

Shepherd Solar and Energy Storage Technical Open House

April 1st, 2026

Elbert County Agricultural Building, Kiowa

5:30-6:30 pm

1. Presentation Summary

Project Introduction

Description of a 199 MW solar and 100 MW battery project.

Project location noted with boundary and preliminary project layout.

Construction Timeline & Phases

- Engineering period estimated at 10–12 months.
- Construction estimated at 18–24 months with overlapping phases:
 1. Civil work and grading.
 2. Installation of panel structures.
 3. Electrical installation and cabling.
 4. Substation construction and grid interconnection.
- Erosion & Wind Control
 - High winds and potential for soil erosion identified as major concerns in December 2025 open house.
 - Mitigation strategies include water application, revegetation, vegetated stock piles, erosion mats, and hydroseeding.
- Perimeter & Drainage Controls
 - Use of silt fencing and straw wattles on slopes and boundaries.
- Vegetation & Pest Management
 - Potentially using grazing to manage vegetation and maintain agricultural use of the land. Grazing may also help in reducing fire risk without the need to mow the entire site.
 - Construction activity expected to deter prairie dog colonies temporarily
 - Post-construction monitoring planned to manage colony growth over the lifetime of the project. Additional local resources and strategies will be applied to limit colony growth
- Equipment & Soil Stockpiling
 - Heavy equipment expected during civil work.
 - Stockpiled soil will be vegetated quickly to prevent erosion.
- Road Construction & Local Hiring
 - Permanent access roads to be built for long-term use.
 - Intention is to hire local labor and vendors whenever possible.

- Safety & Emergency Coordination
 - Coordination with fire departments to ensure site familiarity.
 - Training planned for emergency response around site equipment.

2. Q&A

I am concerned about erosion control and placement of infrastructure in natural drainage areas, specifically for the substation. Won't everything erode during periods of runoff?

The current preliminary layout avoids impacts to all swales, wetlands, and natural drainage areas. Runoff will be managed through the site's erosion and sediment control design, which will include stormwater basins that are built to capture any runoff. The Shepherd Solar project (Project) will be designed and constructed in accordance with the Mile High Flood District standards. The stormwater methods utilized for construction of these sites is comprised of common strategies for managing drainage and runoff, and these methods are currently working well at our other project sites.

Please clarify on the water storage cistern planned for the project and water sourcing for construction. Where will all the water for on-site plannings be sourced?

A 30,000 gallon water cistern is planned for emergency use and will be located at the site entrance. This will be available to the Big Sandy Fire Protection District for fire mitigation in the unlikely case of a fire, and available to offsite fires in the neighborhood. Construction water will be sourced commercially. No new wells will be drilled or used for the site.

Water use is expected to be minimal for the project, with the majority of water usage happening during construction for dust mitigation and for revegetation purposes. Water may occasionally be used for panel cleaning, although this is unlikely due to the soil profile onsite. Compared to commercial or residential development, the site will use a fraction of water during its planned 40-year operational life

What is the plan in case of a fire or natural disaster?

Modern systems reduce sparking risks, and the source of sparking is well known. Arrestors are used to secure wiring, with greatly reduces this risk. During construction, primary fire risk comes from machinery onsite, just as machinery for farming poses a risk. There will be some welding required, but a welding supervisor will be present until everything has completely cooled.

Severe weather protocols include shutdown, inspection, and cleanup. The facility will use tempered glass which remains largely intact if broken. Facilities are monitored continuously 24/7 by our Remote Operating Control Center (ROCC). If the ROCC receives a trigger, the operational team responds as soon as is safe. Once onsite, we'll remove damaged equipment, clean up as necessary, and back up online. We will prepare an Emergency Management Plan, in coordination with Big Sandy Fire Protection District and Elbert County Office of Emergency Management, which will detail different emergency response protocols, including severe weather events.

How would you clean up glass?

Glass that's used in solar panel manufacturing is tempered glass. Much like the glass used in car windows, it doesn't shatter into many small pieces. The panel itself largely stays intact, even if the glass is broken.

I'm concerned about agricultural land being removed from production. Why this site? Can you speak to this?

The site was selected due to proximity to existing transmission and road access. We're exploring options to continue agricultural use of the land while the project is operational including options like sheep grazing. During the Project's operation, there will be minimal soil disturbance, allowing the soil to rest. After decommissioning, the land will be restored to pre-existing conditions and can be reverted to agricultural use, if desired by the landowners. Many farms opt in to CRP programs which intentionally takes farmland out of production to encourage soil rest, and this offers an alternative option.

Ultimately, it comes down to the landowner's decision to exercise their private property rights. This may include temporarily transitioning from agricultural production based on the needs of their family and preparation for the future.

Why are you trucking in water from a distance? Why not use a well?

We understand water is a precious resource in Elbert County and the Eastern Plains. We will not utilize any onsite existing wells for the Project, nor will we be installing any new wells. We've had initial discussions with Simla Water to provide bulk water for the project and continue to evaluate options for water supply.

There is limited of phone and internet service. How will 24/7 monitoring work?

Site monitoring will use satellite-based communication with battery backup. We're currently using satellite-based service at other sites and it offers a good solution. The battery provides about 48 hours to monitor equipment in case of an outage. If that battery starts to die off, our remote operation control center will shut the whole project down.

How will this impact wildlife?

We've been working with Colorado Parks and Wildlife on this project. We've done habitat studies out on site to get an understanding of what wildlife might be present in the area. Colorado Parks and Wildlife had some recommendations for us to include in our project design which we've chosen to include. Our site will allow wildlife movement through the area by only fencing in the panels rather than the entirety of the site to allow for continued big game migration. The project will avoid drainages, washes, wetlands and swales allowing for continued access to those areas. We're also avoiding barbed wire and opting for safer fencing options for wildlife.

How will this impact property values?

There is extensive research underway to better understand the impact of solar facilities on property values. We'd be happy to come out to adjacent sites to walk through visual impact and options moving forward.

I'm concerned about equipment failures seen at other solar projects. How will you handle this?

Newer technology includes more durable mounting systems and bearings, for example the industry is switching from a clamp system to a bolt system. At this point, we are familiar with where the operational failures occur and do as much preventative work to avoid failures.

Repair timelines vary by severity but occur promptly to get the unit up and operational quickly. For smaller cases, we typically can get someone out there within a day. For larger failures, especially if parts must be shipped in, it can take up to a week or two for repair.

What will construction noise and operational noise be like?

Construction activity will present the most noise during the lifetime of the project. Because of this, construction occurs only during daytime. Operational noise is minimal.

How do you ensure this project will endure overtime? Are you planning to sell it?

We have an IPP branch which operates our existing sites and provides operational services to projects owned by other companies. It's hard to predict what will happen in regard to future sale, but we can prepare and permit high quality projects. In the scenario that they are sold, the future owner is held legally responsible for upholding all terms and conditions agreed upon during permitting.

We are required to post a decommissioning bond which requires the project owner to completely remove everything from site and return the site to its original state. If the project owner does not comply, they receive a significant penalty.

Will you engage with local conservation groups for community benefits?

In addition to the economic benefits predicted for the project, we're in the process of negotiating a benefit agreement with Simla Fire to enhance fire services in the area. The project will also conduct road improvements in the area.

We are also in the process of negotiating a fee with the County that will go into the General Fund for use as needed in the area. Overall, community benefit is an ongoing topic of exploration. We'd love to connect with local groups and nonprofits to provide an array of community benefit options.

Are you coordinating with the local conservation district?

Yes, they had representation at the December open house, and we will be meeting with them following this meeting to further receive any recommendations they may have to incorporate local knowledge into our project planning efforts. We're open to incorporating local best practice knowledge into our Project's development and construction.

How will this connect into transmission lines? Will you be trenching, and what will electrical safety look like?

The project will interconnect with a Tri-State transmission line which cuts almost directly over the site. Trenching is required for cabling. Safety systems include engineered rock barriers and protective equipment.

Correction: The reference made to a recently-executed contract between the Shepherd Solar project and Tri-State Generation & Transmission Association was in reference to an interconnection agreement between the project LLC and Tri-State, not a Power Purchase Agreement. The project currently has no contracted offtake partner.

Why solar?

Tri-state puts out requests for specific project technology in the region. In this case, it was solar, and this site has unique characteristics that make solar viable.

Correction: The Shepherd Solar project was sited due to its proximity to existing grid infrastructure, high solar irradiance potential, low visual impact, among other favorable siting and market conditions.