



## Fallbrook 2.0 BESS

Fallbrook Community Planning Group

February 2024



# Background



- The project includes construction of a battery energy storage system (BESS) approved by California Public Utilities Commission (CPUC) on December 14, 2023<sup>1</sup> with a target operation date of August 2024 in response to **emergency procurement directed by the CPUC**.<sup>2</sup>
- The project will increase resiliency and reliability of the community and grid.
- SDG&E will own, engineer, construct and operate the BESS facility in accordance with all codes, best practices and laws (including for example: grading, environmental/biological/cultural monitoring, dark sky lighting, noise, work hours, traffic, storm water, fire/safety and water quality).
- The development of the utility-owned BESS project is necessary to maintain electricity service which is essential to the public health, safety, and welfare.
- The utility-owned BESS project is governed by Commission General Order 131-D as it relates to permitting electric facilities in California.

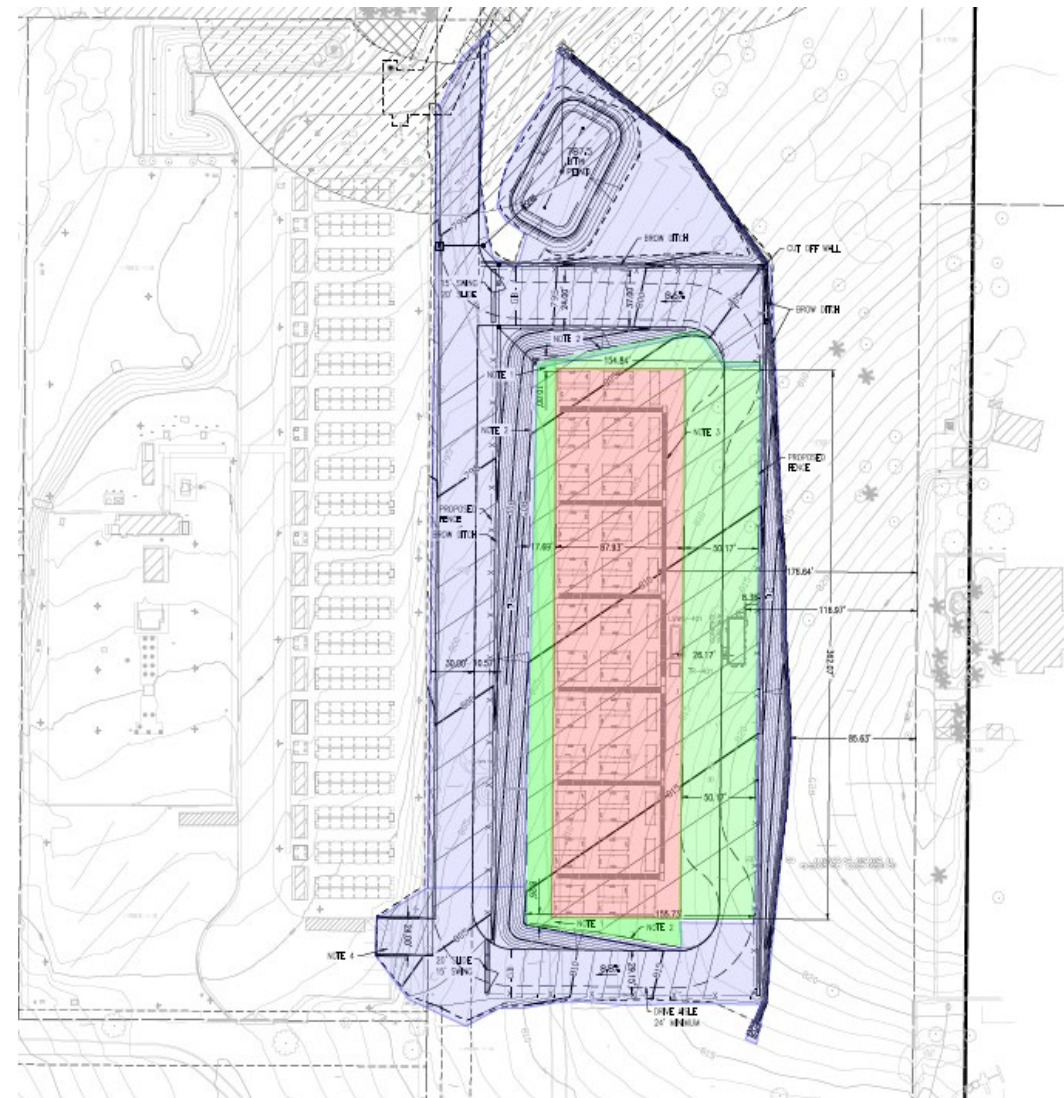
# SDG&E BESS and Microgrids

- Projects presented represent only SDG&E owned and operated energy storage sites.
- SDG&E has developed energy storage throughout San Diego County, increasing resiliency and reliability.
- There are other energy storage projects within San Diego County owned and operated by independent power producers.
- As reference, utility-owned energy storage amounts to only about ~10% of the energy storage in California.



# Project Overview

- Fallbrook 2.0 BESS is a 30 MW/120MWh lithium-iron-phosphate (LFP) battery energy storage system (BESS)
- The project will be built on SDG&E owned property adjacent to the existing Fallbrook 1.0 site ([1397 E. Mission Rd, Fallbrook, CA](#))
- Overall scope includes:
  - Applicable safety and environmental mitigation including soil, hazard, noise testing, etc.
  - Grading and development of site to prepare for the construction of the new BESS
  - Installation of new BESS facility and interconnection into existing SDG&E facilities
  - Commissioning and Testing for market operations





# SDG&E Safety

- **Cell Safety:** highly stable **lithium iron phosphate** (“LFP”) (UL 9540 and 9540A listed and compliant; NFPA 855 compliant)
- **Electrical safety:**
  - a) E-Stop
  - b) Module, rack, and inverter AC/DC overcurrent/voltage protection
  - c) Insulation resistance monitor
  - d) Lightning protection
- **Fire protection safety:**
  1. UL 9540 listed and compliant: lab tested to ensure nonpropagation at cell, module, and rack unit levels; NFPA 855 ensures nonpropagation between enclosures
  2. Energy Management System (EMS) – monitor all cell and module temperatures; systems are liquid cooled to regulate within +/- 3°C and shut down if threshold reached
  3. Detectors – Smoke, Temperature and Gas
  4. Ventilation and smoke exhausting to prevent deflagration
  5. Water – Dry pipe sprinkler system
- **SDG&E Procedures and Plans:**
  - Emergency Action Plans and Emergency Response Plans
  - Notification and Communications plans
  - Third Party Fire Brigade (Capstone)
  - 24/7 Monitoring
  - Safety Training and On-site Tours
  - SDG&E Energy Storage Task Force



# SDG&E Environmental Review



SDG&E performs a robust environmental review for each proposed project whether on an existing substation site with little to no natural or cultural resources, or more green-field sites. The review is completed by subject matter experts for:

- Paleontological Resources
- Archaeological / Cultural Resources
- Natural Resources
- Aquatic Resources
- Water Quality, including preparation of a SWPPP when necessary
- Air Quality
- Noise
- Hazardous Materials
- Safety

SDG&E issues an *Environmental Release* for each job package prior to construction. This *Release* includes the environmental measures necessary to ensure compliance with local, state, and federal requirements.

# Project Timeline





# Questions