



Power Generation Planning Perspectives

May 2026

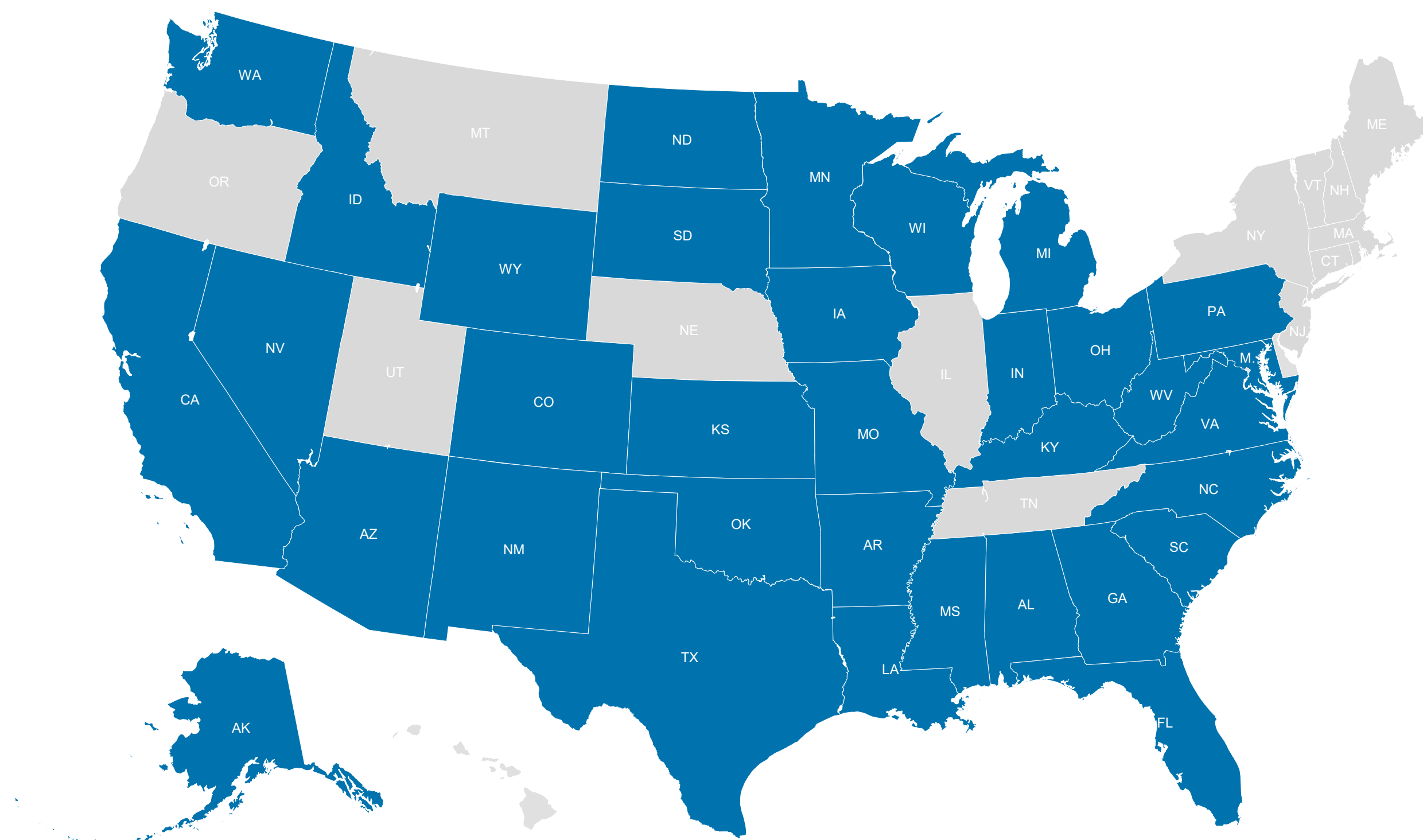
CRA Charles River
Associates



CRA Works on Resource Planning across the Country

Over the last 5 years CRA has supported electric, gas and combined IOUs and POUs in more than 30 states to address market forecasting, strategy, and investment planning questions.

States Where CRA Has Recently Engaged in Strategy, Resource and Investment Planning



Client Examples





The Energy Transition Hasn't Ended, It's Just Shifted

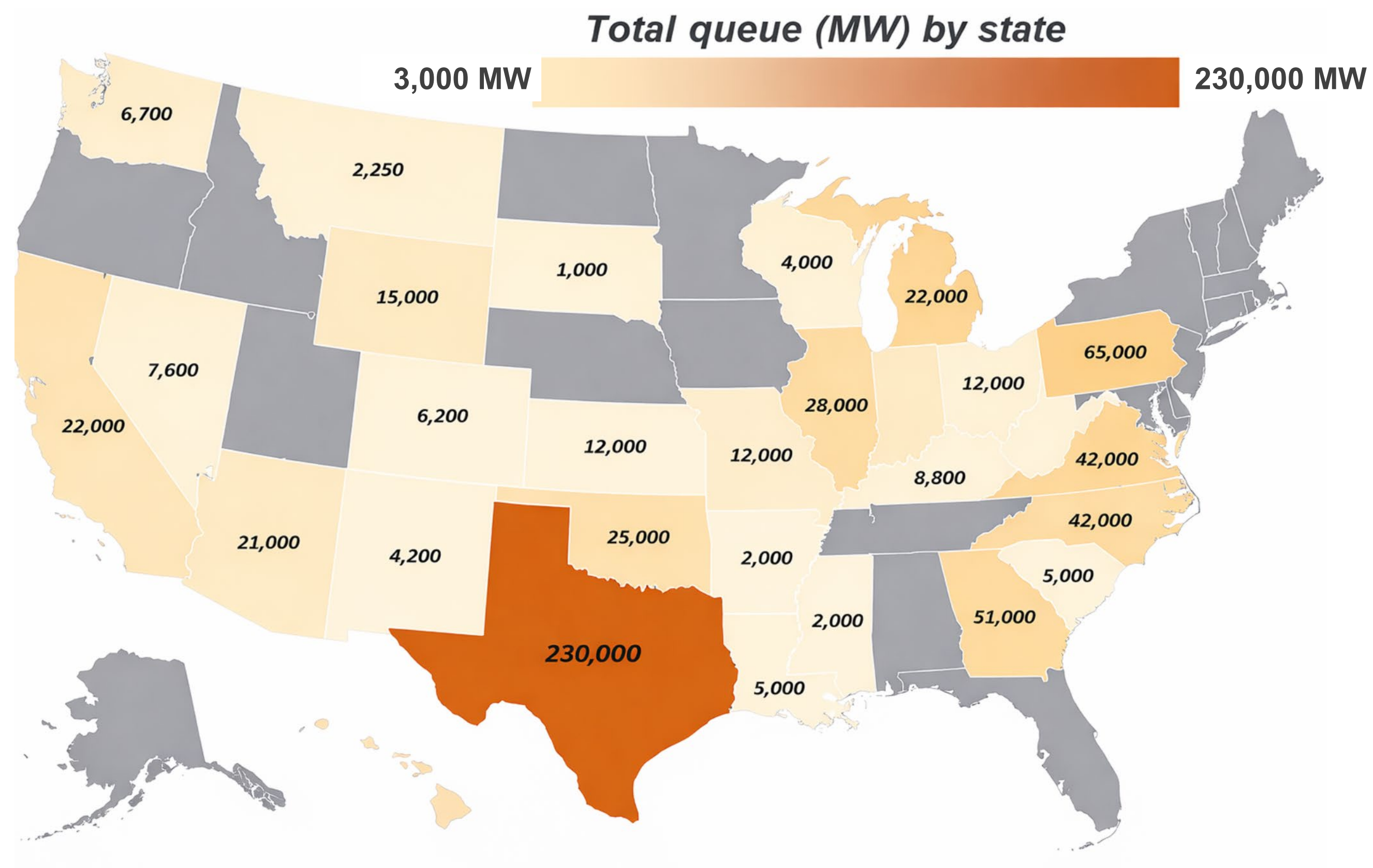
Relative to 2022, U.S. power industry trends include:

- **Load growth expectations are up**
 - **New resource costs are up**
 - **Federal environmental policy has shifted**
- We are transitioning to a more flexible, multi-source system—as well as a cleaner one.
 - Reliability is emerging as the central organizing principle, while cost and environmental sustainability objectives remain important.



Load Queues

New Large Load Queue by State



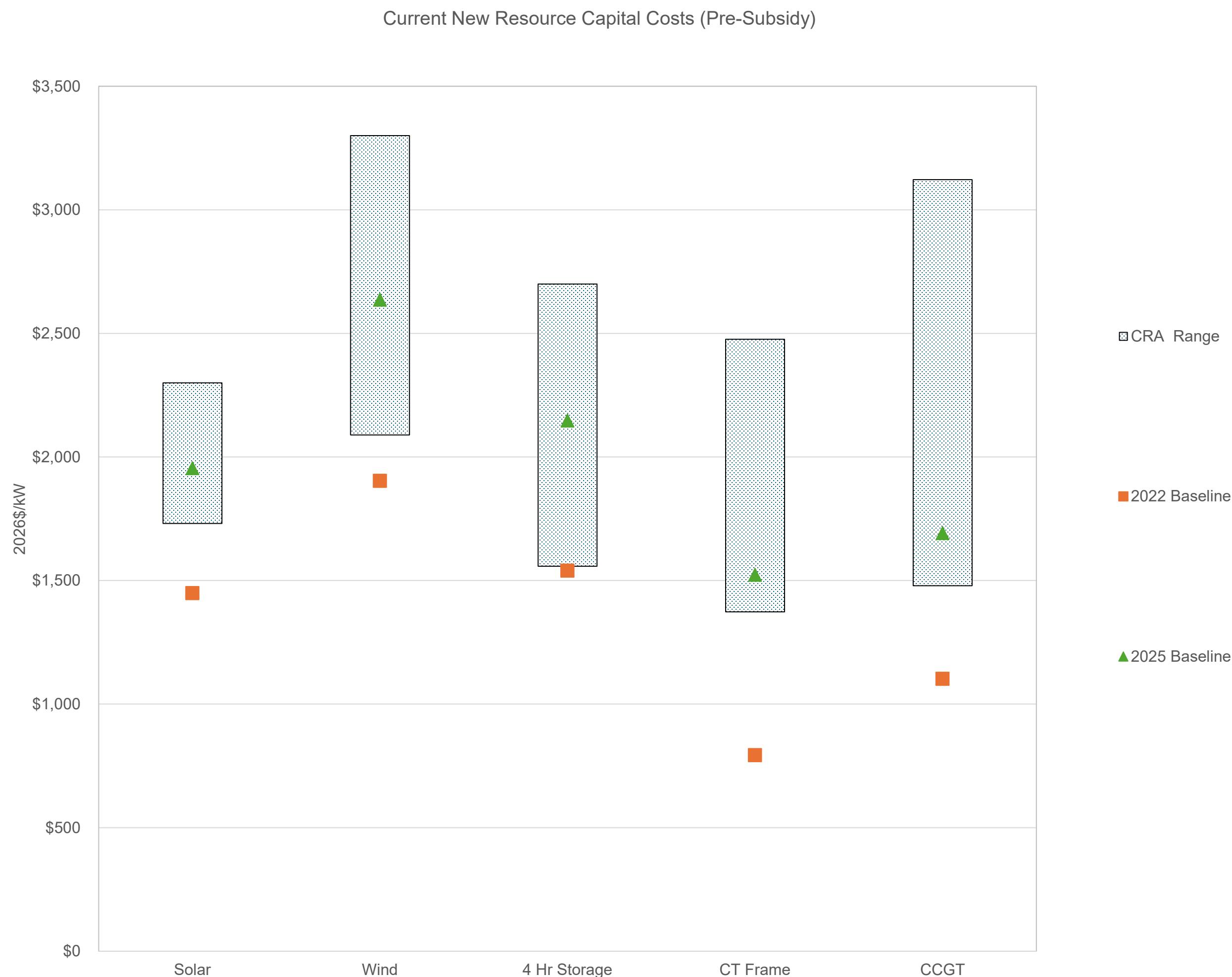
Source: [SemiAnalytics Labs](#), CRA Analysis

- The ERCOT large load interconnection queue continues to see increased activity.
 - As of March 2026, over 230,000 MW of large loads applied to interconnect by 2030, with approximately 140,000 MW more waiting review for interconnection by 2036
 - While applications increase exponentially, approvals see more modest growth, with ~28,000 MW in any type of approval stage, and only 9,000 MW having approval to energize.

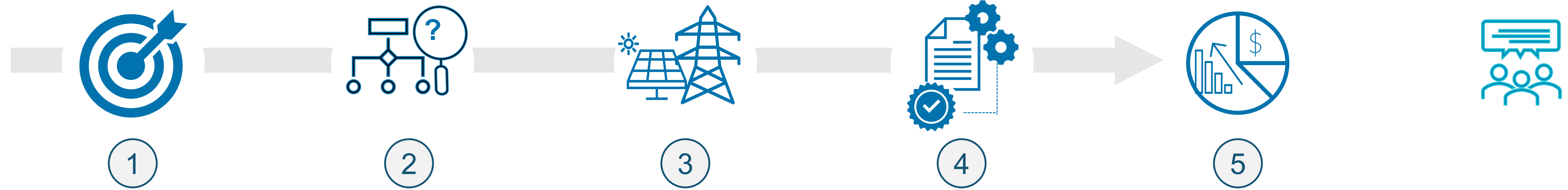


Power Generation Capital Costs Continue to Increase

- CRA continues to observe upward pressure on real-world projects, pushing cost estimates up.
- New generation demand stemming from expectations of increased load is squeezing supply chains for gas turbines.
 - All 3 major turbine manufacturers – Siemens, Mitsubishi, and GE Vernova – are expanding capacity in the coming years.
- Renewable costs also continue to increase as a result of increased demand, rising labor and equipment costs, and tariff uncertainty.



CPS Energy is Following Best Practices



1 Identify Planning Objectives and Key Questions

- Identify diverse objectives that reflect utility's vision and targets, mindful of other relevant stakeholders
- Define discrete, meaningful, measurable, and independent metrics

2 Develop Market Perspectives (External Drivers)

- Perform load forecast with attention to all key variables (EE, EV, DER, data centers)
- Develop deterministic / stochastic inputs that cover commodity prices, capital costs, load growth, policy, and market design

3 Develop Integrated Resource Strategies (Pathways)

- Consider a diverse range of new resource options
- Deploy pathway optimization tools
- Consider alternative pathway themes to thoroughly assess best overall value

4 Pathway Modeling and Analysis

- Hourly production cost and dispatch that captures utility interaction with market
- Financial rev. req. and customer costs
- Probabilistic resource adequacy and other risk assessments

5 Evaluate Tradeoffs and Select Preferred Plan

- Consider integrated scoring comparison to compare s across metrics and assess tradeoffs
- Preferred plan should tie back to key objectives

Other Considerations

- Engage stakeholders as appropriate
- Embrace flexibility and continuous planning as needed

Questions

Appendix



Charles River Associates

At the intersection of Strategy, Economics, and Engineering

Charles River Associates (CRA)

- **Founded in 1965**
- **1,000+ Consultants today**
- **23 Offices in 10 Countries**
- **Industry Practices:** Energy, Chemicals, Industrials, Metals + Mining, Life Sciences, Financial Services
- **Cross-Industry Practices:** Investigations, Strategy and Governance, Anti-trust

The CRA Energy Practice



Deep Energy Sector Expertise

- Electricity
- Natural Gas
- Alternate Fuels
- Global Transport



100+ Team Members

- 30 Senior Staff
- 60 Mid, Junior Levels
- 15 Senior Advisors
- Backgrounds in Economics, Engineering, Finance, Data Analytics



- Practice Office Loc's: NYC, Boston, WDC, SLC, Chicago, Toronto, and London



250+ Projects Per Year

- Transaction Advisory
- Business Strategy
- Market Design
- System Planning
- Energy Procurement
- Disputes and Arbitration



CRA Provides a Range of Utility Planning Services

Modeling and Analysis

- Commodity price fundamentals and power market analysis
- Utility pathway analysis (optimization, dispatch, revenue requirements, risk analysis)

Technical Advisory

- Support and advice to client resource planning teams
- Technical support to stakeholders

Stakeholder Engagement

- Organizing and performing communication of technical analysis
- Interaction with internal and external stakeholder groups

Expert Witness Testimony

- Expert witness support in regulatory proceedings
- Public appearances in front of Boards or Commissions

Active Electric Resource Planning Clients:





Defining Objectives for Comparison

- Alternative pathways are evaluated against key CPS Energy **objectives** via a summary that:
 - Presents all key outputs together
 - Drives structured trade-off discussions
 - Helps communicate differences
 - Validates and rationalizes decisions
- The summary is not designed to provide a single quantitative ranking of options, nor “select” the preferred plan on its own

Criteria for good planning objectives

- ✓ *Measurable*
- ✓ *Discrete*
- ✓ *Specific*
- ✓ *Balanced*
- ✓ *Reflective of CPS Energy's overall priorities*



Energizing Progress Together

May 2026

Informational Update

PRESENTED BY

David Kee

Director of Energy Market Policy

Today, we're going to share:


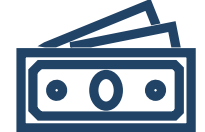

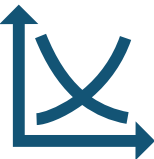




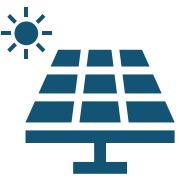

- ▶ Process Overview
- ▶ Key Inputs
- ▶ Generation Plan Outlook
- ▶ Key Observations
- ▶ Recommendation & Next Steps

GENERATION PLAN PROCESS OVERVIEW

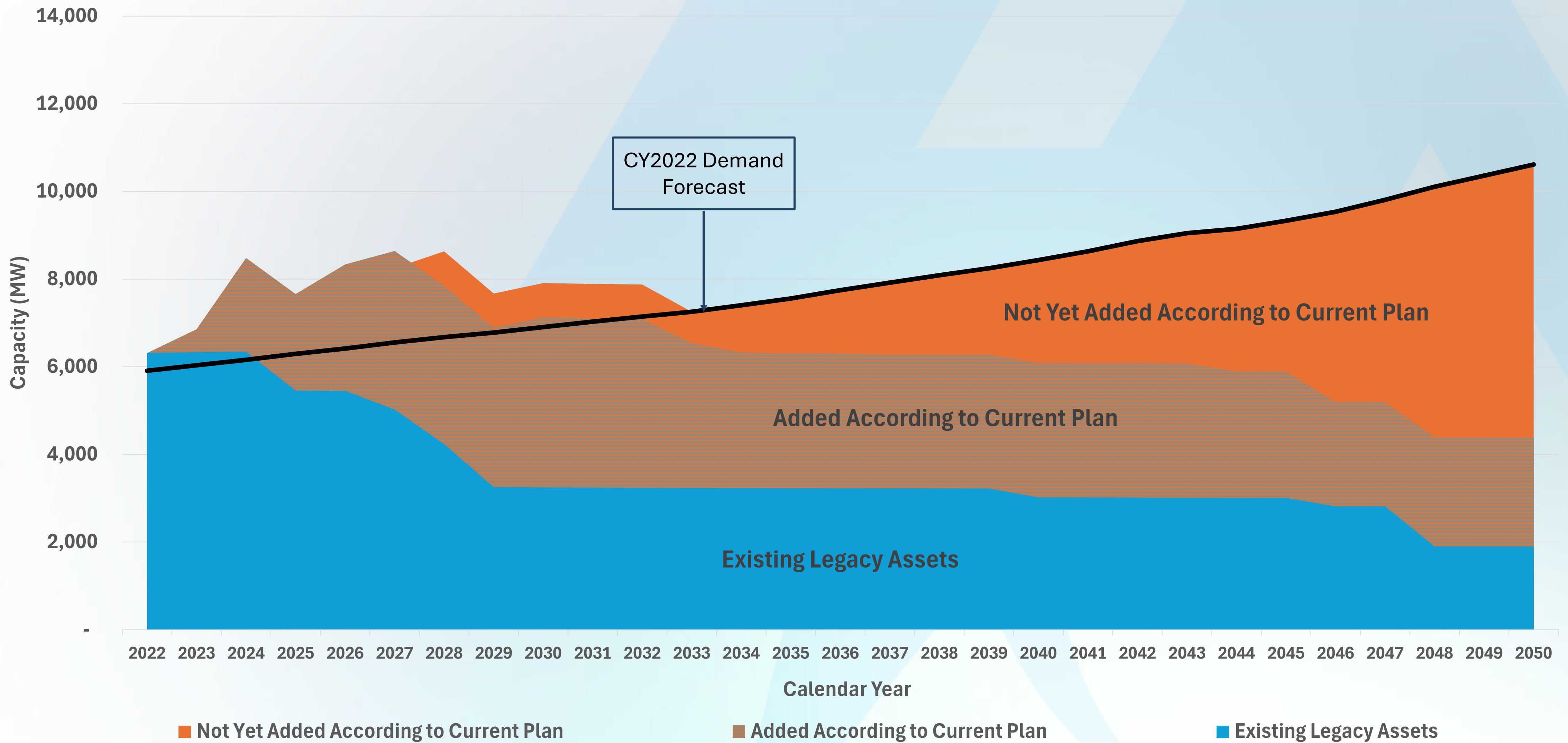


KEY INPUTS

Fundamental Market Analysis

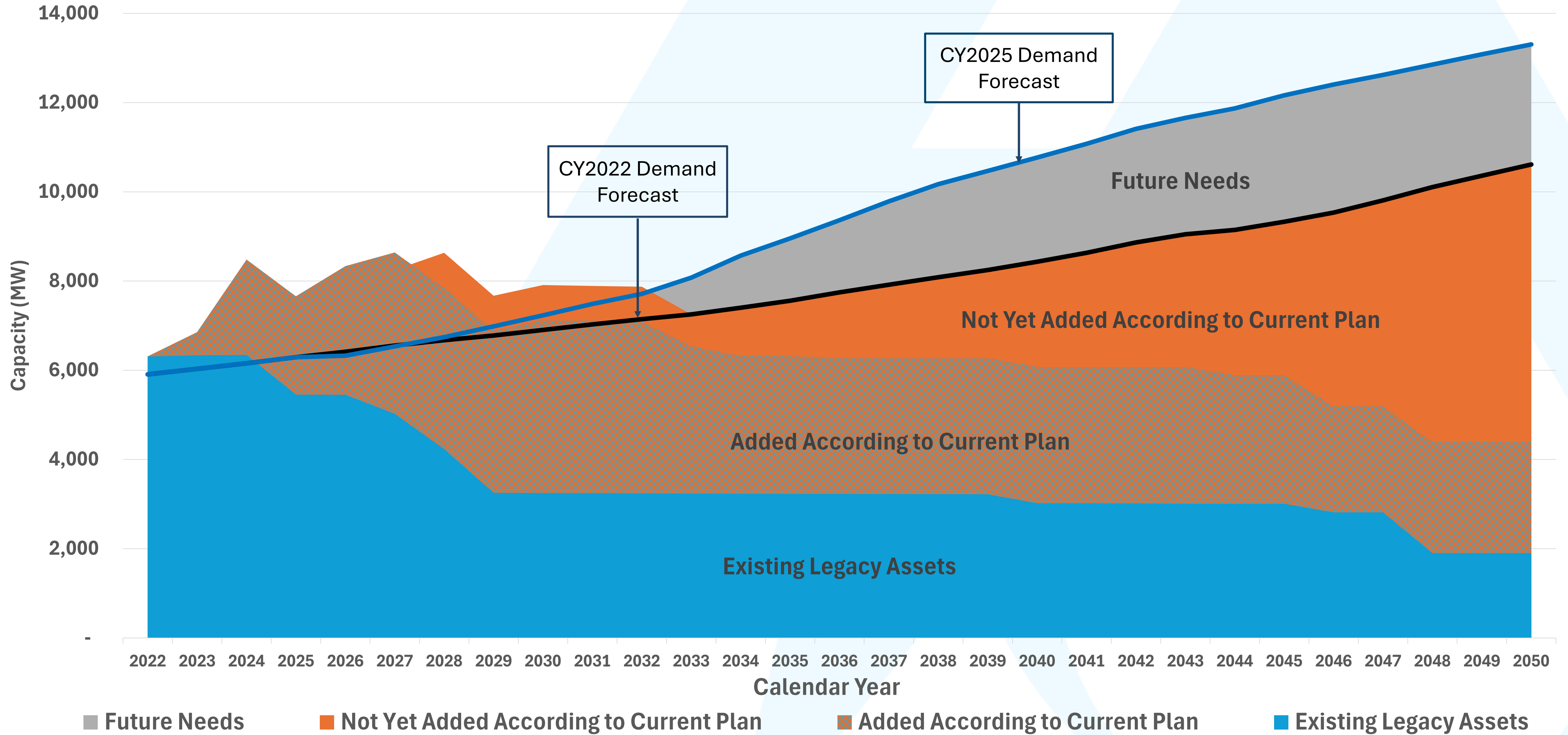
CPS Energy Load			✓
New Resource Costs			✓
Regional Load Growth			✓
ERCOT Market Prices			✓
Environmental Policy			✓
Fuel Prices	 		✓
Wind and Solar Output	 		✓
Thermal Resource Availability			✓

CURRENT GENERATION PLAN



Demand forecast includes reserve margins

GENERATION PLAN CY2025 DEMAND FORECAST



Demand forecasts include reserve margins

Current Plan
(2023)

Avg. residential bill: \$207

~10,000MW by 2050

~\$1,200/KW new build cost

Minimal market energy purchases

Ongoing rate support

Current Plan in Today's Price Environment
(2026)

Avg. residential bill: \$239

~13,000MW by 2050

~\$2,300/KW new build cost

Significant market energy purchases
increase price risk

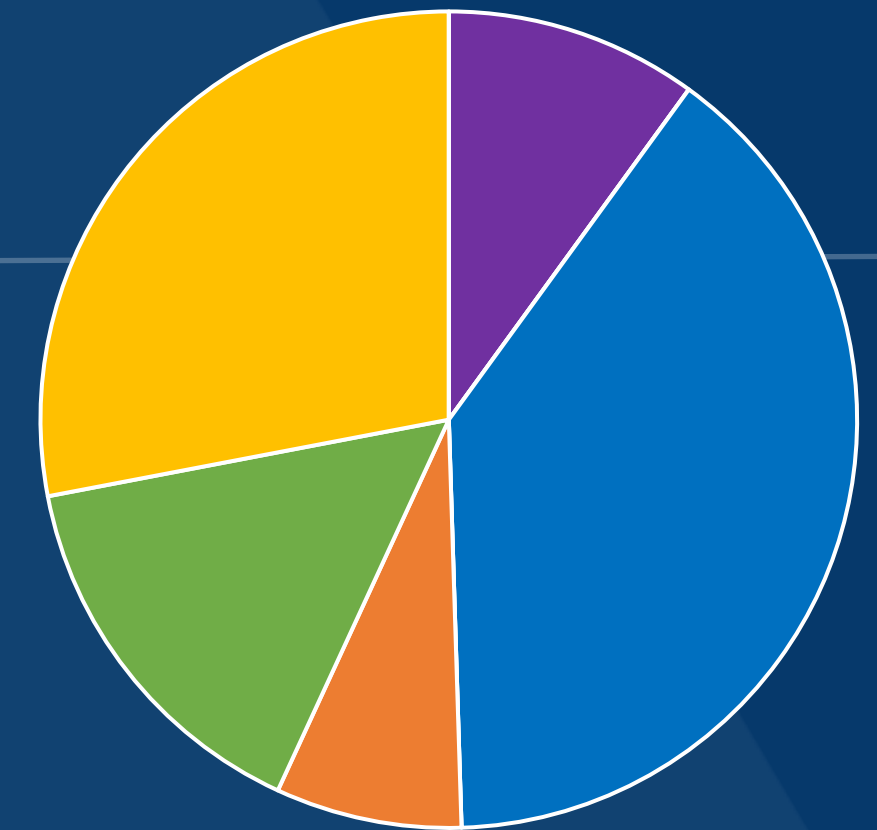
Ongoing rate support

SUMMARY OF OBSERVATIONS



<ul style="list-style-type: none"> ■ Nuclear ■ Wind ■ Natural Gas ■ Geothermal ■ Solar ■ Market Purchase ■ Storage 		Affordability	System Reliability and Resiliency	Environmental Sustainability	
		Customer Energy Cost	Price Risk	Progress Towards City of SA CAAP Goals	
How we fill the gap:	Total Generation Mix (MW)	Average Monthly Residential Bill (\$)	Forced Market Exposure	Emission Intensity (lb CO2/MWh)	
	2040	2026-2051	2040	2030	2040
Current Plan in Today's Price Environment		\$239	\$\$\$\$\$	467 ✓	353 ✗
Updated Blended Plan		\$248	\$	468 ✓	334 ✗
Primarily Natural Gas		\$226	\$\$\$	526 ✓	612 ✗
Zero Emitting Power Sources		\$259	\$\$\$	480 ✓	199 ✓

Smaller numbers are better



Sustain the Blended Strategy

Our proposed strategy provides flexibility to make affordable decisions

Key Strategic Insights:

- Add dispatchable capacity, renewables, and storage
- Exit coal and leverage emerging technologies
- Evaluate generation options, including life extensions and conversions

Benefits of our Strategy:

- Produces most predictable outcomes for customers
- Offers greatest risk mitigation
- Balances our customers' priorities - reliable, affordable, cleaner energy

Seeking Board approval of our **strategic plan**

Benefits of strategic plan endorsement

- Clear direction on future decisions
- Provides certainty and enables flexibility
- Enables efficient execution and ability to take advantage of market opportunities

Implementation efforts focused on customer outcomes

- Our strategy and assumptions create the “plan to beat”
- Our internal processes will seek solutions that meet or improve upon the planning assumptions (cost, emissions, schedule)

Implementation efforts will require Board approval

- Approval doesn’t direct us to start building a new asset today
- Our established Board oversight processes will be utilized to examine and approve specific project proposals that align with our strategic approach

Thank You

Appendix

Delivering for Our Community

For Families & Neighbors

- More consistent and predictable bills
- Community insight and input
- Continued service reliability

For Small Businesses

- Reliable energy
- More consistent and predictable bills
- Modernized systems

For Commercial & Industrial Businesses

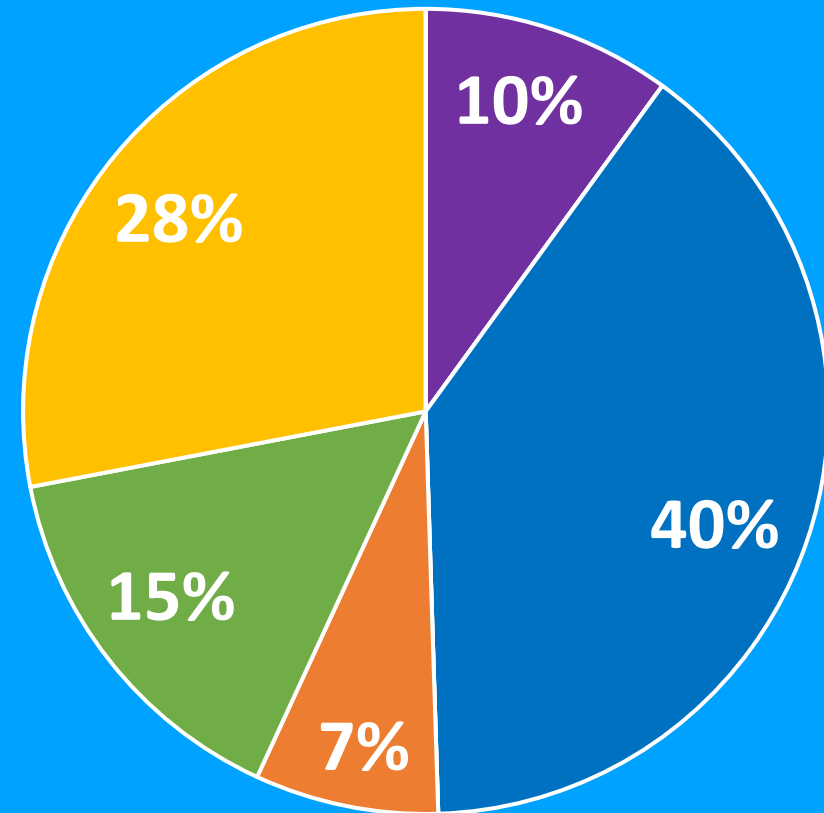
- Resilient grid
- Capacity growth
- Operational certainty
- More consistent and predictable bills for energy costs

For Business & Economic Development

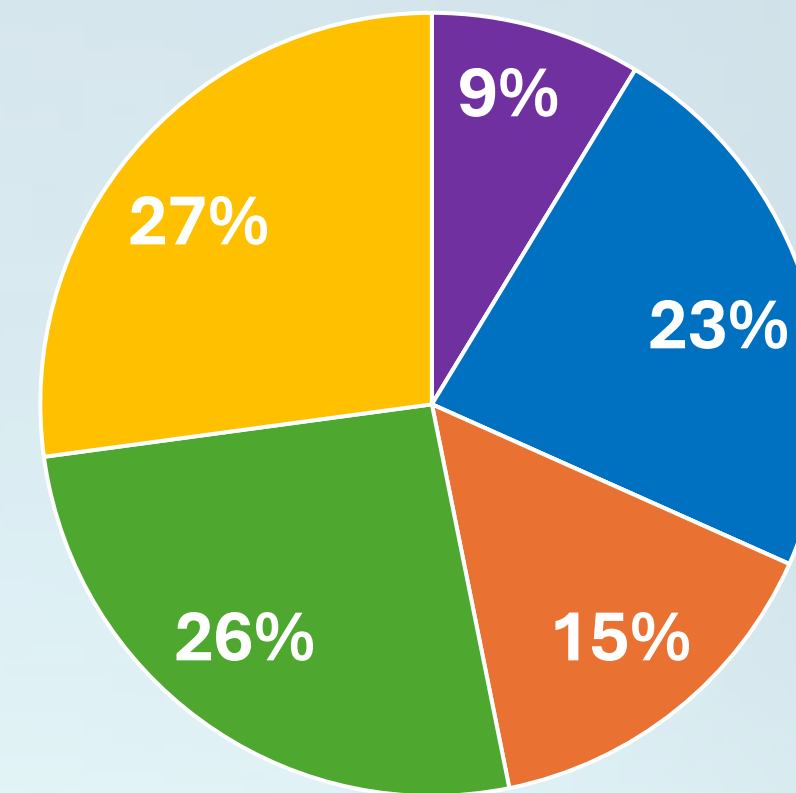
- Growth readiness
- Stronger economy
- Investment capacity
- Modern infrastructure

HOW TO CLOSE THE GAP (MW) CY 2040

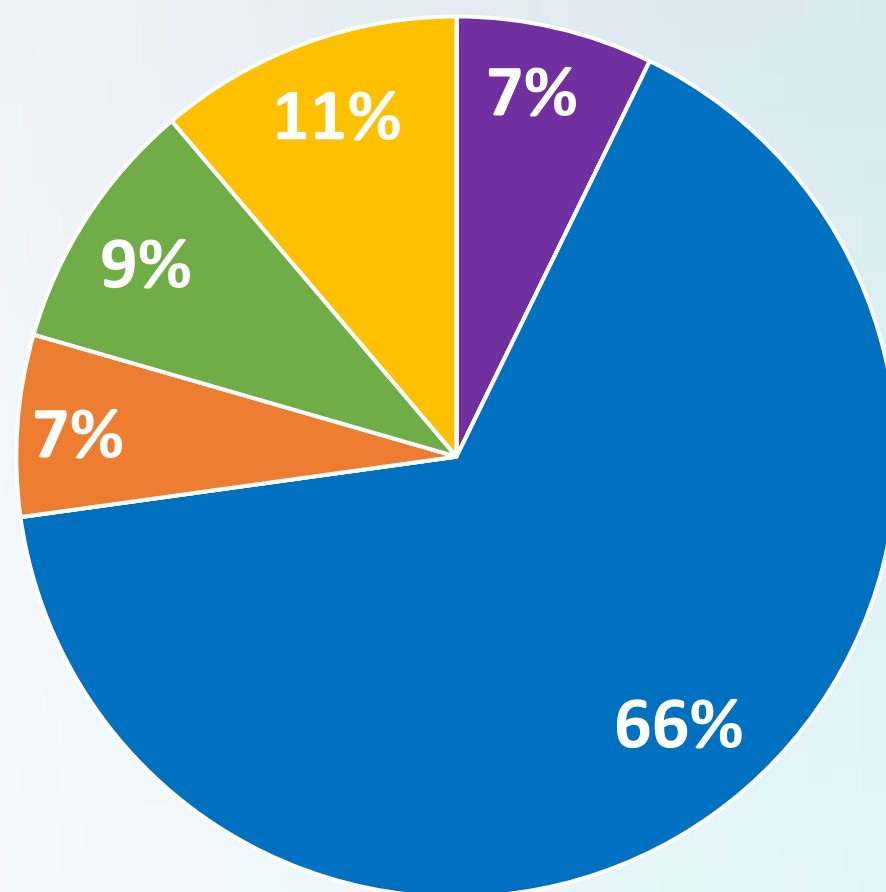
Updated Blended Plan



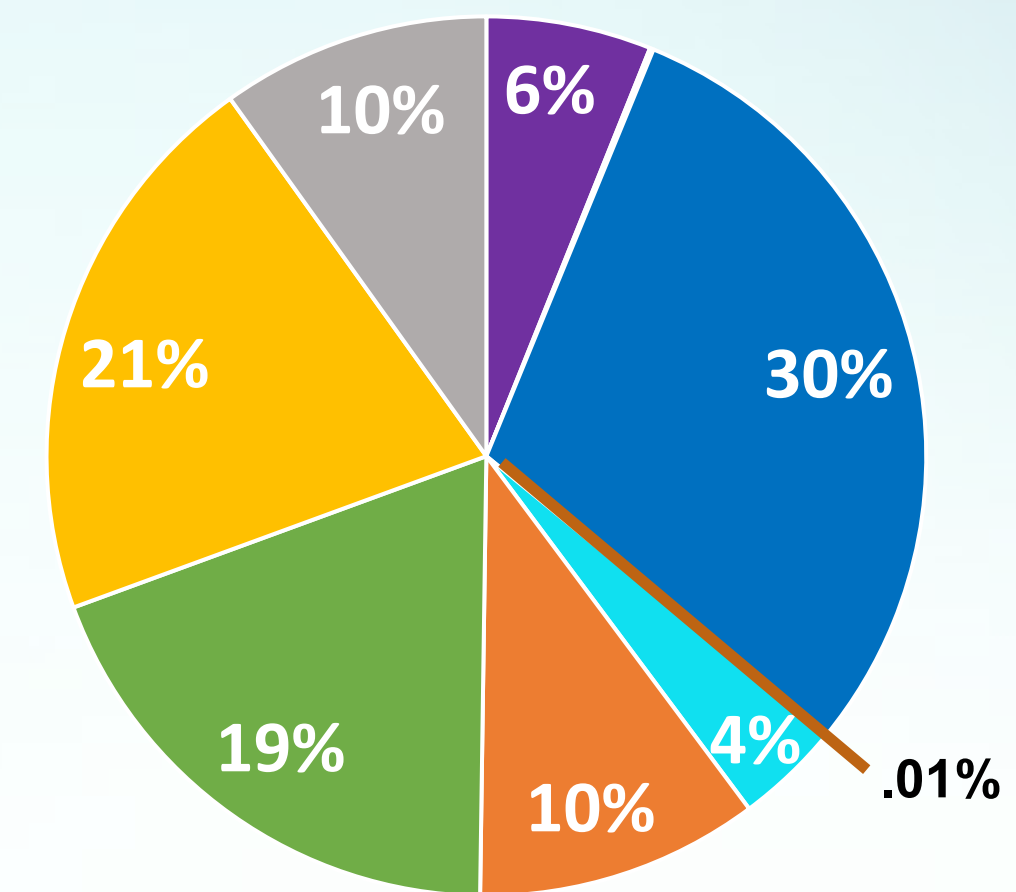
Zero Emitting Power Sources



Natural Gas



Current Plan in Today's Price Environment



■ Nuclear
 ■ Geothermal
 ■ Nat. Gas
 ■ Hydrogen
 ■ Storage
 ■ Wind
 ■ Solar
 ■ Market Purchase

Updated Blended Plan

- Rightsizing the approved Generation Plan
- Allows technology types to be optimized

Natural Gas

- Comparing against alternative priorities
- Capacity additions are primarily natural gas

Zero Emitting Power Sources

- Comparing against alternative priorities
- Capacity additions are zero carbon resources including wind, solar, storage, & nuclear

Current Plan in Today's Price Environment

- Leverages the board-approved plan from 2023
- No capacity additions beyond those included in approved generation plan
- Increased load growth met through market purchases

CPS Energy considers all objectives equally critical to serving our customers.



**System Reliability
& Climate
Resiliency**
Consistent delivery
& ability to cope
with extreme
events



Affordability
The portfolio's
impact on
customer costs



**Environmental
Sustainability**
Support for
community
environmental
goals

Rising Demand

- By 2040, the current forecast shows more than 2200 MW greater than the 2022 forecast

Market Volatility

- Wholesale Market Prices are trending up with increasing volatility
- Average market prices are ~80% higher in 2025 vs 2022

Longer Build Times

- Build time for all resources trending longer than 2022 assumptions
- Supply Chain & Economic challenges

External Directives

- ERCOT Reliability Must Run requirements
- Department of Energy Executive Orders

Higher Costs

- The One Big Beautiful Bill Act (OBBBA) accelerates tax-credit phase out for solar & wind
- Supply Chain, Economic, and Inflationary Forces have raised costs across the industry

69%

of customers who took
the survey

22% responded not sure
9% responded no

Support
continuing using
a **blended mix** of
power sources

OBJECTIVES AND METRICS

Planning Objectives

Metrics



System Reliability and Resiliency
Consistent delivery & ability to cope with extreme events

Market Exposure during Extreme Event Conditions



Affordability
The portfolio's impact on customer costs

Energy Cost
Total Revenue Requirements



Environmental Sustainability
Support for community environmental goals

Progress Towards City of SA Climate Action & Adaptation Plan (CAAP) Goals



Modeling Process

The modeling process includes ERCOT market analysis and CPS Energy-specific portfolio evaluation.

ERCOT-wide Price Forecast

CPS Energy Portfolio Dispatch

ERCOT Market Inputs

CPS Review

- Existing Plants in ERCOT
- New Plant Technology Costs
- Fuel Prices
- Emission Prices / Policy
- Zonal Transmission Constraints
- ERCOT Electricity Demand (aligned with CPSE)



ERCOT Market Outputs

- Energy Prices by Zone
- Ancillary Service Prices by Zone
- Average ERCOT Carbon Emissions*

ERCOT Market Scenario Development

- Existing Plants / Contracts
- Electricity Demand

Aurora

- Portfolio optimization
- Utility Resource Portfolio Modeling Dispatched to ERCOT Market Price
- Portfolio Cost Accounting with Market Transactions

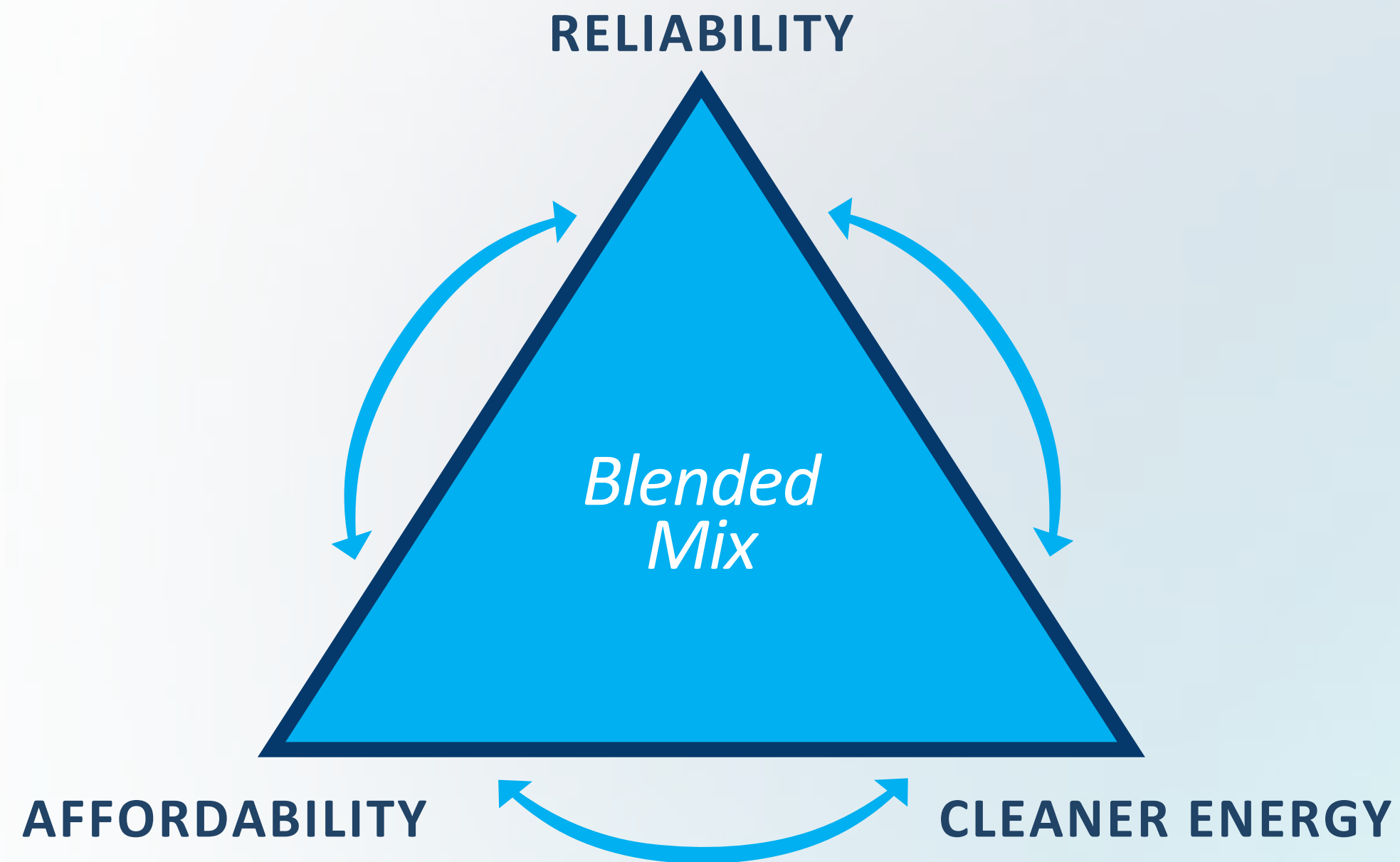
CPS Energy Portfolio Outputs

- Plant Dispatch, Cost, & Emission Profiles
- Market Sales and Purchases
- Portfolio Costs

CPS Energy Portfolio Analysis

Note: *This is used to measure carbon emissions from electricity purchases by CPS Energy.

With Added Generation



Market dependence increases exposure to:

- Price volatility and higher costs
- Higher emissions and environmental risks
- Lower reliability
- Peak demand risk

Planned resources help us maintain customer needs and priorities.

Investing in our resources empowers us to take ownership of our future and shape the path ahead