



# **Item 8: Advanced Grid Technology Acceleration Projects (GFO-24-312)**

*June 22, 2026 Business Meeting*

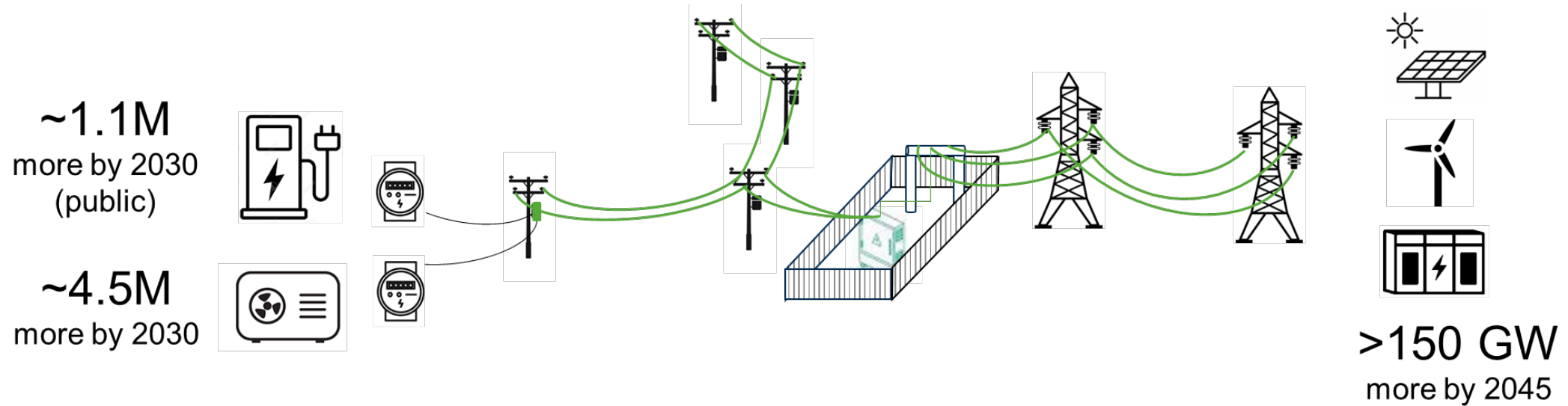
Sebastian Rubio Ruiz, Energy Commission Specialist  
Energy Research and Development Division  
Grid Innovation Unit



# Background, Motivation, and Overview

California's climate and energy goals require rapid, large-scale deployment of renewable resources and electrification of end uses

- Advanced grid technologies can help balance pace, affordability, reliability, and more



**Purpose:** Develop and demonstrate advanced grid technologies to validate performance and inform incorporation into grid planning and operations.



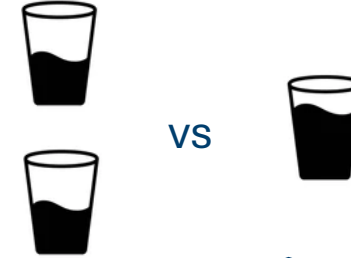
# Benefits to Californians



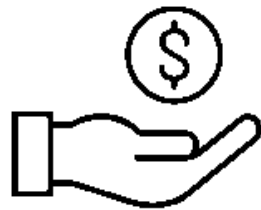
Faster grid connections



Improve awareness and control



Increase grid utilization



Promote affordability



Accelerate climate progress



# New Sun Road, P.B.C.

MAGIC – Microgrids for Advanced Grid Interaction and Control



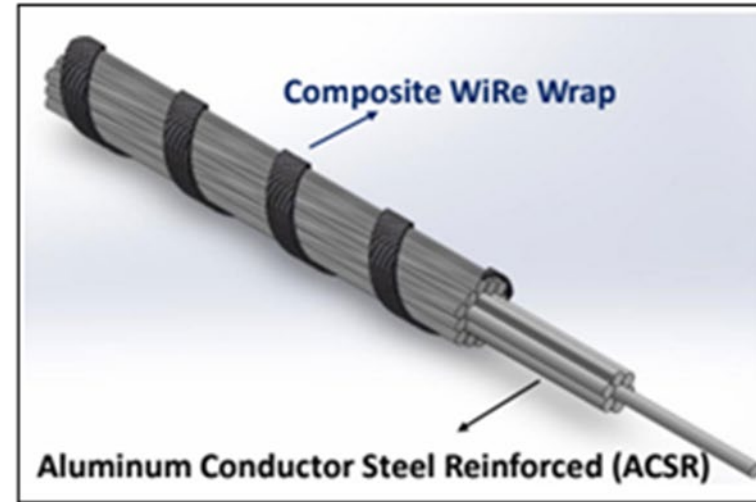
- Advanced microgrid control technologies for distribution grid services
- Two demonstrations in rural and urban communities
  - Tomales Community Microgrid
  - East LA Community Microgrid



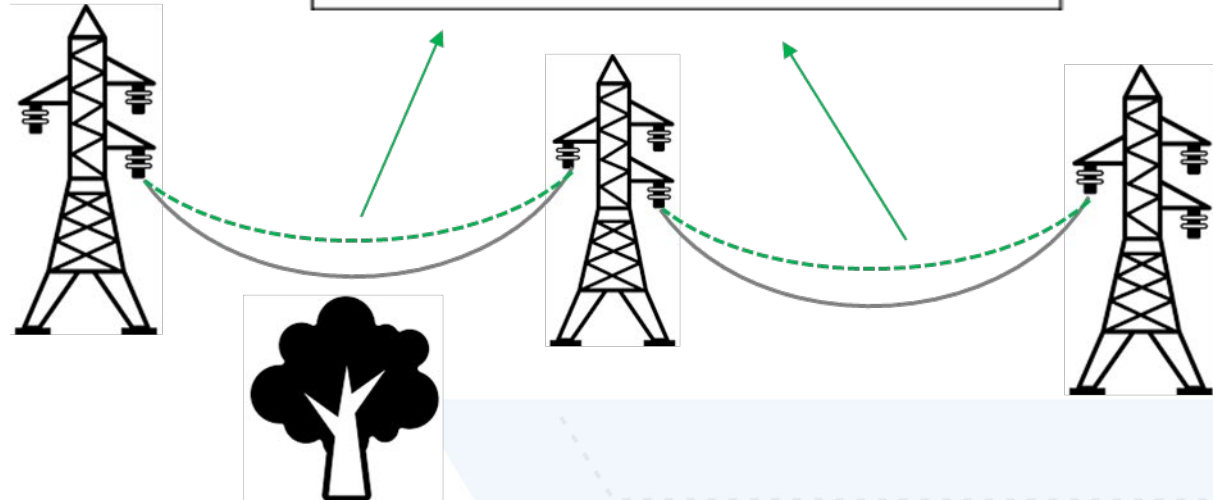
# GridWrap, Inc.

## Composite WiRe Wrap: Advancing Grid Capacity and Wildfire Safety in California

- Composite wrap directly installed on existing lines to prevent sag, carry more power
- Testing with San Diego State University and Idaho National Laboratory
- Promotes affordability, reliability, and greater grid capacity



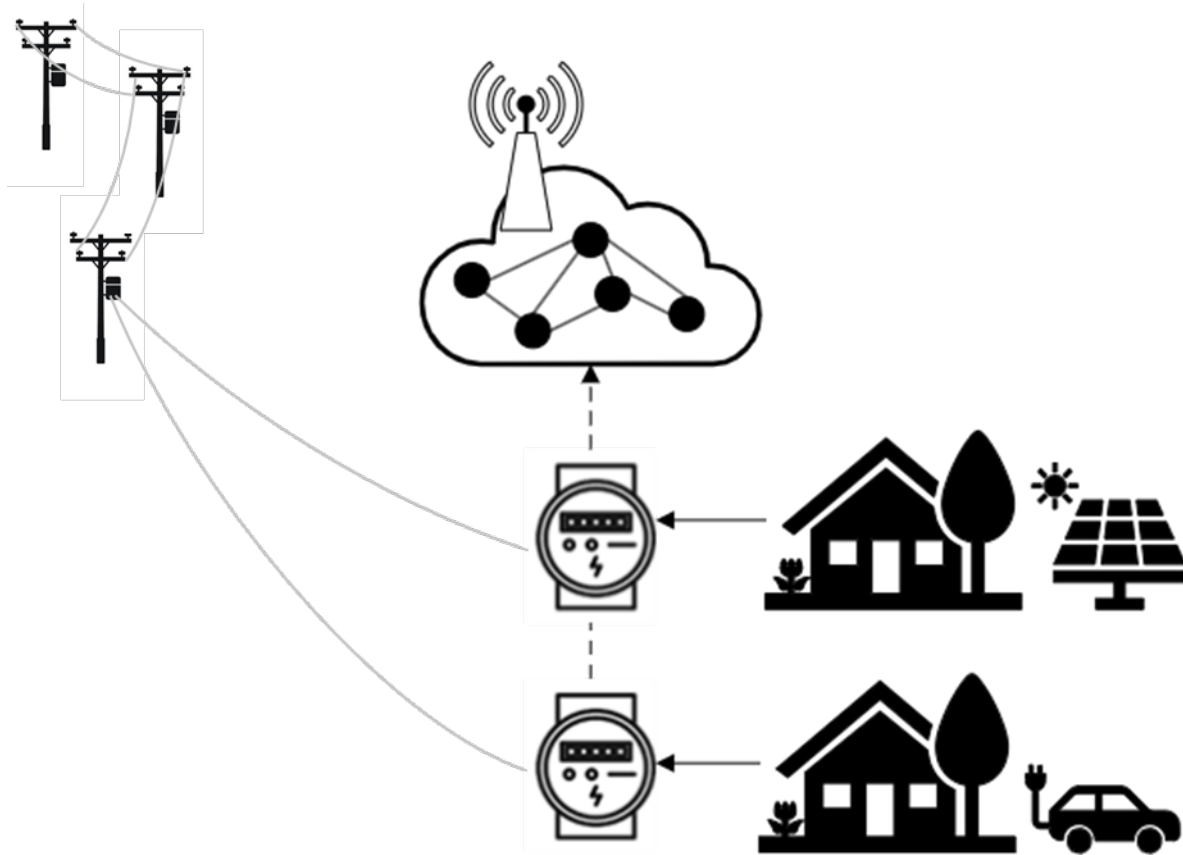
Source: GridWrap





# Lawrence Berkeley National Laboratory (LBNL)

## Line Impedance Network Estimator (LINE) for Grid Mapping via Smart Meters

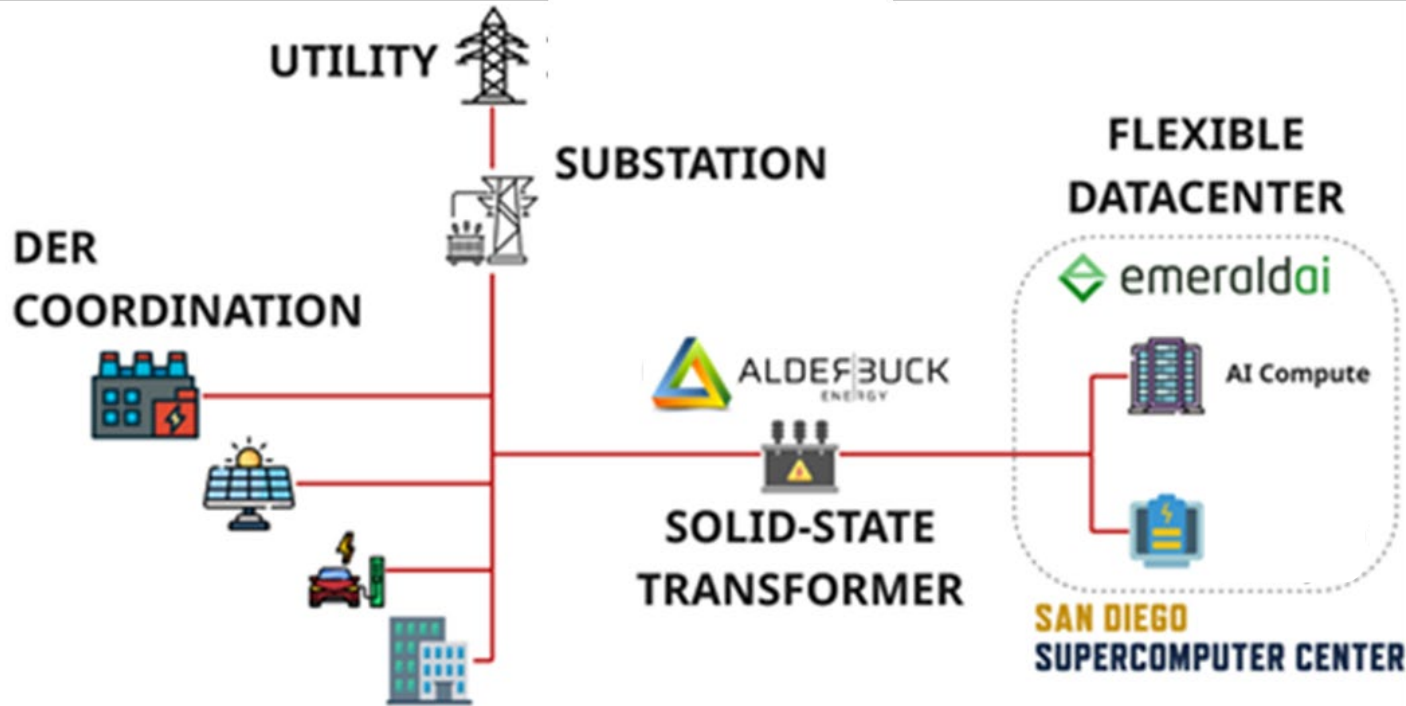


- Next generation smart meters for estimating local grid characteristics
- Reduces need to send in person inspectors
- Field validation in San Francisco Bay Area



# UC San Diego

## Accelerating Grid-Interactive, Flexible Data Centers in California



- Grid integrated solid-state transformer (SST) system
- Flexible datacenter load at the San Diego Supercomputer Center
- Inform planning for new data center loads



# Staff Recommendation

- Approve 4 grant agreements
- Adopt staff's recommendation that these actions are exempt from CEQA