



# **NASUCA Webinar: RMI Tools for Consumer Advocates**

**A Demo of the PIMs Database and Dispatch Dashboard**

**July 31, 2024**



## Agenda

- About RMI
- Overview of RMI's Toolset
- Featured Tools
  - PIMs Database
  - Economic Dispatch Dashboard
- Q/A

# About RMI



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# https://utilitytransitionhub.rmi.org/



Check out the IRA Opportunity Map, a tool that lets users explore the ways clean energy investments can save utility customers \$12 billion annually. →

Created by  RMI

## Utility Transition Hub™ Charting A Path To Decarbonization

- Data Portal
- Insights
- Data Download
- Our Work ▾
- About ▾

RMI’s Utility Transition Hub™ helps key stakeholders—regulators, investors, policymakers, advocates, and utilities—chart a path to an equitable and affordable energy transition

 Data Portal

 Key Insights

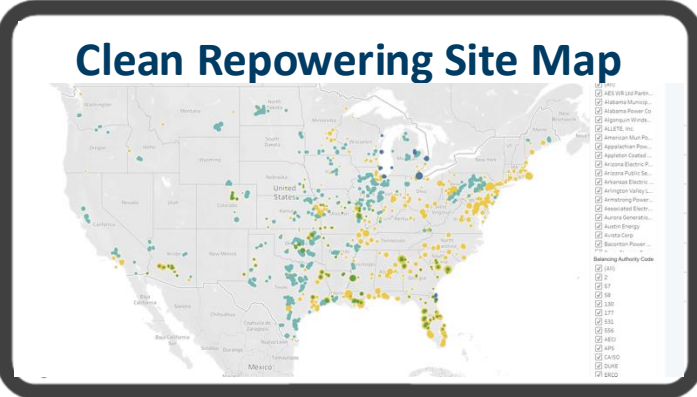
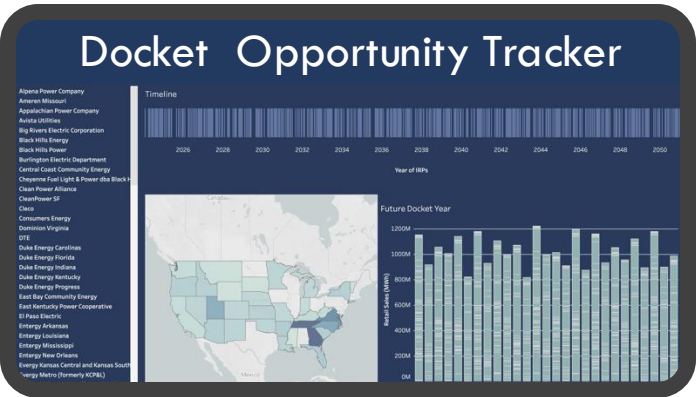
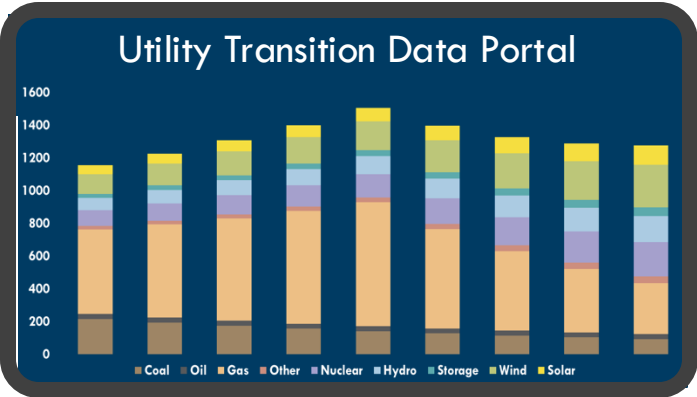
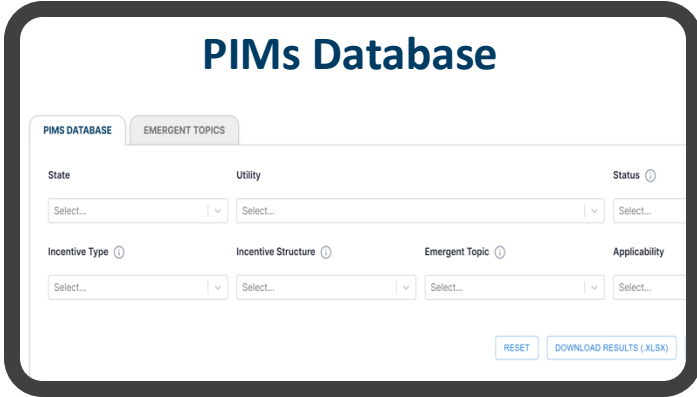
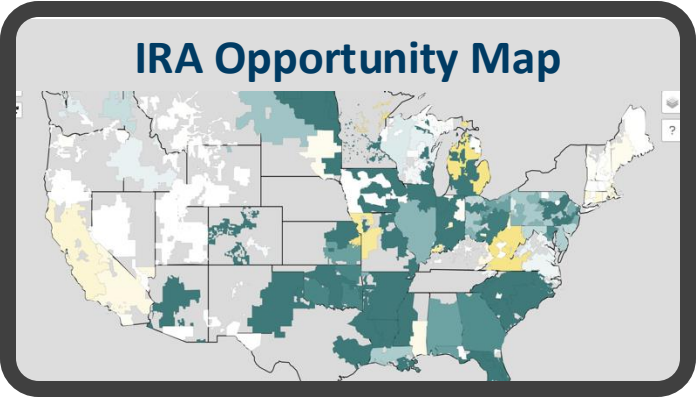
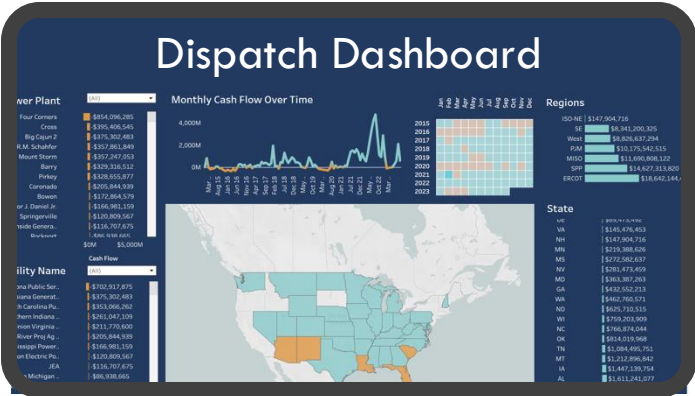
### Latest Insights →

Why Purchased Power is Such a Big Deal to Better Understand US Utilities’ Climate Impact

Running the Numbers: How Clean Electricity Tax Credits Could Save Americans \$5 Billion by 2024

A Fair Green Deal for the Last Coal Plant in Mississippi

# Overview of Tools for Consumer Advocates





# PIMs Database

<https://rmi.org/pims-database>

# Utility incentives are misaligned with supporting an affordable transition of the electric sector



**CAPEX BIAS** creates a utility preference for capital-intensive projects (e.g., power plants, T&D infrastructure)



**GOLD PLATING** refers to the utility's incentive to overinvest in capital projects in order to earn a higher return



**THROUGHPUT INCENTIVE** encourages the utility to increase energy sales to increase its revenue



**RESISTANCE TO THIRD-PARTY AND CUSTOMER-OWNED SOLUTIONS** can undermine cost effectiveness and an equitable distribution of benefits

# The incentive misalignment challenge is particularly acute in the face of load growth

## Utility resource plans increasingly anticipate load growth [MWh]

As of Jan 2021/Aug 2022/Dec 2023/June 2024, IRPs expected load to grow 8.2/10.3/15.0/23.9% from 2021–2035.

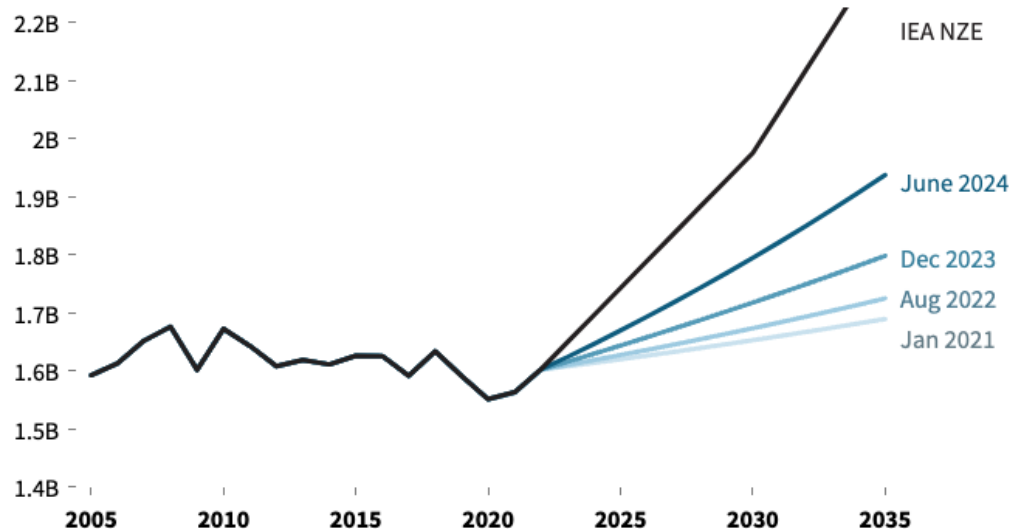


Chart includes projections from 121 IRPs, covering 48% of electricity delivered to US customers.



## Planned capacity [GW] in IRPs

Since the IRA was passed in Aug 2022, utilities have revised resource plans to add 80 GW more wind and solar capacity and accelerate retirement of 1 GW of coal; but also increase gas capacity by 37 GW by 2035.

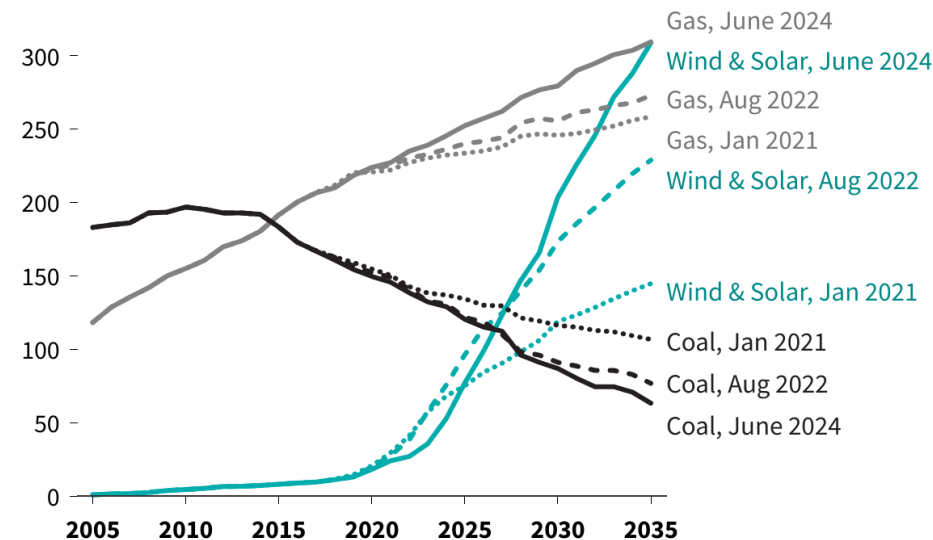


Chart includes projections from 121 IRPs, covering 48% of electricity delivered to US customers.





# PIMs can help realign utility incentives with desired outcomes

## What is a PIM?

A **performance incentive mechanism (PIM)** is a **financial incentive** tied to a **metric** and **target**.

PIMs can be structured in many ways. For example:

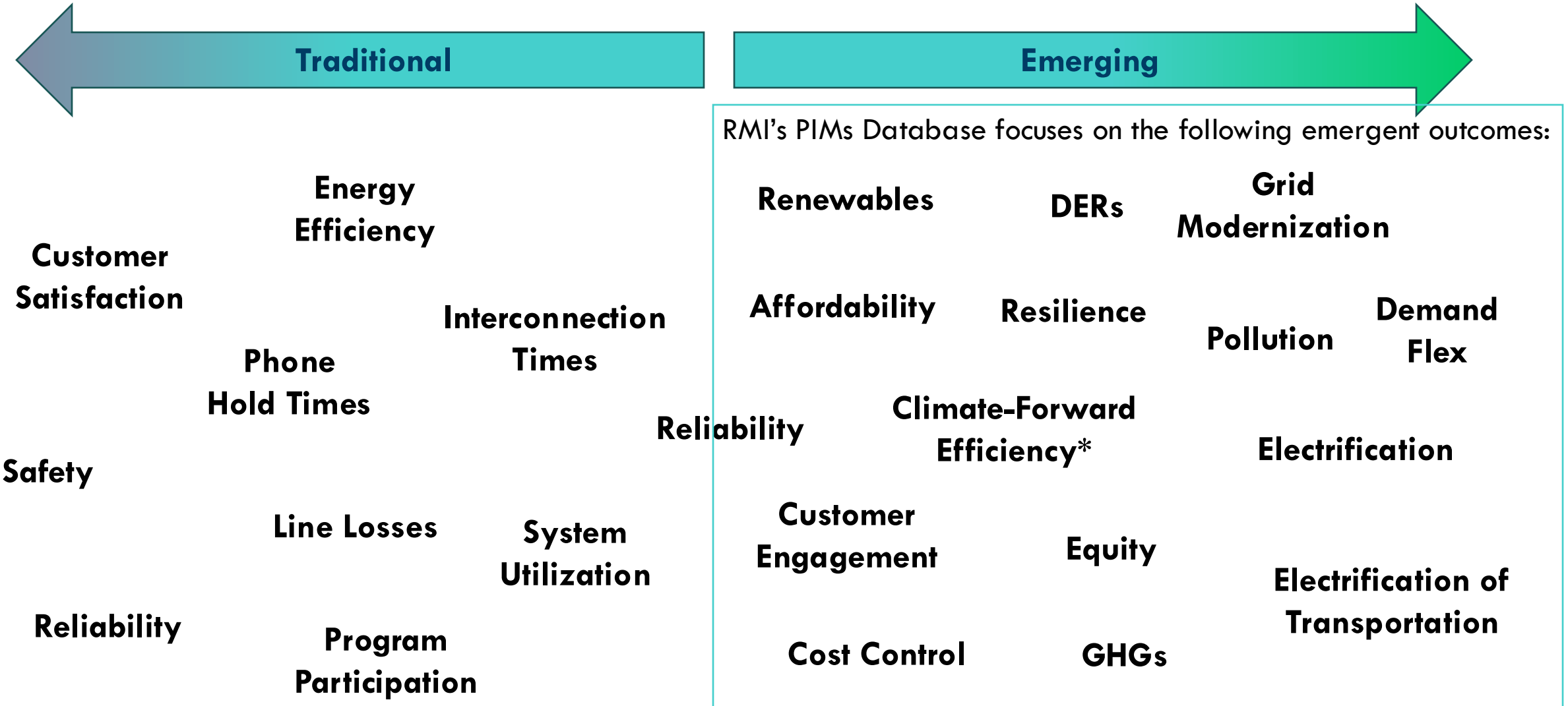
- Failure to achieve a target triggers a penalty.
- An incremental incentive is awarded over a range of performance.
- The utility earns a share of estimated savings. This is known as a **shared-savings mechanism (SSM)**.

PIMs be used to **motivate improved performance** in specific areas.

## How PIMs can address the misalignment of utility incentives

- Can provide opportunity for utilities to earn a competitive return on non-traditional investments, leveling the playing field by addressing the opportunity cost of more capital-intensive investments
- Can shift utility decision-making in favor of actions more likely to support a desired policy outcome

# There are a wide range of emergent outcomes for which PIMs can be designed, many of which align with affordability



# RMI's PIMs Database documents the design of PIMs implemented across the U.S. on a variety of emergent topics

*The PIMs Database currently features...*

## 159 PIMs & counting!

15 states & DC

CO, CT, DC, HI, IL, KS, MA,  
MI, NC, NJ, NY, NC, RI, VT,  
WA

42 utilities & Energy  
efficiency program  
administrators

Xcel, DCSEU, Hawaiian  
Electric, Ameren, ComEd, Con  
Ed, National Grid, Puget  
Sound Energy, others...

13 emergent  
outcomes

Demand flexibility, equity,  
electrification, grid  
modernization, resilience,  
others...

# How to use the Database

Question	How the PIMs Database Can Help
<p>Are there any active PIMs in place elsewhere that incentivize [insert topic or outcome of interest]? How are the metrics and targets structured?</p>	<p>The PIMs database categorizes each PIM by emergent outcome, such as grid modernization, equity, resilience, etc. It also provides detail on the focus (e.g., specific outcomes, programs, or actions that the PIM is intended to encourage) and design of the PIM. Another state's PIM could provide a useful model to substantiate PIM development in your own jurisdiction.</p>
<p>How are incentives structured?</p>	<p>The PIMs database contains information on whether a PIM is upside-only (reward), downside-only (penalty), or symmetrical (both). This information could be useful when developing a new PIM with a specific incentive structure or assessing the design of a proposed PIM in your own jurisdiction.</p>
<p>What PIMs have had long runs and why? Why have others been sunset prematurely?</p>	<p>The PIMs database contains a narrative history intended to help users understand the broader context in which the PIM exists. It delves into the reasoning behind regulatory decisions to modify or discontinue a PIM. This history might help you assess when a PIM of your own design should be updated or retired.</p>

# The PIMs Database is dynamic & we have exciting plans to leverage its insights!

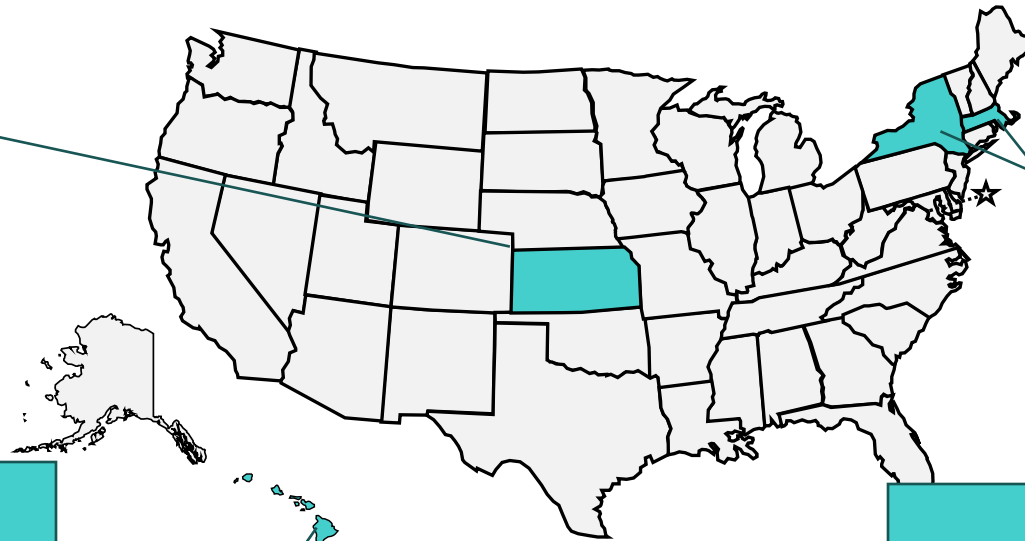
- Regular updates as PIMs evolve and new mechanisms are adopted
- Expansion to include information on *utility performance* against PIMs
- Analysis on PIM design & performance trends (e.g., [Equity PIMs insight brief](#))
- Insights via the quarterly PIMs Database newsletter ([sign up here!](#))

**15+ states have implemented  
PIMs to meet emergent  
outcomes**

# Example PIMs focused on support cost control

## Evergy (KS)

A symmetrical PIM incentivizes the company to maintain a capacity factor (%) threshold for the a wind farm facility relative to a target to ensure ratepayer savings from utility ownership



## Multiple Utilities (NY)

Upside-only PIMs incentivize NY utilities to non-pipes and non-wires alternatives measured as a net benefit savings between an alternative project and the net present value of the traditional infrastructure project it would defer or replace

## Hawaiian Electric (HI)

Have a shared savings mechanism to incentivize cost control of all revenue components not incorporated into the MYRP (e.g., fuel costs, purchased power costs, and approved project capital costs that are tracked and recovered separately).

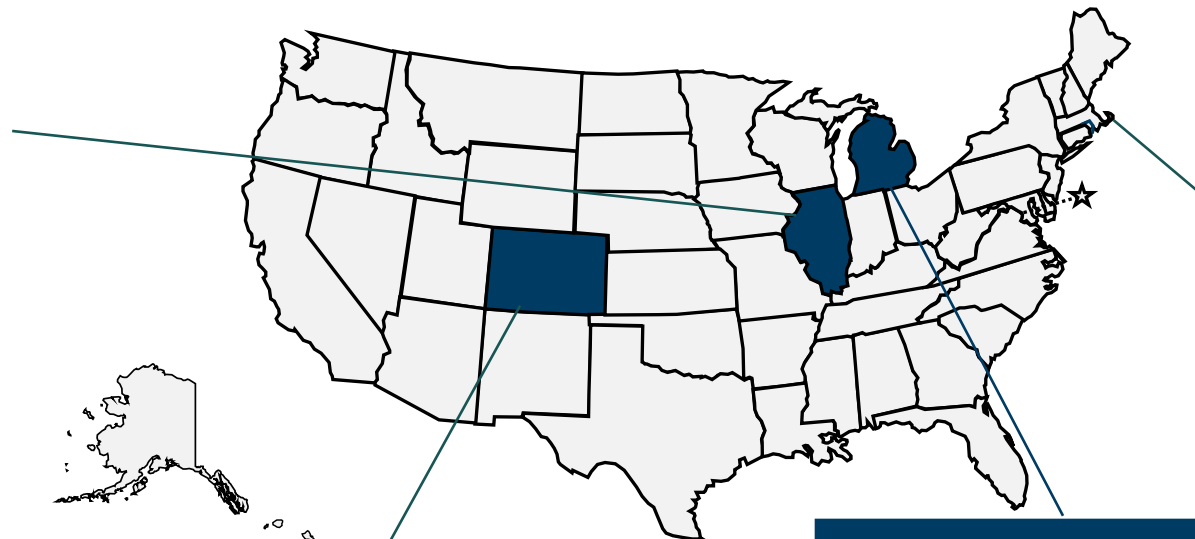
## Multiple Utilities (MA)

Upside-only incentive to pursue energy efficiency programs that maximize net benefits (e.g., minimize costs and focus efforts on core initiatives that deliver cost savings).

# Example PIMs focused on demand flexibility

## ComEd & Ameren (IL)

Both utilities have symmetrical, ROE-basis point incentive PIMs that incentivize targeted MWs of peak load reduction each year



## Rhode Island Energy (RI)

Upside-only PIM incentivized the company to achieve targeted MWs of annual peak capacity savings through customer programs and non-wires alternatives (“NWA”)

## Xcel (CO)

Xcel had an upside-only SSM that incentivized a GWh target of annual energy efficiency savings

## DTE & Consumers (MI)

DTE’s upside-only PIM incentivizes MW peak load reductions past a target identified in the company’s integrated resource plan (“IRP”), while Consumers’ upside-only PIM incentivizes incremental MWs of demand response capacity growth



# PIMs Database Demo

Created by RMI

## PIMs Database

Emergent Performance Mechanisms across the United States

[← BACK TO RMI](#)

**PIMS DATABASE** | EMERGENT TOPICS

State:  | 
 Utility:  | 
 Status:

Incentive Type:  | 
 Incentive Structure:  | 
 Emergent Topic:  | 
 Applicability:

[RESET](#) | 
 [DOWNLOAD RESULTS \(.XLSX\)](#) | 
 [DOWNLOAD ALL \(.XLSX\)](#)

State	Utility	PIM Name	Status	Incentive Type	Incentive Structure	Period of Performance	Emergent Topic	Applicability	
CO	Xcel	Equity PIM – Charging Ports metric	Inactive (Performance Period Concluded)	Upside	Fixed amount	2021 - 2023	TE; EQ	Electric	<a href="#">Details</a>
CO	Xcel	Equity PIM – EV Rebates metric	Inactive (Performance Period Concluded)	Upside	Fixed amount	2021 - 2023	TE; EQ	Electric	<a href="#">Details</a>

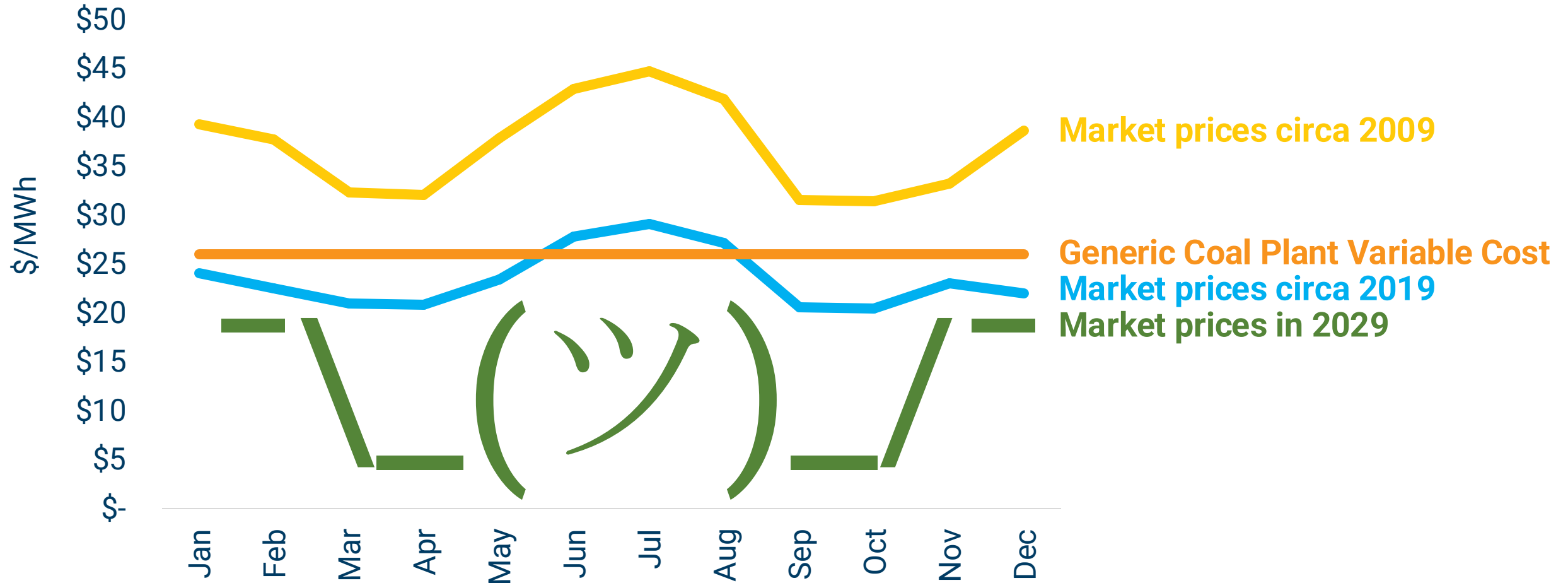


# The Economic Dispatch Dashboard

Using Data To Track Dispatch Economics of Coal Plants

<https://utilitytransitionhub.rmi.org/economic-dispatch/>

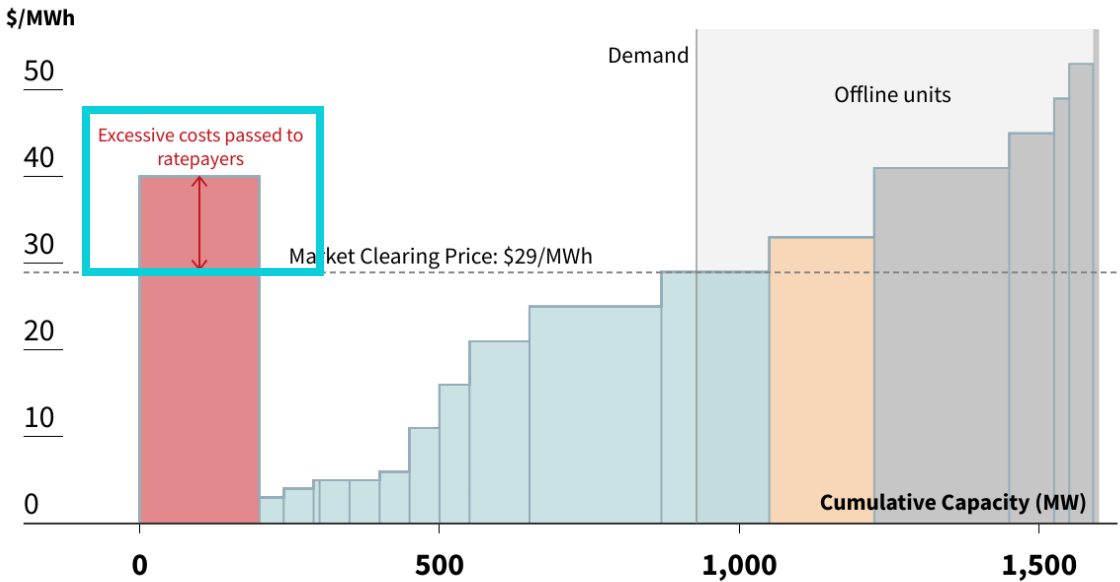
# Market prices don't justify running coal as "baseload"



# In uneconomic dispatch, coal is dispatched out of merit order, distorting the market and increasing costs.

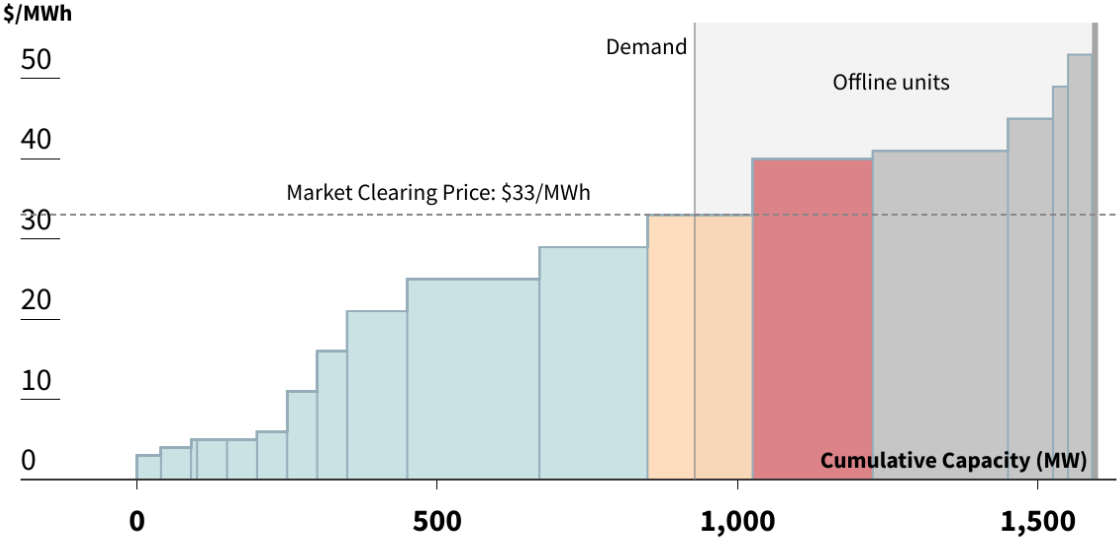
## Supply curve with uneconomic dispatch

With uneconomic dispatch, ratepayers pay more than they should.



## Supply curve with economic dispatch

With economic dispatch, electricity markets operate as intended, and customers get the best deal.



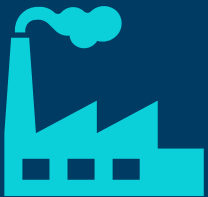
# The impacts of uneconomic coal operations:



Increases customer costs \$1-\$2 billion per year



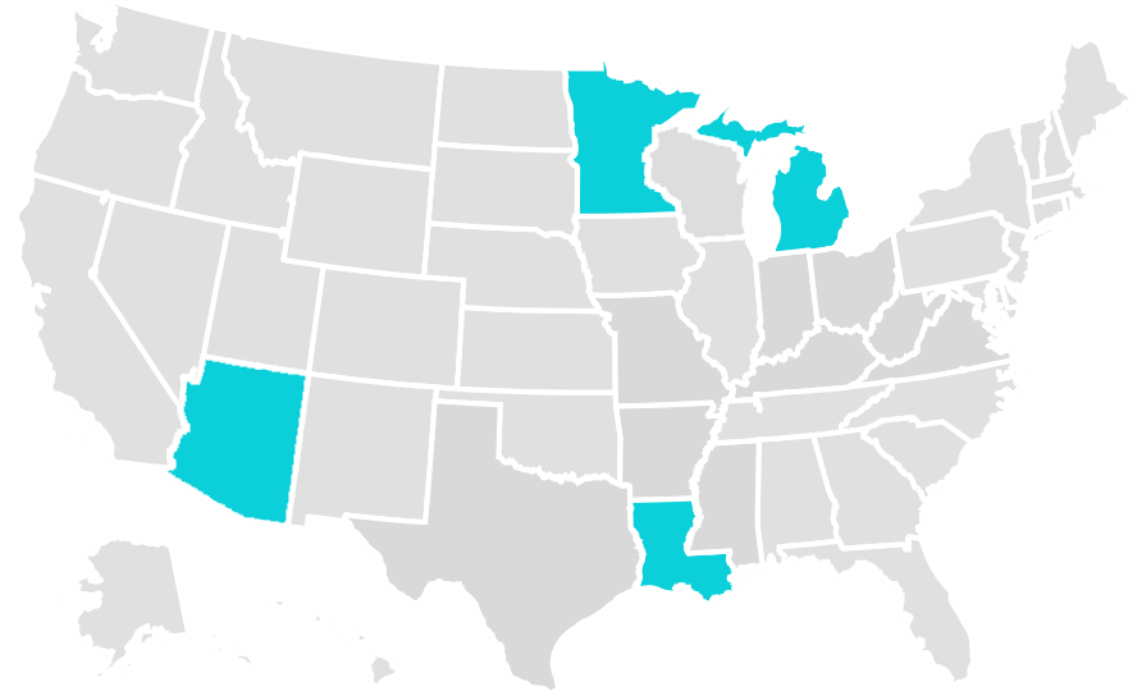
Increases congestion and curtailment risk



Increases coal emissions by up to 20%

# Commission Action in the past year

- Minnesota
  - Ongoing regulatory docket monitoring coal plant commitment and savings
- Michigan
  - \$11.2 million disallowance for I&M
- Louisiana
  - \$125 million settlement with SWEPCO and Cleco
- Arizona
  - All utilities modeled coal plants as economic dispatch in IRPs.

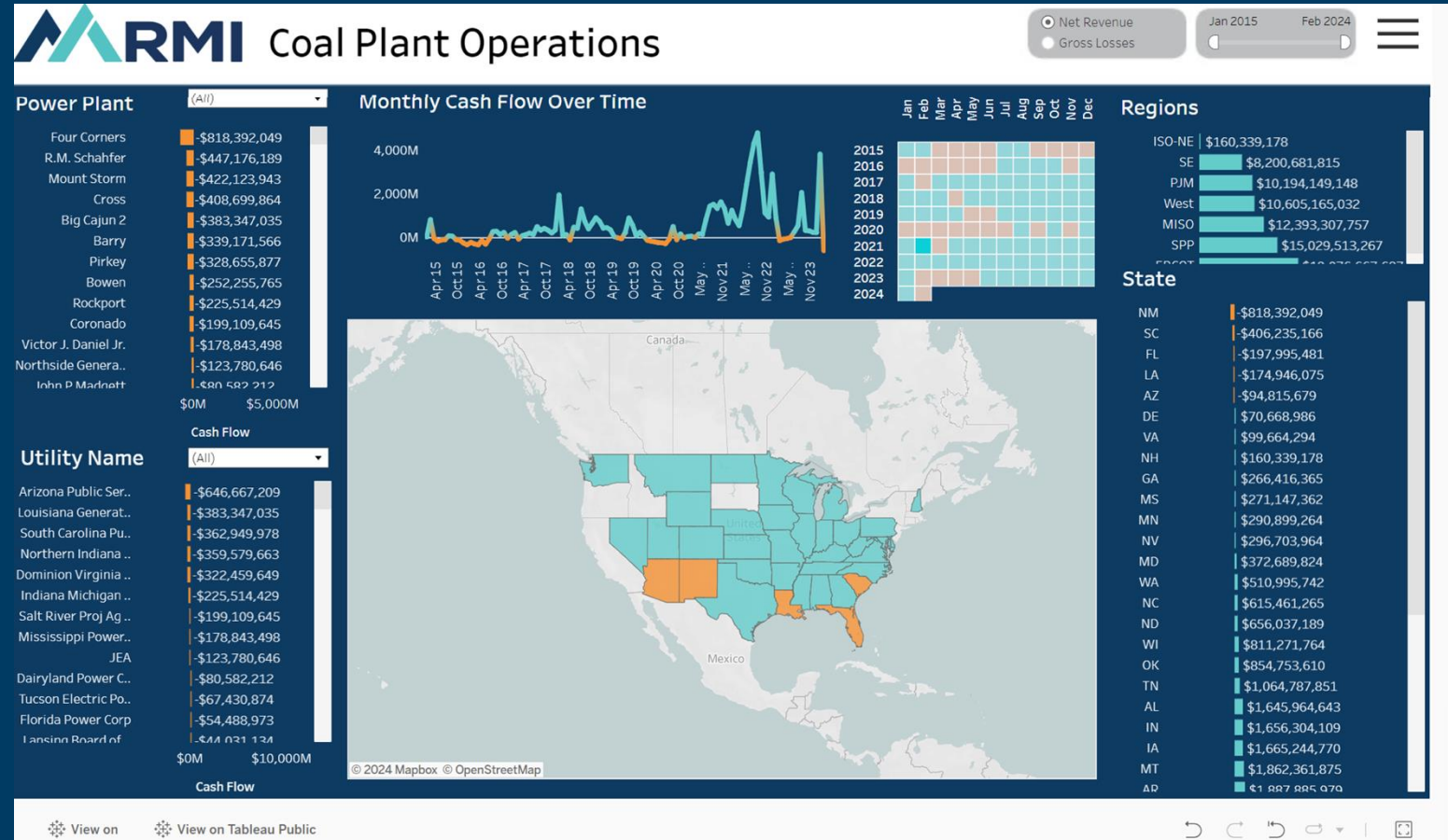


# RMI's Analysis is Innovative in three ways

First public analysis for non-RTO West and Southeast.

Detailed results downloadable updated quarterly

Graphic user interface with affordability lens



# Live Demo



**Questions?**



# Discussion

## • PIMs Database

- How are incentive discussions related to cost control are coming up in your jurisdiction?
- What opportunities or venues might exist to advance mechanisms that support cost control and affordability in utility spending?

## • Economic Dispatch

- How is economic dispatch coming into discussions during cost recovery?
- What opportunities exist to advance economic dispatch or prevent uneconomic dispatch costs from being passed on to customers?

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### Reach out to us if you are interested in:

- Presenting these tools to your colleagues, other stakeholders, or Commission
- Technical assistance or consultative support on specific questions around economic dispatch and/or PIMs design and implementation
- Discussing PIM development processes and stakeholder engagement

