

Wild Springs Solar, LLC

Model Design Specifications and Sound Analysis

In compliance with paragraph 25 of the Permit Conditions approved by the South Dakota Public Utilities Commission and included with its December 4, 2020 Order Granting Motion to Approve Decommissioning Condition and Final Decision and Order Granting Permit to Construct Facility; Notice of Entry for the Wild Springs Solar Project (“Project”), Wild Springs Solar, LLC (“Wild Springs”) is submitting a non-material change request for facility location adjustments. The Pennington County Zoning Ordinance specifies that noise levels may not exceed 55 dBA, as measured at the closest property line. Final design will utilize the technology listed in the table below. The distance to 55 dBA was determined based on the tracker and transformer manufacturers’ noise modeling data and the inverter manufacturer’s sound measurement data.

Inverter and Tracker Noise Levels		
Facility Type	Equipment Model	Distance to 55 dBA
Inverter	Sungrow 3600	92 feet
Tracker	NexTracker Horizon	< 5 feet
Transformer	Main Power Transformer	23 feet

Noise levels will be at 55 dBA at 92 feet from the inverter, 5 feet from the trackers, and 23 feet from the transformer.

The Project has been designed to meet the Pennington County 55 dBA noise standard (at the closest parcel line). The closest inverter to any parcel line, including those within the Land Control Area, is 92 feet. The closest array tracker to an external parcel line is 48.9 feet. The closest parcel line to the main power transformer at the Project substation is 100 feet. Additionally, the closest residence to an inverter is 1,262.14 feet.