

# CPS ENERGY MARKET & GENERATION PLAN UPDATE

PRESENTED BY:
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Chief Strategy Officer

CPS Energy Community Input Committee 07/09/2025

## **AGENDA**



- Executive Summary
- Market Outlook
- Generation Plan Progress
- Headwinds
- In-Progress Work
- Upcoming Generation Plan Refresh

We have made significant progress towards achieving our Vision 2027 Generation Plan and are we are moving forward to manage our community's increasing energy needs.

## **EXECUTIVE SUMMARY**



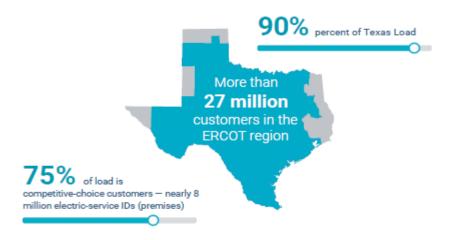
- Electric demand is accelerating in our region and throughout the State of Texas
- Growth, coupled with retiring legacy generation, and increasing costs/lead times to build generation mean that energy prices will become more volatile
- CPS Energy has made solid progress in executing and improving upon our community-led, Boardapproved long term generation plan to meet our community's growth and economic development needs amidst emerging headwinds
- We are exploring owned and purchase power opportunities across all technologies both for new and operating projects to meet our needs in a timely, cost-effective manner
- Beginning this fall we will be refreshing our power generation plan with updated assumptions and information and the CIC will be a key group for input/involvement

## **ELECTRIC RELIABILITY COUNCIL OF TEXAS**





The Electric Reliability Council of Texas (ERCOT) is a nonprofit organization that ensures reliable electric service for 90 percent of the state of Texas. The grid operator is regulated by the Public Utility Commission of Texas and the Texas Legislature.

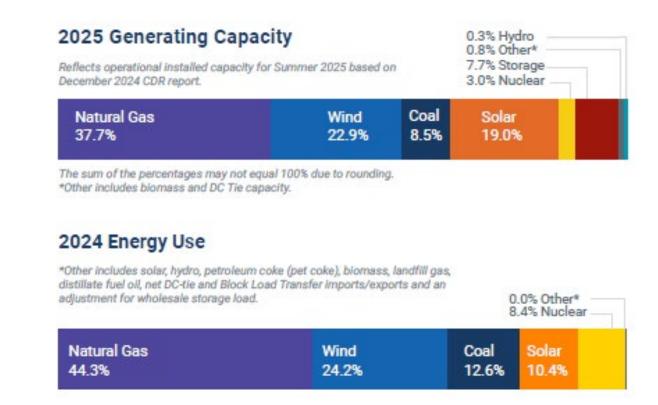


1 MW of electricity is enough to serve about 250 residential customers during ERCOT peak hours.

85,508 MW

Record peak demand (August 10, 2023) 85,116 MW

Weekend peak demand record (August 20, 2023)



\*Unofficial until final settlements occur

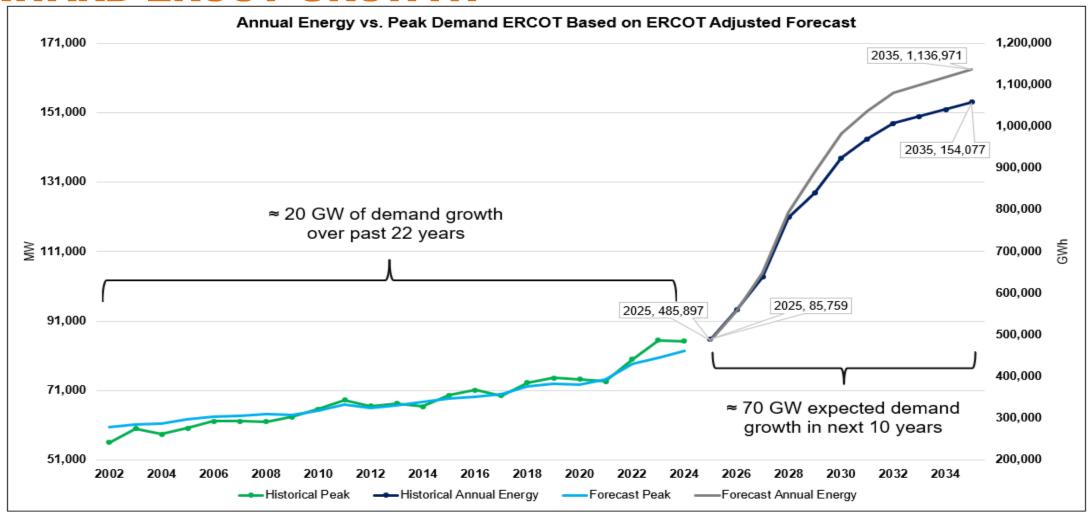
ERCOT is the grid operator that provides electricity to over 90% of the State of Texas. Dispatchable resources are needed to support the growing renewable supply.

Source: ercot.com

## **ERCOT DEMAND OUTLOOK**

## CDS

## **FORWARD ERCOT GROWTH**

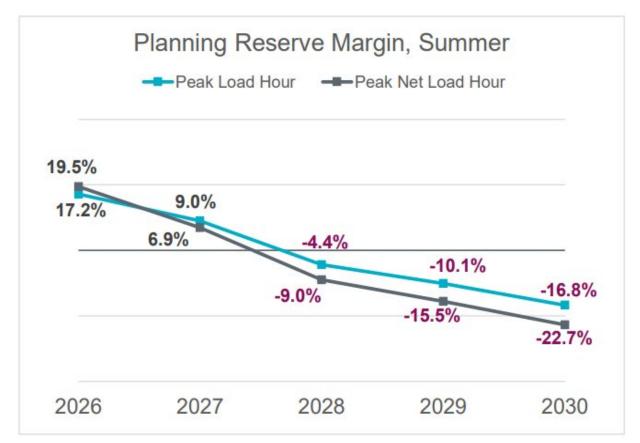


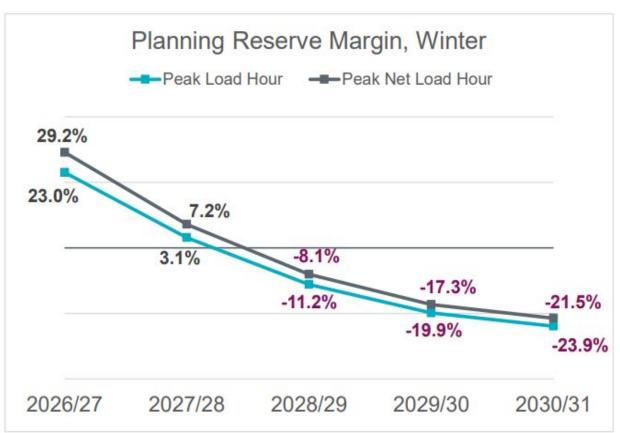
Source Date from ERCOT Adjusted Load Forecast – 4/15/2025

Unprecedented demand growth in the ERCOT market will require flexible, dispatchable generation resources to provide energy during peak hours.

# ERCOT DEMAND OUTLOOK SUMMER AND WINTER RESERVE MARGIN UPDATES







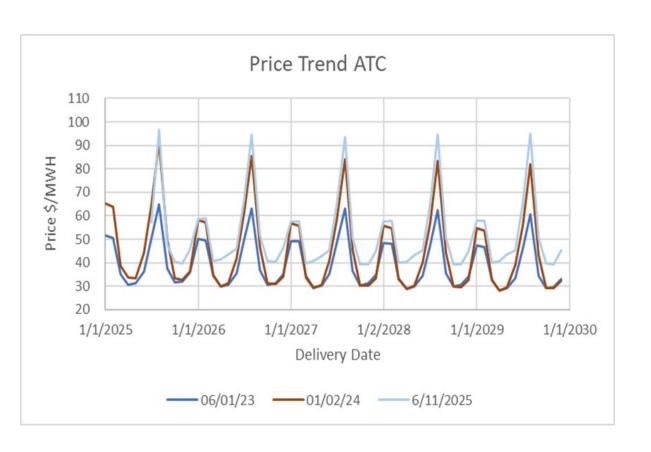
ERCOT Report on the Capacity, Demand and Reserves (CDR) in the ERCOT Region, 2026-2030 - May 16, 2025

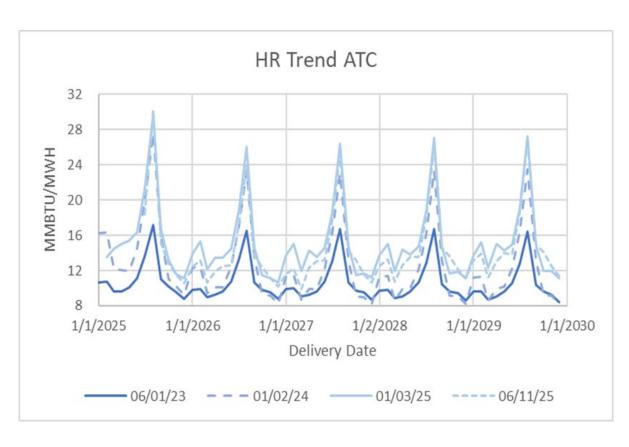
Rapid projected demand growth in ERCOT poses significant risk to reserve margins and is expected to increase market price volatility.

## **ENERGY PRICE TRENDS**

## **CDS**

### **ERCOT HUB SOUTH**





Forward market price signals have increased 30-50% over the past two years. System supply constraints could lead to additional price increases in the coming years.

## **OVERCOMING UNCERTAINTY**



### Headwinds

- Load growth
- Supply chain constraints
- Transmission constraints
- Regulatory uncertainty
- Pace of technological advancement

### **Tailwinds**

- Acquisition of additional generation assets
- Community support for generation plan
- Industry partnerships
- Access to capital markets
- Financial support when needed
- Transaction agility

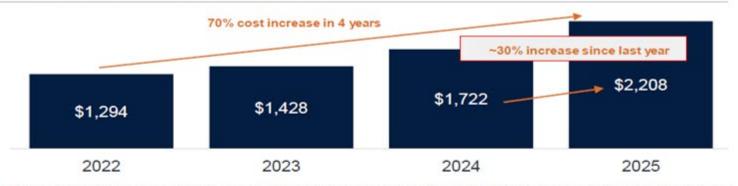
We have the momentum and flexibility to manage uncertainty and achieve our generation plan objectives.

# RISING NEW BUILD COSTS OVER THE PAST FEW YEARS



#### GAS-FIRED GENERATION OVERNIGHT CONSTRUCTION COST OVER TIME (\$/KW)

- New gas generation construction costs have nearly doubled since 2022
- Turbine slot availability limited prior to 2030s, pushing out newbuild CODs
- Tariffs and regulatory changes have potential to further accelerate cost pressures



Sources: 2022 and 2023 US EIA data; 2024 market study by Brattle Group and Sargent & Lundy; 2025 market price adjustment to market study by Brattle Group and Sargent & Lundy based on management analysis and market intelligence.

#### INDUSTRY PERSPECTIVES

"It's clear that we're in a whole new ball game on cost. The estimates for new build CCGTs consistently exceed \$2,000 with some estimates being closer to

\$ 3,000 a kW. And those are higher in certain locations in which we operate. For context, this is about 3x as much as we spent on Wolf Hollow and the Colorado Bend plants less than 10 years ago. So a 300% increase in less than 10 years."

Constellation Energy President, CEO & Director Joseph Dominguez, May 2025 Q 1 Earnings Call



"Costs for gas-fired power generation have more than tripled as demand has surged, with the cost of building a gas- fired power facility climbing from \$785/kw for some facilities in 2022 to as much as \$2,400/kw currently."

"When you look at gas as a solution... you're really looking at 2030 or later"

NextEra Energy CEO John Ketchum at CERAWeek Conference, March 2025



New builds are more expensive than brownfield projects: "The [cost of NRG's recent] brownfields are because of all the work we did in advance. That's a number that's not achievable again...\$1,000 [/kW]...roughly."

"You can look at us within this other transaction [GE Vernova-Kiewit-NRG partnership to build new CCGTs] to be more at the market, which seems to be in that \$1,500 to \$2,000 [kW] range right now."

NRG Energy Chair, President, and CEO Lawrence Coben, February 2025



"I would expect by the end of the summer, we will be largely sold out through the end of '28 with this equipment"

GE Vernova CEO, Scott Strazik at CERAWeek Conference, March 2025 GE VERNOVA

"Transformer lead times have been increasing for the last 2 years – from around 50 weeks in 2021, to 120 weeks on average in 2024. Large transformers

...have lead times ranging from 80 to 210 weeks"

Wood Mackenzie, April 2024



Cost and timelines for new construction of gas resources have more than doubled.

# REGULATORY DEVELOPING/HORIZON ITEMS



- Federal
  - Federal tax incentives/IRA changes
    - Renewable resources
    - Nuclear, geothermal, hydrogen
  - 202(c) recent actions
- State/ERCOT
  - Effective Load Carrying Capacity (ELCC) Changes
  - Market design updates (real time co-optimization, etc.)
  - PUCT firming reliability requirements rulemaking

# WORK IN PROGRESS NEAR-TERM ACCOMPLISHMENTS





South Texas Nuclear Project (STP)

Purchase Power Agreement for 200 MW in place; acquiring additional 2% ownership share (52MW)

**✓** Community Solar

50 MW currently in negotiations

**✓** Wind

29 MW currently in negotiations

**✓** Natural Gas Peaking Units

Procuring key equipment and services

Spruce 2 Conversion to Natural Gas

On schedule; core contract services in development

**✓** Unit Retirements

Braunig supporting ERCOT reliability

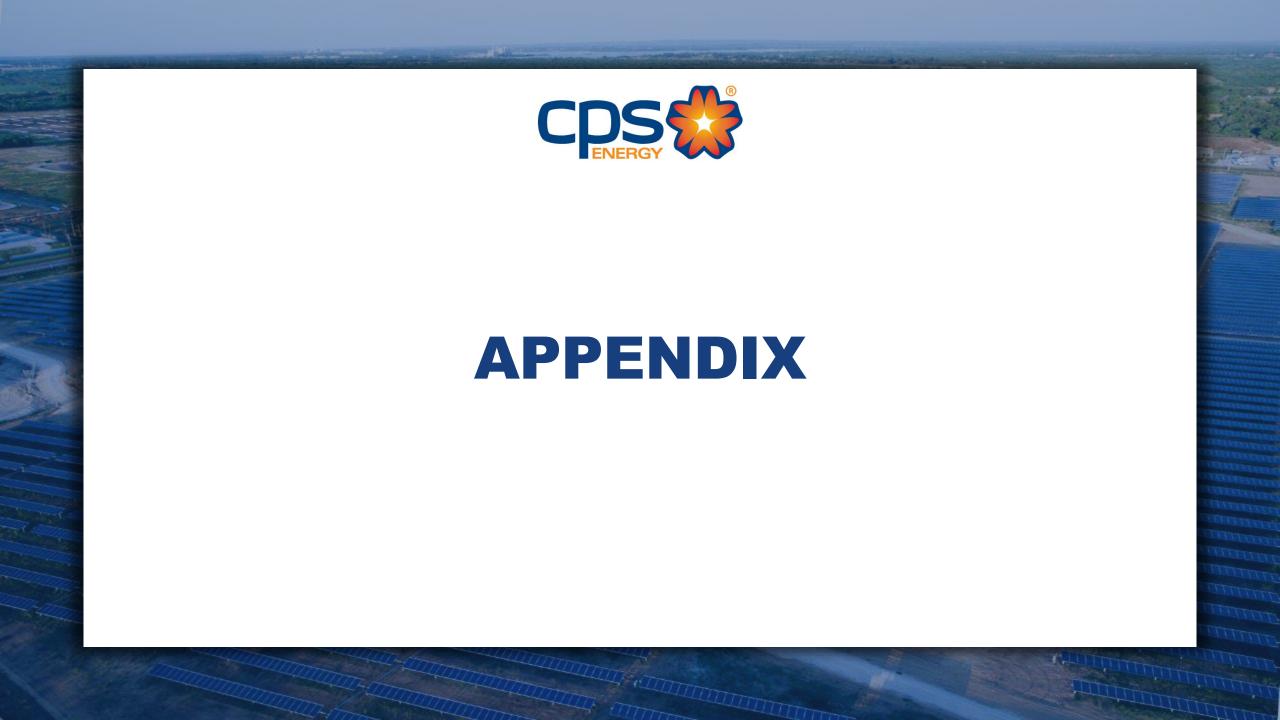
# WORK IN PROGRESS IN PROGRESS/UPCOMING WORK



- Continue to add new generation (build, buy, contract) in alignment with the Vision 2027 Generation Plan
  - Wind
  - Solar
  - Storage
  - Natural Gas
- Generation Plan Refresh (Fall 2025)
  - Update to 2022 assumptions/developments
  - Seek input/involvement of CIC and other stakeholders

Continued load growth is driving the need for new generation capacity.





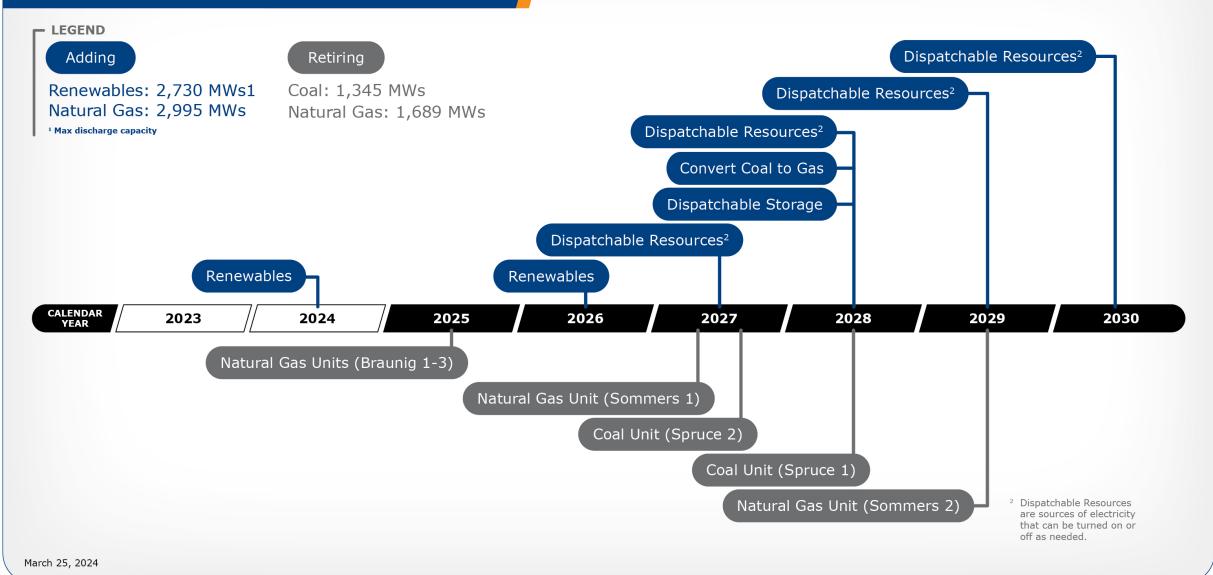
## **GLOSSARY / DEFINITIONS**



ACRONYM OR WORD	DEFINITION
BESS	Battery energy storage system
CCL	Corpus Christi & Laredo
CDR	Capacity, Demand & Reserves report
CCGT	Combined cycle gas turbine
СТ	Combustion turbine
ERCOT	Electric Reliability Council of Texas
DC (tie)	Direct current tie
GW	Gigawatt
GWH	Gigawatt-hour
KW	Kilowatt
KWH	Kilowatt-hour
MW	Megawatt
MWH	Megawatt-hour

ACRONYM OR WORD	DEFINITION
NPV	Net present value
RICE	Reciprocating internal combustion engine
SA CAAP	San Antonio Climate Action & Adaptation Plan
STP	South Texas Project
FY	Fiscal year
HE	Hour ending
COD	Commercial operations date
CY	Calendar year
ATC	Around-the-clock
HR	Heat Rate
WrNF	Wholesale revenue net of fuel
MMBTU	Million British Thermal Units

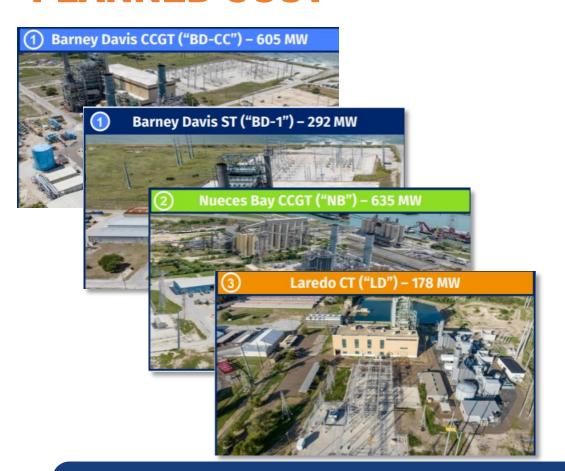




## **PREVIOUS SUCCESSES**



## **EXECUTED ON GENERATION PLAN @ LOWER THAN PLANNED COST**



# Purchased Natural Gas Capacity vs. Build



## Wholesale Return in First Year of Ownership:

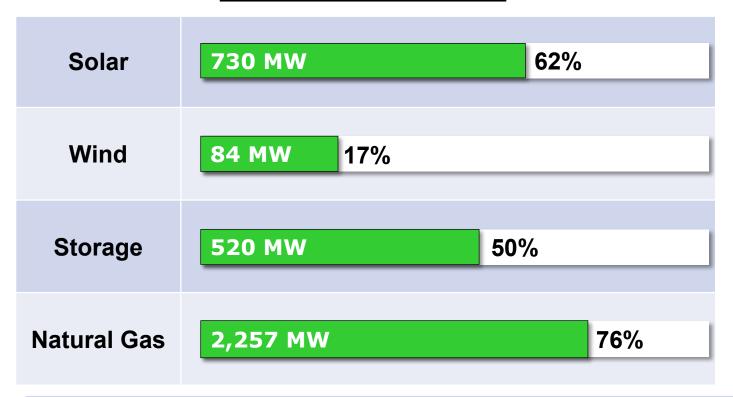
~\$200M

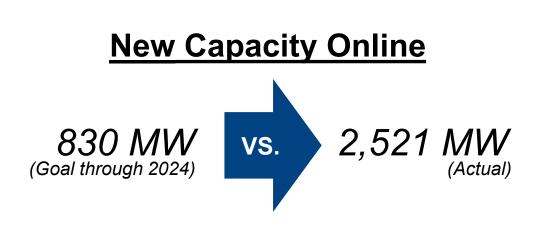
Capacity was consistent with the environmental profile of the generation plan and the acceleration of ownership enabled significant wholesale revenues. This successful purchase was able to cover nearly 1/3 of original price in just 1 year, for a 25 year asset.

## 2030 PLANNED CAPACITY ADDITIONS



## % of 2030 Target That is Online or Under Contract





As our Community's need for electricity accelerates, we are producing more power ahead of schedule.

# ACHIEVING COMMUNITY GOALS CO2 INTENSITY

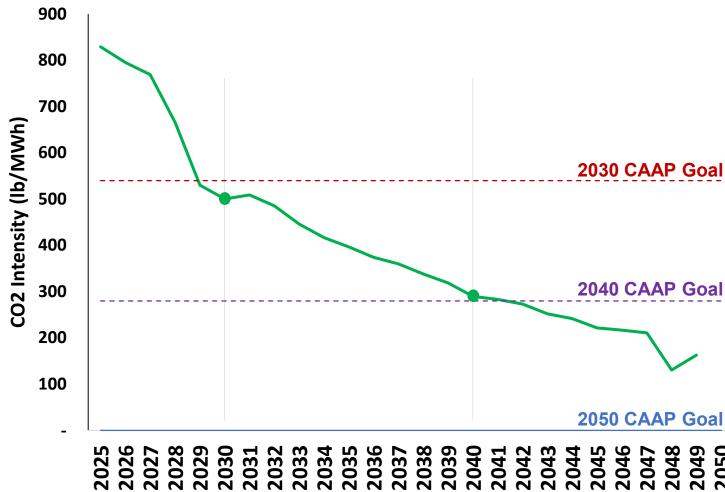


Our accomplishments have better positioned us to meet our Community's CAAP goals for 2040.

We will continue pursuing opportunities to lower our CO2 intensity.

This ongoing effort is essential for achieving net zero carbon by 2050.





Calendar Year