distributed Energy Resources.

Steve Donkersloot, Director of Strategic Energy Resources and Services, and Patrick Devon, Energy Analyst, are staff members of MPPA and are here to provide additional BMRA information.

Recommendation:

Attachments:

1. MPPA BMRA Presentation City of Charlevoix
2. BMRA Final Results - Charlevoix 11.08.2022

Michigan Public Power Agency

"Delivering Value Added Energy Solutions and Services to its Members"

City of Charlevoix

April 17, 2023


Public Power
✓ Not for profit
✓ Community-owned
✓ Locally controlled
Customer sided utility business model

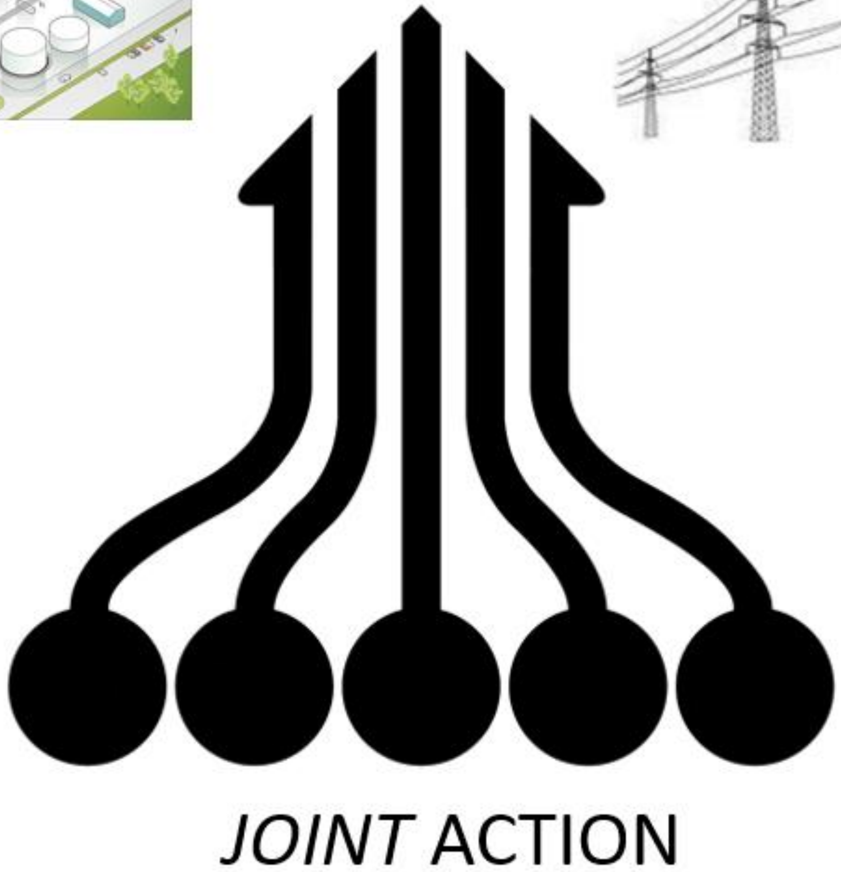
Joint Action Agency

Joint Action Agencies (JAA) formed -1970s

- Enabling Legislation 1976 (Act 448)
- Consortiums to invest in power projects
- JAA finance, own, or contract – Members take % share

Share resources and expertise

Lower costs and diversify risk



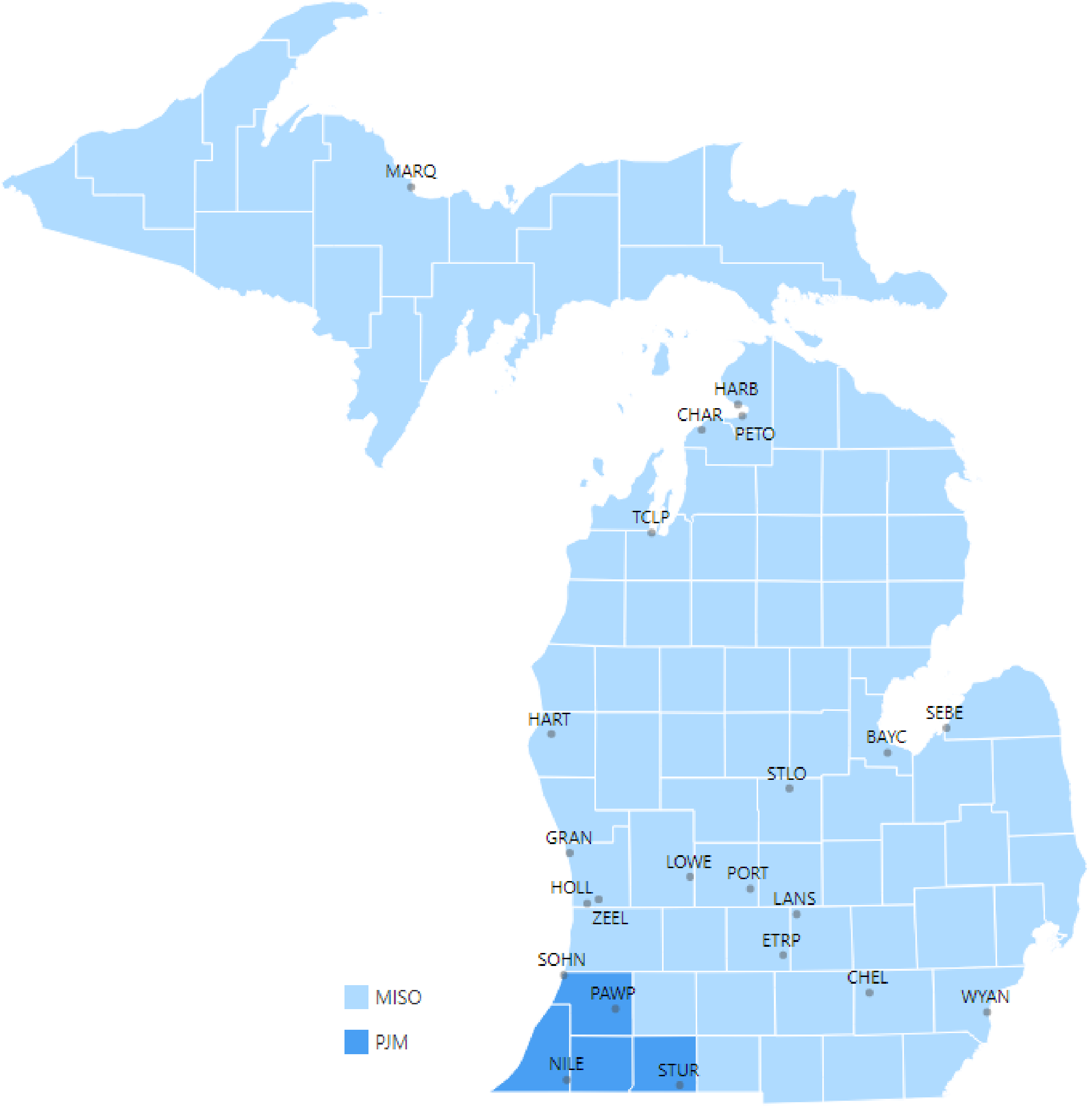
© Michigan Public Power Agency

Michigan Public Power Agency

Established 1978	22 Members
Michigan Municipal Electric Utilities	Project Based Agency

PJM and MISO

5 Associate Members do not participate in power supply



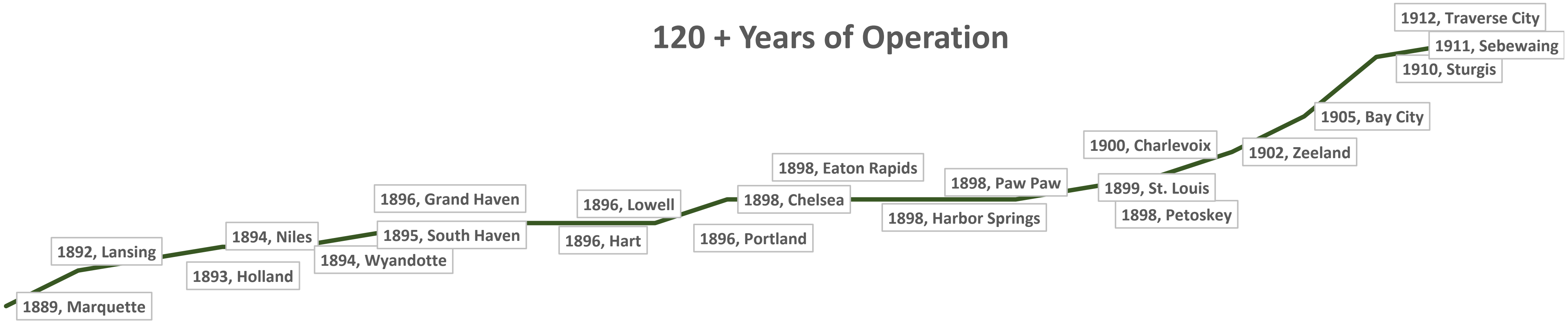
© Michigan Public Power Agency

Agency Member Profile

6 Million MWh Retail Sales

1.4 GW Peak Load

275,000 Retail Customers



© Michigan Public Power Agency

What MPPA Does for Members

Interface Wholesale
Energy Markets

Power Supply Portfolio
Management

Transaction / Investment

Economies of Scale

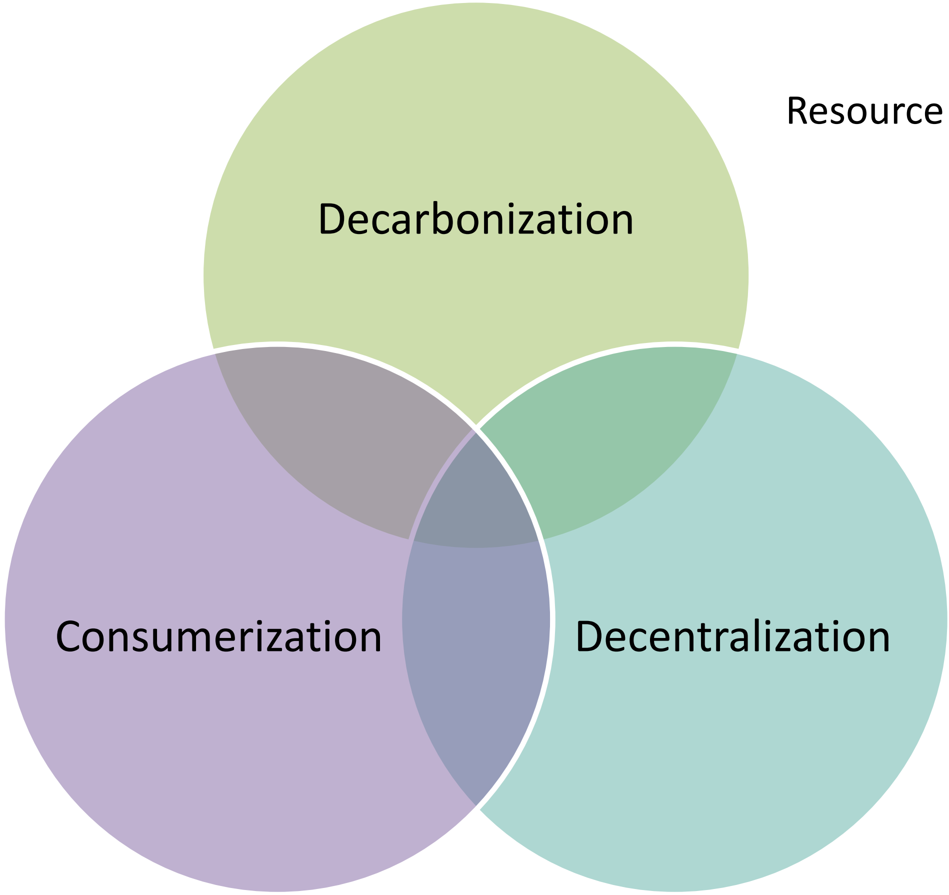
Risk Diversification

© Michigan Public Power Agency

Michigan Public Power Agency

Industry Transformation

Resource changes focused on reducing / eliminating fossil fuel



Smarter, faster, smaller, efficient, local

Interest in and control over energy aided by Decarbonization & Decentralization

MPPA Transformation

Renewables, Energy Storage, Distributed Energy Resources

Power Supply

Staffing

Analytics, Business Intelligence, Finance, Services

Huge volumes of data, scenario analysis, automation, new dispatch logic

Systems

Engagement

Education, Participation, Marketing

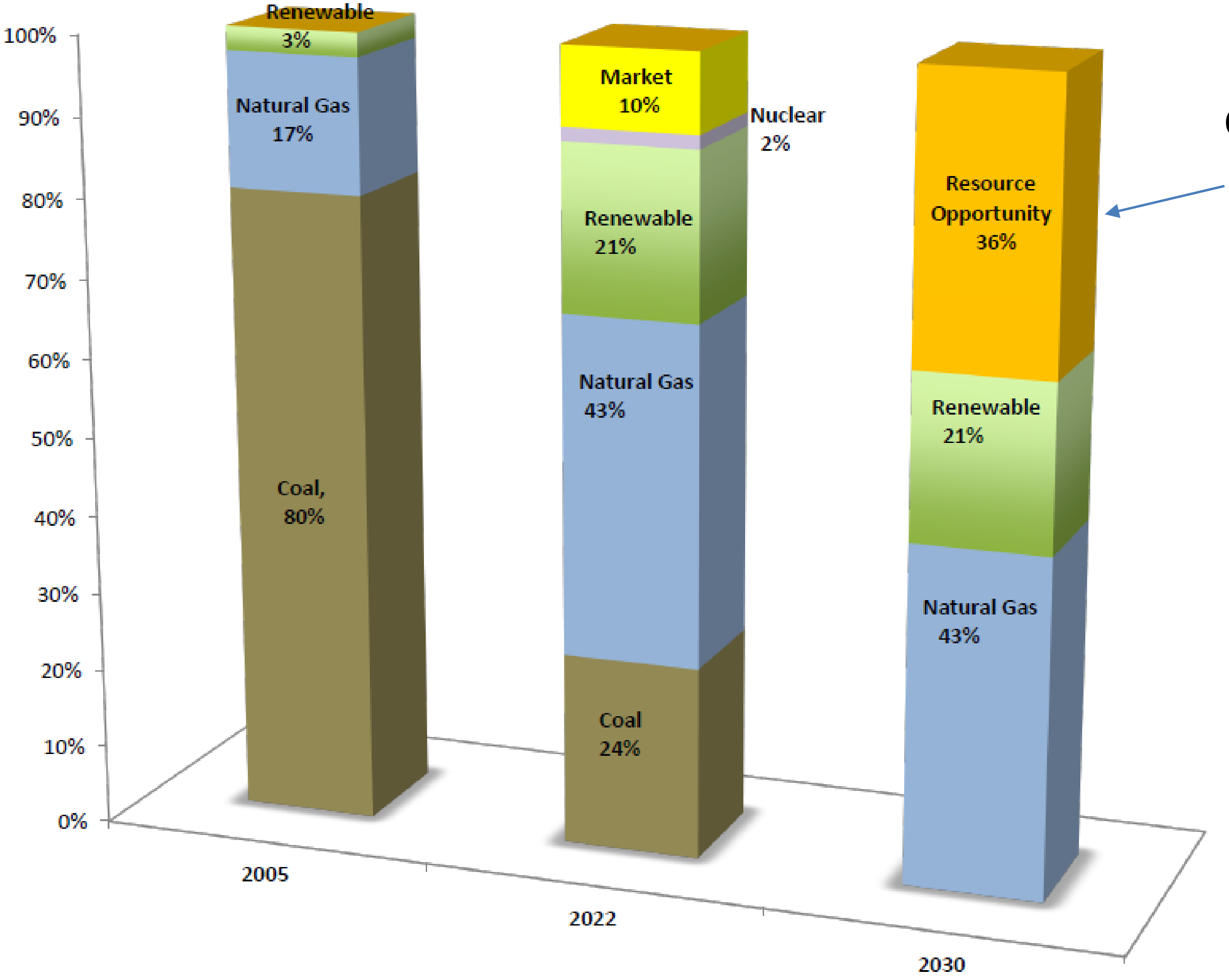
© Michigan Public Power Agency

MPPA Power Supply Portfolio

$1+ Billion of Renewable PPAs

60% CO_2 reduction from 2005

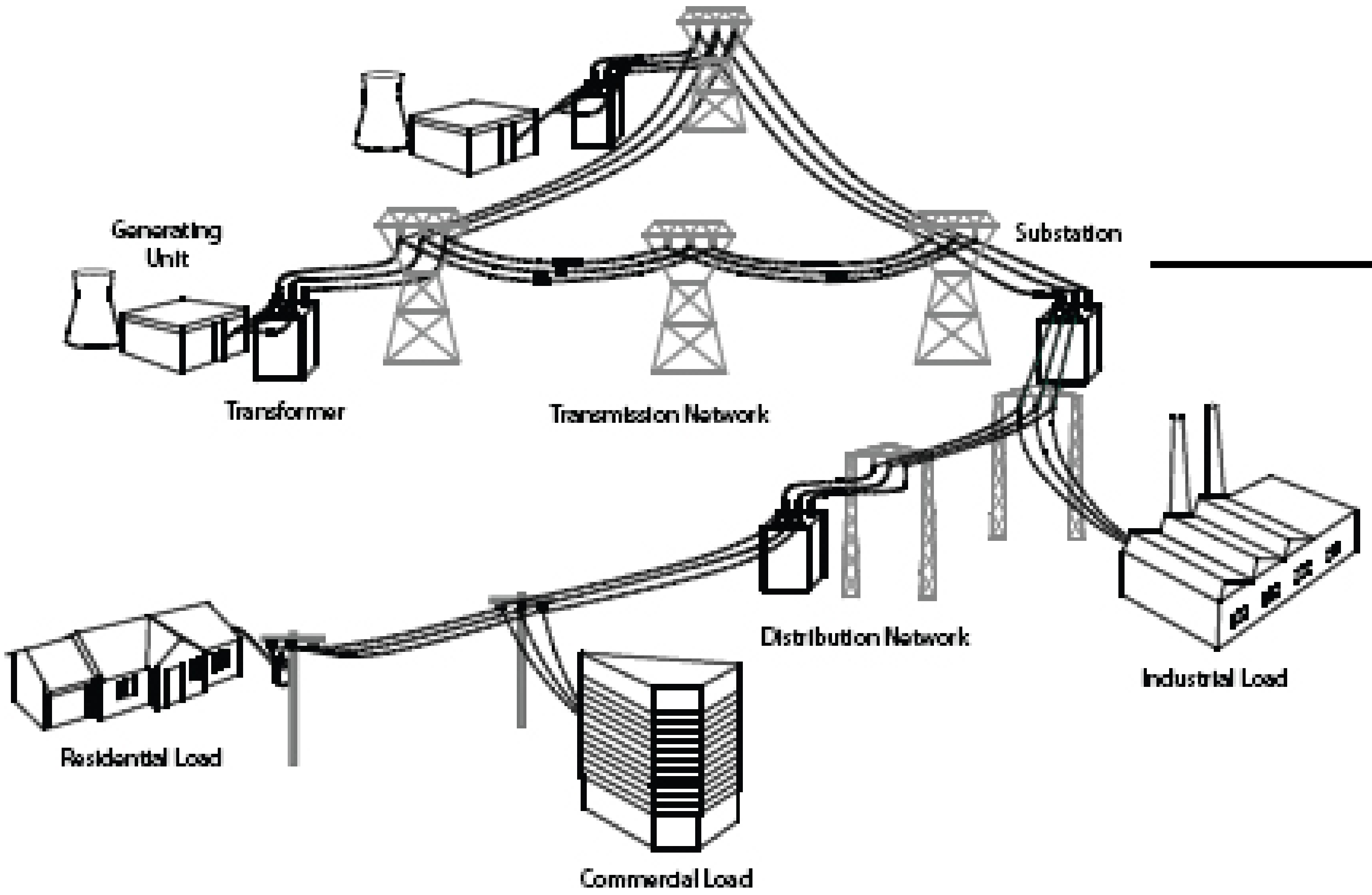
- Coal debt retired in 2018 & 2021
- One of the largest solar projects in Michigan (160 MWs)
- We believe the last wind project to reach commercial operation



Complexity navigating reliability, supply fit, land use, carbon risk, cost

© Michigan Public Power Agency

Historical Dividing Line for Services

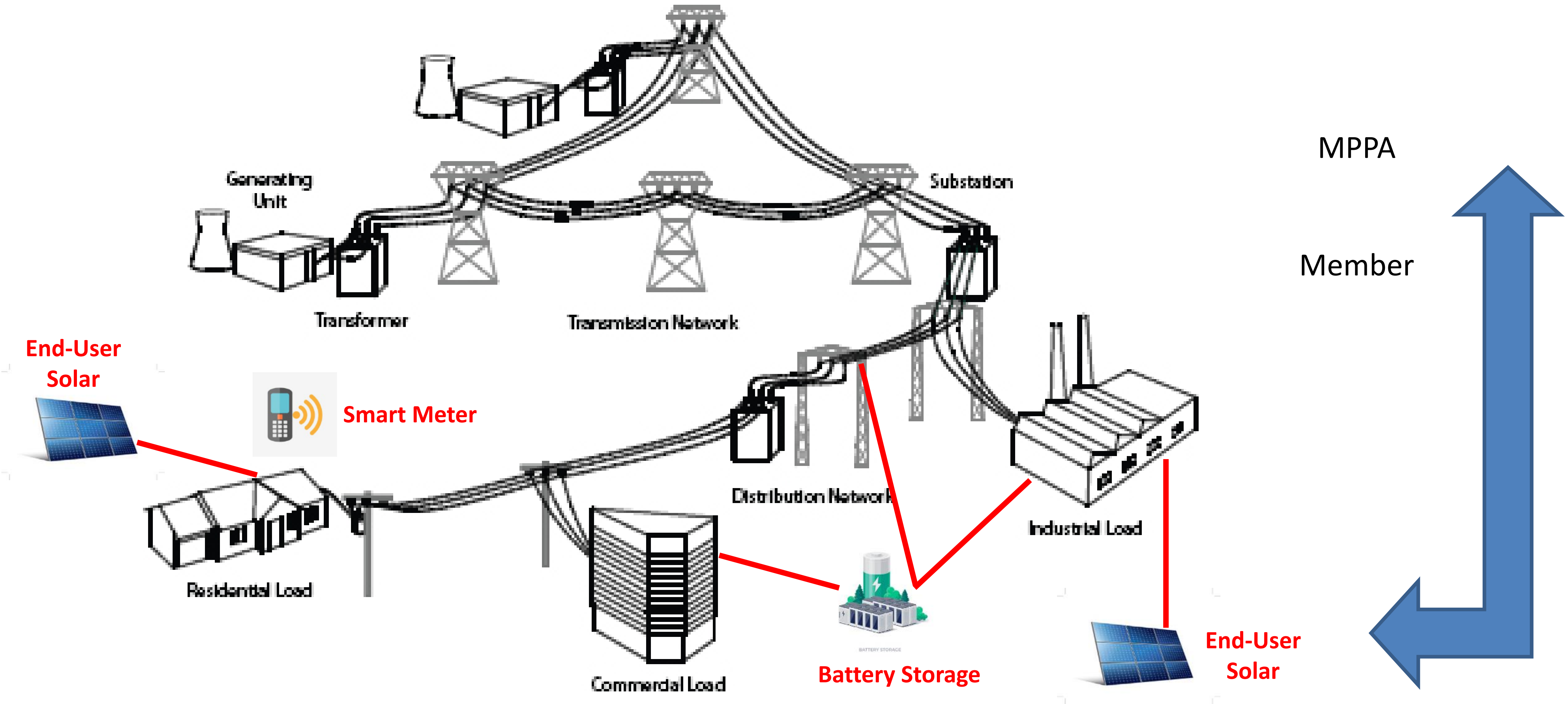


MPPA

Member

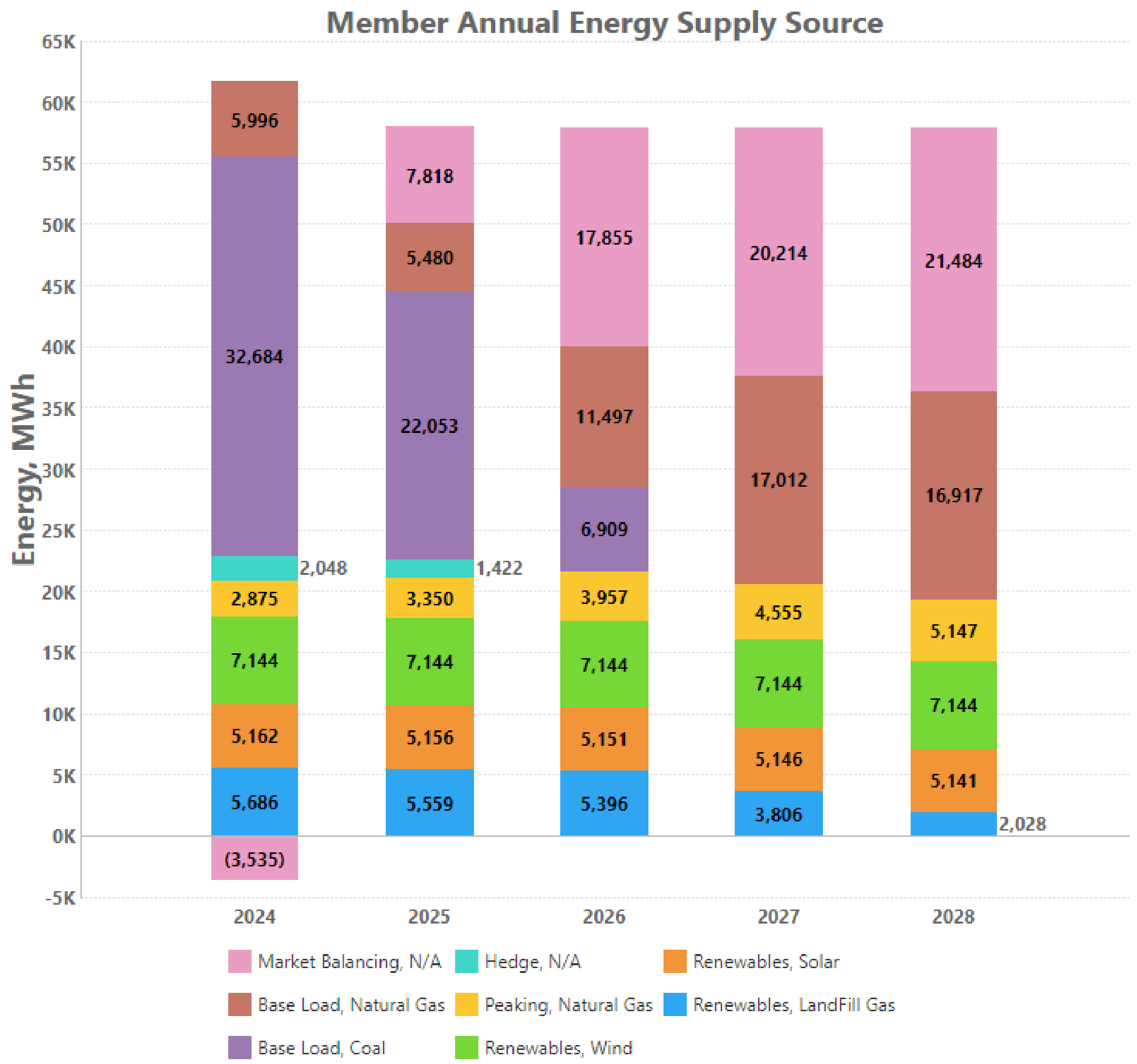
© Michigan Public Power Agency

Future Driving New Services



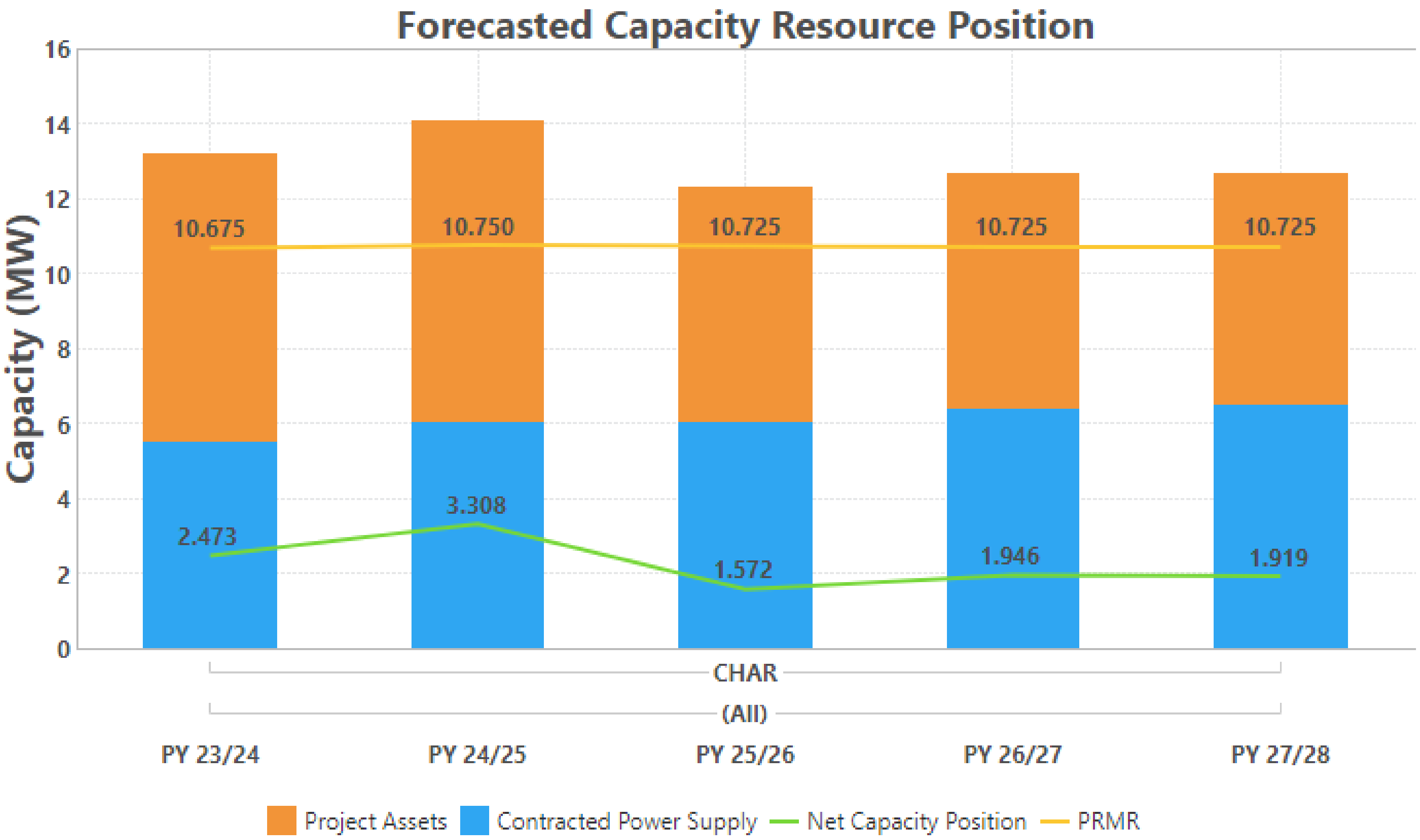
© Michigan Public Power Agency

Charlevoix Power Supply Portfolio - Energy



© Michigan Public Power Agency

Charlevoix Power Supply Portfolio - Capacity



© Michigan Public Power Agency

Summary

Industry is under dramatic change impacting all facets of utility operations

MPPA is responding with new business plans, transitioning people skills and designing systems

Members must respond to ensure they remain competitive, financially secure and customer focused

© Michigan Public Power Agency

Retail Rate Competitiveness:

Background & Importance:

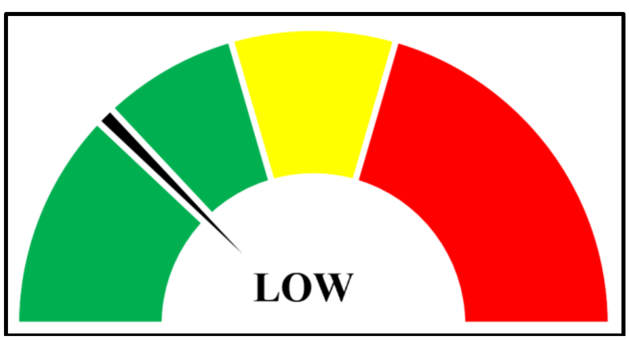
- A weighted average comparison of your utility's all-in retail rates to your neighboring utility's all-in retail rates on a cents per kWh basis.
- Rates are important in influencing your utility's ability to attract and retain customers. Their relative affordability (to the neighboring utility) can influence the willingness to raise rates and revenue flexibility, which are key credit considerations.
- Understanding your utility's rates, whether below or above the neighboring utility, provides key and actionable information that should be considered when making operational and financial decisions.

The Results:

Rate	Charlevoix Rate*	Comparable Consumers Energy Rate*	% Difference
111 / 121	12.18	18.63	-34.6%
131 / 141	12.26	17.91	-31.5%
152 / 552	9.75	14.08	-30.6%
162 / 562	8.98	13.87	-35.2%

*Cents / kWh for Average Customer utilizing CY 2021 data

Risk Profile – Competitive Retail Rates:



Note: Overall risk calculated utilizing S&P Global Ratings' methodology scale for Retail Electric Market Position

Potential Next Steps:

- Develop a 5+ year Rate Strategy (if your utility does not yet have one)
- For customer classes where your utility has lower / competitive rates:
  - Educate and communicate this value proposition to your customers
  - Consider whether a small rate increase makes sense for the purpose(s) of investing in your utility's distribution system, staff, facilities, IT infrastructure/systems or enhancing your creditworthiness

Customer Concentration:

Background & Importance:

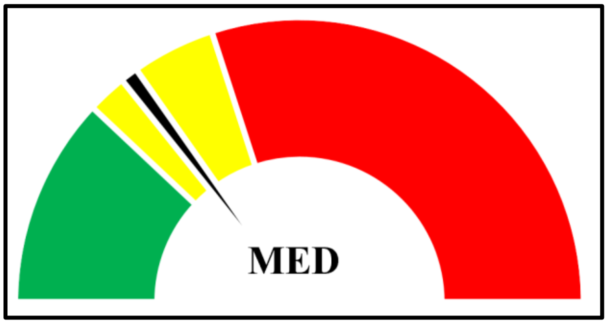
- The percentage share that key customer groups make up of your utility's total retail load (in MWhs).
- Retail sales volatility can occur if a significant portion of your utility's sales are tied to a small set of customers (or perhaps just one customer). If one or more of these customers were to leave, the loss of sales would negatively affect cash flow. This is also true during recessionary periods – but to a lesser extent.
- Understanding how the following three key customers groups contribute to your utility's total retail sales provides key and actionable information that should be considered when making operational, power supply and long-term investment decisions.

The Results:

Customer Group	% of Load*
Residential Class	41.2%
Top 10 Customers	20.0%
Top Customer	6.7%

*% of Retail Sales (MWhs) utilizing CY 2021 data

Risk Profile – Customer Concentration:



Note: Overall risk calculated utilizing S&P Global Ratings' methodology scale for Diversity of Sales and Demographics

Potential Next Steps:

- Implement a Key Customer Accounts Program with sufficient resources and focus to maintain a relationship of mutual information sharing and benefits with each key customer
- Develop a Rate Strategy to ensure your utility's fixed and variable expenses are being recovered appropriately in your rate structure

Distributed Energy Resource ("DER") Readiness:

Background & Importance:

- Due to significant advancements in energy resource technology (such as solar), changing customer perspectives & objectives and Federal Energy Regulatory Commission ("FERC") reforms, the edge of the distribution grid (i.e. at the retail customer level) is becoming the most important part of the energy ecosystem.
- The grid edge is now where clean energy investments (solar, storage, fuel cells) meet the utility system.
- It is critical that your utility has visibility and control at the grid edge to integrate new and dynamic distributed energy resources.

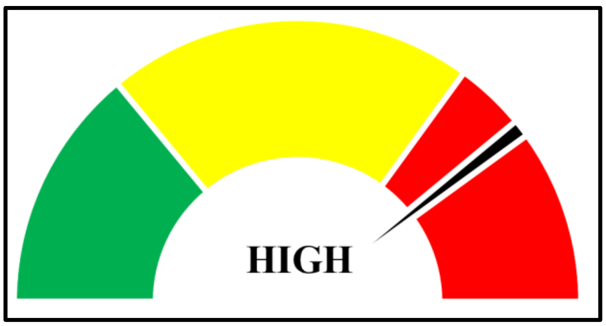
2022 BUSINESS MODEL RISK ASSESSMENT

The Results:

Category Evaluated	Readiness*
Advanced Metering Infrastructure ("AMI")	0 of 4
Electric Interconnection Policy	2 of 4
Retail Rates	1 of 4

*Utility's responses in Q1/Q2 of 2022 about whether or not key prerequisites for each Category are currently in place

Risk Profile – DER Readiness:



Note: Overall risk calculated utilizing internal MPPA scale.

Potential Next Steps:

- Plan and budget to develop / implement an AMI System with data management capabilities and flexibility to adapt to grid edge developments (e.g. Electric Vehicles with vehicle-to-home and vehicle-to-grid capability)
- Review your utility's Electric Interconnection Policy every 5 years and, if necessary, update it.
- Include unbundling in your long-term Rate Strategy: structure the components of your rates (transmission, distribution, capacity, energy) so they reflect cost causation and move your utility to financial indifference toward DER.