



KENTUCKY MUNICIPAL ENERGY AGENCY



KYMEA President & CEO Report

Doug Buresh

October 21, 2020

- **IRP Focus Group Feedback**
 - KYMEA Market Access
 - MISO Capacity Market
 - KYMEA Energy Mix/Competitive Portfolio
- APPA Communications Awards
- COVID-19 Disconnections

To encourage public participation in the development of its IRP, KYMEA held two Community Focus Group Sessions (June 24 and September 2).

Community Feedback Report

1. Apogee Climate & Energy Transitions (Apogee) contracted Synapse Energy Economics (Synapse) to prepare a report regarding the KYMEA IRP Community Focus Group Sessions (September 30).
2. Apogee distributed the Synapse report to the governing bodies of the KYMEA members (October 7).

KYMEA welcomes the Apogee/Synapse participation in the IRP process, but we are concerned that certain elements of the Synapse Memorandum may contribute to public confusion and promote unrealistically rosy expectations, due to some fundamentally mistaken assumptions about KYMEA's market position and the resource alternatives available to it.

- KYMEA offered some clarifying facts and explanations (October 12).

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KYMEA Market Access

EEl Market Access requires purchases from the Joppa plant and LG&E/KU Network Service. EEl sold the transmission system to GridLiance 9/10/2018. The grandfathered EEl/Joppa path ends 5/31/2022 when GridLiance becomes part of MISO.

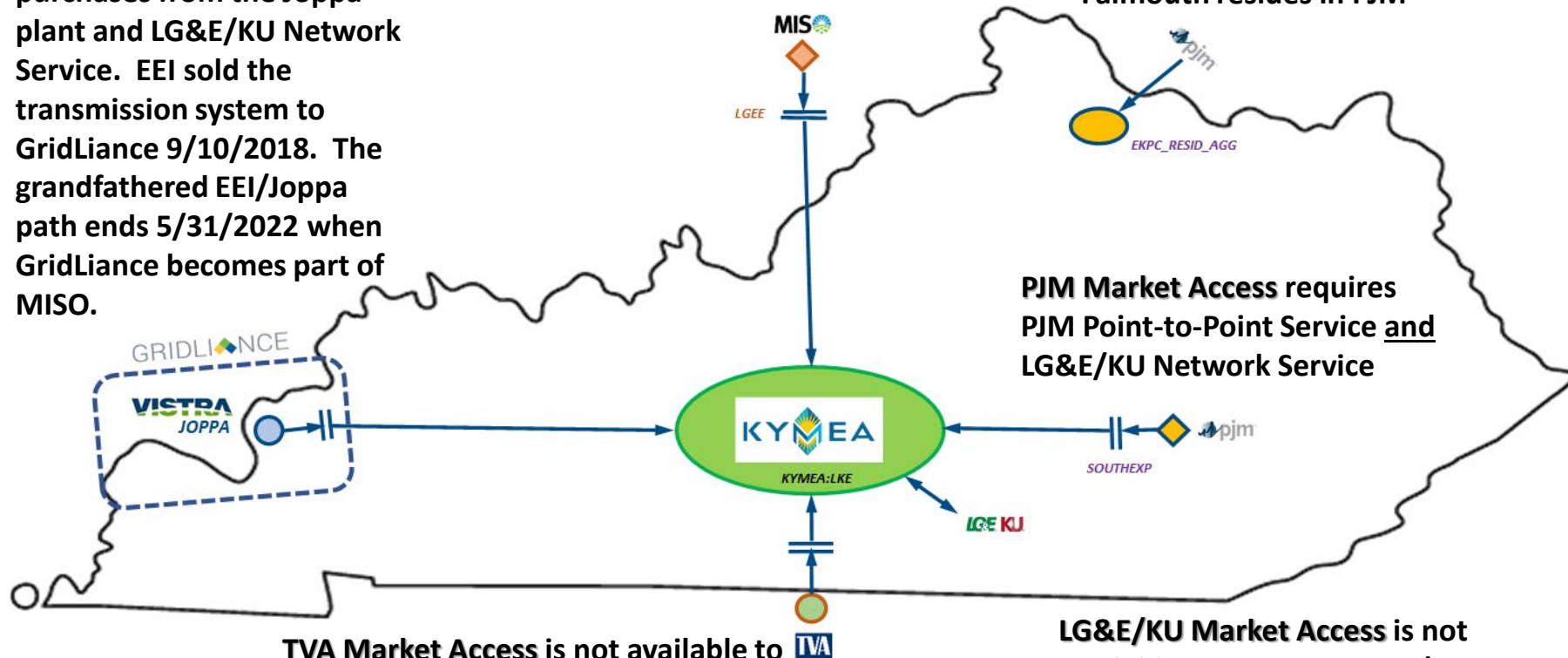
MISO Market Access requires MISO Point-to-Point Service and LG&E/KU Network Service

PJM Market Access for Falmouth is unconstrained as Falmouth resides in PJM

PJM Market Access requires PJM Point-to-Point Service and LG&E/KU Network Service

TVA Market Access is not available to KYMEA or Kentucky Municipals due to the 1959 TVA Act Amendment. It is possible to pancake wheel from non-TVA companies over this path.

LG&E/KU Market Access is not available to KYMEA. LG&E/KU has horizontal market power in the LG&E/KU control area so they can only sell cost-based power.



Point-to-Point Tariff

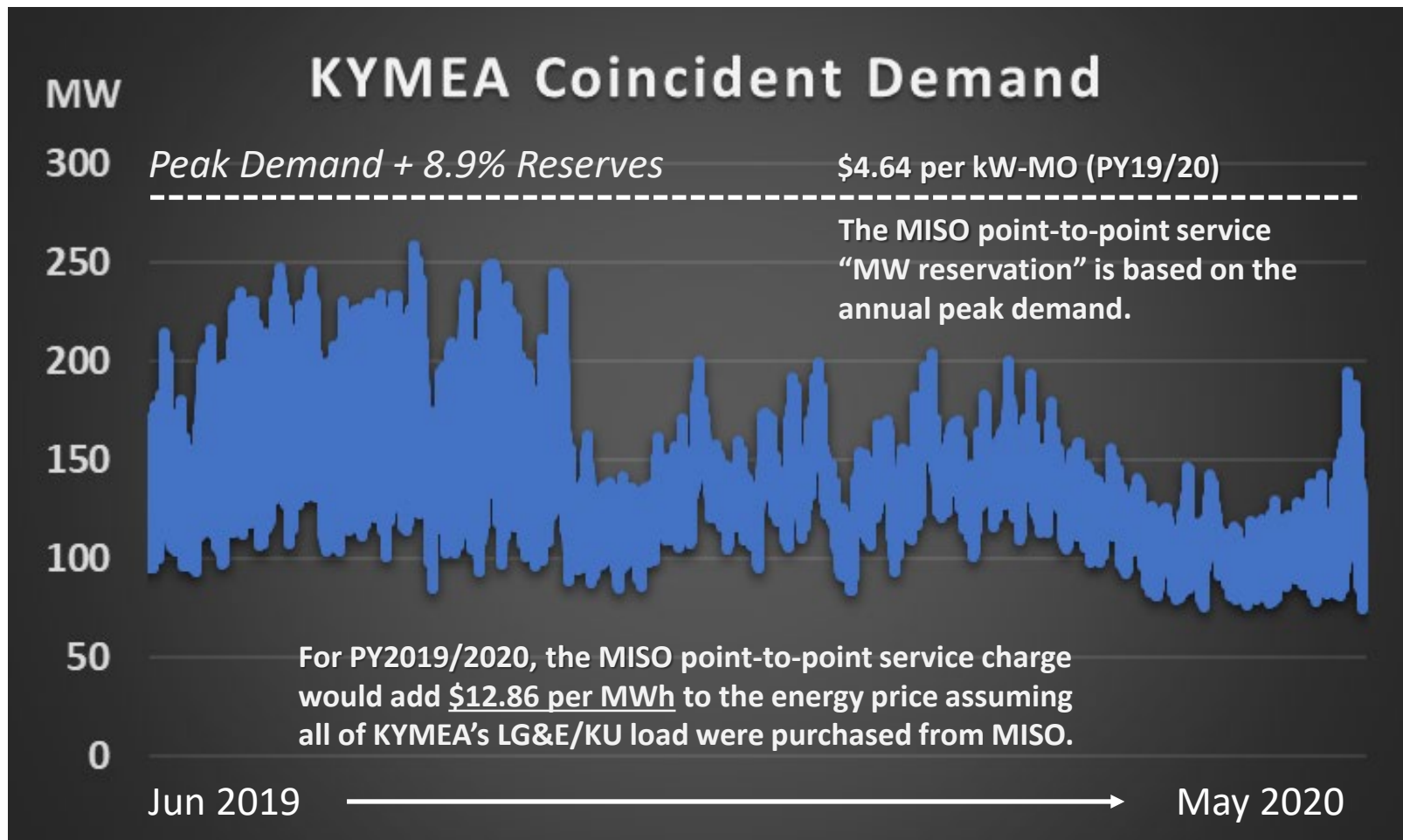
MISO “Drive Out” Rate
(point-to-point) requires
Tariff Schedules 1, 2, 7, 26,
26a, and 45.



PJM “Drive Out” Rate (point-
to-point) requires Tariff
Schedules 1, 2, 6, and 9.



MISO Point-to-Point Price



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MISO PRA

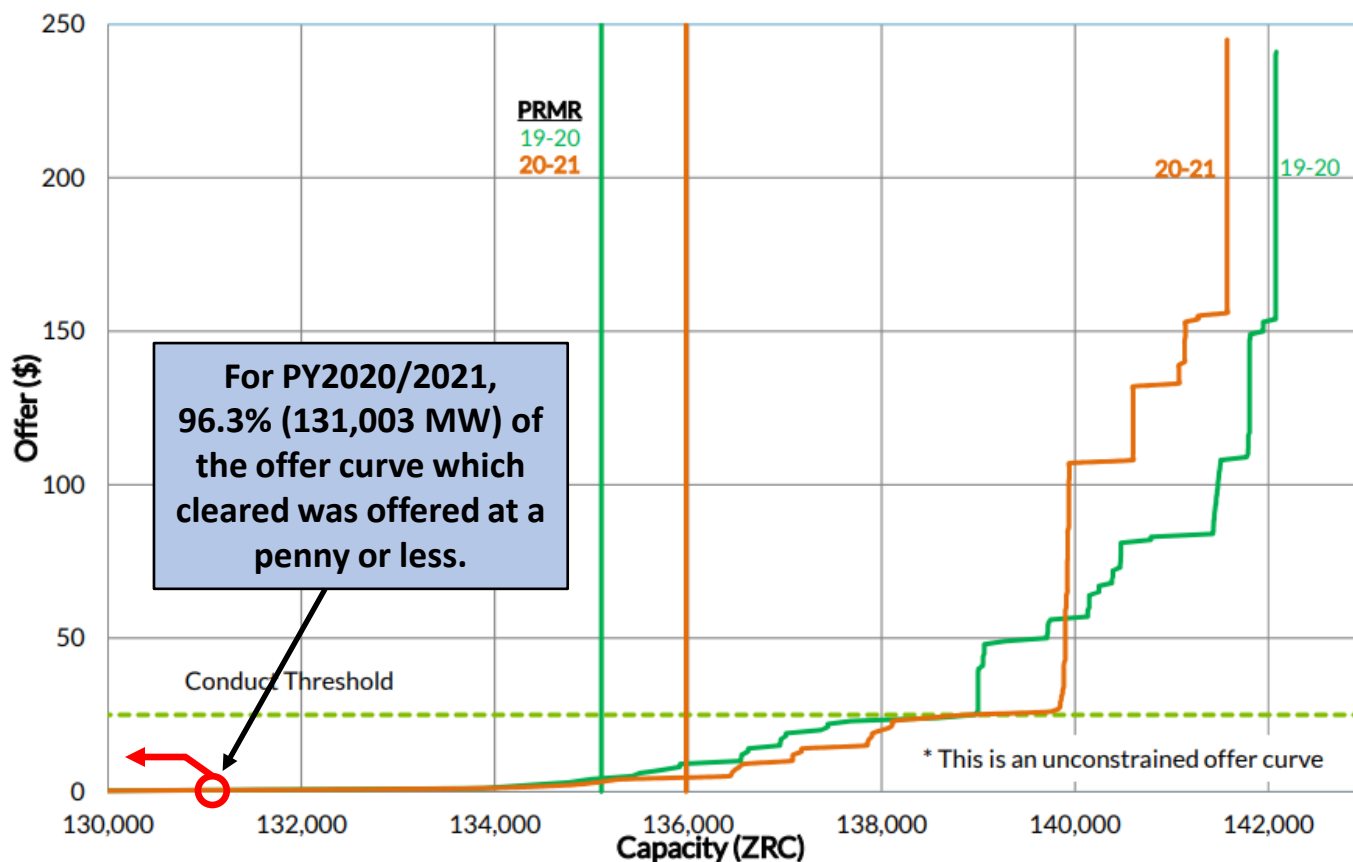
MISO holds a voluntary annual capacity auction called a Planning Resource Auction (PRA).

The PRA provides a way for MISO Market Participants to meet resource adequacy requirements. The PRA's location-specific approach encourages resources to take part in the zones where they provide the most benefit.

BREC PPA: KYMEA has 100 MW in MISO Zone 6 which we remove from the MISO Auction and direct to our load in LG&E/KU.



MISO PRA Offer Curve

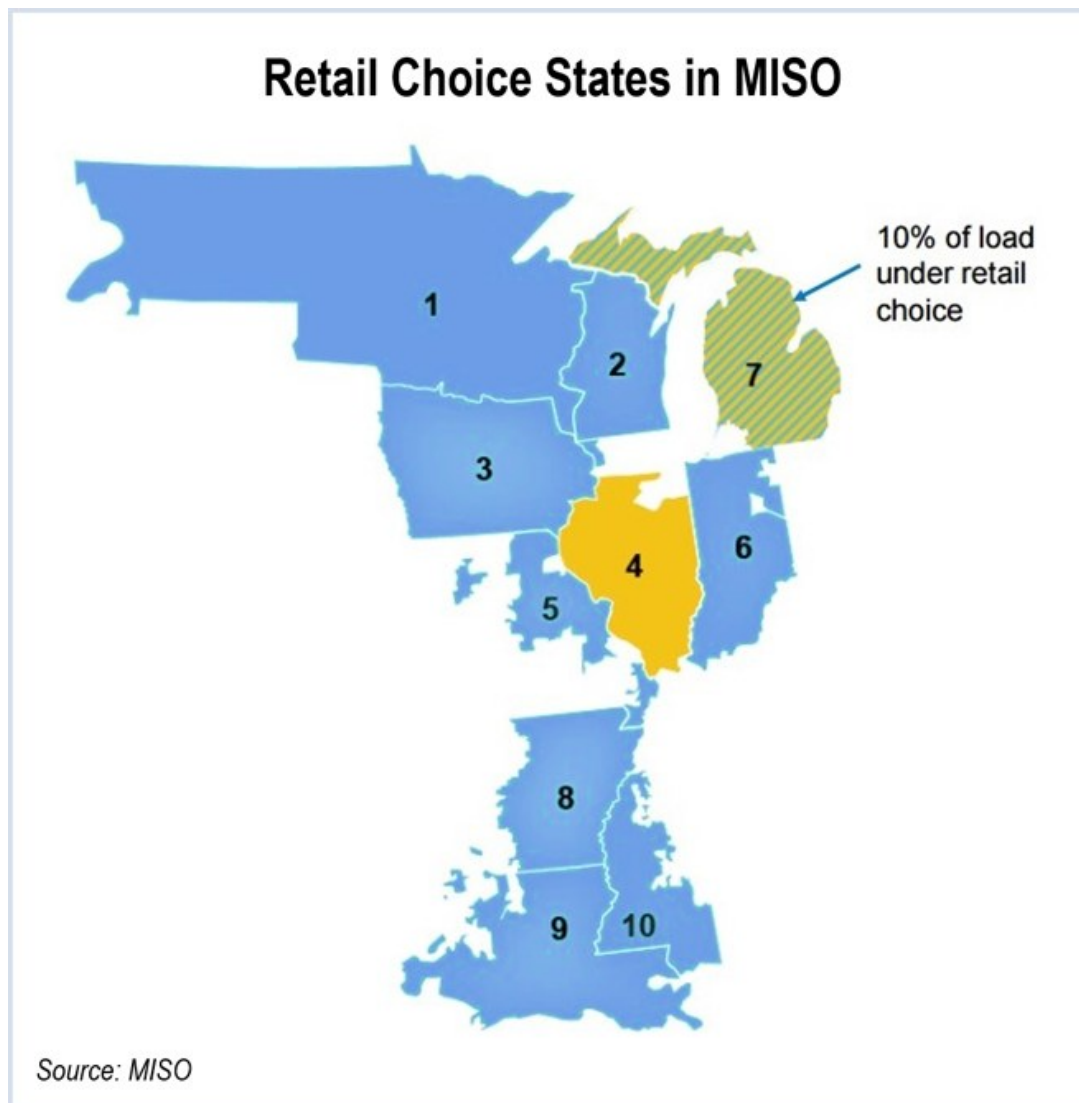


MISO Bid Behavior

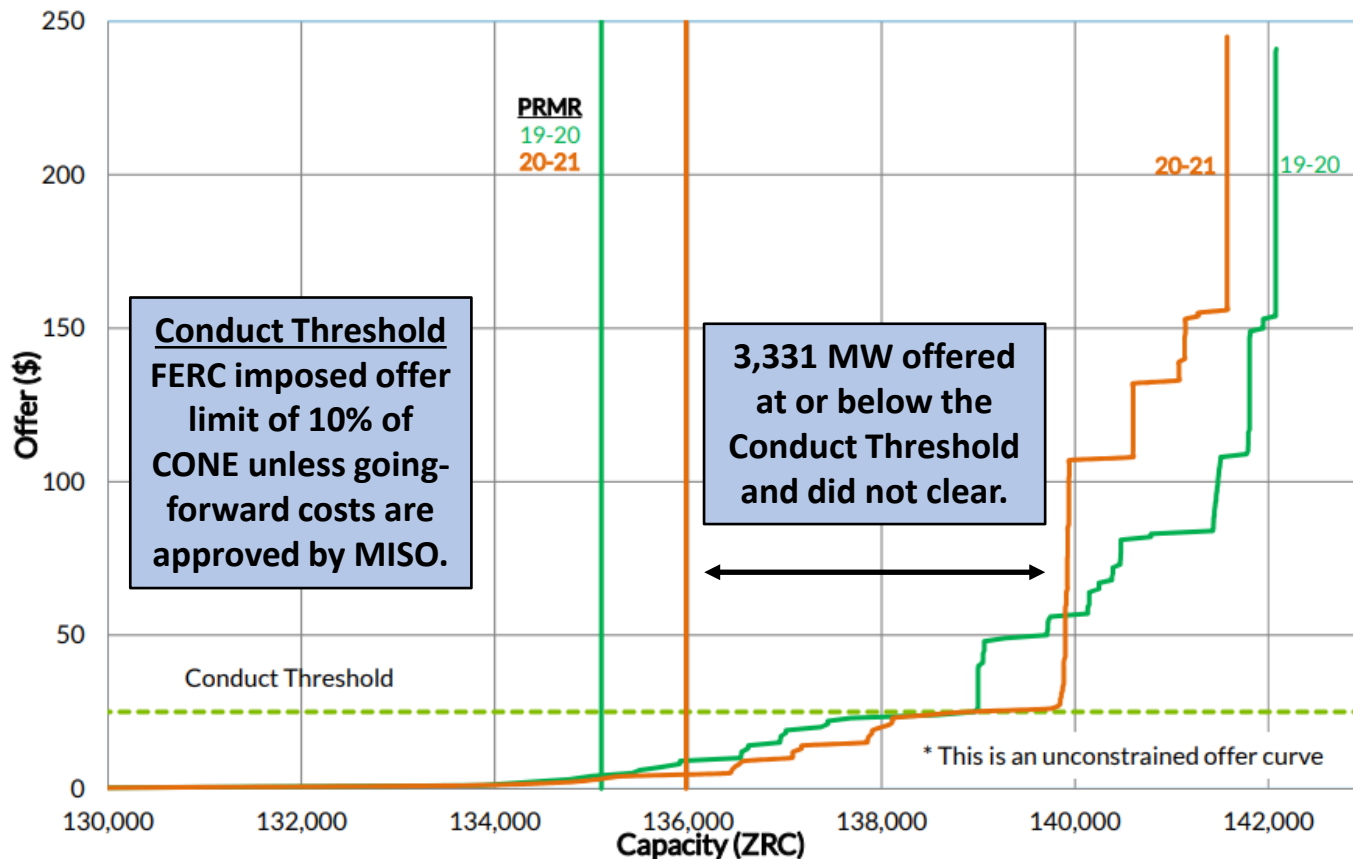
The reason the majority of MISO market participants (MP) offer at a penny or less is because most of MISO States are not retail choice states.

The MPs are largely vertically-integrated utilities with both supply and demand.

The vertically-integrated MP is highly motivated to ensure their supply clears in the auction since their load must purchase from the auction.



MISO PRA Offer Curve



MISO Capacity Balance

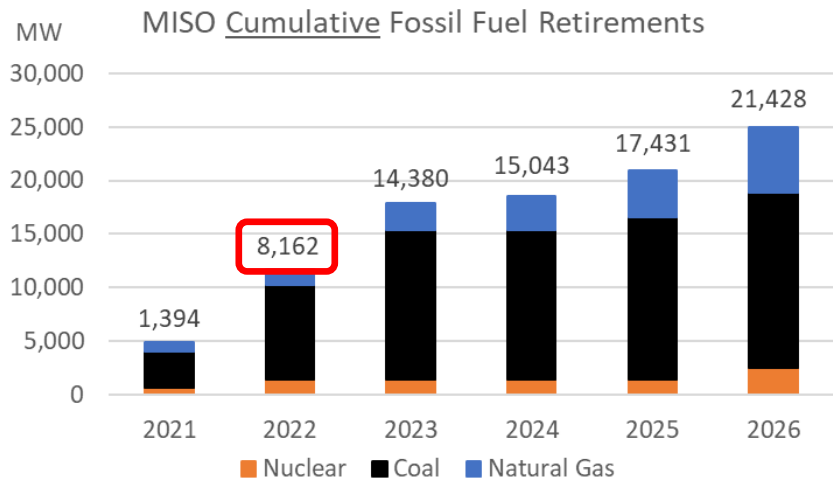
Supply Offered & Cleared

	Offered (ZRC)			Cleared (ZRC)		
Planning Resource	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Generation	126,159	125,290	125,341	120,855	119,779	120,143
External Resources	3,903	4,402	3,832	3,089	3,183	3,736
Behind the Meter Generation	4,176	4,202	3,997	4,098	4,097	3,892
Demand Resources	7,370	7,876	7,754	6,964	7,372	7,557
Energy Efficiency	173	312	650	173	312	650
Total	141,781	142,082	141,574	135,179	134,743	135,979

5,294 MW
Uncleared

MISO Fossil Retirements/Additions

By 2022, there is expected to be great upwards pressure on the MISO Capacity Market Price.



Fossil Additions

Unit Name	Type	MW	On-Line	State
Blue Water Energy Center	CC	1,146	4/1/2022	Michigan
Delta Energy Park	CC	224	6/1/2021	Michigan
Montgomery County	CC	993	2/1/2021	Texas
		2,363		

MISO Capacity Market Design

Excerpt from IMM Report

PRA Demand Curve

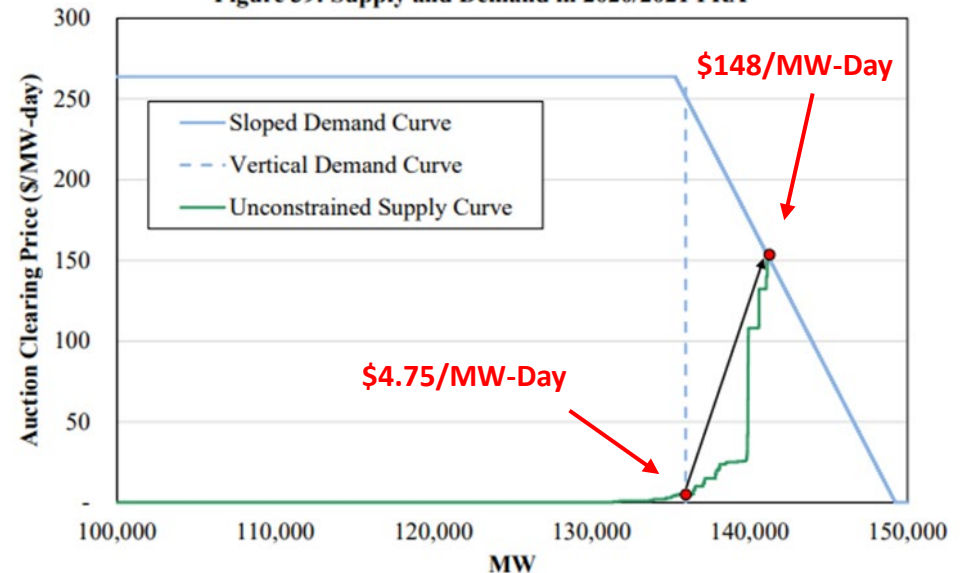
“The demand for capacity in the PRA continues to poorly reflect the true reliability value of capacity and undermines the market’s ability to provide efficient economic signals.”

“We have sought to address this flaw by recommending that MISO implement a sloped demand curve. A sloped demand curve would produce more stable and predictable pricing, which would increase the capacity market’s effectiveness in providing incentives to govern investment and retirement decisions.”



In the 2020/2021 MISO PRA, Zones 1 through 6 and 8 through 10 cleared at clearing prices between \$4.75 per MW-day and \$6.88 per MW-day. These prices are close to zero, reflecting less than 3 percent of the CONE for investing in a combustion turbine in the Midwest. Zone 7 was short of the local clearing requirement and cleared at the \$257.53 per MW-day price cap set at the CONE in that region. Almost 136 GW of capacity cleared in the 2020/2021 auction.³⁹

Figure 39: Supply and Demand in 2020/2021 PRA



In our sloped-demand-curve simulation, we found that more than 141 GW of capacity cleared, while 431 MW of offered capacity would not have cleared. Auction clearing prices by zone would have been:

- \$148 per MW-day in Zones 1 through 6, 8, and 10, and for all external zones;
- \$155 per MW-day in Zone 9; and
- \$270 per MW-day in Zone 7, which is 5 percent higher than CONE.

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KYMEA Energy Mix

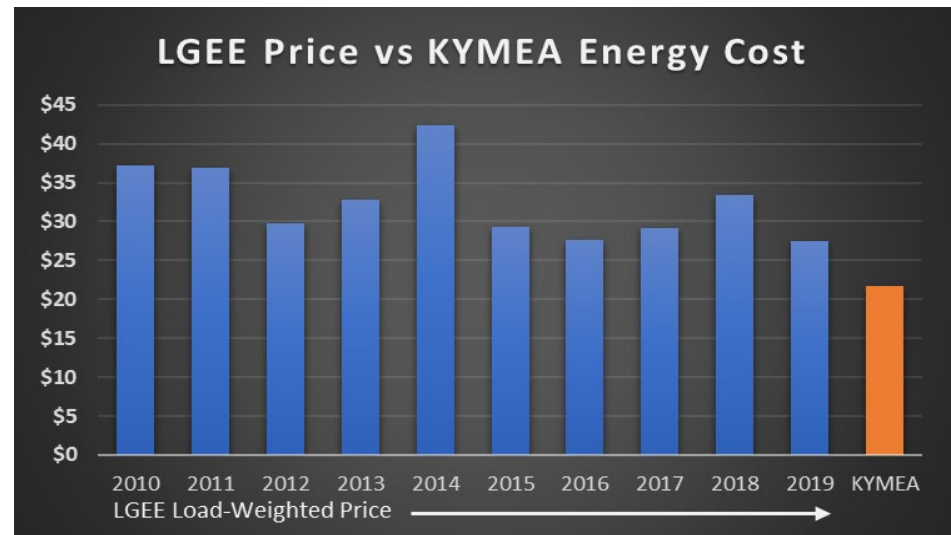
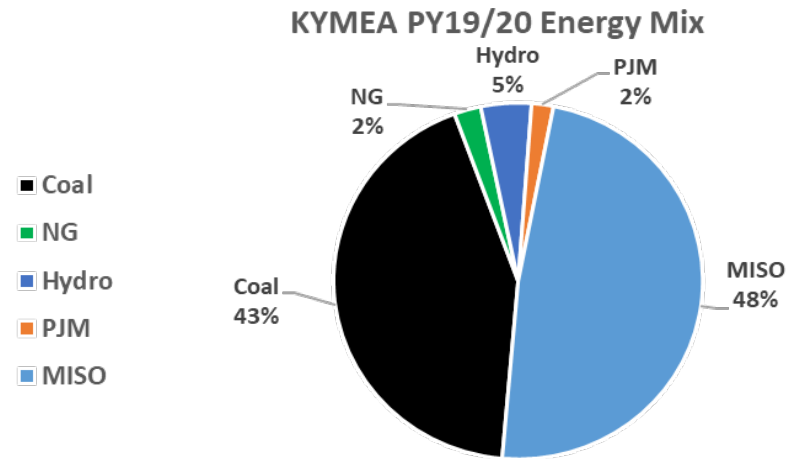
KYMEA Energy Mix

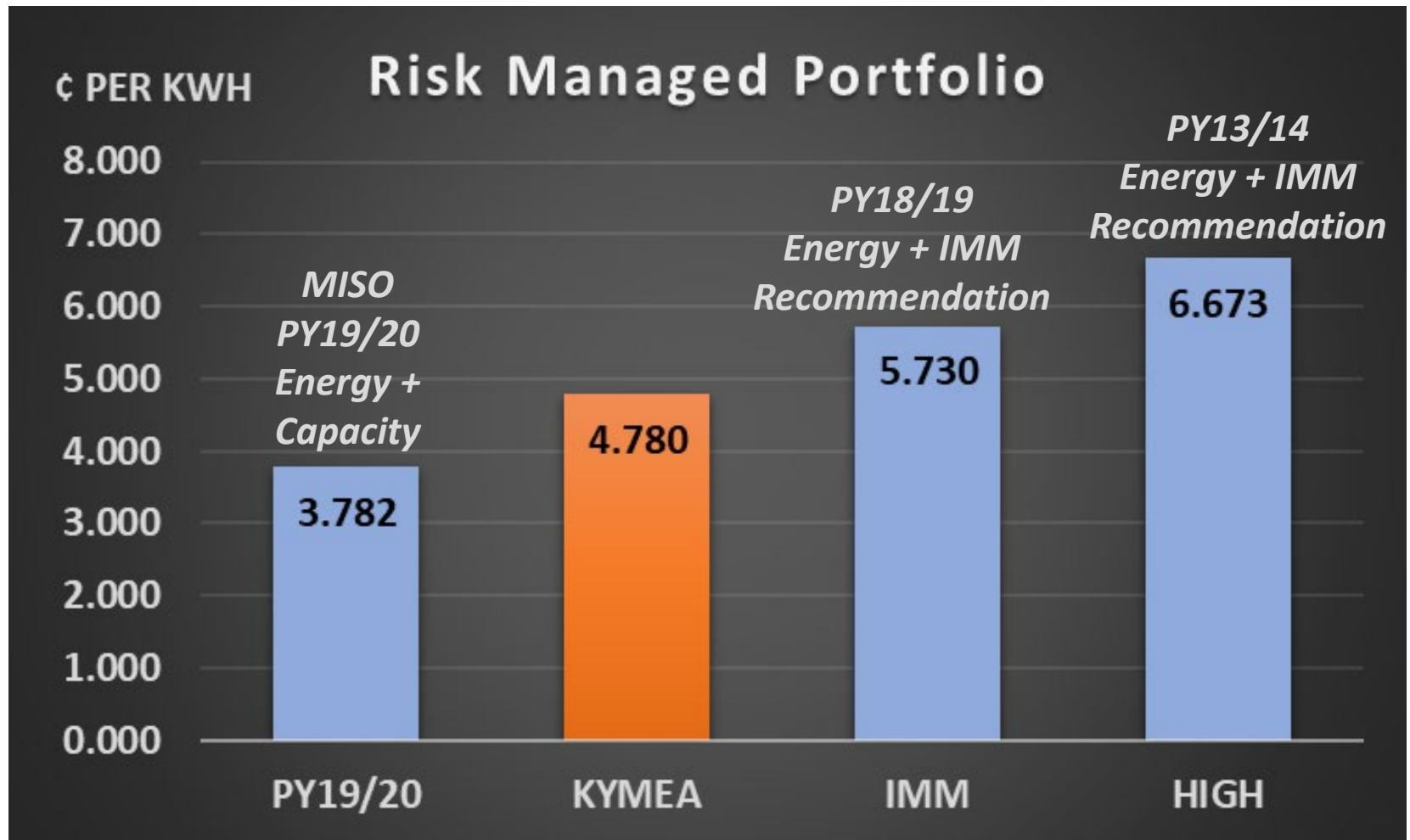
As Illustrated by the chart to the right, KYMEA purchased half of its energy needs from MISO/PJM in PY19/20.

KYMEA Energy Cost

KYMEA's energy cost in \$/MWh (PY19/20) is lower than the LGEE interface price for each of the previous 10 years.

For every dollar per MWh increase in energy cost, KYMEA has \$1.3 million in added expense. The KYMEA PPAs cap our exposure to high market prices while allowing KYMEA to take advantage of low market price opportunities when they present themselves.



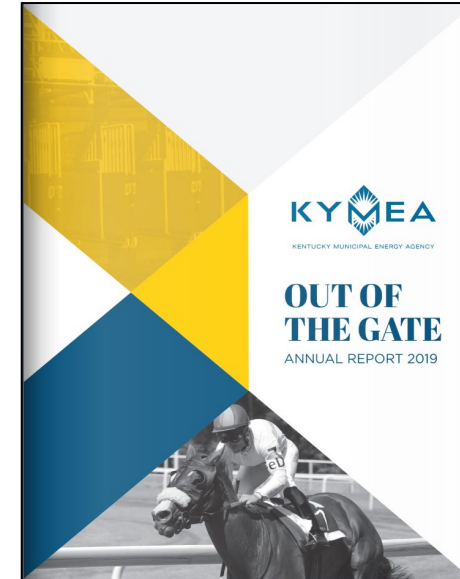


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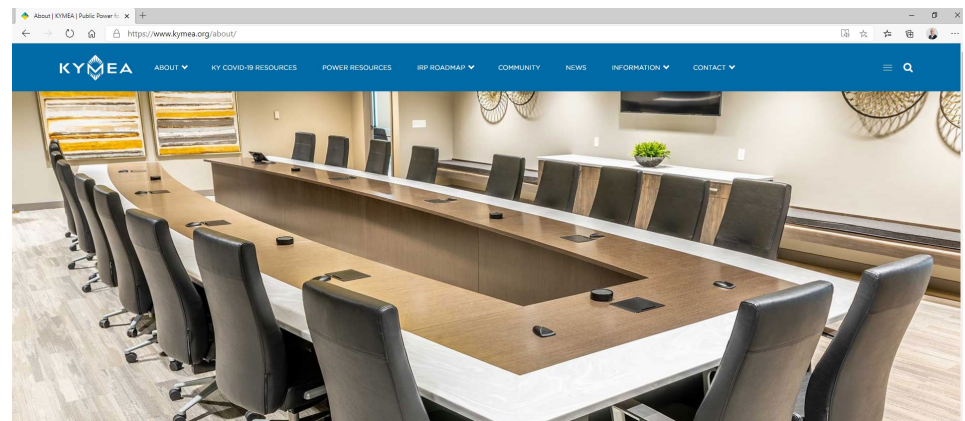
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 - KYMEA Competitive/Risk Managed Portfolio
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APPA Communications Awards

KYMEA is pleased to report that the 2019 Annual Report won the Excellence in Public Power Communications and Individual Achievements Award. This is the second year in a row the agency has won this prestigious award.



Equally exciting is KYMEA won the Merit in Public Power Communications Media Award for its Website.



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On October 6, 2020 KYMEA sent a letter to Governor Beshear for consideration to lift and remand Directive #6 of the Governor's Executive Order 2020-323 (May 8, 2020) on behalf of the KYMEA member communities.

Governor Beshear's New Executive Order Dated October 19, 2020

1. Suspension of disconnects for nonpayment rescinded effective November 6, 2020.
2. Continue to waive assessment of late payment fees for residential customers through December 31, 2020.
3. By November 6, 2020, create payment plan for all affected residential customers.
4. Make reasonable efforts to contact affected residential customers on ways to pay, details of payment plan, sources of potential assistance.