Energy Resilience

Project examples and experience in vulnerable communities (Inland Empire)

GRID ALTERNATIVES

Overview

1. Into: About GRID (1 slide)
2. Resiliency: challenge and goals, case studies, features, lessons learned (6 slides)
3. Takeaways: prioritizing resiliency, reflection, GRID points of contact (1 slide)

About GRID

- **History**
  - Founded in 2001; leading voice in low-income solar policy; largest non-profit renewable energy installer
- **Regions**
  - Affiliate regions throughout California, in Colorado, and Mid-Atlantic, and international (Nicaragua, Mexico, Nepal) and tribal programs
- **Mission**
  - Build community-powered solutions to advance economic and environmental justice through renewable energy. We envision a rapid, equitable transition to a world powered by renewable energy that benefits everyone
- **Impact**
  - People: 22,235 households; 181 community facilities; $590M lifetime savings
  - Planet: 2.4 (GWh); 1.6M tons of GHGs removed; ~311,000 cars removed
  - Employment: 32,000 trained; 293,000 hours trained; 310 job-training partners

Energy Resiliency

- **Challenge**
  - Extreme weather events are destroying homes and communities which leads to displacement, and they causing health problems, including deaths. These global realities have disparate impacts on economic and environmental justice communities as well as indigenous communities

- **Goal**
  - Investments to support resiliency for and with these communities should be prioritized.

Energy Resiliency (con't)

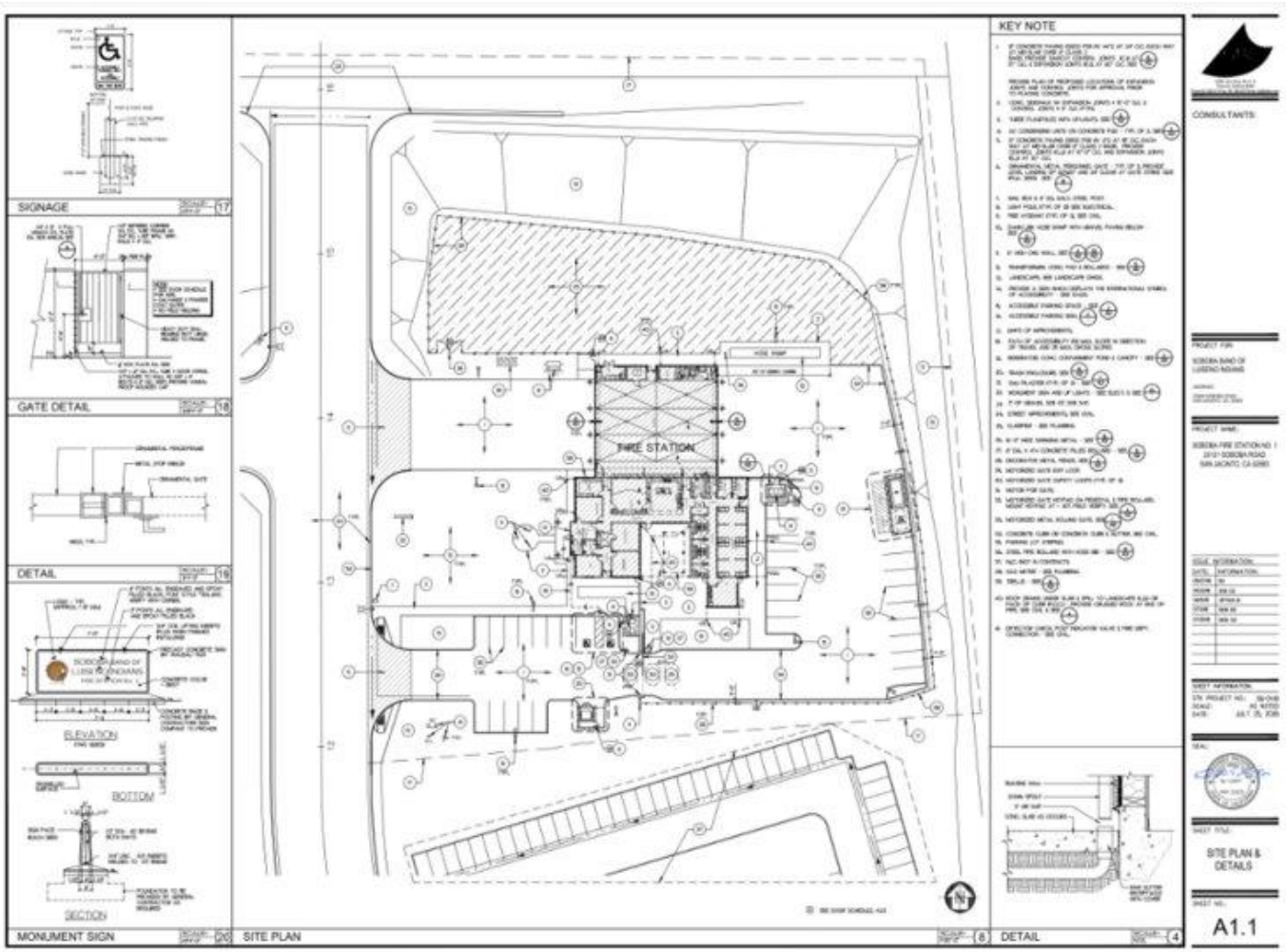
- **Case Studies**
  - Chemehuevi Microgrid (UCR; funded by CEC) (2020)
  - SunAnza low-income community solar pilot (2022)
  - Soboba Fire Station (2022)
  - Noteworthy: Vista Verde (TCC Ontario)
- **Features**
  - Collaborative action
  - Meaningful participation of frontline communities
  - Critical facilities
  - Local control
  - Community engagement, education and job training

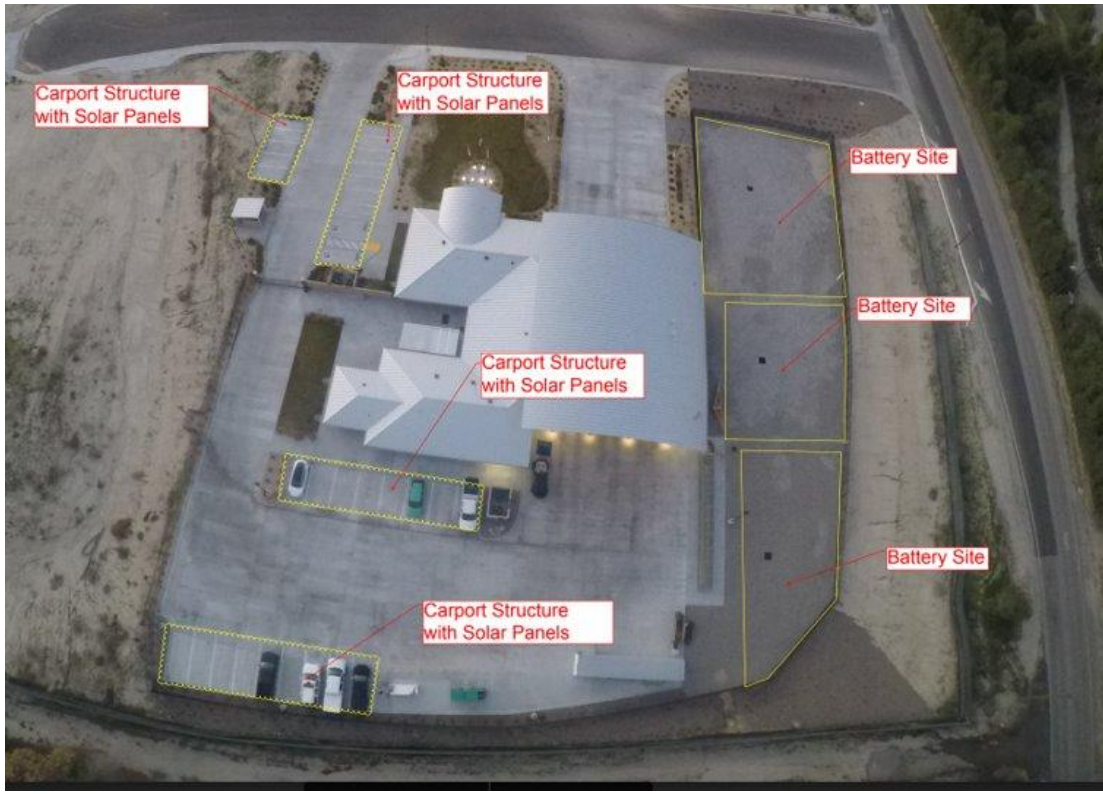
Energy Resiliency (case studies)

- **Chemehuevi Microgrid (UCR; funded by CEC) (2020)**
  - 90 kW solar PV carport system + 25 kW/125 kWh flow battery
  - Provide uninterruptible power at the Chemehuevi Community Center
    - Single SCE substation with frequent outages prior to installation
  - Results: 50% reduction in annual electricity costs, 69kW peak reduction, GHGs reduction, grid reliability
- **SunAnza (GRID; funded by CSD) (2022)**
  - ~1 MW ground mount solar array on Santa Rosa Band of Cahuilla Indian land
  - Deliver first successful low-income community solar project
    - Full energy offsets for members of Santa Rosa Band tribe, load management
  - Results: job training, 200 members enrolled, many “firsts”
- **Soboba Fire Station (GRID; funded by CEC) (2022, pending)**
  - 50 kW solar PV carport + 50 kW/500 kWh flow battery
  - Provide reliable energy to a site that would serve dual functions as fires tation and community center in the event of outages
    - 17 grid outages in the previous 3 years

Chemehuevi Microgrid

SunAnza, low-income community solar





Soboba Fire Station

Takeaways

- **Prioritizing Resiliency**
  - We have organized and designed our lives around a fossil-fuel based extractive economy. While extreme weather events affect all of us, those who have been denied opportunities and investments are the ones whose lives, health and overall well-being are disproportionately affected

- **Reflection**
  - If the climate events we are experiencing are a byproduct of the ways in which we have chosen to organize ourselves, how do we move into a new way of being? What must we confront and commit to doing differently in order to create a near-future where ALL of humanity is recognized?

Thank You

GRID Points of Contact

- Jaime Alonso, Executive Director (GRID IE); jalonso@gridalterntives.org
- Lisa Castilone, Tribal Program Manager (GRID IE); lcastilone@gridalterantives.org
- Dan Dumovich, Director of Strategic Initiatives (GRID); ddumovich@gridalternatives.org