



# Board of Directors Meeting

February 27, 2025

# Item 3: CEO Report

# Oceanside & Vista Enrollment Stats

| City         | Eligible Customers | Opt-Downs to 50% Renewable | Opt-Ups to 100% Renewable | Opt-Outs     | Participation Rate |
|--------------|--------------------|----------------------------|---------------------------|--------------|--------------------|
| Oceanside    | 73,939             | 216                        | 94                        | 4,217        | 94.3%              |
| Vista        | 39,517             | 88                         | 316                       | 1,722        | 95.6%              |
| <b>TOTAL</b> | <b>113,456</b>     | <b>304</b>                 | <b>410</b>                | <b>5,939</b> | <b>94.8%</b>       |

# CEA Enrollment Stats

| Member City           | Clean Impact – 50% Renewable | Clean Impact Plus - 75% Carbon Free | Green Impact – 100% Renewable |
|-----------------------|------------------------------|-------------------------------------|-------------------------------|
| Carlsbad              | 158                          | 49,443                              | 225                           |
| Del Mar               | 4                            | 2,774                               | 72                            |
| Escondido             | 143                          | 53,085                              | 62                            |
| Oceanside             | 189                          | 69,121                              | 89                            |
| San Marcos            | 114                          | 34,518                              | 63                            |
| Solana Beach          | 15                           | 7,091                               | 158                           |
| Vista                 | 82                           | 37,241                              | 311                           |
| <b>TOTAL ACCOUNTS</b> | <b>705</b>                   | <b>248,734</b>                      | <b>980</b>                    |

# Equitable Building Decarbonization Direct Install Program

- Purpose: Accelerate large scale residential building decarbonization.
- Funding:
  - \$329M for the 6 Southern California Counties (2024-2029)
  - L.A. County (Internal Services Department) is the fiscal agent
  - \$1.3M is budgeted for San Diego County Partners including CEA
  - Partners budget does not include implementors/project budgets
- CEA will assist with:
  - Program Marketing
  - Program Design & Support
  - Community Education & Training
  - Participant Recruitment

# Commercial & Industrial (C&I) Solar Generation Plus Storage Behind-the-Meter (BTM) Request for Proposals (RFP)

- Program will be designed for commercial & municipal customers
- Deploys Solar Plus Batteries
- Deploys Battery Only Systems where applicable
- Enhances peak load management
- Increases local resiliency and reliability
- Supports overall grid health

# Commercial & Industrial (C&I) Solar Generation Plus Storage Behind-the-Meter (BTM) Request for Proposals (RFP)

| Task:  | Date:                       |
|--|-----------------------------|
| Issue RFP                                      | March 10, 2025              |
| Deadline for written questions to be submitted | March 21, 2025, 5:00 PM PDT |
| Responses to written questions                 | March 21, 2025              |
| Submittal due date                             | April 7, 2025, 5:00 PM PDT  |
| Evaluate Proposals (oral interviews if needed) | April 7 – May 9, 2025       |
| Results to Board for Selection                 | May 29, 2025                |

# Completed Community Events

| DATE                 | DESCRIPTION  |
|----------------------|--|
| February 5, 2025     | California Efficiency + Demand Management Council (EM&V Forum)   |
| February 12, 2025    | SANDAG Regional Climate Workshop                                 |
| February 15, 2025    | NSDC NAACP Youth Council Black History Brunch                    |
| February 19, 2025    | San Marcos CAP Citizens Advisory Committee                       |
| February 22, 2025    | The Learn Program – Home Electrification Fair                    |
| February 24, 2025    | City of Oceanside Senior Listening Session                       |
| February 24, 2025    | Battery Storage Safety and Technological Advancements Discussion |
| February 25-27, 2025 | Intersolar & Energy Storage Conference                           |



# Upcoming Community Events

| DATE           | DESCRIPTION  |
|----------------|--|
| March 15, 2025 | NCAAWA 30th Anniversary Women's Conference                 |
| March 27, 2025 | Oceanside Chamber of Commerce: Meet the City Event         |
| April 16, 2025 | Carlsbad Chamber of Commerce: Green Business Expo          |
| April 23, 2025 | Vista Environmental Commission: Presentation on Microgrids |
| April 24, 2025 | San Diego County Farm Bureau Graze 2025                    |

# Solar Plus Update

- 12 Active / 4 Complete Contracts (as of 01/22/25)\*
  - Solana Beach 4 Active, 0 Complete
  - Carlsbad 1 Active, 1 Complete
  - Escondido 2 Active, 0 Complete
  - San Marcos 4 Active, 1 Complete
  - Oceanside 5 Active, 1 Complete
  - Vista 4 Active, 1 Complete

\*Current focus is onboarding channel partners for program expansion

# Questions/Discussion

# Item 4: Regulatory Update

# Clean Energy Alliance: Regulatory Update

Tim Lindl – Keyes & Fox LLP

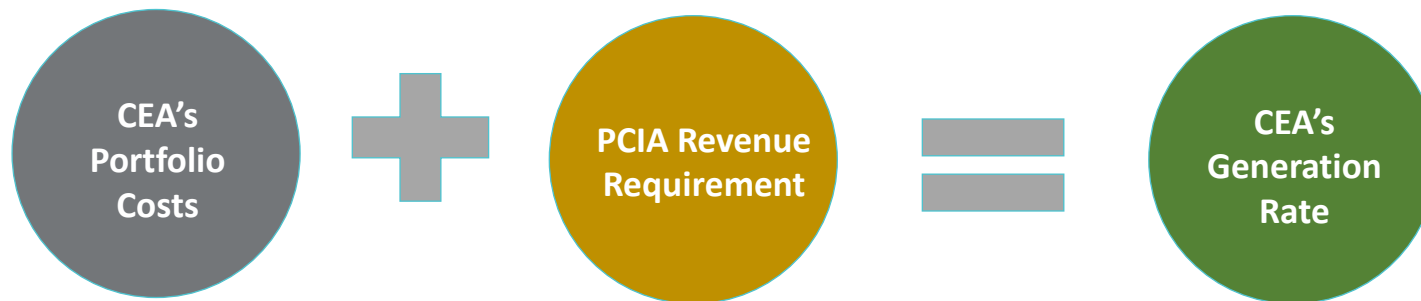
February 27, 2025

# Overview

- Power Charge Indifference Adjustment (PCIA) Primer (cont'd)
- New Rulemaking 25-02-005: Revising the PCIA Ratemaking Methodology and Process

# PCIA Overview

- The PCIA is the “exit fee” that is intended to ensure such indifference remaining SDG&E customers to be left economically “indifferent” to CEA’s customers leaving SDG&E’s service.

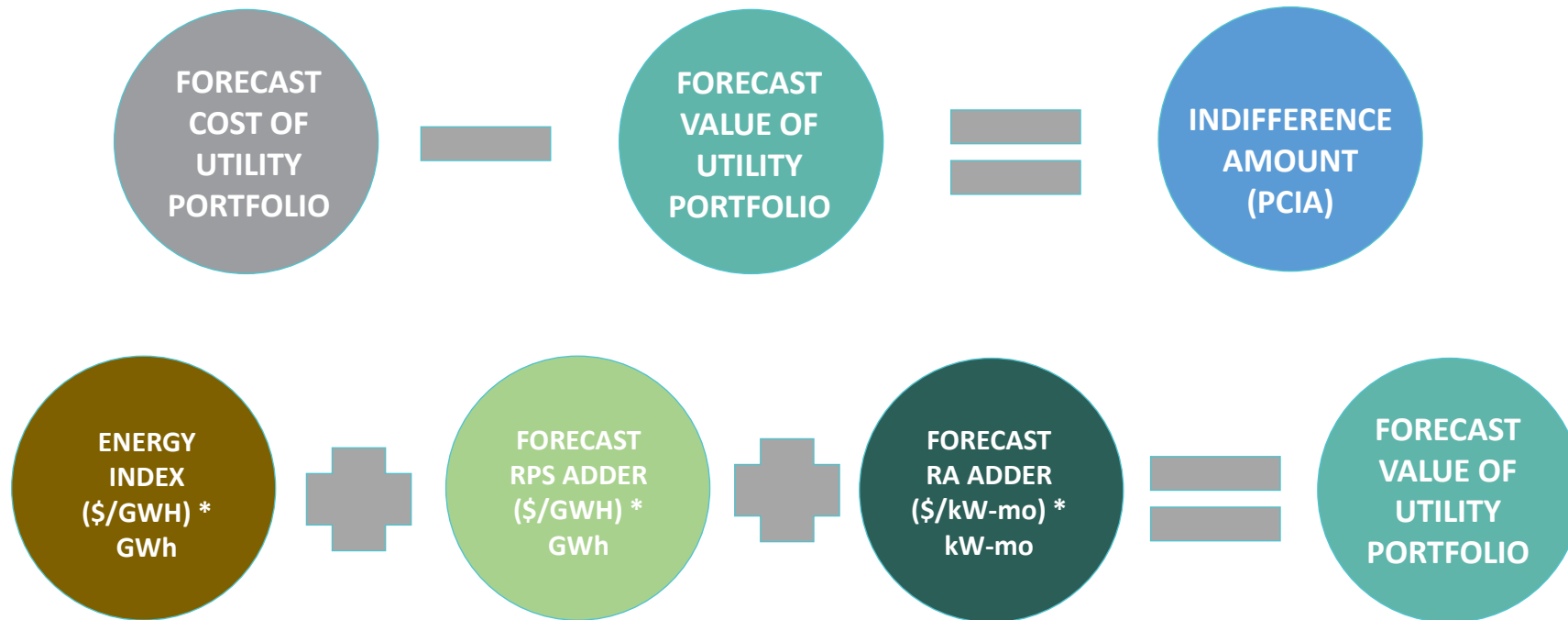


# Setting PCIA Rates

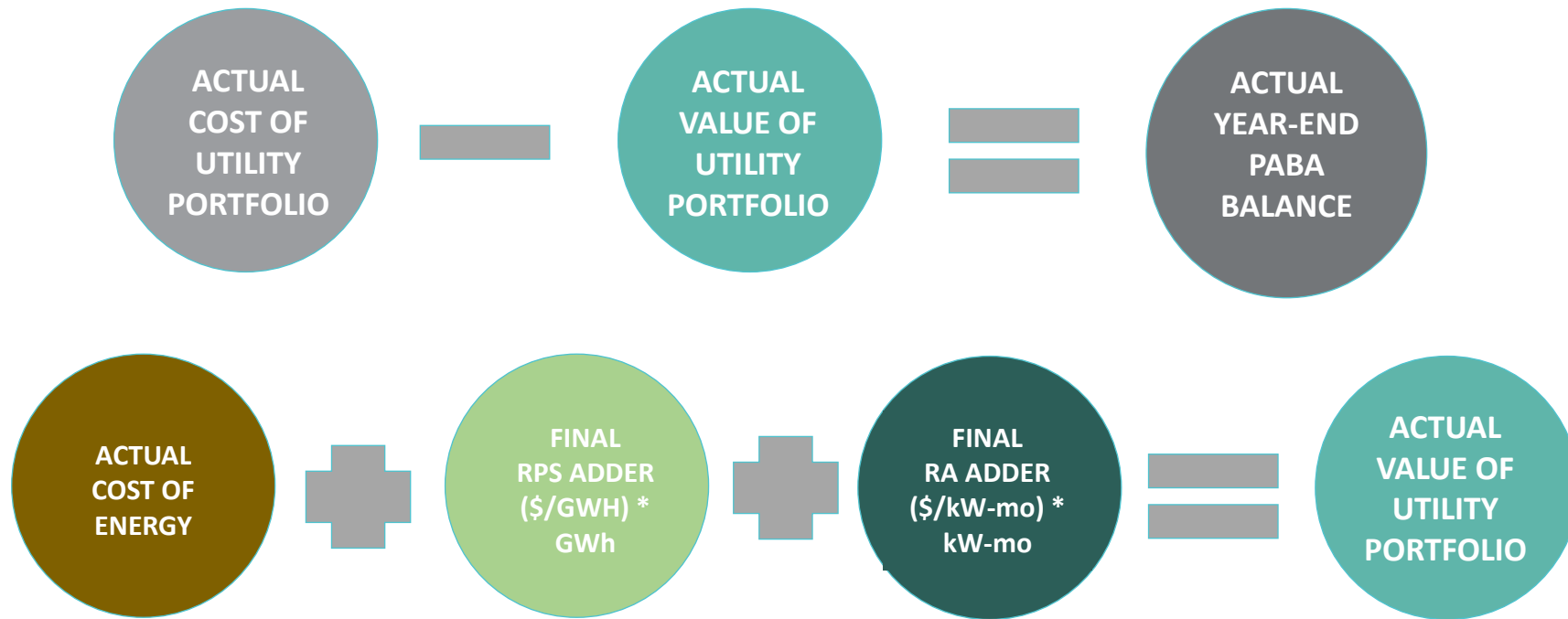




# Setting PCIA Rates – Forecast Component



# Setting PCIA Rates – True-Up Component



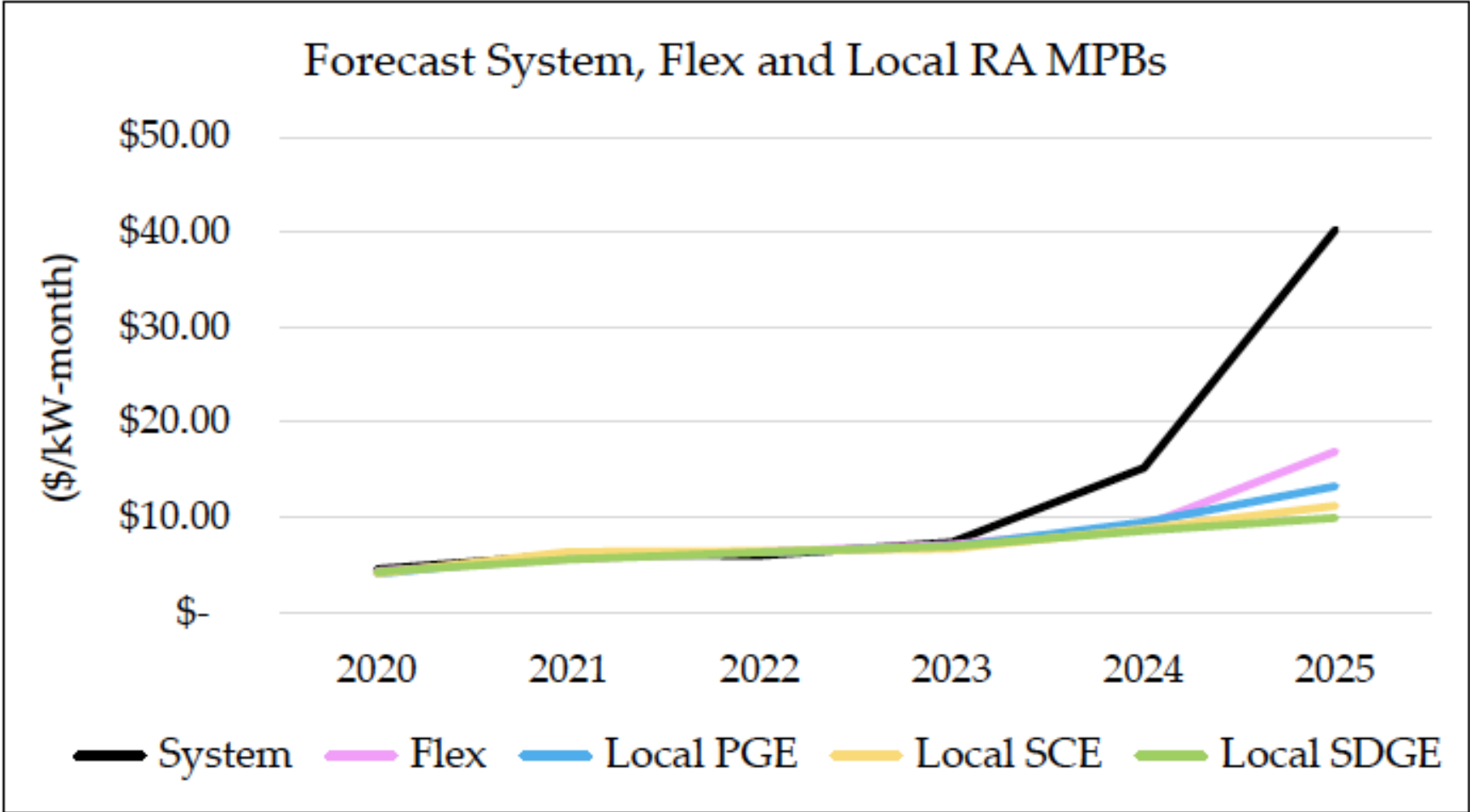
# Setting PCIA Rates – RA Adder

RA ADDER  
(\$/kW-mo)  
\* kW-mo

## Three Different Kinds of Capacity

- \* System \*
- Local
- Flexible Capacity

# Setting PCIA Rates – RA Adder



# Developments in Last Year's ERRA

- Publication of MPBs delayed and then revised twice
- October 8 ALJ Rulings requesting “procedural mechanisms” in ERRA Forecast cases to reduce potential over or under-collections tied to the RA MPB
- Decision 24-12-040 adopted 2025 PCIA rates for SDG&E

# New PCIA Rulemaking 25-02-005

## Goals:

- To consider and identify reasonable improvements to existing ERRA and PCIA rules, mechanisms, and processes to ensure best practices in utility forecasting and other procurement plan activities;
- To identify ways to mitigate and respond to rate volatility, whether resulting from market conditions or ratemaking constructs;
- To best ensure indifference among bundled and departed customers; and
- To provide policy guidance to ensure that individual utility forecast ratemaking proceedings function as efficiently and consistently as possible.

# New PCIA Rulemaking 25-02-005

## Two Tracks

- Track 1: Focused on near-term revisions to the RA MPB
- Track 2: Lingering issues that have arisen during prior ERRA Forecast and Compliance cases

# QUESTIONS?

Tim Lindl  
tlindl@keyesfox.com  
(510) 314-8385



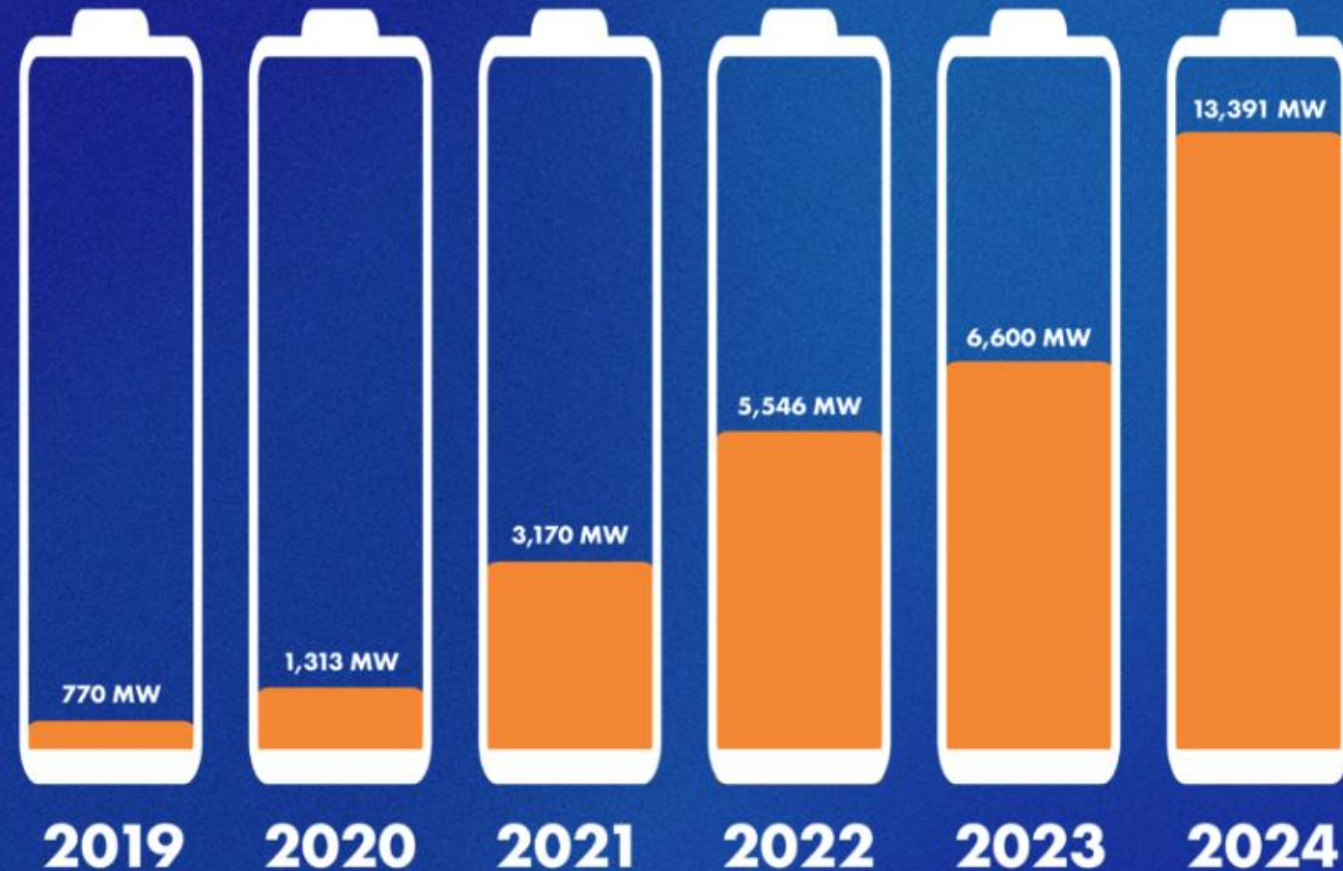
# Item 5: Battery Storage Informational Discussion

# Battery Energy Storage Systems

- First in a series of presentations on BESS to orient and inform the CEA Board
- Energy Storage is and will play a pivotal role in providing and supporting renewable energy goals and maintaining grid reliability during peak demand
- To reach its 2045 100% clean energy target, California is projected to need 52,000 Megawatts (52 Gigawatts) of energy storage capacity

# Battery Energy Storage Systems

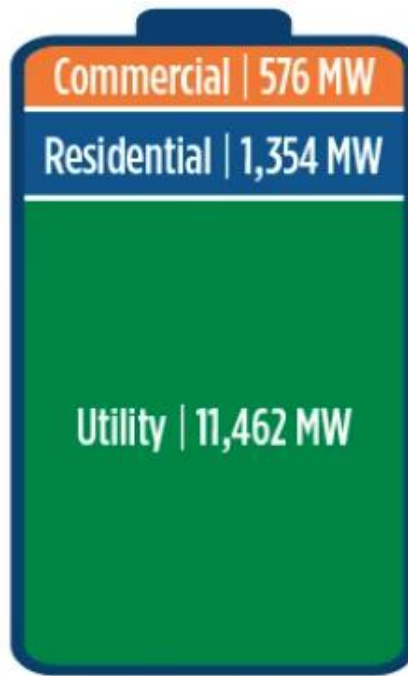
California has increased battery storage capacity by **1,639%** since the beginning of the Newsom Administration. This is a major victory on the state's path to 100% clean electricity.



# Battery Energy Storage Systems

## Energy Storage in California by Type

*\*As of October 2024*



2024 | 13,391 MW



2025 | 52,000 Total MW

# Overview of Battery Energy Storage Systems



**February 27, 2025**

Clean Energy Alliance Board of Directors Meeting

Jason Anderson, President and CEO, Cleantech San Diego

We are a **business association** founded 18 years ago by visionary leaders from the private, public, and academic sectors who recognized a growing cleantech industry as the next great **economic opportunity** for the San Diego region.



Our support of the cleantech sector spans **solar, wind, energy efficiency, storage, electric vehicles, and biorenewables.**

We were founded on the premise that setting a **high bar for sustainability** would result in an economically-viable **response from industry** to help meet those goals.



### **What do we do?**

Position the greater San Diego region as a global leader in the cleantech economy.



### **How do we do it?**

Foster collaborations across the private-public-academic landscape, lead advocacy efforts to promote cleantech priorities, support energy entrepreneurs, and encourage equitable investment across the San Diego region.



### **Who's with us?**

More than 135 businesses, universities, governments, and nonprofits committed to advancing sustainable solutions for the benefit of the economy, the environment, and all members of the community.

# THE CLEANTECH INDUSTRY IN SAN DIEGO 2023 ECONOMIC IMPACT STUDY

## TOTAL CLEANTECH AND SOLAR JOBS SUPPORTED



23,305

Cleantech Jobs

38,525

Direct 21,305  
Indirect 7,120  
Induced 10,050



15,220

Solar Installation Jobs

## TOTAL ECONOMIC OUTPUT



867

Payrolled Business  
Locations

\$9.4 Billion

Direct \$6.0 Billion  
Indirect \$1.6 Billion  
Induced \$1.8 Billion



\$128,188

Average Earnings per  
Cleantech Job

*\*Cleantech and Solar Installation Jobs are not mutually exclusive*



# Agenda

- About BESS
- BESS Benefits
- Why BESS
- Technology Advancements
- Safety Codes and Standards
- Best Practices
- BESS in San Diego
- Public Sentiment

 **ENERGY**  
STORAGE SYSTEM

 **ENERGY**  
STORAGE SYSTEM

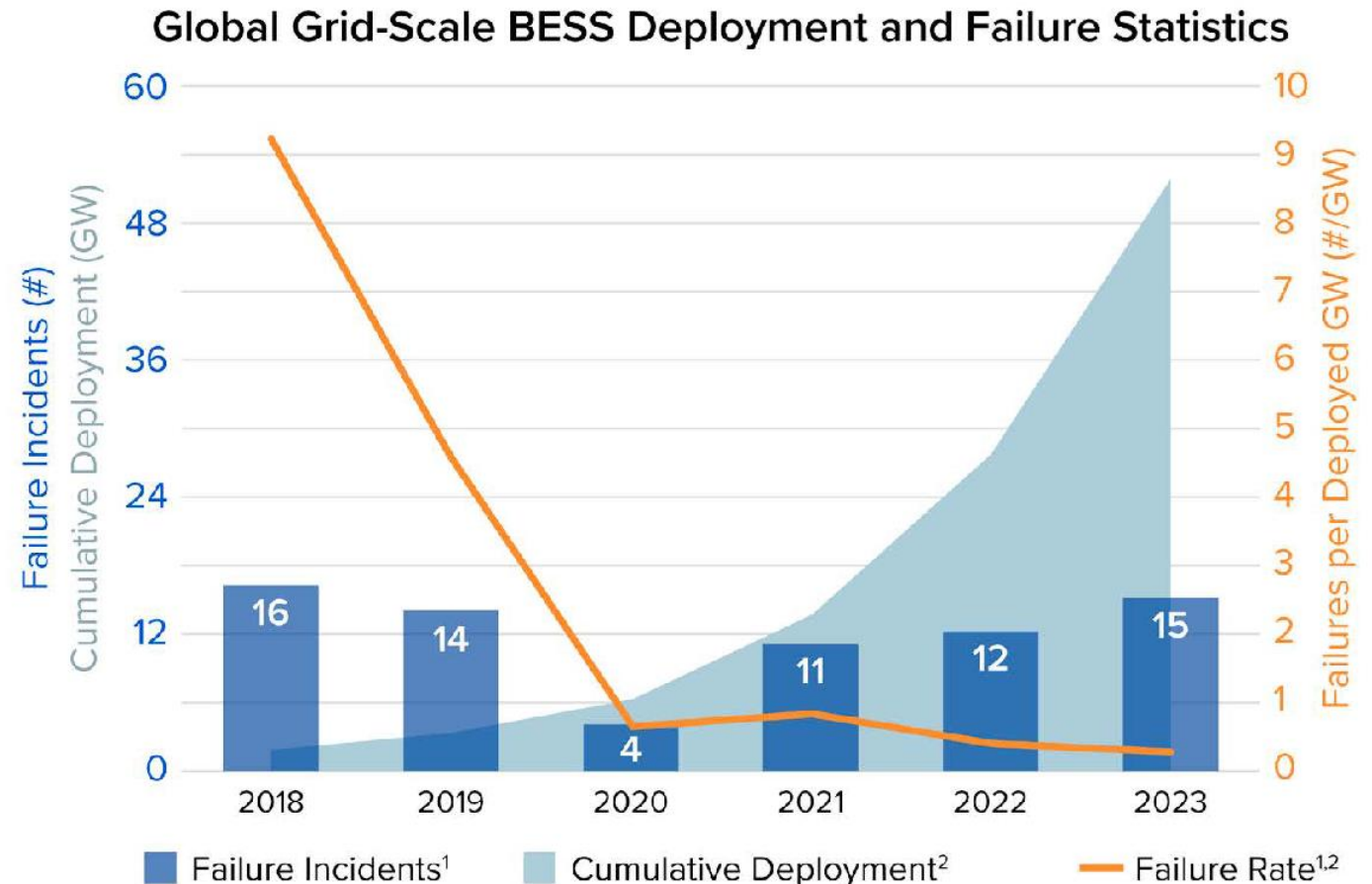


# Context for BESS Conversation

- Sept. 2023:** Fire in Industrial Park in Valley Center
- May 2024:** Fire in Industrial Park Near Otay Mesa
- Sept. 2024:** Fire in Industrial Park in Escondido
- Sept. 2024:** City of San Marcos Considers BESS Opposition
- Oct. 2024:** City of Escondido Considers Ordinance Prohibiting BESS
- Dec. 2024:** San Diego County Considers Additional Requirements for BESS
- Jan. 2025:** Fire at Moss Landing
- Feb. 2025:** SD County Considers Support for AB 303

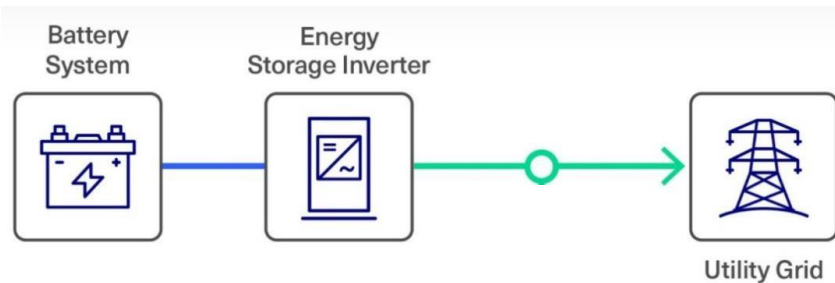
# Incidents Have Significantly Decreased

- According to EPRI statistics, BESS fire incidents are decreasing while deployments are increasing substantially
- The rate of BESS failure incidents fell 97% between 2018 and 2023
- During this time, codes and standards regulating BESS have rapidly evolved to better address safety concerns



Sources: (1) EPRI Failure Incident Database, (2) Wood Mackenzie. Data as of 12/31/23.

# Introduction to Battery Energy Storage Systems (BESS)



**BESS** = Battery Energy Storage System

BESS is one of the fastest growing and rapidly evolving technologies in the energy transition

## What is a Battery?

- A device that stores energy that can be used later
- Typically, electro-chemical energy storage

## What Can BESS Do?

- Charge/discharge energy at the time of need
- Help stabilize the grid
- Regulate frequency and voltage
- Prevent blackouts
- Reduce the need for transmission upgrades

# Types of Battery Projects

Batteries range from small-scale use for single family residences or businesses up to utility-scale systems

- Residential or Commercial: smaller and typically behind the meter
- Utility Scale: 10MW+  
4 hours of energy
- Long Duration Energy Storage: 8+ hours of energy





# BESS Benefits

- More renewable energy can be placed on the grid
- Provides emergency back-up power
- Lowers costs by storing energy when the price of electricity is low
- Balances power supply and demand instantaneously
- Makes the grid more reliable, resilient, and efficient

# Why BESS

A 2024 CAISO study estimated that California is projected to need 50 gigawatts of energy storage by 2045 to meet its greenhouse gas reduction goals.



# CCA Obligations Supported by BESS

- Midterm Reliability
- Resource Adequacy (RA) Requirements
- Integrated Resource Planning
- Renewable Portfolio Standards





# Technology Advancements Are Rapidly Evolving



- Moving toward full engineering and secured outdoor containerized solutions as opposed to indoor installations
- Advancements in monitoring, detection, and thermal imaging
- Advancements in chemistry options

# Safety Codes and Standards

National codes and safety standards guide the planning, developing, and operating of each energy storage project

- **NFPA 855** – mandatory requirements for design, installation, commissioning, operation, maintenance, and decommissioning of energy storage facilities
- **UL9540A** – comprehensive large-scale fire testing that tests the equipment's reaction to a possible thermal event at the enclosure level, not just the battery cells and modules.
- **California Fire Code** – based on national standards with updates anticipated in July 2025





# Best Practices

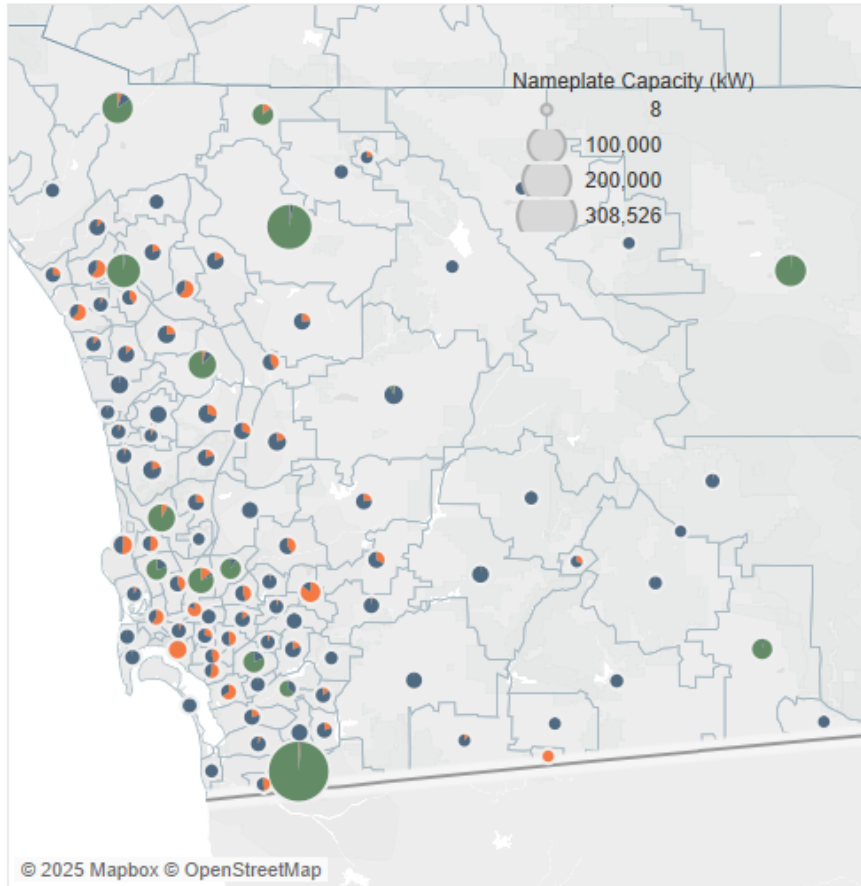
Today's BESS safety features and best practices provide:

- Hazard Mitigation Analysis
- Battery Management Systems
- Emergency Shutdown
- Flammable Gas Detection
- Fire Detection and Alarm
- Direct Injection Fire Suppressant
- Exhaust Ventilation
- Deflagration Venting
- First Responder Training
- Emergency Response Plans

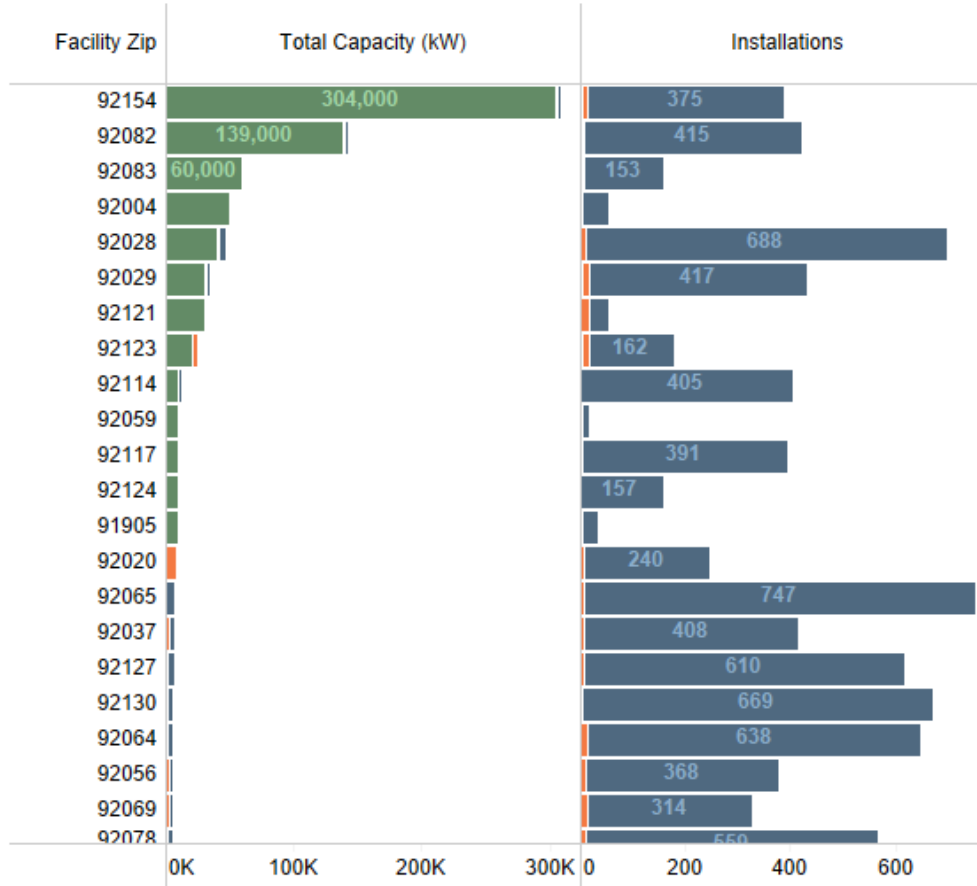
# BESS in San Diego County

| Customer Sector | Total Capacity (MW) | Installations | Average Capacity (kW) |
|-----------------|---------------------|---------------|-----------------------|
| Residential     | 157                 | 23,017        | 7                     |
| Commercial      | 67                  | 381           | 175                   |
| Utility         | 725                 | 23            | 31,542                |
| <b>Total</b>    | <b>949</b>          | <b>23,421</b> | <b>41</b>             |

Installed Storage Capacity by ZIP Code



Capacity and Installations



County  
San Diego

Zip Code  
All

Utility  
All

Sector  
All

Online Year  
All

CAISO Flag  
Multiple values

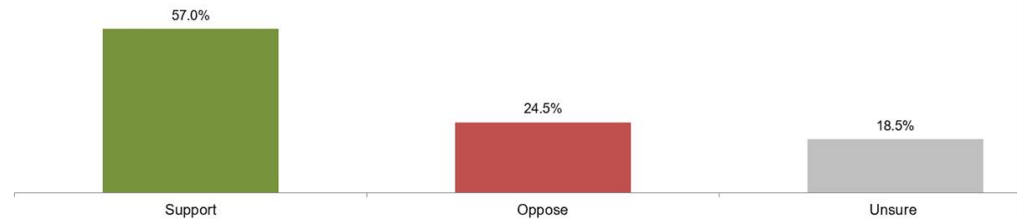
Customer Sector  
■ Residential  
■ Commercial  
■ Utility



# San Diego County Residents Support BESS

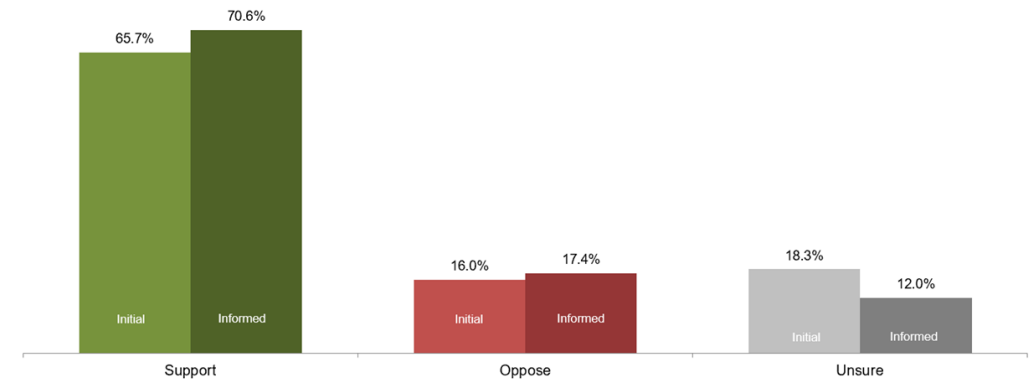
## 57% of residents support battery storage projects in their neighborhood

Question 14: Do you support or oppose battery storage projects in your neighborhood?



## Informed: 71% of residents support battery storage in San Diego County

Question 22: Knowing what you know now, do you support or oppose battery storage as an alternative energy source in San Diego County?



# Overview of Battery Energy Storage Systems



**February 27, 2025**

Clean Energy Alliance Board of Directors Meeting

Jason Anderson, President and CEO, Cleantech San Diego

# Questions/Discussion

# Item 6: Mid-Year Budget Review





**FY24/25 Mid-Year Budget Review  
and Full-year Forecast**  
**February 27, 2024**

# Topics for Financial Review

- Actual financial performance through December 2024
- Forecast through June 2025
- JP Morgan credit line compliance

# Financial Performance through December 31, 2024

|   | Year-to-date  |               |   |                                  |
|---|---------------|---------------|---|----------------------------------|
|   | Actual        | Budget        | Variance:<br>Favorable /<br>(Unfavorable) | YTD Actual as %<br>of YTD Budget |
| <b>OPERATING REVENUES</b>                 |               |               |   |                                  |
| Total Operating Revenues                  | \$207,804,870 | \$199,667,399 | \$8,137,471                               | 104%                             |
| <b>OPERATING EXPENSES</b>                 |               |               |   |                                  |
| Total Cost of Goods Sold (Energy Expense) | 157,212,702   | 163,753,367   | 6,540,665                                 | 96%                              |
| Other Operating Expenses (excluding COGS) | 4,455,307     | 4,289,264     | (166,043)                                 | 104%                             |
| Total Operating Expenses                  | \$161,668,010 | \$168,042,631 | \$6,374,621                               | 96%                              |
| <b>OPERATING INCOME/(LOSS)</b>            | \$46,136,860  | \$31,624,768  | \$14,512,092                              | 146%                             |
| <b>NON-OPERATING REVENUES (EXP.)</b>      |               |               | -   |                                  |
| Total Nonoperating Income/(Expense)       | (887,024)     | (671,312)     | (215,712)                                 | 132%                             |
| <b>CHANGE IN NET POSITION</b>             | \$45,249,836  | \$30,953,456  | \$14,296,380                              | 146%                             |
| <b>Beginning Net Position</b>             | (16,964,834)  |               |   |                                  |
| <b>Ending Net Position</b>                | 28,285,002    |               |   |                                  |

# YTD December 2024 (6 months) Financial Highlights

- Revenues (billing to Customers)
  - \$8.1 million (4%) higher than budget
  - Although usage was 2% lower than budget, it was 4% higher than budget during peak months of July-September when customer rates are higher
- Expenses
  - 4% below budget
  - Energy costs were lower than budgeted
  - Non-energy costs were 4% above budget - mostly related to timing
- Change in Net Position
  - \$45.3 million, or \$14.3 million better than the budget of \$31.0 million

# Financial Performance Projected through June 30, 2024

|   | Full Year FY2024-2025             |                                 |  |
|---|-----------------------------------|---------------------------------|--|
|   | Full Year Forecast<br>FY2024-2025 | Full Year Budget<br>FY2024-2025 | Variance: Favorable /<br>(Unfavorable) |
| <b>OPERATING REVENUES</b>                 |                                   |                                 |  |
| Total Operating Revenues                  | \$363,088,496                     | \$360,839,549                   | \$2,248,947                            |
| <b>OPERATING EXPENSES</b>                 |                                   |                                 |  |
| Total Cost of Goods Sold (Energy Expense) | 311,953,629                       | 317,090,165                     | 5,136,536                              |
| Other Operating Expenses (excluding COGS) | 9,649,949                         | 9,378,650                       | (271,299)                              |
| Total Operating Expenses                  | \$321,603,579                     | \$326,468,815                   | \$4,865,237                            |
| <b>OPERATING INCOME/(LOSS)</b>            | <b>\$41,484,918</b>               | <b>\$34,370,733</b>             | <b>\$7,114,184</b>                     |
| <b>NON-OPERATING REVENUES (EXP.)</b>      |                                   |                                 | -                                      |
| Total Nonoperating Income/(Expense)       | (1,136,089)                       | (1,063,383)                     | (72,705)                               |
| <b>CHANGE IN NET POSITION</b>             | <b>\$40,348,829</b>               | <b>\$33,307,350</b>             | <b>\$7,041,479</b>                     |
| <b>Ending Net Position</b>                | <b>\$23,383,949</b>               |                                 |  |

# Full-year FY2025 (12 months) Forecast

- Revenues (billing to Customers) expected to be \$4.8 million, or 4%, higher than the full-year budget
- Expenses expected to be very close to budget
- Change in Net Position expected to be
  - \$40.3 million, or \$7.0 million better than the budget of \$33.3 million
  - Less favorable in the 2<sup>nd</sup> half of the year, although could be better since some conservatism is built into the forecast

# JP Morgan Credit Line

- Met both Credit Line Covenants at 9/30 and 12/31
- On track to comfortably meet covenants going forward
- Current credit line expires January 2026

|             |               | Dec 31<br>2024 | Mar 31<br>2025 | Jun 30<br>2025 | Sept 30<br>2025 | Dec 31<br>2025 |
|-------------|---------------|----------------|----------------|----------------|-----------------|----------------|
|             | <b>Metric</b> |                |                |                |                 |                |
| <b>DSCR</b> | <b>1.0</b>    | 12.2           | <b>16.1</b>    | <b>27.7</b>    | <b>48.0</b>     | <b>60.3</b>    |
| <b>DLOH</b> | <b>45</b>     | 57             | <b>52</b>      | <b>35</b>      | <b>80</b>       | <b>101</b>     |

# FY2025-2026 Budget Timeline

- Board Meeting May 29, 2025 – Draft Budget Review
- Board Meeting June 26, 2025 – Final Budget Approval