

Commercial & Industrial Consumer Market Access

ESIG Forecasting & Markets
Workshop

June 12, 2024



WHO WE ARE

R Street Institute is a nonprofit, nonpartisan, public policy research organization. Our mission is to engage in policy research and outreach to promote free markets and limited, effective government.



Outline

- Retail Matters
- C&I-led Reforms
 - Direct Market Access
 - Indirect Market Access
- Load Growth Context →
- Research Priorities



AI-generated image of “AI energy demand”...perhaps for art fans only

RTOs are Not Enough

- Market composition matters as much as design
 - IPPs vs. CoS gen: stark contrast in same market
 - Monopoly LSEs: inefficient regardless of RTO status



Competition Status

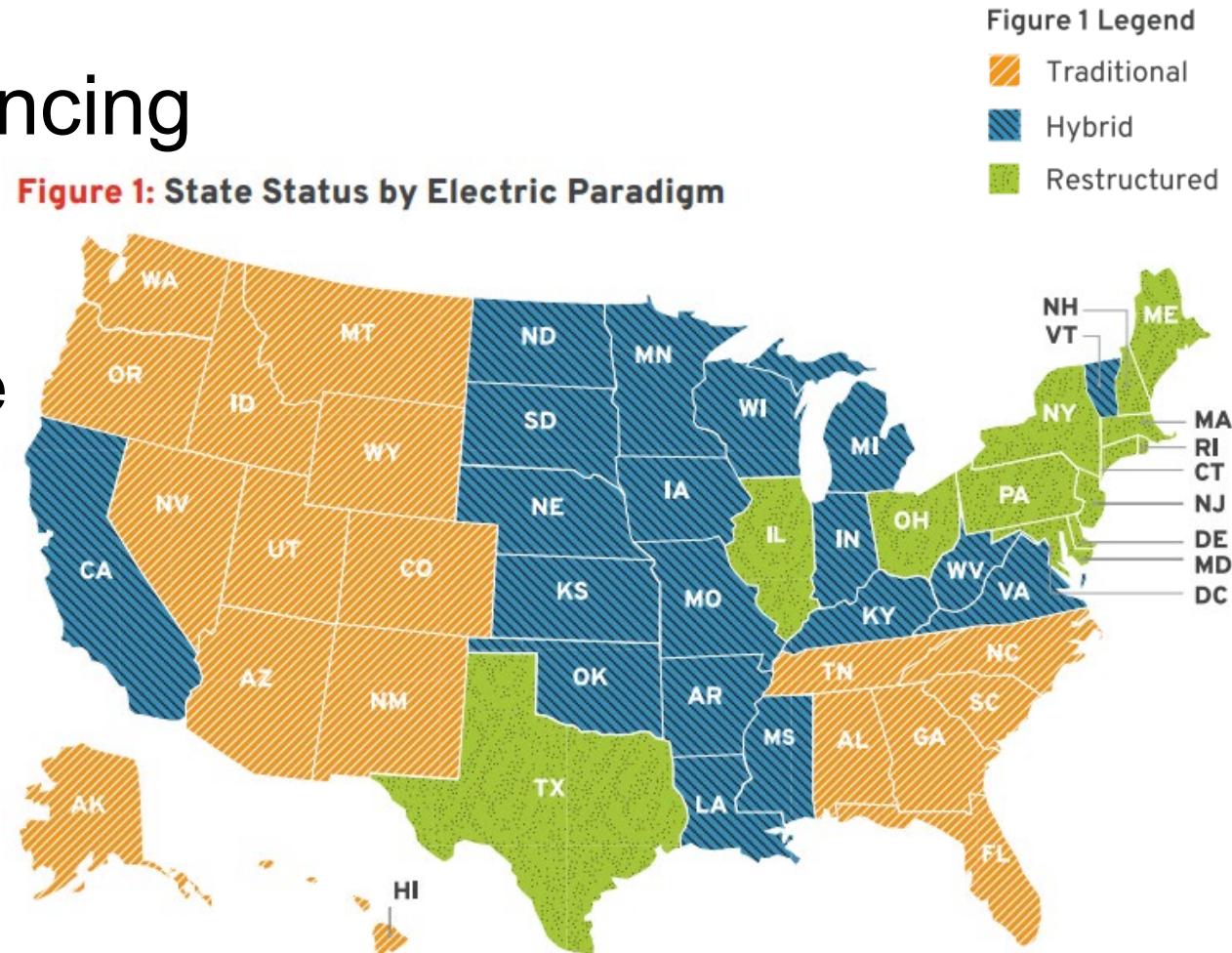
- Wholesale markets advancing
- Retail markets
 - Resi stagnant
 - C&I monopoly impatience

- Denied service
- Inferior terms
- Self-supply barriers
- Strongest in hybrid states
i.e., MISO, SPP

Diverse buyer preferences: risk, price, reliability, RECs vs. premium green



Recall: C&I initiated restructuring 1.0



Source: R Street Electric Paradigms [paper](#), 2023

C&I-led Reform Push

Monopoly states

- Preference: C&I choice (direct market access)
- A alternatives: market index rates, sleeves & PPAs
- B alternative: competitive procurement, special tariff
- E.g., LA, VA, SC, NC, MI, IA, IN, WI, OK, MO, WV
- Key: whether C&I pairs w/ resi (e.g., NV, FL attempts)

Restructured states

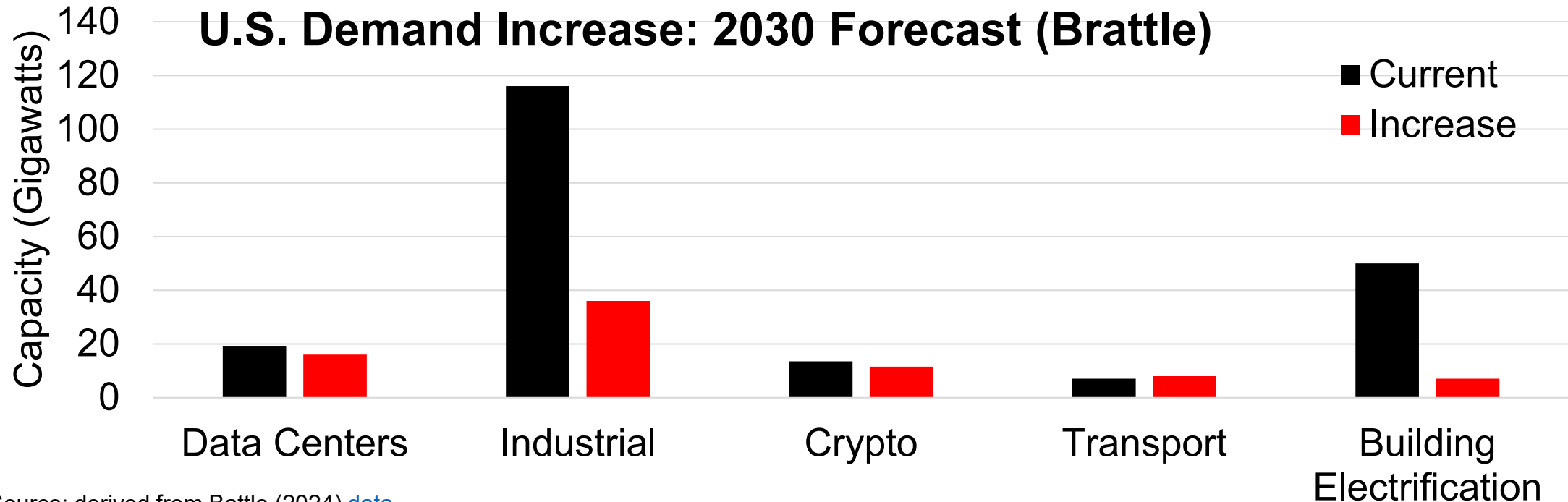
- Implement choice properly (e.g., elim cross subsidies)
- Prevent distribution monopoly creep into gen
- E.g., OH, PA

Retail Competition Resurgence?

- Load growth → renews restructuring thesis
- Latest IRPs: overcapitalization & risk socialization
- Rate base of C&I growth still hit resi (ave. rates)

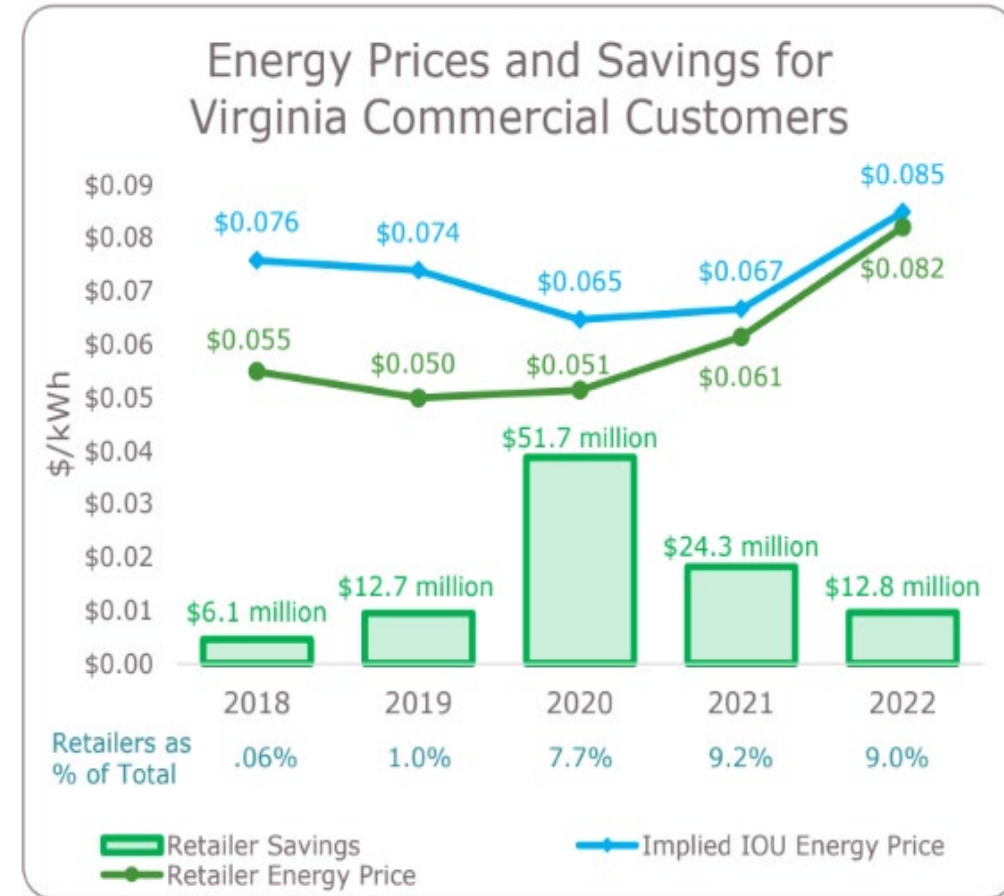
Case study:
MISO states

1980s-90s
Restructuring
Déjà vu



Econ Meets Politics

- Political economy of competition
 - One incumbent supplier vs. dispersed consumer beneficiaries
 - Negotiations: large vs. small C&I carveouts
 - PUCs: rate evidence needed
 - Leg: NGOs' role prominent
 - E.g., [VA](#)

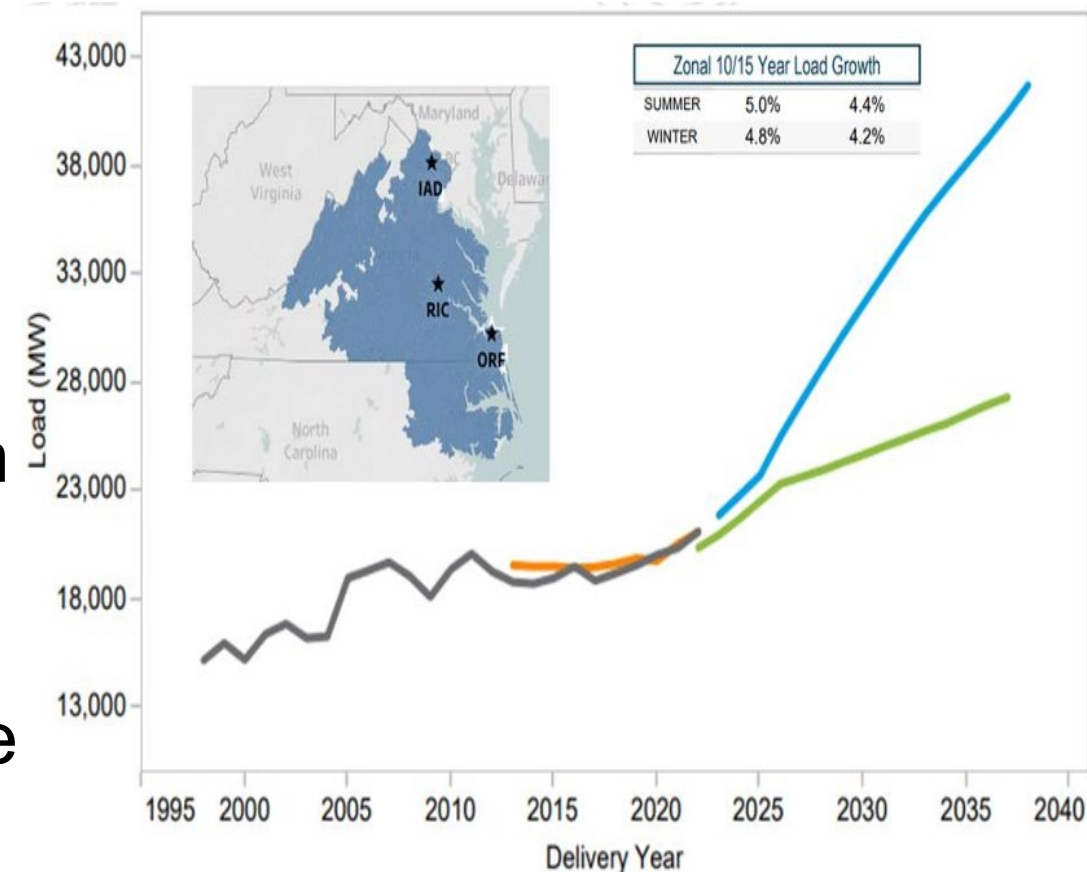


Source: EIA 861 data.

Market Advantage Grows

- Complex supply decisions
 - Tech choice variety
 - High risk environment
 - IPPs bear it, e.g., PJM, ERCOT
- Load growth w/o choice
 - On-peak, limited self-supply, sited irrespective of congestion
- Load growth w/ choice
 - More flexible operations, siting accounts for congestion, ample self-supply

PJM (Mid-Atlantic) 2023 Load Forecast Data Center Sensitivity



Research Priorities

- Econ efficiency as function of:
 - Wholesale & retail policy combos
 - Prospective, state-specific
 - Best for policy impact
- C&I WTP for self-supply
 - Green (e.g., implicit \$/ton)
 - Reliability (e.g., implied VOLL)
- Elasticity of C&I load growth
 - Short-run: flexible operations
 - Long-run: siting considerations

THE **TEXAN** 

**First Small Modular Nuclear
Reactor of Its Kind Unveiled
for... Dow Chemical Plant**



**Microsoft, Google, Nucor partner
on initiative to spur emerging
24/7 clean power technologies**

THE WALL STREET JOURNAL.
**Microsoft Targets Nuclear to
Power AI Operations**

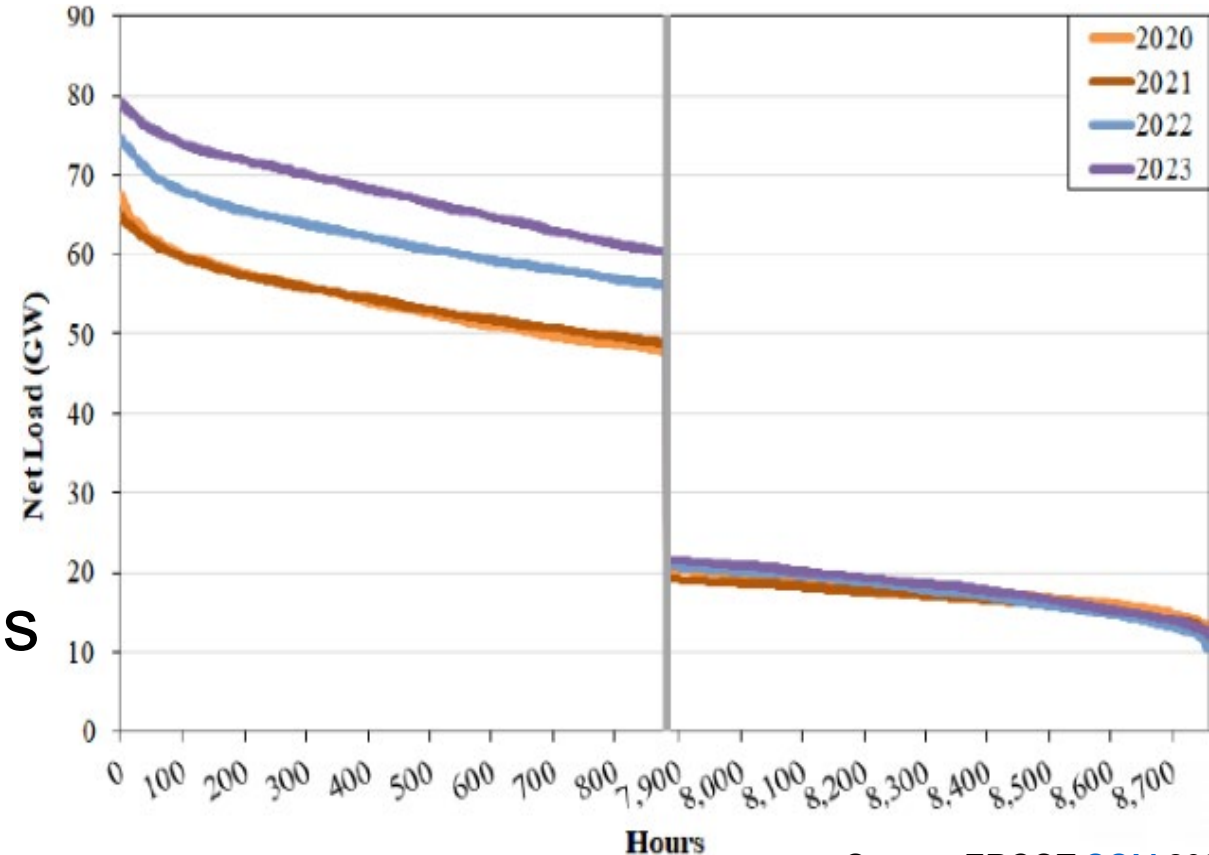


Unlock Flexible Demand (finally)

- Eval future flex D value
 - Esp. w/ wind & solar variance (i.e., net load)
 - System value
 - Corp. goal alignment
- Eval low VOLL flex barriers
 - Market design
 - Transaction costs & info access
 - C&I characteristics (e.g., lead time)



ERCOT Net Load Duration Curve:
top and bottom deciles



Thank you!

Devin Hartman
dhartman@rstreet.org

www.rstreet.org

X(Twitter): @DC_Hartman