# Exhibit to Agenda Item #2

Present the Load Management Standard (LMS) Compliance Plan.

Board Energy Resources & Customer Services Committee Meeting and Special SMUD Board of Directors Meeting Wednesday, October 18, 2023, scheduled to begin at 6:00 p.m. Auditorium, SMUD Headquarters Building



Powering forward. Together.

# Background

Load Management Standard (LMS) became effective April 1, 2023

#### **Objectives:**

- Encourage the use of energy at off-peak hours
- Improve system efficiency and reliability
- Reduce fossil fuel consumption and greenhouse gas
  emissions

#### Requirement

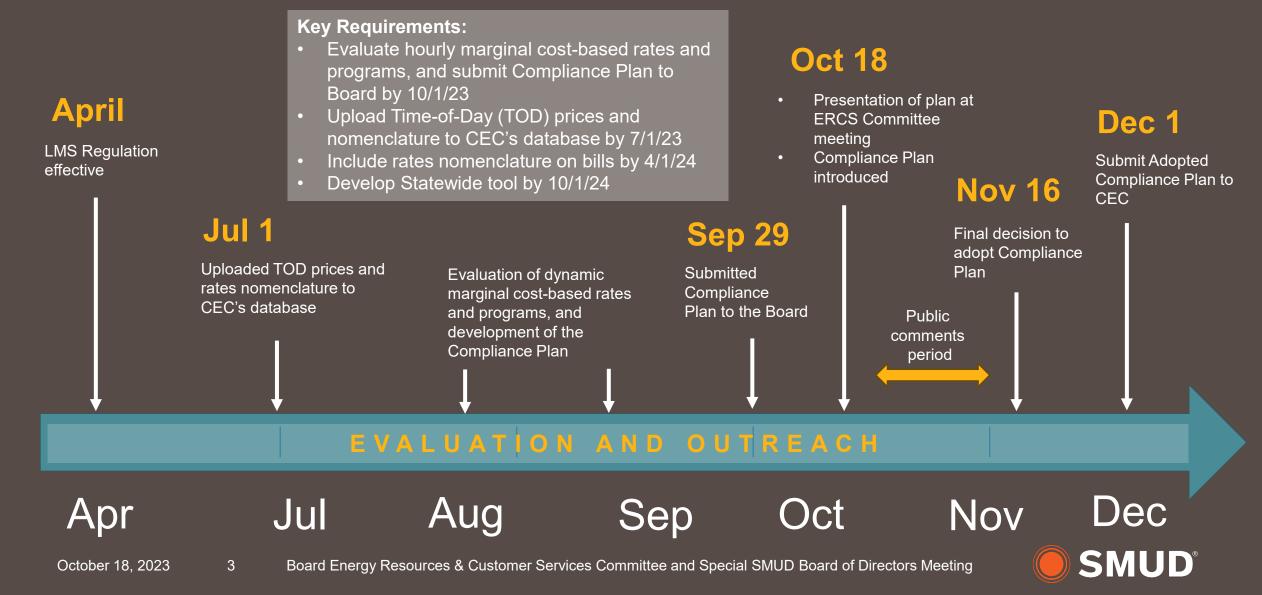
 Develop hourly marginal cost-based rates or programs that allow automatic response for all rate classes for which such rates or programs will materially reduce peak load SMUD has a long history of achieving the same objectives through rates and programs

Our rates are marginal costbased

Strategic Direction SD-2 has same objectives to reflect cost of energy, encourage energy efficiency, conservation and carbon reduction



### Load Management Standard (LMS) Regulation Timeline



# SMUD Time-of-Day (TOD) Rates

- SMUD's TOD rates are marginal costbased
  - They balance many objectives and rate design principles, including SD-2 and LMS goals
- Rates are simple and easy to understand
  - We implemented TOD because of a successful SmartPricing pilot
  - Marginal cost-based TOD rates provide significant load reduction
  - It does not pass through risk of volatile electricity market
  - Participation is >96%



Residential TOD provides 4-8% peak load reduction, 12,000 tonnes reduction of GHG and \$11-16 million in commodity savings.



# Portfolio of Load Flexibility Programs

#### Residential

- My Energy Optimizer (MEO) Partner
- MEO Partner+
- PeakCorps
- PeakConserve
- Managed EV charging pilot

Commercial

- PowerDirect
- Commercial Virtual Power Plant
- Vehicle to Grid pilot

Combined benefit of 364 – 1325 MW Without the need of complex dynamic rates





## **Pricing Risk with Dynamic Rates**

- Our combination of TOD rates and load flexibility programs balance many rate design objectives, including LMS goals
  - Dynamic rates pass through market volatility to customers
    - Impact on customer experience
    - May reduce participation in load flexibility programs
  - Our TOD rates reduce customer exposure to volatile energy markets
    - Customers would have experienced substantially higher bills in December 2022 with pass through of market prices

#### 2022 Average Monthly Market Prices (NP-15)

Month	Avg. Daytime Price (\$/MWh)		Avg. Nighttime Price (\$/MWh)	
January	\$	54.89	\$	50.17
February	\$	48.43	\$	46.58
March	\$	48.09	\$	45.24
April	\$	63.40	\$	63.44
May	\$	67.86	\$	65.06
June	\$	77.34	\$	68.66
July	\$	80.59	\$	67.34
August	\$	104.93	\$	87.21
September	\$	130.24	\$	96.46
October	\$	73.36	\$	65.75
November	\$	93.51	\$	88.70
December	\$	271.06	\$	256.14



## Recommendation

#### Not recommending dynamic rates at this time.

- Current Time-of-Day (TOD) rates provide significant peak load reduction.
- Passing through market prices to customers risks exposing customers to extreme market volatility.
- Hourly rates are more complex than our simple easy to understand TOD Rates.

#### Not recommending programs link to CEC's rate database at this time.

- Current programs designed to achieve significant peak load reduction.
- SMUD is piloting programs to refine our customer experience, ensure operational value and measure cost effectiveness
- Will continue to evaluate how to incorporate real time/day ahead marginal costbased price signals.



### **Requested Action**

Adopt the proposed Load Management Standards Compliance Plan at the Board Meeting on November 16. Once adopted by the Board, staff will submit the Compliance Plan to the CEC.

