
STAFF MEMORANDUM SUPPORTING SETTLEMENT STIPULATION

TO: COMMISSIONERS AND ADVISORS
FROM: AMANDA REISS, DARREN KEARNEY, AND JON THURBER
RE: DOCKET EL20-018 – IN THE MATTER OF THE APPLICATION BY WILD SPRINGS SOLAR, LLC, FOR A PERMIT OF A SOLAR ENERGY FACILITY IN PENNINGTON COUNTY, SOUTH DAKOTA
DATE: NOVEMBER 5, 2020

Commission Staff (Staff) submits this Memorandum in support of the Settlement Stipulation in the above-captioned matter.

BACKGROUND

On May 15, 2020, the South Dakota Public Utilities Commission (Commission) received an Application for a Solar Energy Facility Permit (Application) from Wild Springs Solar, LLC (Wild Springs or Applicant). In its Application, Wild Springs proposes to construct and operate an up to 128 megawatt (MW) alternating current (AC) solar generation facility to be located in Pennington County, South Dakota, known as the Wild Springs Solar Project (Project). The Project is located approximately one-half mile south of New Underwood, South Dakota, on 1,499 acres of privately owned land in the Rapid City East and East Central Pennington Unorganized Territories, where civil township data is not available (Project Area). The Project includes solar modules, inverters, tracking racking, fencing, access roads, a substation, an operations and maintenance building, a parking lot, electric collection lines, up to three weather stations, and temporary construction areas. The Project will interconnect to the New Underwood Substation owned by Western Area Power Administration, located adjacent to the Project Area. Wild Springs has entered into a Power Purchase Agreement with Basin Electric Power Cooperative, who is taking the entire output of the Project for 15 years, starting in 2022. The Project is expected to be completed and in-service by the end of 2022. Wild Springs estimates the total cost of the Project to be \$190 million.

On May 21, 2020, the Commission electronically transmitted notice of the filing and the intervention deadline of July 24, 2020, to interested individuals and entities on the Commission's PUC Weekly Filings electronic listserv. On May 22, 2020, the Commission issued a Notice of Application; Order for and Notice of Public Input Hearing; Notice of Opportunity to Apply for Party Status. On May 28, 2020, the Commission issued its Order Assessing Filing Fee; Order Authorizing Executive Director to Enter into Consulting Contract. On July 1, 2020, the Commission held a telephonic Public Input Hearing. On July 14, 2020, the Commission received an application for party status for the Bundorf Family Trust and on July 28, 2020, the Commission issued an Order Granting Party Status to the Bundorf Family Trust. On August 6, 2020, the Commission issued an Order Adopting Procedural Schedule. On October 16, 2020, Commission Staff filed testimony regarding the appropriate decommissioning financial assurance. On October 30, 2020, Staff, Wild Springs, and the Bundorf Family Trust filed a Joint Motion for Approval of Settlement Stipulation that resolves all issues except for the appropriate decommissioning financial assurance.

STAFF'S ANALYSIS AND SETTLEMENT RESOLUTIONS

Staff reviewed the contents of the Application as it relates to the solar energy facility siting statutes, SDCL Chapter 49-41B, and solar energy facility siting rules, ARSD Chapter 20:10:22. Staff then identified

information required by statute or rule that was either missing from the Application or unclear within the Application and requested Wild Springs to provide or clarify that information. Attachment 1 provides Wild Springs’ responses to Staff’s discovery questions. Commission Staff also issued discovery to the Bundorf Family Trust to get a better understanding of their concerns and address any issues. The Bundorf Family Trust responses to Staff’s discovery responses are provided in Attachment 2.

For approval, pursuant to SDCL 49-41B-22, Wild Springs must show that:

- (1) The facility will comply with all applicable laws and rules;
- (2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area. An applicant for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is determined not to threaten the social and economic condition of inhabitants or expected inhabitants in the siting area;
- (3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and
- (4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given to the views of governing bodies of affected local units of government. An applicant for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is in compliance with this subdivision.

According to the supplemental testimony provided by Ms. Melissa Schmit, Wild Springs obtained a conditional use permit from the Pennington County Planning Commission on August 24, 2020. By obtaining a conditional use permit, Wild Springs has shown that the solar energy facility does not threaten the social and economic condition of inhabitants or expected inhabitants in the siting area as required by 49-41B-22(2), and will not unduly interfere with the orderly development of the region as required by 49-41B-22(4).

Wild Springs, Staff, and Bundorf Family Trust (jointly the Parties) positions were discussed thoroughly at several settlement discussions. As a result, some Party positions were modified and others were accepted where consensus was found. The Parties have resolved all issues subject to this proceeding except for the appropriate decommissioning financial assurance and will notice this item for Commission consideration. Ultimately, the Parties agreed to 37 conditions on the construction, operation, or maintenance of the facility. In the following sections, Staff provides a summary of the Project’s impacts to non-participants and highlights a new condition unique to Wild Springs.

PROJECT NON-PARTICIPANT IMPACTS

The rural nature of the Project Area mitigates many of the common concerns of non-participating residents. For this Project, only three non-participating residences are within 1/4 mile of the Preliminary Development Area. The table below provides the anticipated sound levels at each residence:

Property Owner	Distance from Preliminary Development Area (ft)	Distance from Nearest Inverter (ft)	Predicted Sound Level at Residence (dBA)
Daniel Hall	147	582	38.6
Knuppe Ranch LLP	786	1205	32.2
Clint Ness	1205	1482	30.6

As Wild Springs stated in supplemental testimony, sound is produced by the solar energy facility when electricity is generated during the day. Most energy facility noise complaints are a result of sound emitted at night when residents are trying to sleep, and there will be no sound produced by a solar energy facility at

night. Overall, the highest anticipated daytime sound level is 38.6 dBA, which is below the sound design goal recommended by Staff for wind energy facilities of 40 dBA. Staff is not concerned with the Project sound levels with the site plan as proposed.

SOLAR ENERGY FACILITY SETBACK REQUIREMENTS

Pennington County has established solar energy facility setbacks through their Zoning Ordinance. Table 8-1 of the Application provided below outlines specific Pennington County requirements that were incorporated in the Project’s design:

Table 8-1 Utility-Scale Solar Energy System Setback Requirements		
Utility-Scale Solar Energy System Setback Requirement	Requirements	Proposed Setbacks
Pennington County		
204 – H Section Lines	Minimum of 58 feet (33 feet for statutory right-of-way plus public road setback)	63 feet
317-A-7-c Public road rights-of-way	25 feet or 1.5 times the height of the structure, whichever is greater	30 feet
317-A-7-c Any property line	25 feet or 1.5 times the height of the structure, whichever is greater ¹	30 feet
317-A-7-c-1 Residentially zoned lots and existing residences ²	100 feet	147 feet
317-A-7-h Noise requirement	Noise standard of 55 A-weighted decibels (dBA) at the closest property line	Wild Springs will site panels and inverters at the distance required to meet the 55-dBA standard (at least 143 feet for inverters and at least 10 feet from arrays)

In response to Staff data request 1-23, Wild Springs stated they were unaware of the basis for certain setbacks. The South Dakota legislature has not established setbacks for solar energy facilities in state law, and the Commission has not ordered setbacks in past proceedings. Staff is not opining on the appropriateness of Pennington County’s setbacks as the rural nature surrounding the Project Area and the site plan as proposed resulted in setbacks that far exceeded county requirements and low land use impacts.

POST-CONSTRUCTION BREEDING BIRD SURVEY AND AVIAN FATALITY REPORTING

Appendix A of Wild Springs’ Application includes recommendations that the South Dakota Game Fish and Parks (SD GFP) made for the Project. One of SD GFP’s recommendations was that the Project conduct some form of post-construction mortality monitoring, similar to what is done for wind energy projects. The Bundorf Family Trust supported the idea of Wild Springs conducting post-construction avian mortality monitoring since avian mortality associated with “lake effect” was one of their concerns raised. Wild Springs, however, committed to doing a post-construction breeding bird survey in lieu of mortality monitoring since their wildlife experts believed that the breeding bird survey would produce the most valuable data to inform future solar siting decisions in South Dakota.

In order to capture the spirit of SD GFP’s request for mortality monitoring, Wild Springs agreed to report to the SD GFP any avian fatalities discovered during operation and maintenance of the Project for the first two years. Wild Springs worked with the SD GFP to draft Condition 32 of the Settlement, which sets forth the

post-constructing breeding bird survey and avian fatality reporting that the Project will undertake. Condition 32 states:

“Applicant agrees to undertake two years of independently-conducted postconstruction breeding bird surveys and associated nest monitoring within the Project site and adjacent reference areas for comparison. A copy of the reports and all further reports shall be provided to the United States Fish and Wildlife Service, South Dakota Game, Fish, and Parks (SDGFP), and the Commission. Applicant also agrees to provide the SDGFP with documentation on a Wildlife Incident Reporting System (WIRS) in the event that avian carcasses are discovered during routine operation and maintenance activities on an annual basis until the postconstruction avian surveys are complete.”

Since the SD GFP believes that Condition 32 will provide them with useful data, Staff agreed to this unique condition for the Wild Springs project.

RECOMMENDATION

Staff recommends the Commission grant the Joint Motion for Approval of Settlement Stipulation and adopt the Stipulation without modification. Staff will be available to discuss all stipulated permit conditions at the November 12 commission meeting.