

# Exhibit to Agenda Item #1a

2025 Proposed Energy Delivery & Operations Budget.

Board Finance & Audit Committee and Special SMUD Board of Directors Meeting  
Thursday, November 7, 2024, scheduled to begin at 6:00 p.m.

SMUD Headquarters Building, Auditorium

# Energy Delivery & Operations 2025 Proposed Budget & Initiatives

**Frankie McDermott**

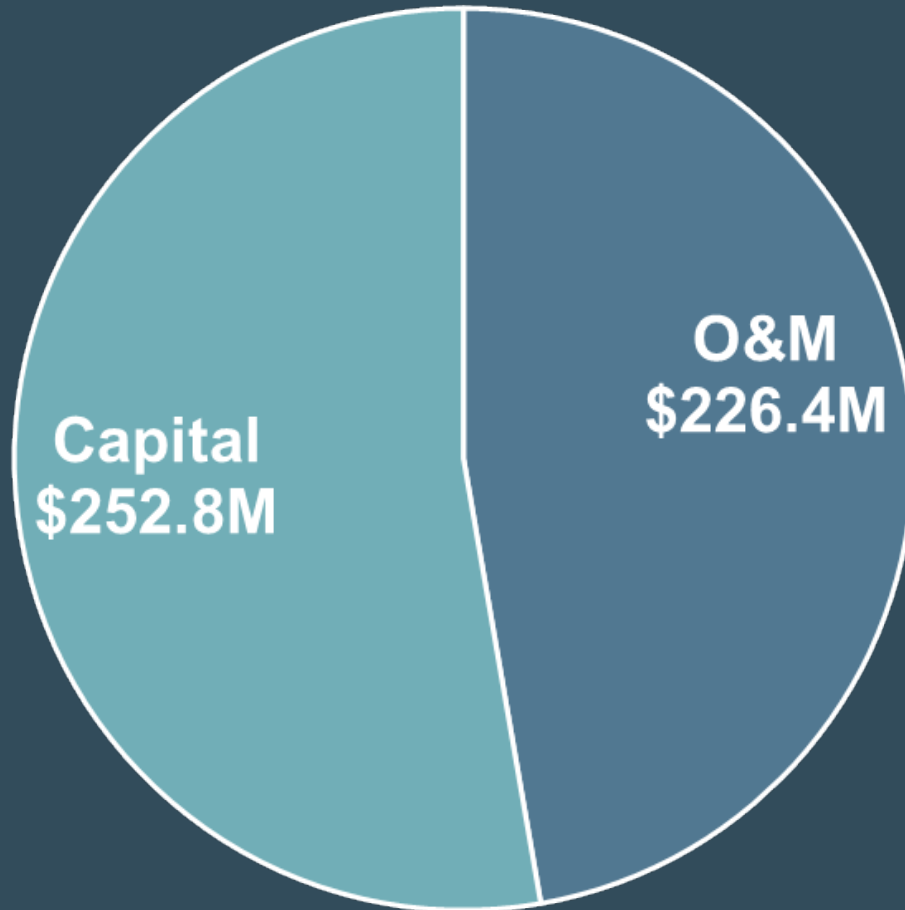
Chief Operating Officer

# Energy Delivery & Operations

| Corporate                                       | Zero Carbon Energy Solutions                    | Customer & Community Services              | Energy Delivery & Operations                 | Information Technology                              | Workforce, Diversity & Enterprise Partnerships   |
|---|---|--|--|---|--|
| Governance                                      | Power Generation                                | Customer Success                           | Transmission Planning & Operations           | Customer & Grid Operations Technology Center        | People Services & Strategies                     |
| Finance & Strategy                              | Advanced Energy Solutions                       | Customer Operations & Assistance           | Distribution Planning & Operations           | Enterprise Systems, Strategy & Governance           | Facilities, Security & Emergency Operations      |
| Legal, Government Affairs & Contracts           | Research & Development, Grants and Partnerships | Community Energy Services                  | Line Assets                                  | AI, Automation & Customer Self-Service Technologies | DEIB, Learning & Sustainable Communities         |
| Communications, Marketing & Community Relations | Resource & Market Planning and Settlements      | Customer Experience Planning & Integration | Substation, Telecom, Network & Metering      | Cybersecurity                                       | Enterprise Change & Organizational Effectiveness |
| Enterprise Affairs                              | Customer & Grid Strategy                        | Business Intelligence & Operations Support | Strategic Services & Operations PMO          | IT Infrastructure Platform Services                 |  |
|   |   |  | Environmental, Safety & Real Estate Services |   |  |
|   |   |  | Operational Excellence                       |   |  |
|   |   |  | Specialized Enterprise Initiatives           |   |  |

# Energy Delivery & Operations

## 2025 Proposed budget details



### O&M

|                                     |                |
|-------------------------------------|----------------|
| Vegetation Management               | \$56.2 million |
| Transmission Planning & Operations  | \$32.6 million |
| Substation O&M                      | \$31.0 million |
| Distribution Planning & Operations  | \$25.3 million |
| Line Field Operations               | \$14.1 million |
| Line Network Corrective Maintenance | \$13.8 million |

### Capital

|                                  |                |
|----------------------------------|----------------|
| Distribution Substation Capacity | \$38.0 million |
| Bulk Substations (New)           | \$34.8 million |
| Distribution Network             | \$33.8 million |
| Transmission Substation Capital  | \$28.3 million |
| Line Capacity Projects           | \$24.8 million |
| Line New Services                | \$23.0 million |
| Cable Replacement                | \$21.6 million |

# Energy Delivery & Operations

**Our multi-year plan focuses on safety & reliability, transforming SMUD's grid, optimizing operations, and developing our workforce**

- Safety is our top priority
- Transform and maintain a reliable and resilient grid
- Storm Process Improvements & Readiness
- Accelerating Operational Excellence: Strategic Investment Planning & Benchmarking
- Inclusive Workforce strategy



Lineworker Scholarship Graduation - Student Demonstration

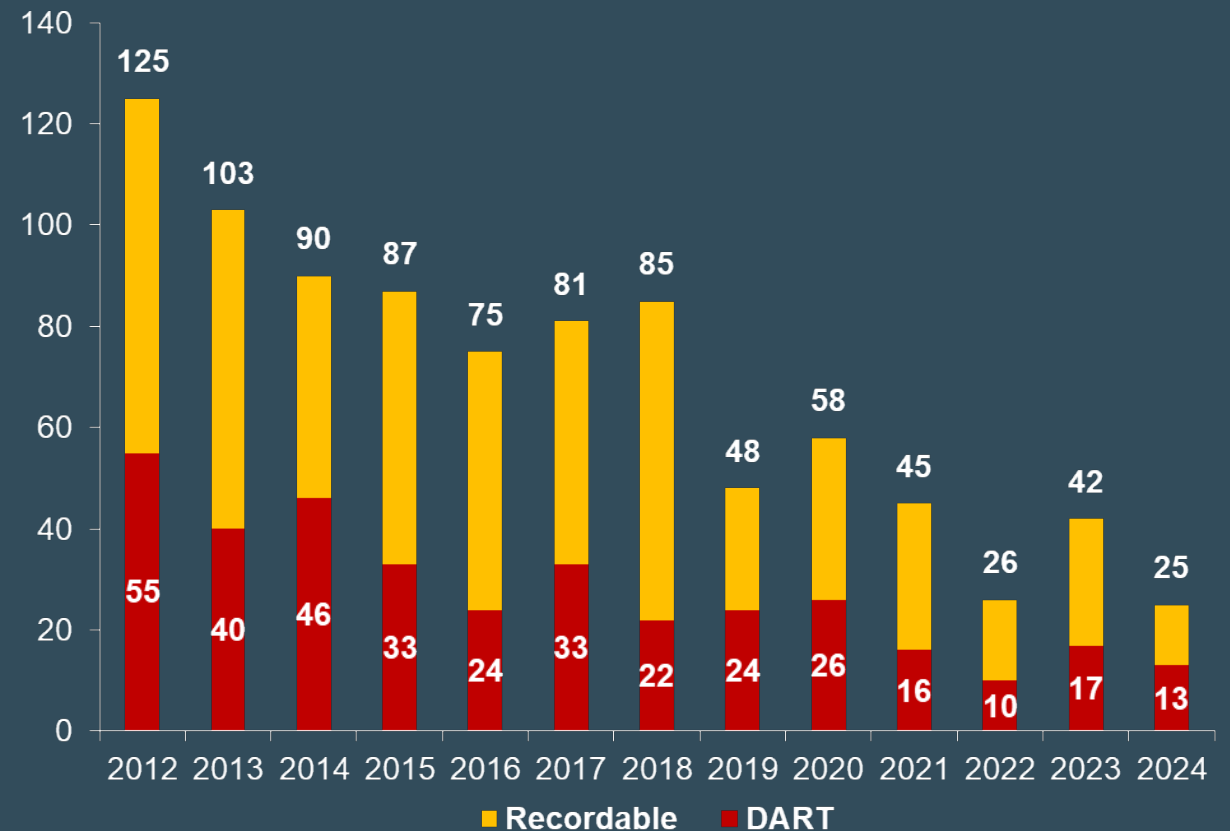


# Infrastructure Investment

Alignment to Strategic Direction: SD-4 SD-6 SD-8 SD-11 SD-14 SD-16 SD-17

## Safety is the cornerstone of all that we do

- Safety for Life culture – road to zero incidents
- Serious Injury Fatality (SIF) mitigation focus
- Expanded technology use to improve safety
- Increased Contractor and Public Safety engagement
- Keeping our workforce safe during adverse events





# Infrastructure Investment

Alignment to Strategic Direction: SD-4 SD-6 SD-8 SD-11 SD-14 SD-16 SD-17

- Transform and maintain a reliable and resilient grid
- Zero Carbon plan
  - Electrification
  - Clean Energy manufacturing
  - Renewable project interconnections
- Increased commercial and residential development
- Responding to external cost and availability pressures



**Aggie Square**



# Infrastructure Investment

Alignment to Strategic Direction: SD-4 SD-6 SD-8 SD-11 SD-14 SD-16 SD-17

## Storm Process Improvements & Readiness

Faster restoration with accurate information

### Key improvements made for the 2025 storm season:

- Doubling of damage assessment capacity over February 2024 levels
- Ability to provide Estimated Restoration Times (ERTs) for single customer outages
- Improved routing of crews and data for repair scheduling
- Enhanced training and safety standards for high wind events
- Updated outage map to clarify that most customers are restored in the assessment phase



Storm response





# Infrastructure Investment

Alignment to Strategic Direction: SD-4 SD-6 SD-8 SD-11 SD-14 SD-16 SD-17

## Transform and maintain a reliable and resilient grid

- Cable & Pole Replacement Programs
- Wildfire Mitigation Plan
- Vegetation Management
- Downtown Network
- Asset Health On-line Monitoring
- Folsom Administrative Operations Building



Line crew replacing 90 ft. steel pole – Folsom Blvd.



# Infrastructure Investment

Alignment to Strategic Direction: SD-4 SD-6 SD-8 SD-11 SD-14 SD-16 SD-17

## Transform and maintain a reliable and resilient grid

- **Substation projects** – Planned 35 construction projects in 2025, a 17% increase over 2024
  - Load growth - 12 substation and associated line projects
  - Substation Reliability - 23 projects
- 35 additional projects that begin design and engineering work in 2025 and construction in future years



**Cordova Substation**

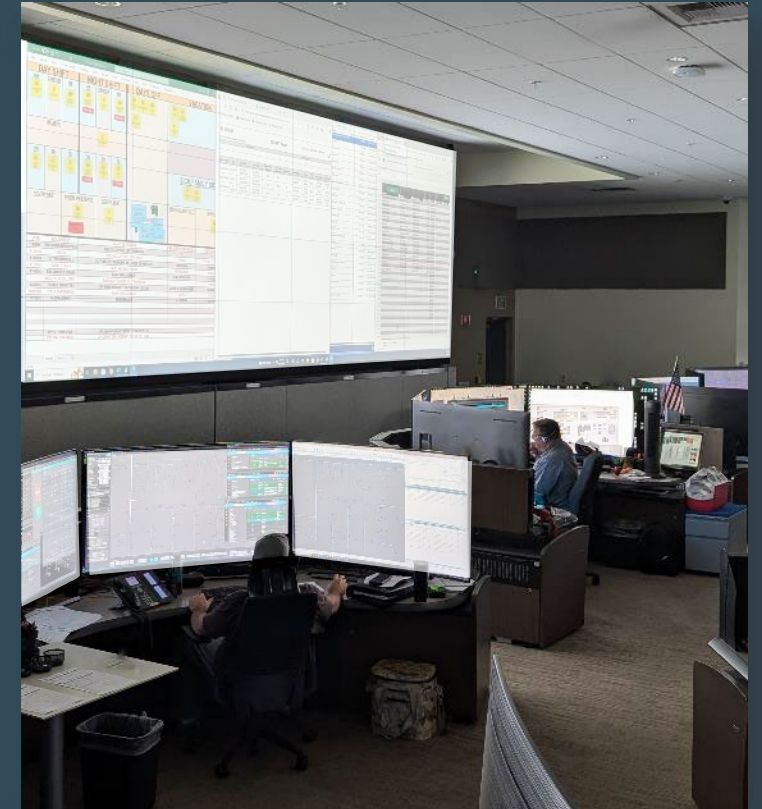


# Zero Carbon Plan

Alignment to Strategic Direction: SD-2 SD-3 SD-7 SD-9 SD-10 SD-19

## Grid Transformation

- Distributed Energy Resource Management System (DERMS)
- Outage Management System (OMS)
- Advanced metering – Distributed Intelligence Apps
- Energy Management System (EMS) Upgrade
- Distribution Automation (DA)
- System Readiness Strategy



**Distribution System Operators utilizing ADMS and DERMS**



# Zero Carbon Plan

Alignment to Strategic Direction: SD-2 SD-3 SD-7 SD-9 SD-10 SD-19

## Enterprise Operational Excellence (OpEx)

We're taking a strategically aligned approach and longer-term view of where we will put our resources to improve efficiency, increase effectiveness, and reduce cost

### Strategic Investment Plan

(3-5-10 Year View)

Long Term Prioritization of Work Categories

Comprehensive Cost Benchmarking

Process Improvement Focus Areas

Targeted Use Cases for New Technologies

Change Mgmt, Communication, & Workforce Development

Efficiency & Cost Optimization Initiatives Supporting the Strategic Investment Plan



# Zero Carbon Plan

Alignment to Strategic Direction: SD-2 SD-3 SD-7 SD-9 SD-10 SD-19

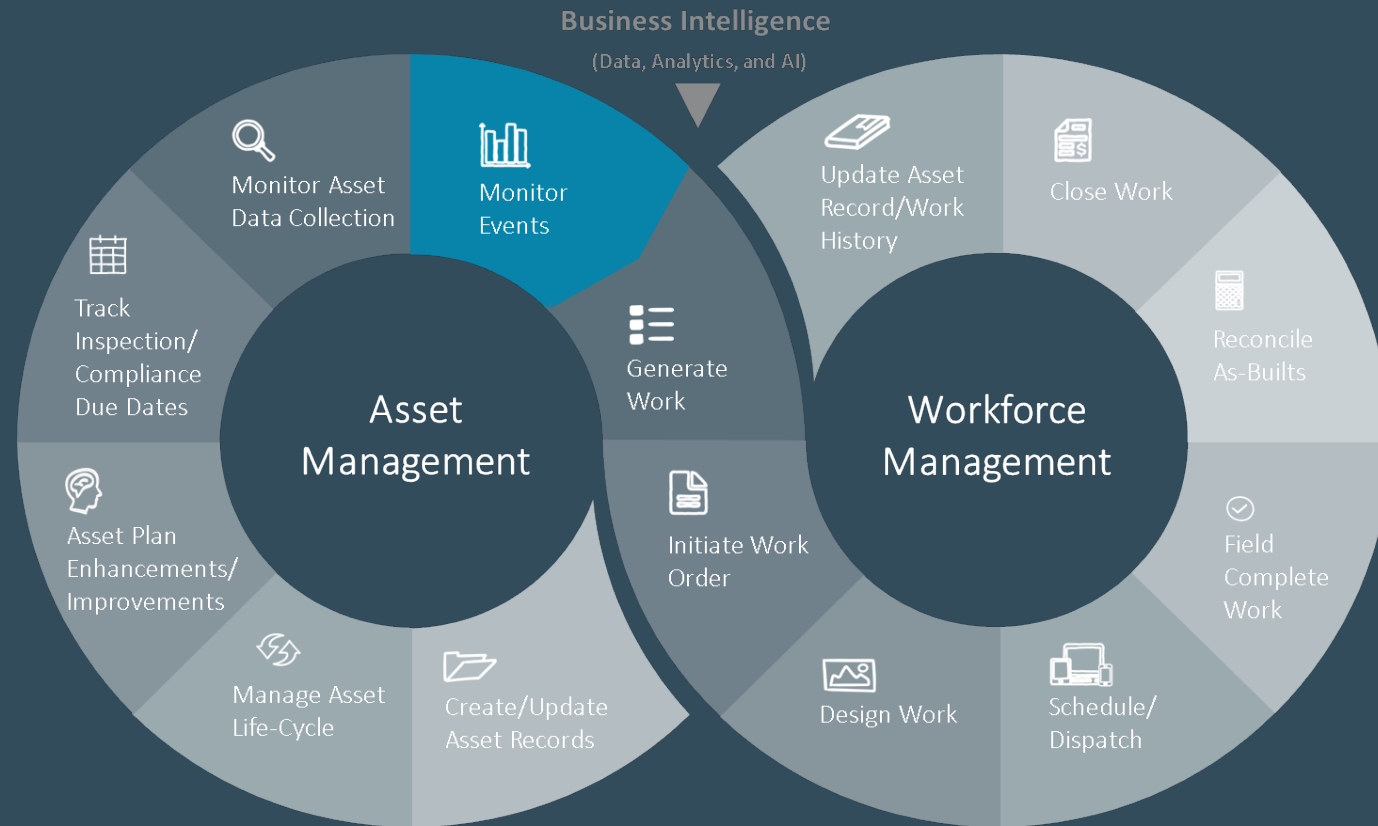
## Asset Management & Analytics

- Performance
- Investment Planning
- Health Index
- Analytics

## Workforce Management

- Scheduling
- Mobile Work Management
- Field Mapping

### 360-Degree Asset & Work Management Lifecycle





# Zero Carbon Plan

Alignment to Strategic Direction: SD-2 SD-3 SD-7 SD-9 SD-10 SD-19

## Environmental Leadership

- Sustainable Operations & Habitat Conservation Plans
- Remediation cleanup at legacy sites
- Environmental Compliance and Permitting
- Biodiversity Enhancement & Climate Adaptation Resilience



**Big Hill Lookout and Union Valley Reservoir**



# Community Impact

Alignment to Strategic Direction: SD-5 SD-13 SD-15

**We are building a workforce that represents the communities that we serve:**

- Sustainable local workforce
- Building our skilled workforce through our entry level and apprentice programs
- Creating new pathways
  - Scholarship Programs
    - Multi-utility collaboration opportunities
  - Powering Careers
  - Bridging Program
- Partnership with Sacramento State University's power engineering program

