

Energy Resilience Activities Overview

Executive Committee 9/4/24



Overview of Resilience Efforts to Date

- Objective: Provide an overview of current Resilience related services and planned/ongoing future work
- Energy Resilience is an increasing concern to our local communities in light of historical power outages and planned power shutoffs related specifically to wildfire risk
 - There have been 5 Public Safety Power Shutoff (PSPS) events during Ava's service. The first was in October 2019 impacting nearly 50,000 customers and the last event was July 20, 2024 impacting 200 accounts.

Over the last several years, Ava has funded over 1,200 incentives for residential solar & storage systems and provided 200 portable back-up batteries for Medical Baseline customers at no or reduced cost.



Ava is currently developing a portfolio of over 60 critical municipal facilities in eight cities, such as community centers, libraries and fire stations, to increase energy resilience at these sites that provide public services



Ava is expanding its energy resilience efforts to Community Resilience Hubs through local support, technical assistance, and incentives for solar + storage.



Resilient Critical Municipal Facilities

Phase 1 Municipal Outreach & Project Identification

- Cities identified sites deemed critical to providing services during outages in their emergency response plans
- Ava developed a battery energy storage system (BESS) requirement to provide resilience based on facility load
- Ava confirmed which sites could host solar
- Ava identified Cities ready to sign a PPA with Ava to develop and operate resilience hubs

Phase 2 Technical Evaluation & Pre-development

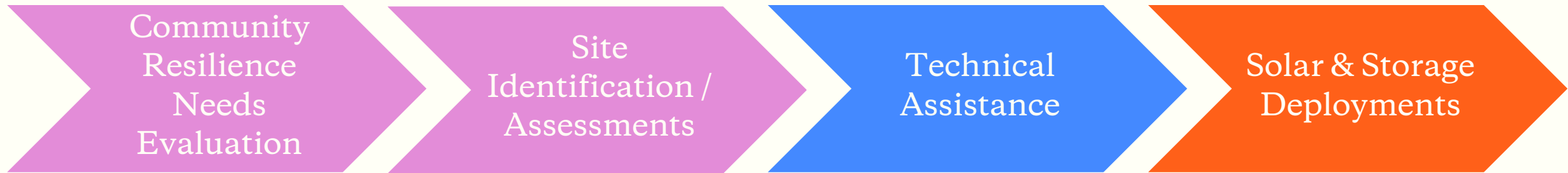
- Contracted with two engineering firms to assess the feasibility and identify sites best fit for solar and storage
- Developed standard PPA that was pre-negotiated with four City attorneys
- Identified 61 sites in eight Cities totaling 10 Megawatts of solar and 19 Megawatt-hours of batteries
- Sites include Senior and Community Centers, Libraries, Fire Houses, City Halls, Sports Centers, and others
- Developed Conceptual designs for all Cities that could be issued in RFP
- Issued RFP and are in negotiations with PPA counterparty

Phase 3 Contract Execution & Development

- Ava is currently negotiating a PPA for all sites with a solar/storage asset owner and plans to sign the PPA in the fall
- Ava is working with City Attorneys to execute solar and storage PPAs with Ava by the end of 2024
- Project development will start in early 2025 and all projects will be operational by end of 2027
- \$7M has been approved for this Program to ensure that City portfolios are cost effective even with some sites on Solar Billing Plan.



Community Resilience Hubs



- Ava's focus on supporting and enabling Community Resilience Hubs is scoped around energy related services
- Ava will seek the assistance of CBOs, along with program management and technical consultants to scale our efforts in a timely manner



Community Resilience Hub Initiative

Phase 1 Community Outreach & Project Identification

Outreach and Needs Evaluation via Community Grant Partner(s)

- To start Each Partner will:
- evaluate community needs via at least **3 public workshops** within 2 months of start
 - expand upon **case study work** underway, provide research on the types of potential site control, and expand understanding of organizations that are currently operating resilience hubs
 - help define **site ownership requirements and eligibility criteria**

Site Identification/ Project Assessments

- Over 3 years Each Partner will:
- identify a pipeline of resilience hubs sites through **community outreach, education, and research efforts**
 - Conduct at least **4 public workshops** per year to distribute information and toolkits
 - identify at least **90-100 sites** interested in becoming resilience hubs

Phase 2 Technical Assistance

- Technical assistance to **provide support and guidance** to community-based sites, helping them transition from resilience concept plans to identification of key parameters needed for solar and storage project development.
- **\$2M** has been approved for this phase. The goal of this phase is to provide technical assistance to up to 200 sites.

Phase 3 Solar+Storage Incentive

- Provide incentives for community resilience hubs to **install solar and storage** and connect with Ava's managed battery program.
- **\$20M** has been approved for this Program, with **\$10M in up-front incentives** allocated for resilience hubs and CARE customers with additional funding for ongoing performance payments.

State Case Study: Resilient Maryland

State-funded program operating since 2019 helping Maryland communities identify optimal microgrid and other DER configurations to bolster resilience and sustainability to safeguard from the harmful effects of prolonged power outages.

Budget: \$6M annual budget for 2024, capital grants support energy projects and require 50% cost share

Support Provided: Feasibility studies and grants for capital projects

Site control Requirement: all site entities to sign grant agreement

Operations Requirements:

- Requires staffed operations minimum of 14 hours/day during disruption/outage
- Public sites open for public use, housing development projects can be limited to serving residents
- Providing heating, cooling, charging, refrigeration services

Outcomes:

- **2023:** 5 sites operating after 5 years and \$7.5M total program award
- **2024:** 7 sites funded for capital support \$8.6M; total program spend will be \$16.6M



Scotland Recreation Center in
Scotland, Montgomery County, MD



Municipal Case Study: County of Santa Barbara Energy Assurance Services

County Govt-funded program since 2021 with initial grant from CEC to County of Santa Barbara. As of 2024, part of 3CREN (SB, SLO, Ventura counties) funded by CPUC. 3CREN provides outreach to CBOs

Budget: \$1.6M for 4 years (2024-28)

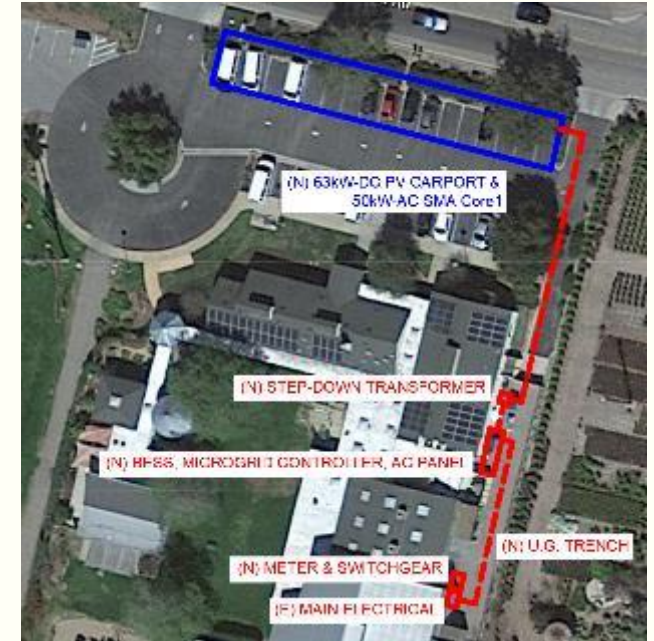
Support Provided: technical assistance + fundraising support to public sector sites. Includes energy audits, demand response, electrification, PV, BESS, microgrids; stand alone energy efficiency is allowed

Site control requirements: municipal governments including public sector schools, governments facilities, site control not required for community facilities. Site owner deals directly with PPA/EPC

Operations requirements: Duration and services are determined by applicant, agree to serve community, can include overnight stays. No program requirements for loads served.

Outcomes:

- Audited and provided EAS reports to 12 sites in 3 years
- Developed Resilience Hub toolkit funded by CA Resilience Challenge Grant



CCA Case Study: Clean Power Alliance Power Ready Program

CCA-funded program operating since 2022

Budget: \$3.15M implementation budget “first round” serving municipal sites.

- **2024-28 cycle:** Eleven sites pre-identified for new cycle; program will screen **5-10 sites each chosen by the 35 member agencies; 55 detailed assessments anticipated.**

Support Provided: supports with feasibility assessments, rankings, RFO solicitation prep, construction support, EV feasibility for Behind the Meter (BTM) solar and storage microgrid systems for normal operations and critical functions during outages to operate as emergency evacuation centers, command centers for emergency ops, resilience centers.

- Approved Energy Supplier finances, builds, operates system for 20 years. CPA pays Energy Supplier via PPA directly
- Member Agency provides site control and operations, pays energy bill

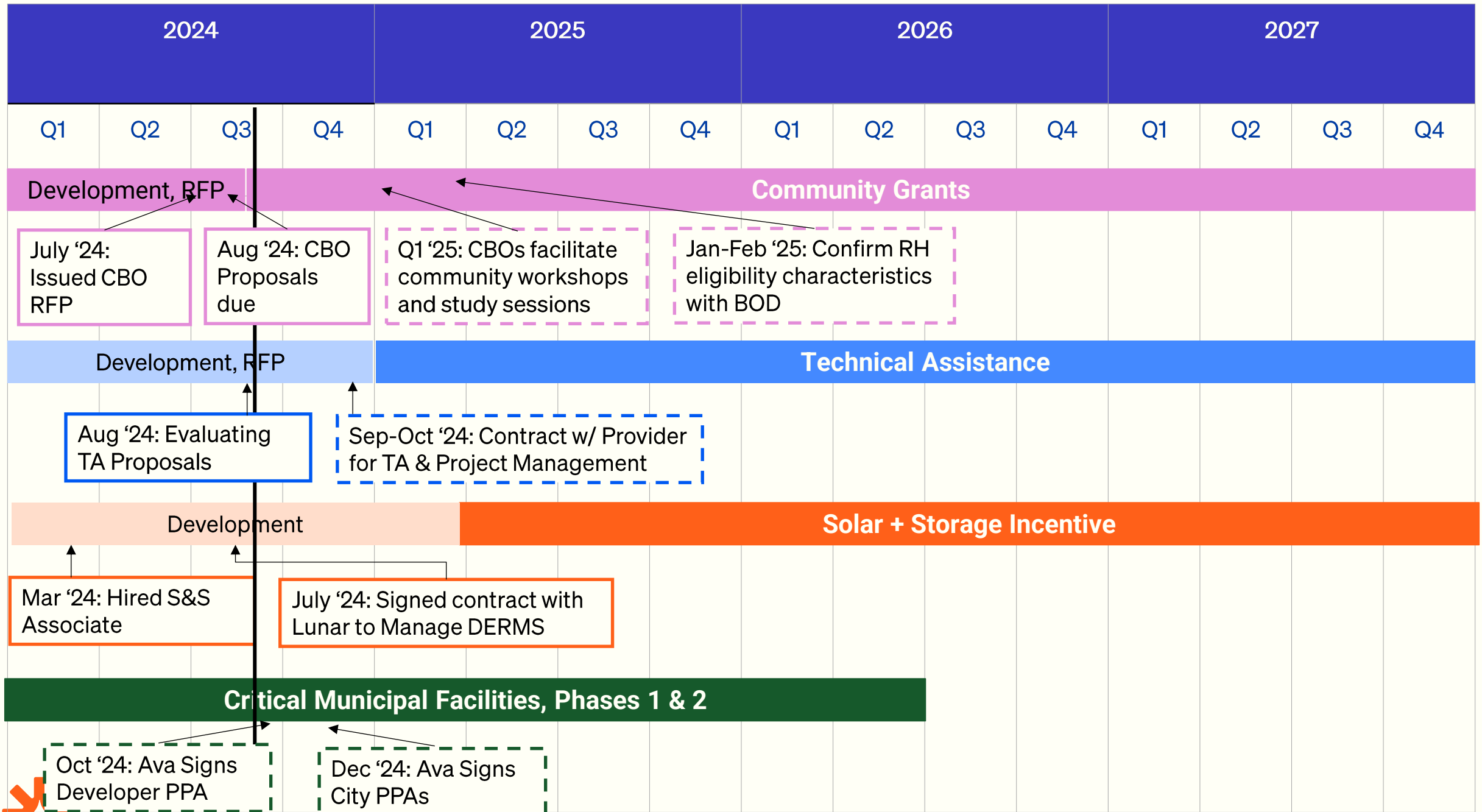
Site control requirements: municipal sites through member agencies, member agencies responsible for ensuring site control and operations during critical periods

Operations requirements: Operations Plan to ensure service through critical periods, minimum 4-hour duration for critical loads

Outcomes:

- 11 sites to PPA/EPC after 2 years and \$3.15M of total spend
- 2024 – 28 to do detailed assessments, 55 sites





Overall Budget

Total = ~\$37.6M for Resilience overall (~\$14.3M for Community Resilience Hubs)

- **Community Grants** - ~\$600k in Community Grants for Phase 1
 - ⑩ \$300,000 for each grantee over three years (for 1-3 grant recipients)
- **Technical Assistance** - \$2M to support project development in Phase 2
- **Solar + Storage** - \$28M in upfront and on-going incentives and performance payments over 5 years
 - ⑩ Resilience Hubs and CARE Customers: \$11.7M
 - ⑩ Market Rate: \$16.3M
- **Critical Municipal Facilities** - \$7M in support of municipal resilience hubs

