



Solar Plus Storage Procurement for Cooperatives

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National Renewable Energy Laboratory

Solar Energy Innovation Network

Round Two

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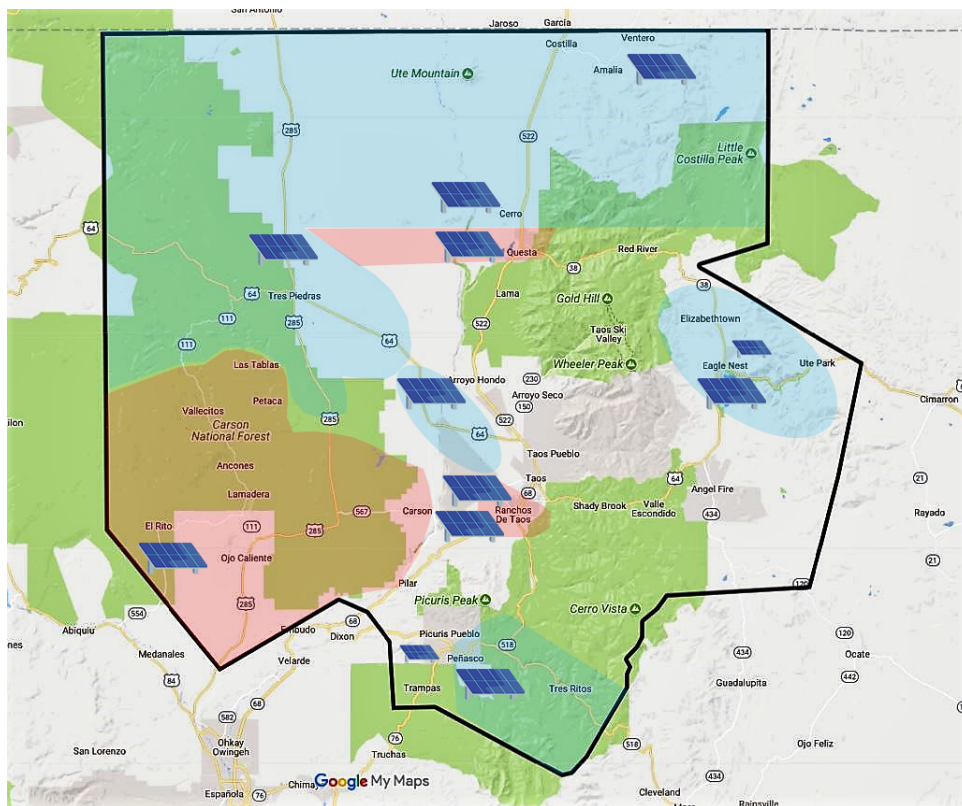


The map of KCEC's solar arrays and...

Going into 2020: 16 MW Solar plus 2.5MW BTM Solar

Two locations in 2020 for new battery energy storage systems (BESS)

1. Angel Fire; 24 MWh
2. Taos Mesa – near the airport; 3 MWh



The Procurement Process



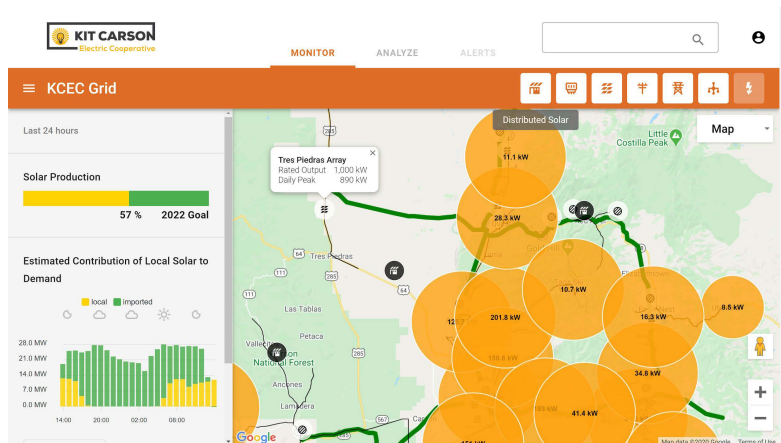
- Guzman Energy, KCEC's energy supplier, drafted and implemented the RFI & RFP
- Partnering with Torch Clean Energy and Kit Carson Propane (KCEI)
- PPA is between KCEC and Kit Carson Energy (Propane). Using our propane company with its tax status. Entered into a leasing deal. KCEI will utilize the ITC, then will sell the energy to KCEC for 9 to 12 years. KCEC will have the option to purchase at pre-negotiated price. KCEC will not take on debt
- There are provisions in the contract to potentially purchase the assets after seven years
- Panels and equipment were ordered in a "safe harbor" to secure the lowest cost price and to qualify for ITC



Expected Use Cases for Solar plus Battery Storage

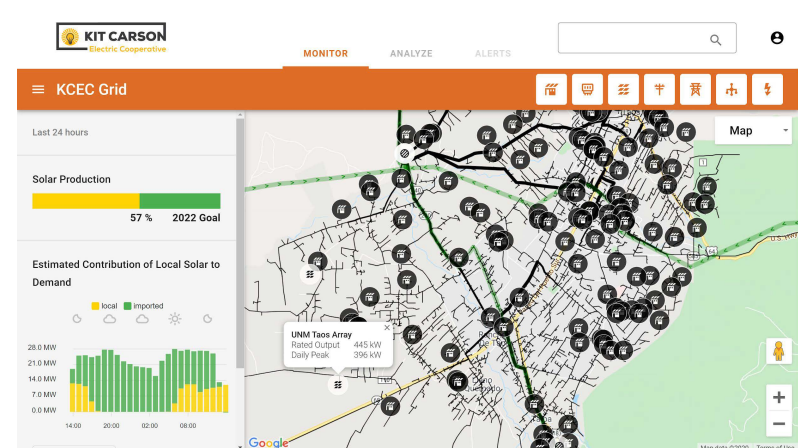
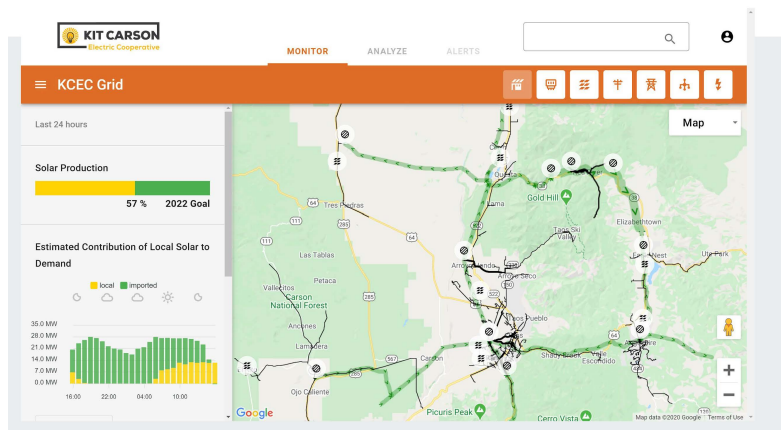
- Reduce peak demand which will in turn reduce transmission costs
- System Reliability
- Exploring other use cases





Camus Energy dashboard and how it will operationalize Kit Carson Electric Cooperative's smart grid future

- Integration of legacy systems and smart meters
- (DG)² was given to the community as open-sourced. Camus Energy is looking into building the functionality from (DG)² in the future



KCEC's 100% Goal and Beyond!

By 2021, KCEC will:

- Reach the 100% daytime solar
- Have an increase in % of total renewables
- Evolve the 'new' business model with battery storage
- Researching BESS locational value and mobility
- Implementing EV charging stations
- Meet carbon-free goals by 2045

