## FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

May 2-3, 2019 San Diego, CA

## Welcoming Remarks Scott Crider

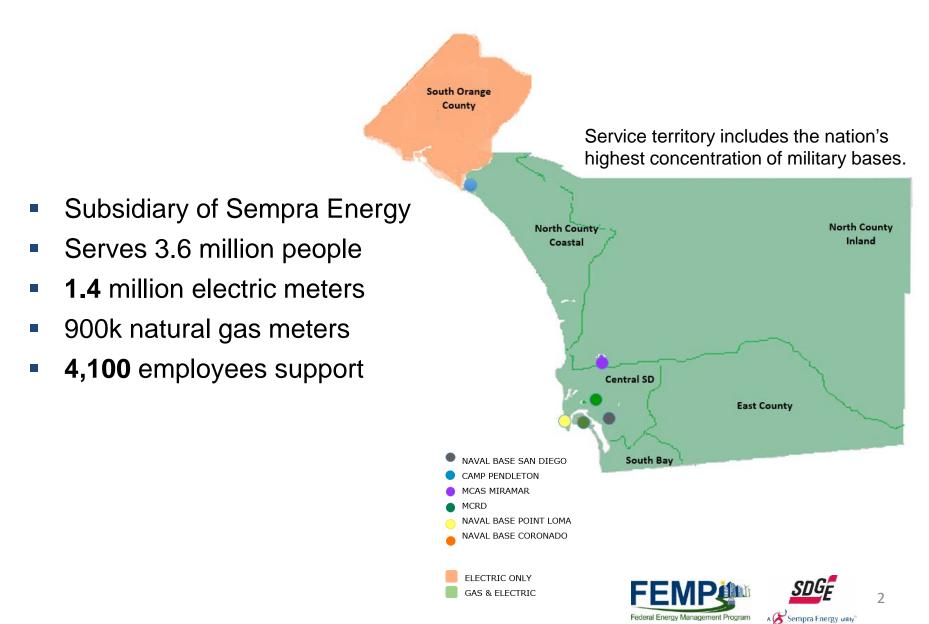
### Vice President, Customer Services

## Hosted by





### San Diego Gas & Electric



Our Mission: We improve lives and communities by building the cleanest, safest and most reliable energy company in America.

# clean

### 45% Renewable Energy

Leading the nation in delivering clean energy

## safe

2018 Edison Award

National recognition for wildfire risk reduction

### 2,800 EV Chargers

Cleaner air by improving access to driving electric

## 30<sub>mw</sub>/120<sub>mw-hours</sub>

Largest lithium-ion battery storage owner in North America increasing renewable integration

### 24/7 Gas Emergency Crews

Improving emergency response times

#### 175 Weather Stations

America's largest utility-owned network

# reliable

#### 2018 ReliabilityOne<sup>™</sup> National Reliability Award

Superior performance amongst national utilities

### 60% Underground

Over 10,000 miles of electrical lines undergrounded

### 3,300 Mobile homes upgraded

Upgraded service installed at 30 parks

# Resilience

"The ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. Resilience includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents."

- Presidential Policy Directive (PPD) 21 regarding Critical Infrastructure Security and Resilience



### **Energy Storage & Microgrids**

- Global leader in energy storage with 107 MW of storage:
  - America's largest lithium-ion battery storage facility
  - Vanadium Redox Flow Battery demonstration project
- Over 40 MW of customerowned energy storage
- Built the first large-scale utility microgrid in America

#### Borrego Springs, California



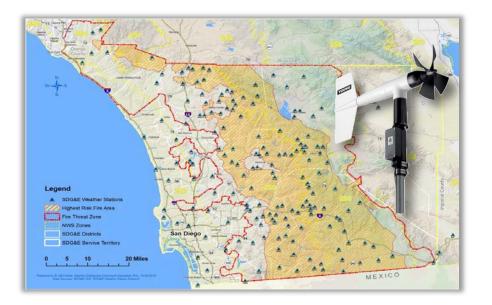
#### **Escondido Battery Storage Facility**







### Wildfire Safety



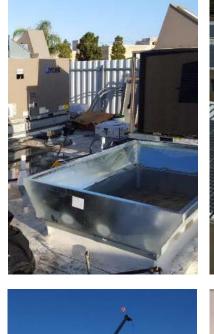


- Wildfire safety is No. 1 risk for SDG&E
- Built most granular utility-owned weather network with +200,000 pieces of weather data collected daily
- Over 100 high definition cameras improve fire detection
- Wireless fault indicators provide more precise information on where to look for ignitions
- Fire prediction and modeling
- Stakeholder and community partnerships



### Federal Utility Partnerships

- Implementation of nearly \$400,000,000 in UESC work for Federal agencies since 1995
- Development of the Armed Forces Program (AFP) demand response program specifically for DoD installations located in California
- Microgrid technology support
- Emergency response/fire threat mitigation
- Assist Navy, FAA and Marines with energy storage initiatives
- Technical training assistance









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