

### East Bay Community Energy – Solar and Storage for Resilience

PRESENTED BY: JP ROSS Senior Director of Local Development, Electrification and Innovation

NOVEMBER 14, 2019

# WHAT IS EBCE?

- East Bay Community Energy (EBCE) is the Community Choice Aggregator (CCA for Alameda County)
- Electric utility serving 560k meters/1.3M residents in Alameda County
- Annual load of 6TWh and \$450M/yr revenue
- Board oversight by elected officials
- EBCE reinvests earnings back into the community to create local green energy jobs, local energy programs, and clean power projects



**EBCE Electricity Products** 



## CALIFORNIA CLEAN ENERGY FUTURE

California's Policy for renewable energy and electrification

- SB100 100% renewable energy by 2045
- Solar is the most cost effective resource both behind the meter and utility scale
- 5 million electric cars by 2030 with \$2.5B invested in charging
- 40-270GW of solar and 30-90GW of storage will be needed to meet increased load depending on level of integration solutions



### PSPS - SOS

- 2 events in October impacting up to 50k EBCE accounts, resilience needs are increasing with Climate Change challenges



### **RESOURCE ADEQUACY ON THE DECLINE**

- Retirements tightening Resource Adequacy
- Import capacity is also constrained as coal retirements and increased renewable standards will limit exports from WECC states

Expected Resource Retirements by 2030	GW Retiring
Nuclear (Diablo Canyon)	2.3 GW
Once through Cooling (OTC)	3.6 GW
Combined Heat and Power (CHP)	~2 GW
Out of State Imports	4.5 GW
Total Retirements/At Risk Imports	12.4 GW

### Joint RFP For Resilience and RA

#### County Marin County Purpose: San Francisco County EBCE, PCE, SVCE and SVP are seeking proposals for San Mateo a comprehensive offering to provide a minimum of 32.7MW of Resource Adequacy (RA) capacity and resilience to their residential and commercial Santa Clara customers through the development of customersited Distributed Energy Resources (DERs).

\*Note: The cities of Alameda, San Jose, Palo Alto, Pleasanton, Newark and Tracy are outside of the service areas of the soliciting agencies.

### Purpose and Goals

- Seeking to expand the market for distributed Resource Adequacy (RA) capacity and accelerate the adoption of DERs in our service territory
- Support the deployment of meaningful resilience projects for their customers to address Public Safety Power Shutoff (PSPS) impacts
- Procure economically viable and competitive RA capacity which EBCE can count towards state obligation through Proxy Demand Response (PDR)

# **EBCE Program Elements**

- Targeting a minimum of 10MW of residential and commercial Resource Adequacy
- Minimum of 20% to be installed at DAC/Low Income, CARE/FERA and Medical Baseline accounts
- New and existing solar and solar+storage are eligible for enrollment
- Deployment by September 2020 and 2021 to coincide with EBCE RA filing and summer fire seasons
- Projects must be in EBCE service territory and able to island to provide backup power during outages
- Local workforce and prevailing wage is required for all installations
- EBCE has provided anonymized commercial interval data and solar rooftop potential to bidders

# Municipal Storage Program Timing

- EBCE/PCE jointing evaluating critical facilities in Alameda and San Mateo County for S+S with BAAQMD grant
- 500 facilities across both counties
- Will be issuing RFI in Jan/Feb to develop plan for municipal storage retrofits
- Will issue followup RFP for municipal Resilience/RA in Spring 2020



# Go-to-Market & Engagement Strategy

- Participating customers will have lower cost of ownership through ongoing RA payments from EBCE (up to 10 years)
- Leverage EBCE role and relationships to increase customer awareness
- Utilized anonymized interval data and solar rooftop provided by EBCE to target outreach efforts
- Proposals will need to be optimize customer value streams (Demand Charge management and Time of Use rates) and EBCE values (Resource Adequacy and wholesale market price exposure)

# NEW MODELS TO CLEAN THE GRID

- EBCE has contracted for 550 MW of new solar and wind with 137MW of storage
  - Average price of new solar is \$22/MWh
- EBCE has over 250MW of existing BTM solar & 15MW of storage
- New stationary storage and battery electric vehicles must play a role in addressing emerging RA constraints
  - By 2025 Electric vehicles will have >10x EBCE peak load in battery capacity
- PG&E PSPS events will increase appetite for behind the meter storage
- New models to build community resilience and stabilize the grid will be lead by CCAs and public private partnerships

THANK YOU

> JP Ross jross@ebce.org