



Use by Special Development Standards
for
Dove Solar Facility
Johnstown, Weld County, Colorado
June 2022

SunShare, LLC, a Colorado limited liability company, is pleased to present our application for a Zoning Permit for a Medium-Scale Solar Energy Facility (“SEF”) on property owned by the Archdiocese of Denver located on approximately 30 acres of Parcel ID No. 105916100039 in the northeast corner of Section 16, Township 4 N, Range 67 W in Weld County, CO.

The current zoning on the parcel is Agricultural (A), however the landowner does not possess any water rights for this parcel. SunShare has executed a lease agreement with the Archdiocese of Denver for a joint solar facility which will provide solar energy to the Archdiocese’s housing recipients.

This 5,000 kW-AC (5,976 kW-DC) project will use standard photovoltaic technologies that have been proven safe and effective through deployment across the United States in thousands of utility or commercial-scale solar developments. The solar panels are mounted to single-axis tracking arrays, which sit parallel to the ground and follow the path of the sun across the sky. The panels face east in the morning, lay flat at noon, and face west in the evening. The tracking arrays produce DC current, which is converted into AC current by inverters for synchronization and delivery of energy into the utility’s distribution grid at a utility transformer. The modules utilize a non-reflective glass which eliminates glare concerns and all electrical cables on the improved area will be buried, except for the direct current string wires that connect between solar collectors, direct current collection circuits between rows of solar arrays that are no more than four (4) feet above grade crossings, substations, switch yards, and circuits voltages greater than 34.5 kilovolts (where necessary.) There will be no permanent employees on site during operation, and maintenance visits are expected to occur quarterly on average.

The appearance of the solar arrays is uniform and symmetrical. Solar panels will not exceed ten (10) feet in height above the grade, at maximum tilt. The facility will be constructed in accordance with IBC 2021 and NEC 2020 and will be surrounded by an 8’ high game fence made of 4’ X 4” reinforced mesh.

This project is in discussions with the relevant oil and gas entities to build within the setbacks surrounding their infrastructure. All other setbacks are in accordance with the development standards and are identified on T.100 of the Sketch Plan. Fence details are on page C.102 of the Sketch Plan. All oil and gas facility and pipeline owners have been identified and contacted. All adjacent area landowners within 500





ft of the project area have been contacted with no known objections to date.

Access to the facility will be from the east off Weld County Road 19 via a 20' wide all-weather access driveway. The entrance to the site will include a 20' wide all-weather access driveway with an emergency hammerhead turnaround. SunShare will apply for any necessary access permit prior to construction.

This project site has areas where the slope exceeds the acceptable limit for solar panels. As a result, cut and fill work will take place once permitted to create a level space. This SEF will abide by all dust mitigation standards laid out by the County and/or Town.

Following the eventual decommissioning of this project, this land will be left more suitable for farming due to its improved topography. The project is not located within any FEMA designated Special Flood Hazard Areas. The Stormwater Management shall be addressed via the attached Surface Drainage Analysis. Conceptual design details can be found in the enclosed Sketch Plan, T.100.

This site currently houses a pivot irrigation system for agricultural purposes. The pivot will be easily adjusted to avoid the SEF and will still be fully capable of supplying water to any surrounding crops.

The operational life of an SEF is generally between 20-40 years. The SEF has an initial 20-year contract with Public Service Company of Colorado (Xcel) to sell power into the Xcel Electric grid, and the major equipment components have warranty options up to 30 years, with a useful life of 35-40 years. Upon decommissioning, SunShare will entirely remove all SEF components (fencing, steel racking, cabling, solar panels and associated interconnection equipment) and undertake measures to restore the land to its original state.

SunShare will obtain all required permits and approvals, including utility interconnection agreements, prior to commencing construction. The project's engineers and general contractor will be made up of local experienced and individuals licensed in Colorado, who will ensure that all required codes and standards are followed throughout the design and construction. The project will comply with all applicable provisions by Johnstown. SunShare looks forward to working with Johnstown to successfully complete this proposed development and bring the benefits of community solar energy to the Town.





Use by Special Review - Medium Scale Solar Energy Facility Questionnaire for Dove Solar LLC, PID 105916100039

1. Explain the proposed use and business name.

SunShare LLC, d/b/a Dove Solar LLC proposes a Medium-Scale Solar Energy Facility (SEF) to be placed at Weld County PID 105916100039. The SEF will have a nameplate capacity of 5,000 kW AC and will cover approximately 30 acres on the east side of the total parcel.

This project has the explicit purpose of benefiting low-income and energy burdened families. 100% of the energy generated from this project will go to households that are qualified as low-income or nonprofit and religious organizations that provide essential services to these households. The recipients of the energy will receive savings on their monthly electricity bills. A secondary benefit of the project will be to provide job training for individuals looking to enter the solar and electrical trades.

2. Explain the need for the proposed use.

This project meets a multitude of needs in the community:

- Energy costs disproportionately impact low-income households and drain resources from low-income services organizations. This project is being developed to help solve this issue. In addition to being the landowner, the Archdiocese of Denver is helping to develop the project and will be directing a large portion of the electricity and savings to its large network of low-income service organizations that are operating in Weld County and who are eager to participate in the project. These organizations include schools that serve low-income students, homeless shelters, and food banks, among others.
- The Parcel Landowner (the Archdiocese of Denver) is interested in being annexed by the Town of Johnstown so long as this solar facility is also permitted with the annexation
- The Landowner (the Archdiocese of Denver) does not have water rights for the property and is therefore unable to secure any significant financial value from the land. The lease revenue paid the landowner will enable them to hold on to the land for the long term and have revenue that can be dedicated for the funding of services for low-income households.
- Households, Businesses, and Nonprofits in Colorado have not traditionally had a choice in who their utility provider is and where their energy comes from. Community solar solves this issue by providing ratepayers with an opportunity for choice, and an option to choose locally generated electricity.
- The Town of Johnstown, Weld County, and Colorado as a whole, are experiencing massive growth in electricity consumption. More electricity generation is needed to meet this need. Local solar projects like this help the state and county diversify its electricity sources and have local generation that result in a more stable and resilient grid. Weld County has long been the energy capital of Colorado and adding solar in the County will further diversify the County's energy mix and further its role as an energy leader in Colorado.



- Weld County’s Comprehensive plan specifically calls out a goal of supporting “*responsible energy and mineral development.*” This project meets the definition of responsible (see answer to question 21).
- The Town of Johnstown’s comprehensive plan calls for energy projects, specially calling for “*flexible regulations that accommodate evolving economic trends and industries, and attract new business interests and investment (e.g., renewable energy...)*”.

3. Describe the current and previous use of the land.

The specific location of the project has historically been used for oil and natural gas extraction and agriculture. This land is not currently incorporated into the city limits of any city in Weld County.

Occidental Petroleum Corporation previously drilled on this land for oil and natural gas resources. They have since plugged and abandoned the 2 wells present which remain onsite, abandoned the pipeline which remains (underground) onsite, and fully removed the battery that was previously onsite. This site is no longer used for oil and gas activity.

The Landowner is currently leasing the land to a Tennent Farmer who traditionally farms barley crops. The Landowner does not have water rights for this parcel and is therefore unable to secure any significant value from its current agricultural use.

The western side of this parcel (where we do not intend to develop) houses additional agriculture, as well as an irrigation reservoir.

4. Describe the proximity of the proposed use to residences.

There are no residences within 500 feet of the proposed SEF. The area overall is rural with limited residential buildings and units. The closest homes are over eight tenths of a mile away and will experience no impacts from the SEF.

5. Describe the hours and days of operation (i.e., Monday thru Friday 8:00 a.m. to 5:00 p.m.).

Once construction is complete, the SEF will continuously operate 24/7, but will produce power only during daylight hours. The proposed SEF will use single-axis trackers, which will angle the solar modules accordingly as the sun shifts in the sky. These trackers allow for maximized energy production. While the array will be running all day, it will create no disturbances. Solar arrays are nearly silent and produce no smoke, smog, vapors, or dust. Construction will run during normal business hours for the duration of about 3 months.

6. Describe the number of employees including full-time, part-time and contractors. If shift work is proposed, detail number of employees, schedule and duration of shifts.

During construction: Construction during daytime hours will range from 7 to 14 during the early mobilization and site preparation stage with site construction workers peaking at 50 to 60 workers midway through the project and reducing back down to 7 and 14 workers during the final commissioning and testing stage.



Once operational: The SEF will have a maintenance crew visit once quarterly (or as needed if damage occurs due to weather), otherwise the SEF will be unmanned.

7. Describe the maximum number of users, patrons, members, buyers or other visitors that the site will accommodate at any one time.

N/A. This proposed use will be for energy production only and will not host patrons, etc.

8. List the types and maximum numbers of animals to be on the site at any one time (for dairies, livestock, confinement operations, kennels, etc.).

SunShare values the prominence of agriculture in Weld County, and we often make efforts to support the industry when constructing SEFs. One practice that we offer at our SEF is working with a local sheep rancher (with whom we have a pre-existing partnership), offering our site as grazing land for his sheep. This allows for the SEF site's vegetation to be maintained, while benefitting a local rancher (rather than employing mechanical mowers). We will have to complete a more thorough analysis of the current vegetation of the area to determine if there is enough growth for the sheep, and if it is all safe for the sheep.

Should we move forward with sheep grazing, there will be approximately 60 sheep present onsite. The site will be fully fenced in, containing the sheep, and the rancher will have access to the site whenever needed. The sheep will visit for a few weeks at a time, as frequently as needed onsite.

9. List the types and number of operating and processing equipment.

There will be a total of 11,076 540w monocrystalline modules, forty 125kVA inverters, and 142 rows of single-axis trackers. The system consists of string level DC to AC conversion inverters, two main equipment pads with AC Recombiners, switchgear and MV step up transformers that connect to Xcel's grid.

10. List the types, number and uses of the existing and proposed structures.

There are no existing structures onsite. There will be no structures associated with the proposed solar facility other than the solar array itself, which will be used for energy generation.

11. Describe the size of any stockpile, storage or waste areas.

During the construction phase, there will be a materials and equipment laydown yard located on the interior of the facility. This laydown area will be approximately 50' X 250' in size. When the construction is completed, there will be in place a metal connex container for storing spare modules and other spare parts.

12. If storage or warehousing is proposed, what type of items will be stored?

Response: A steel container (8' X 40') is being proposed to store equipment and spare parts for the solar facility. The container is proposed to be positioned in the interior of the solar



arrays, which should lessen its visual impact. The container will be painted a light tan to help blend the container with the natural environment.

13. Describe where and how storage and/or stockpile of wastes, chemicals, and/or petroleum will occur on this site.

Response: N/A - There will be no stockpiles of wastes, chemicals, or petroleum associated with this facility.

14. If there will be fuel storage on site, indicate the gallons and the secondary containment. State the number of tanks and gallons per tank.

Response: N/A – There will be no fuel storage associated with this facility.

15. Describe the method and time schedule of removal or disposal of debris, junk and other wastes associated with the proposed use.

During the construction phase, waste will be stored in refuse dumpsters, which will be emptied on a regular basis or as needed. Once the facility is operational, there will be no waste or refuse produced from the solar operation.

16. Include a timetable showing the periods of time required for the construction of the operation.

• Solar Facility Components First Deliver	Day 1
• Perimeter Fence Installation	Day 1 to Day 11
• Solar Panel Foundation Installation	Day 1 to Day 30
• Racking, Trenching, Wiring	Day 30 to Day 64
• Solar Panel Installation	Day 64 to Day 94
• Inspection & Set Meters	Day 94 to Day 99
• System Testing & Commissioning	Day 99 to Day 109

17. Describe the proposed and existing lot surface type and the square footage of each type (i.e., asphalt, gravel, landscaping, dirt, grass, buildings).

The west side of the parcel is currently a reservoir and farmed agriculture. This will not change as we are not impacting this area whatsoever.

The subject area (30 acres on the east side of the parcel) is currently agricultural land and will need to be re-seeded within the construction area. Following the completion of the construction for each phase, disturbed areas within the limits of construction, such as roadcuts, utility trenches, and other areas where vegetation has been removed, altered, or eliminated, will be reseeded with native seed mix. There will be approximately 9,339 square feet of gravel access including the hammerhead turnaround. In addition, there will be a gravel laydown area that is approximately 12,500 square feet, for a total of 21,839 square feet of gravel surface area. There will be two (2) concrete transformer pads, each measuring approximately 48 square feet, for a total of 96 square feet of concrete area.



18. How many parking spaces are proposed? How many handicap-accessible parking spaces are proposed?

There will be two (2) internal parking spaces for vehicles servicing the facility. There will be no ADA parking spaces, as this is not a facility for general public use.

19. Describe the existing and proposed fencing and screening for the site including all parking and outdoor storage areas.

To comply with the National Electric Code, there will be an 8' tall game fence installed around the entire perimeter of the site. The fence and gate will be constructed of 4" X 4" welded rod material. The two (2) internal parking spaces will be screened by the solar array. There will be no outdoor storage associated with this proposed solar facility.

20. Describe the existing and proposed landscaping for the site.

The entire affected area of the parcel has been used for agricultural purposes and has been covered by crops, by unplanted land, and oil and gas infrastructures such as wells and batteries. The remainder of the parcel has also been used for agriculture or houses a reservoir. The unaffected area's landscaping will not change. Once the construction phase is completed, the affected area within the solar facility fence will be seeded with a native seed mixture. As previously mentioned, there are no residences or commercial buildings nearby, so screening trees and shrubs will not be needed.

21. Describe reclamation procedures to be employed as stages of the operation are phased out or upon cessation of the Use by Special Review activity.

Once the site is no longer used for the proposed solar facility, the panels, racking, cabling, inverters, and all associated equipment will be removed from the site and recycled and/or disposed of in a responsible manner. The site will be returned to the condition it was in prior to the solar facility being constructed with the exception of certain site improvements desired by the landowner or system design such as re-grading and leveling. Solar leaves behind no ground contamination, so there will be no hazardous elements left behind on the land.

22. Describe the proposed fire protection measures.

The subject property is within the Front Range Fire Rescue Fire Protection District. Fire access within the facility will be via a 20'-wide gravel driveway, with a hammerhead turnaround at the end of the drive. Grasses within the solar facility will be mowed as needed, to help prevent the spread of range fires.

23. Explain how this proposal will be compatible with future development of the surrounding area or adopted master plans of affected municipalities.

The subject parcel falls within the Intergovernmental Agreement Boundary for the towns of Johnstown and Milliken, though it is just outside the town limits for either town. The



landowner is interested in allowing annexation of the parcel by the Town of Johnstown so long as it is inclusive of approval of this proposed SEF.

This proposal is compatible with the 2021 Comprehensive Plan (CP) for the Town of Johnstown. The Town's CP includes the following goal:

"W1.1. Collaborate interdepartmentally to create flexible regulations that accommodate evolving economic trends and industries, and attract new business interests and investment (e.g., renewable energy, business incubators, artists/makers spaces, synergistic businesses, etc.)." (Page 36). This goal shows the Town's great willingness and interest in supporting and fostering new energy sources, such as solar. Additionally, the CP sites that it received feedback from its residents requesting "Focus on sustainable industry[ies] and honor our agricultural heritage by being good stewards of the land" (Page 18). Our proposed SEF supports this request from residents as it will create no environmental contamination. Additionally, the land beneath the array will be planted with a native seed mix, supporting the native vegetation of Weld County.

Additionally, the proposed solar facility will be in place for approximately 20-40 years (depending on possible operation extensions). Following the decommissioning of the SEF, the land will be free and clear for any potential uses that the Town of Johnstown may want to pursue with the landowner, such as commercial or residential development. The freed land will allow for the Town to implement new and different goals, as well as expand its footprint.

24. Explain how this proposal impacts the protection of the health, safety and welfare of the inhabitants of the neighborhood and the County.

This development will positively impact the health, safety, and welfare of the inhabitants of the surrounding area, the Town, and County.

The SEF will create no airborne or ground contaminants, making it nonhazardous for residents near and far. The SEF is also nearly silent when operating, thus it will not contribute to any noise pollution. The SEF will produce local electricity without adding any pollution to the air.

Most importantly, however, this SEF will generate a source of revenue and energy savings that will help provide affordable housing, food, and resources to those who are struggling and are qualified as low-income. This project has the explicit purpose of benefiting low-income and energy burdened families. 100% of the energy generated from this project will go to households that are qualified as low-income or nonprofit and religious organizations that provide essential services to these households. The recipients of the energy will receive savings on their monthly electricity bills.

25. Explain how this proposal complies with Article V and Article XI of Chapter 23 if the proposal is located within any Overlay Zoning District (Airport, Geologic Hazard, or



Historic Townsites Overlay Districts) or a Special Flood Hazard Area identified by maps officially adopted by the County.

N/A – The subject property is not located within any Overlay Zoning District or Special Flood Hazard Area.

27. Detail known State or Federal permits required for your proposed use(s) and the status of each permit. Provide a copy of any application or permit.

SunShare will need to apply for the following permits to complete this SEF:

Local/County:

- Building permit
- Grading permit
- Access permit
- ROW Agreement or Road Maintenance Agreement, if deemed necessary

State:

- CDPHE SWPPP