

Dolores Canyon Solar – Dust Suppression Plan

Site Specific Development Plan/Land Development Agreement Application Appendix item 20

Introduction

juwi Inc., parent company to both Dolores Canyon Solar LLC (“Company”) and JSI Construction Group LLC – juwi’s construction arm – is a Boulder, Colorado-based utility-scale solar energy development, engineering, procurement, construction, operations, and maintenance firm. The Company looks forward to working in concert with Dolores County to permit the 110 megawatt/ac Dolores Canyon Solar facility (“Project”) on several hundred acres of land a few miles northeast of Cahone, roughly near the intersection of County Roads 15 & M.4. The Company is a builder of solar farms across the country and has over twelve years of experience working in Colorado and the West managing the arid and semi-arid landscape of solar farms before, during, and after construction.

This plan discusses how Project surfaces will be managed to minimize potential impacts from dust and to protect public health and safety. In accordance with State of Colorado standards for projects over 25 acres in size, a Land Development Air Pollutant Emission Notice (“APEN”) will be obtained. Dust generated will likely be highest during the construction phase of the Project; however, the operations phase of the project is also addressed.

Plan Purpose

Article IV, §2(F)(1) of the Dolores County Land Use Regulations charges new developments or changes in land use to contemplate the nuisance of dust, which can adversely affect surrounding property owners. The purpose of this plan is to prescribe methods for management of fugitive dust outcomes, generated by construction and operations activities. The construction phase of this Project will have a higher potential to generate dust than the operations phase due to the higher volume of truck traffic on natural-surfaced county roads and building activities at the Project site during the construction time period. In the operational phase, Project dust generation will be minimal owing to the low volume of traffic and the few, if any, small areas of non-vegetated surface.

Project Description

The Project will consist of a solar photovoltaic energy generation facility. Some of the surface in the Project area will be graded to develop a consistent surface topography for the solar panel array. The Project will include an overhead transmission line to the electric grid interconnection substation – the Cahone Substation owned by Tri-State Generation & Transmission Association. The overall fenced Project area is roughly 800 acres.

Most of fenced Project area will contain solar modules arranged on a single-axis, sun-tracking racking system. Some of the surface in the area will be bladed to develop a consistent surface topography for the solar panel array. Furthermore, construction traffic, both foot traffic and vehicular traffic, may damage some of the vegetation in the Project area. Construction activities that remove or damage vegetation increase the possibility of generating dust.

The Project has an estimated construction duration of 20 months of time involving elevated levels of traffic, and by extension, elevated levels of potential fugitive dust generation.

Dust Occurrence and Avoidance

Fugitive dust is a product of dry, unconsolidated soils displaced by air movement. Dust is commonly created when surfaces are bladed to remove vegetation and change topography. Dust is also created by moving soil, for example, in loading topsoil into trucks or in constructing piles or berms. As well, dust is generated by driving on unimproved and gravel surfaces, including both at construction sites and on gravel or dirt roads to reach the construction site. A graveled road or driving surface usually propagates less dust than a completely unimproved soil surface.

Key factors in avoiding the emission of excessive dust during a construction project include:

- Minimizing disruption of plant life, which effectively holds soil in place
- Retaining as much of the natural post-wintertime soil crust on the tilled portions of the project for as long as possible
- Avoiding dirt work and truck travel on non-graveled surfaces during unusually dry, windy conditions
- Minimizing the volume of traffic on plain dirt portions of the Project site
- Adding gravel to interior surfaces receiving the most traffic
- Lowering speed of traffic on unimproved and gravel surfaces
- Directing traffic toward more improved roads and away from travel on roads with less improved surfaces, in order of preference:
 - a. asphalt
 - b. gravel that has been treated with a binding agent
 - c. gravel that has been dampened
 - d. gravel that is not dampened
 - e. vegetated surface
 - f. dirt without vegetation

Driving on vegetated surfaces can destroy the existing plant growth that then can expose a dirt surface. Off-road travel should be minimized and directed to avoid damage to vegetation. The majority of internal Project site traffic will utilize Utility Terrain Vehicles (“UTVs”). The Company will advise UTV users of the best internal routes to minimize vegetation and subsequent soil disturbances.

Dust Management Practices

The Company commits to the following practices during construction and operation of the Project:

Prevention:

- Minimizing disruption of vegetation
 - Remove vegetation on the Project site only as needed to develop a firm traveling surface for traffic and an appropriately consistent grading for the solar facility's infrastructure. Vegetation will be promptly reestablished beneath the solar arrays after construction is completed, in concert with the Noxious Weed Management Plan (*please refer to Appendix item 20*).
- Minimizing effects of wind:
 - Utilize the services of a water truck contractor at the project site as needed during construction to apply water on bare soil surfaces in order to minimize dust.
 - Apply gravel to interior roadways and staging areas which receive the largest volumes of traffic on site.
- Minimizing traffic:
 - Encourage workers to ride-share to the site.
 - Minimize traffic to the site by using full loads on trucks when possible.
 - The Company has designated and will utilize a Project traffic routing system in an effort to reduce traffic impacts on the surrounding area. *Please refer to Appendix item 17.*
- Road dust:
 - Instruct construction workers and truck drivers to monitor their own dust creation and to use lower travelling speeds on unpaved surfaces to avoid creating excessive quantities of dust. Though county road speeds vary, the Project speed limit is 10½ miles per hour.
 - Instruct all drivers to be especially careful to minimize speed and dust levels as they drive by homes, pedestrians, equestrians, and other persons near roadways.

Monitoring During Construction. At the Project site, Company staff and subcontractors will be instructed to watch for dust during ground construction activities as well as while driving, apply water / surface treatments as needed, and use lower driving speeds to avoid creating large volumes of dust throughout the Project construction time period.

Operational Phase. Dust concerns will be minimal after the Project is complete and operational, with only a few site visits typically anticipated throughout an operational year. However, if the Company is notified of dust concerns by Dolores County and or neighbors caused by the Project, the Company will work with the County to ensure those concerns are mitigated by an appropriate means for that given situation.

Health and Safety

Dust can contribute to respiratory problems especially for sensitive individuals. Dust can also affect visibility and therefore be a safety issue. As such, by minimizing dust in the Project area, construction workers will benefit from not having to work in a dusty environment for their own health and safety and the Project and Company will benefit from a healthier, safer workforce. To engender this dust-considerate environment, workers will be reminded to use low speeds and other practices to assist in fugitive dust prevention.

The well-being of Dolores County residents in the surrounding area and along the access routes is of paramount significance, and it is incumbent on the Company, Company staff, and contractors to respect the air quality of those residents who could be impacted by our individual or collective dust creation actions.

Responsibility

Although construction will be substantially completed by subcontractors, the Company retains responsibility for managing dust from the site in accordance with this plan and with County and State regulations.

During the construction phase of the Project, concerns about dust should be reported to the supervisor on site. Overseeing the supervisor will be Darnell Everett, Vice President of Construction, who can be reached at deverett@juwiamericas.com. Although premature at this juncture to know with certitude, juwi's operations and maintenance arm will likely direct long-term dust management concerns. The current principal contact for Project operations and maintenance is Matt Cuellar, who can be reached at (720) 838-2298 or mcuellar@juwiamericas.com.