

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

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IN THE MATTER OF THE FILING BY LOOKOUT SOLAR PARK I PROJECT REGARDING ITS NOTIFICATION OF INTENT TO APPLY FOR A PERMIT FOR AN ENERGY CONVERSION FACILITY

ORDER DESIGNATING AFFECTED AREA AND DESIGNATING LOCAL REVIEW COMMITTEE

EL18-007

On February 23, 2018, the South Dakota Public Utilities Commission (Commission) received a Notification of Intent to submit a permit application for an energy conversion facility from Lookout Solar Park I, LLC (Lookout Solar). Lookout Solar proposes to construct, own, and operate a 110megawatt solar generation facility located on the Pine Ridge Indian Reservation in Oglala Lakota County, South Dakota. Associated facilities will include a substation with 110 MVA, and approximately eighteen 34.5. kilovolt single line transmission cables crossing 11 miles in Custer County, South Dakota. The energy conversion facility, known as Lookout Solar Park I, is proposed to be located on the following tracts: the 3395 and 3395-A tracts of Section 36, Township 41N and Range 48W; and the 6368 tract of Section 35, Township 41N and Range 48W, Oglala Lakota County, South Dakota.

On February 28, 2018, Commission staff filed two exhibits along with its recommendation of the affected siting area and local review committee. Specifically, Commission staff recommended the Commission establish an affected area of 5-miles from the project location. On March 1, 2018, the Commission electronically transmitted notice of the filing and the intervention deadline of March 16, 2018, to interested entities and persons on the Commission's PUC Weekly Filings electronic listserv. No petitions to intervene or comments were filed.

The Commission has jurisdiction over this matter pursuant to SDCL Chapter 49-41B, specifically 49-41B-5 and 49-41B-6, as well as ARSD 20:10:22:01. Pursuant to SDCL 49-41B-6, the Commission is required to designate the affected area relative to this filing and also to designate a local review committee within thirty days after the filing of the notification of intent. According to SDCL 49-41B-2(10), the term "siting area" is defined as "that area within ten miles in any direction of a proposed energy conversion facility." In ARSD 20:10:22:01(1), "affected area" is defined as "that area which may be affected environmentally, socially, or economically by the location of a facility at a proposed site."

At its regularly scheduled meeting on March 20, 2018, the Commission considered these matters. The Commission voted unanimously to designate the affected area as a five-mile radius from the proposed energy conversion facility. In accordance with SDCL 49-41B-6, the Commission voted unanimously to designate the local review committee which shall be comprised of the following individuals, ex officio:

- (1) The presidents of the Boards of Education of Oglala Lakota, Hot Springs, and Custer School Districts;
- (2) The chairs of the Oglala Lakota, Custer, and Fall River County Commissions;
- (3) The president of the Oglala Sioux Tribe; and

(4) A representative of Lookout Solar.

Any person on the committee who ceases to hold such office or appointment shall be replaced on the committee by its successor, who shall promptly notify the Commission of such succession. It is therefore

ORDERED, that for the purpose of this energy conversion facility, the affected area shall be a five-mile radius from the proposed energy conversion facility. It is further

ORDERED, that the local review committee shall be comprised of the above referenced individuals, serving ex officio, and that any person on the committee who ceases to hold such office or appointment shall be replaced on the committee by his or her successor, who shall promptly notify the Commission of such succession.

Dated at Pierre, South Dakota, this 265 day of March 2018.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, electronically or by mail.

mers Date (OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

Chairperson

Sary Hanson

CHRIS NELSON, Commissioner



Kristie Fiegen, Chairperson Gary Hanson, Vice Chairperson Chris Nelson, Commissioner

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March 29, 2018

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RE: EL18-007 - In the Matter of the Filing by Lookout Solar Park I Project Regarding its Notification of Intent to Apply for a Permit for an Energy Conversion Facility

On March 6, 2018, the South Dakota Public Utilities Commission (Commission) issued the enclosed Order Designating Affected Area, Designating Local Review Committee in response to a Notification of Intent filed by Lookout Solar Park I Project (Lookout Solar) on February 23, 2018. Lookout Solar proposes to construct, own and operate a 110 megawatt ("MW-AC") solar generating facility located on the Pine Ridge Indian Reservation in Oglala Lakota County, South Dakota and approximately eighteen 34.5 kilovolt ("kv") single line transmission cables

crossing eleven miles into Custer County, South Dakota. The Project would also include a substation with 110 MVA (Project). The Project is described in more detail in the enclosed Order and the Notification of Intent.

You have received a copy of this Order and the other enclosed materials because our contacts with local governments in the area indicate you currently hold one of the offices designated to serve on the local review committee (Committee) for the Project. The responsibilities of the Committee are essentially to assess the potential social and economic effects of the proposed generating facility, assess the surrounding area's ability to absorb those effects and arrive at recommendations and mitigation measures deemed necessary. Copies of the laws defining the Committee's duties in detail are enclosed for your reference.

At this time, Lookout Solar has only filed a notice of its intent to file an application for a permit, as it must do at least six months prior to its permit application. This means that Lookout Solar can file its actual application for a permit on or after August 23, 2018. Within seven months after the actual application is filed, the Committee is required to file a final report with the Commission containing its findings and its recommendations. If the Commission so approves, the Committee may employ outside persons, such as consultants, to assist it in performing the duties and the expenses of this will be paid from the initial fee that Lookout Solar will be required to file with its application. Expense and compensation payments to the committee members themselves, however, are the responsibility of the units of government which the members represent.

The Committee's first step is generally to meet and select a chairperson. While the Committee is an independent body separate from Commission Staff, Staff is available to answer any questions the committee may have. Should you need to contact Staff, please do not hesitate to contact Kristen Edwards, Amanda Reiss, Darren Kearney, or Jon Thurber. Our phone number is 800-332-1782 or 605-773-3201.

The Notice of Intent, Order and all other documents in the case are on file in the Commission's office in the Capitol Building in Pierre and may also be accessed on the Commission's Web site at www.puc.sd.gov under "Commission Actions," "Commission Dockets," "Electric Dockets," "2018 Electric Dockets," "EL18-007."

Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,

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Kristen N. Edwards Staff Attorney

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cc/enc. - Service list EL18-007

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

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IN THE MATTER OF THE APPLICATION OF LOOKOUT SOLAR PARK I, LLC FOR A PERMIT OF A SOLAR ENERGY FACILITY IN OGLALA LAKOTA COUNTY

RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS EL18-059

EE10-037

March 11, 2019

Below, please find Lookout Solar Park I, LLC's ("Lookout Solar" or "Company") responses to the Staff's First Set of Data Requests regarding the Lookout Solar Project (the "Project"). Christian Bohn is responding to each of the interrogatories on behalf of Lookout Solar. Lookout Solar will supplement responses for which it currently does not have complete information.

1-1) Referring to section 6 of the Application and pursuant to ARSD 20:10:22:10, please provide a description of present and estimated consumer demand and estimated future energy needs of those customers to be directly served by the proposed facility. Specifically, will the capacity/energy be sold through a PPA? Or, will the facility be a merchant plant and sell directly to the market?

The Project is in the process of evaluating potential purchasers of the electricity that would be generated by the Project in anticipation of negotiating a power purchase agreement. The purchaser will mostly likely be a single corporate offtaker, via a corporate or "virtual" power purchase agreement. Currently, the Project does not intend to be a merchant generator or sell electricity directly to public markets.

1-2) Referring to section 7 of the Application, please explain why the project cost includes "construction of turbines."

The Project does not include any turbines. The reference to turbines was a typo.

1-3) Referring to section 8.1 of the Application, should an energy storage system be installed, will the location of that system be at the substation near the point of interconnection or within the solar farm boundary?

If the Project includes an energy storage system, then the energy storage project will be located within the Project Area (the solar farm boundary).

1-4) Referring to section 9 of the Application and in accordance with ARSD 20:10:22:12(1), please identify the general criteria used to select alternative sites, how the criteria were measured and weighed, and reasons for selecting the criteria.

The Project Site was identified and selected by a prior development organization. At the time that Lookout Solar became involved in the Project, a lease had already been executed for certain parcels of land on the Pine Ridge Indian Reservation and a review of the impacts of the Project under the National Environmental Policy Act ("NEPA") had already been completed. Accordingly, Lookout Solar was not involved in the consideration of the alternative parcels of land on which the Project might be located.

Portions of the areas subject to the original lease have since been excluded from the Project Area. Lookout Solar selected the current Project Area location (as opposed to the other parcels of land subject to the lease) based on: optimization of the solar radiation potential; the close proximity of the road (BIA 2), which provides access to the road and to the water lines in the road; the close proximity of the Project Area to the Custer County roads (and right of way therein) as well as the point of interconnection to the high voltage transmission lines; and the intent to minimize impacts to neighboring activities, like grazing, by selecting a parcel close to the road rather than a more remote location.

1-5) Referring to section 9 of the Application and in accordance with ARSD 20:10:22:12(2), please provide an evaluation of the four different project locations considered by the Applicant.

The Environmental Assessment completed by the Bureau of Indian Affairs ("BIA") in June 2016 states that during initial scoping, the entity previously developing the Project considered different locations in the Pine Ridge Indian Reservation for the Project but it ruled out those alternatives due to potential issues with geology, migratory birds, viewsheds, and access. Lookout Solar's understanding is that alternative parcels on the Pine Ridge Indian Reservation considered for the Project included parcels 3364 (Section 11, Township 40N, Range 48W), 3455 Section 19, Township 41N, Range 47W), 3522-A (Section 32, Township 41N, Range 47W), and 3523 (Section 33, Township 41N, Range 47W). Lookout Solar does not have additional information regarding the consideration of the different project locations beyond what was provide in the BIA Environmental Assessment because Lookout Solar acquired its interests in the Project after the site selection and BIA review were completed.

1-6) Pursuant to ARSD 20:10:22:14(2), please provide a topographic map of the plant and transmission site.

The Project is working on this request and will submit the map as soon as it is available.

1-7) Pursuant to ARSD 20:10:22:14(3), please provide a map of cross-sections showing bedrock geology and surficial geology to depict the major subsurface variations in the siting area.

The Project is working on this request and will submit the map as soon as it is available.

1-8) Pursuant to ARSD 20:10:22:14(4), please provide "a description and location of economic deposits such as lignite, sand and gravel, scoria, and industrial and ceramic quality clay existent within the plant, wind energy, or transmission site." If no economic deposits exist, please identify such.

The Project is working on this request and will provide a response as soon as it is available.

1-9) Pursuant to ARSD 20:10:22:14(6), please provide "an analysis of potential erosion or sedimentation which may result from site clearing, construction, or operating activities and measures which will be taken for their control."

The Project is working on this request and will provide a response as soon as it is available. In general, Lookout Solar would expect to implement best management practices under the General Permit for Stormwater Discharges Associated with Construction Activities administered by South Dakota Department of Environment and Natural Resources, and to implement erosion control and dust management in accordance with prudent industry standards and applicable laws, ordinances, regulations and permits.

1-10) Pursuant to ARSD 20:10:22:14(7), please provide information on subsidence potential and slope instability for the plant and transmission site.

The Project is working on this request and will provide a response as soon as it is available. The information that Lookout Solar currently has regarding the Project Area indicates that it does not contain any underground mines or caverns, and is undisturbed land that should pose no major subsidence risks. Lookout Solar plans to confirm this conclusion with appropriate geological analysis.

1-11) Pursuant to ARSD 20:10:22:14(8), please provide "an analysis of any constraints that may be imposed by geological characteristics on the design, construction, or operation of the proposed facility and a description of plans to offset such constraints."

Currently, the Project is not aware of any constraints on the design of the Project that would be imposed by geological characteristics of the Project Area. In general, solar photovoltaic installations can be installed in rough conformity with natural contours, although some local cutting and filling may be required. Any grading, local cutting or filling required for installation of the solar panels will be conducted in accordance with prudent industry standards and applicable laws, ordinances, regulations and permits.

1-12) Pursuant to ARSD 20:10:22:15(1), please provide "a map drawn to scale of the plant, wind energy site, or transmission site showing surface water drainage patterns before and anticipated patterns after construction of the facility."

The Project is working on this request and will provide the map as soon as it is available.

1-13) Pursuant to ARSD 20:10:22:15(2), please provide "... indication on a map drawn to scale of the current planned water uses by communities, agriculture, recreation, fish, and wildlife which may be affected by the location of the proposed facility and a summary of those effects."

The Project is working on this request and will provide the map as soon as it is available.

1-14) Referring to section 13.4.5 of the Application, since three sharp-tailed grouse hens were observed in the project area did the Applicant review locations of known active leks? If so, are there any active leks in the project area?

The Project is not aware of any known active leks in the Project Area. In correspondence with the South Dakota Department of Game, Fish and Parks dated August 2, 2018, the State indicated that, according to the State's incidental lek database, there are no known leks in or near the Project Area or Transmission Line Route. We are consulting with the State to confirm that currently there are no known leks in or near the Project Area or Transmission Line Route.

1-15) Pursuant to ARSD 20:10:22:18(1), please provide a map of the project site using the landuse classifications identified as occurring in the project area found in section 15.1 of the Application.

The Project is working on this request and will submit the map as soon as it is available.

1-16) Pursuant to ARSD 20:10:22:23(1), please provide "a forecast of the impact on commercial and industrial sectors, housing, land values, labor market, health facilities, energy, sewage and water, solid waste management facilities, fire protection, law enforcement, recreational facilities, schools, transportation facilities, and other community and government facilities or services."

The Project is working on the forecast and will provide a response as soon as it is available.

1-17) Pursuant to ARSD 20:10:22:23(2), please provide "a forecast of the immediate and longrange impact of property and other taxes of the affected taxing jurisdictions."

The Project is finalizing a tax analysis and will provide a response to this question as soon as the analysis is complete.

1-18) Pursuant to ARSD 20:10:22:23(4), please provide "a forecast of the impact on population, income, occupational distribution, and integration and cohesion of communities."

The Project is finalizing a forecast and will provide a response to this question as soon as the analysis is complete.

1-19) Pursuant to ARSD 20:10:22:23(5), please provide "a forecast of the impact on transportation facilities."

The Project is finalizing a forecast and will provide a response to this question as soon as the analysis is complete.

1-20) Pursuant to ARSD 20:10:22:23(6), please provide "[...] the applicant's plans to coordinate with the local and state office of disaster services [...]."

The Project is located within a rural portion of Oglala Lakota and Custer Counties. During the Project construction period and during subsequent operation, it is expected that the Project would have no significant impact on the security and safety of the local communities and the surrounding area. During Project construction, the Project's general contractor would identify and secure all active construction areas to prevent public access to potentially hazardous areas and work with local and county emergency management to develop procedures for response to emergencies, natural hazards, hazardous materials incidents, manmade problems, and potential incidents concerning Project construction. The contractor would provide site maps, haul routes, project schedules, contact numbers, training, and other requested project information to local and county emergency management. During Project operations, the Project operator would coordinate with local and county emergency management to protect the public and the property related to the Project during natural, manmade, or other incidents. The Project would register with the rural identification/addressing (fire number) system and 911 systems.

1-21) Pursuant to ARSD 20:10:22:24, please provide "[...] the estimated number of jobs and a description of job classifications, together with the estimated annual employment expenditures of the applicants, the contractors, and the subcontractors during the construction phase of the proposed facility" and "[...] the same data with respect to the operating life of the proposed facility, to be made for the first ten years of commercial operation in one-year intervals."

The Project is finalizing an employment analysis and will provide a response to this question as soon as the analysis is complete.

1-22) Please provide the information required in ARSD 20:10:22:26. If any of the subparts do not apply to the solar farm, please identify such.

The Project is a 110 MW solar generating facility that Lookout Solar anticipates operating for approximately 30 years. The major components of the solar generating facility are solar arrays (i.e., solar panels in a frame), steel mounting systems, cables between the solar arrays, inverters, a safety disconnect switch, a transformer, and a control system. No

materials would be flowing into or out of the system. The solar generating facility would not discharge air emissions, wastewater, or solid waste.

1-23) Please provide the information required in ARSD 20:10:22:27. If this does not apply to the solar farm, please identify such.

This provision is not applicable to the operation of a solar project. The only product generated by the solar generating facility is electricity, and there are no byproducts.

1-24) Please provide the information required in ARSD 20:10:22:28. If this does not apply to the solar farm, please identify such.

This provision does not apply to the operation of a solar project because no fuel is used.

1-25) Please provide the information required in ARSD 20:10:22:29. If this does not apply to the solar farm, please identify such.

This provision does not apply to operation of a solar project because no fuel is used.

1-26) Please provide the information required in ARSD 20:10:22:30. If this does not apply to the solar farm, please identify such.

At the time that Lookout Solar began developing the Project, the BIA had already approved a lease that allowed for a solar project on the Pine Ridge Indian Reservation and issued an Environmental Assessment for the proposed solar project. Accordingly, Lookout Solar continued to develop the Project as a solar project. Lookout Solar's understanding is that the entities previously working on the development of the Project considered development of a wind project but decided not to pursue that option based on the costs, the development timeline and the other wind projects that are currently under development and construction in the state.

1-27) Please provide the information required in ARSD 20:10:22:31. If this does not apply to the solar farm, please identify such.

This provision does not apply to operation of a solar project because no solid or radioactive waste will be generated.

1-28) Please provide the information required in ARSD 20:10:22:32.

The Project is finalizing an estimate of the expected efficiency of the Project and will provide a response to this question as soon as the estimate is complete.

1-29) Referring to section 23 of the Application, please provide support for the estimated decommissioning cost of \$1,000,000. Further, please identify what it costs for recycling of the solar panel and any hazardous components of the project that cannot be landfilled.

The estimated cost of decommissioning of the Project was calculated based on the size of the Project, assuming that the project management costs (contractor costs, equipment, etc.) would be approximately \$100,000 and the removal of the equipment and site remediation would be approximately \$900,000. Many of the components of solar projects can be salvaged (metal, glass, wiring, silicon wafers, etc.). Any photovoltaic panels that contain hazardous materials that are not reusable or recyclable will be disposed of in a landfill that can accept hazardous materials.

1-30) Referring to section 25.2 of the Application, please explain why guard structures will be used during the installation of the transmission line when the line will in fact be buried.

The transmission line will be underground. Therefore, no guard structure will be used during installation.

1-31) Referring to section 25.2 of the Application, please explain why the applicant mentions a transmission pole falling when the proposed line will be buried.

The Project does not include any transmission line poles. The reference to a transmission line pole was a typo. The transmission line will be underground.

1-32) Pursuant to ARSD 20:10:22:35(3), please provide a map of the proposed transmission site and major alternatives considered for the route.

The current Transmission Line Route was selected due to Custer County having entered into agreements with private landowners for a right of way for utilities along Riverside Road and the County's statutory right of way for utilities in county roads on section lines, such as 148th Avenue and Cottonwood Cutoff. The Project is currently finalizing a map and will provide the map as soon as the analysis is complete.

1-33) Pursuant to ARSD 20:10:22:35(7), please provide the depth of burial, distance between access points, conductor configuration and size, and number of circuits for the proposed transmission line.

The Project is finalizing a response and will provide a response to this question as soon as the response is complete.

1-34) Please identify if any tree/shrub clearing will be needed for the transmission line for the Application is conflicting on this item.

The Project does not anticipate clearing any shrubs or trees along the Transmission Line Route. There are some shrubs (sand sagebrush) that may need to be cleared in the Project Area depending on the final solar generating facility layout.

1-35) Referring to a question asked by Commissioner Nelson at the Public Input Hearing, please identify the project's benefits for the tribe. Further, please identify what taxes will be paid to the tribe, if any.

The Project is finalizing a tax analysis and will provide a response to this question as soon as the analysis is complete.

Dated this 11th day of March 2019.

/s/ Christian Bohn

Christian Bohn CFO Lookout Solar Park I, LLC

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

* **IN THE MATTER OF THE INITIAL RESPONSE TO STAFF'S** * APPLICATION OF LOOKOUT SOLAR SECOND SET OF DATA REOUESTS * PARK I. LLC FOR A PERMIT OF A * SOLAR ENERGY FACILITY IN EL18-059 * OGLALA LAKOTA COUNTY * March 21, 2019 *

Below, please find Lookout Solar Park I, LLC's ("Lookout Solar" or "Company") responses to the Staff's Second Set of Data Requests regarding the Lookout Solar Project (the "Project"). Christian Bohn is responding to each of the interrogatories on behalf of Lookout Solar. Lookout Solar will supplement responses for which it currently does not have complete information.

2-1) Refer to Pages 6-1 and 6-2 of the Application, and the Project Timeline slide of the Public Input Hearing presentation. The Applicant states on Pages 6-1 and 6-2 of the Application, "If the Project begins construction after December 31, 2019, the tax credit would decrease to 26% or lower in later years. Consequently, a delay could force Lookout Solar to reevaluate the financial viability of the Project." Per the Public Input Hearing presentation, the Company revised start of construction from December 31, 2019, to Spring 2020. Please explain how this delay will impact the financial viability of the project.

Tax regulations allow multiple pathways for obtaining the 30% tax credit available to projects initiated prior to December 31, 2019. At this point in time, the project sponsor intends to rely upon guidance from the Internal Revenue Service under which investment in off-site fabrication during 2019 would be treated as commencement of construction. On-site construction will likely commence later, in spring 2020. The delay in commencement of on-site construction from 2019 to spring 2020 should not impact the rate of the Investment Tax Credit or the overall financial viability of the Project.

2-2) Refer to Page 8-3 of the Application. Please describe the energy storage facility the Applicant is considering constructing.

The energy storage facility would include multiple lithium-ion batteries that would be integrated into the solar generating facility in the Project Area. The capacity of the energy storage system will be determined based on the results of the Definitive Interconnection System Impact Studies ("DISIS") that the Southwest Power Pool is currently completing.

2-3) Pursuant to ARSD 20:10:22:11, please provide a map showing cemeteries, places of historical significance, transportation facilities, or other public facilities adjacent to or abutting the plant or transmission site. If there are none of these features near the site, please indicate as such.

The Level III Cultural Resources Survey identified a historic grave site that may be eligible for listing in the National Register of Historic Places. The Survey also identified portions of the Angostura Canal (a ditches and dams) that may be considered historical. A map and description of the grave site and the Angostura Canal are provided in the attached Level III Cultural Resources Survey.

2-4) Refer to Page 9-1 of the Application. Has the County authorized the Applicant to place the transmission line within the right of way within the County? If no, please provide the status and when the Applicant believes it will obtain County approval.

The Project has submitted an application to the occupy Custer County's right of way in County roads and expects the application to be approved at a Custer County Commissioners meeting in April 2019. The County previously approved use of the County's right of way by the Project under an earlier development plan. The pending application reflects updates in the transmission line route as well as the owner of the Project.

2-5) Refer to Page 16-1 of the Application. The Applicant states it "intends to pursue an ordinance from the Oglala Sioux Tribe that would authorize the Project." What is the status of the ordinance? Please explain.

The Oglala Sioux Tribe issued the attached resolution in support of the Project on May 18, 2016. The Project has continued to provide updates on the Project to the Tribe, including a meeting with the assistants to the President of the Tribe on February 5, 2019. The Project will soon begin outreach to the Tribe regarding a potential resolution that would provide further clarity on how the Project can comply with tribal ordinances and the tribal employment rights office, taxes, and jurisdictional issues.

2-6) Refer to Page 16-1 of the Application. The Applicant states it "intends to obtain building permits from the Oglala Sioux Tribe and Custer County." What is the status of the building permits? Please explain.

The Project has submitted applications for floodplain development and grading permits to Custer County and anticipates that the permits will be issued in April 2019. The Project is in discussions with the Tribe to identify any tribal permits or approvals required for the Project, which may include a business license and a building permit.

2-7) Refer to Page 19-1 of the Application. Has the Applicant identified the primary contractors performing onsite Project construction? If yes, please identify.

The Project has not yet identified the primary contractors for construction of the Project.

2-8) Refer to Pages 20-3 and 21-1 of the Application. On Page 20-3, the Applicant states "during construction, Lookout Solar anticipates that the Project would employ an average

of 150 workers." On Page 21-1, the Applicant states "during construction, Lookout Solar anticipates that the Project would employ an average of 50 workers." Does the Applicant anticipate an average of 50 or 150 workers during construction? Please clarify.

Lookout Solar estimates that up to 150 people would be employed during the construction phase of the Project.

2-9) Refer to Pages 22-1 of the Application and ARSD 20:10:22:25. Please confirm that Applicant does not have any plans for future modification or expansion of the proposed facility or construction of additional facility which the Applicant may wish to be approved in the permit.

The Project currently does not have any plans for future modification or expansion of the Project or any additional facilities for which Lookout Solar is seeking approval.

2-10) Refer to Page 23-1 of the Application, and the Project Timeline slide of the Public Input Hearing presentation. On Page 23-1 of the Application, the Applicant states it "intends for the Project to operate for approximately thirty years." On the Project Timeline slide of the Public Input Hearing presentation, the Applicant states the operation of the project will be approximately 40 years. Is the operating life of the facility anticipated to be 30 or 40 years? Please clarify.

Lookout Solar anticipates that the Project will have a physical useful life and operate for at least 30 years and has entered into a lease option agreement and will negotiate and conclude power purchase agreements for the 30 years of operation. The Project has the option to extend the lease term for two subsequent 5-year periods (up to 40 years) which may be exercised if continuing to operate the Project is technologically and economically viable. Accordingly, the project is expected to operate for at least 30 years, and may operate up to 40 years.

2-11) Pursuant to ARSD 20:10:22:33, please provide "the amount of land irretrievably committed."

Upon the decommissioning of the Project, the land will be restored to substantially similar condition to the state of the land prior to construction of the Project. Accordingly, no land will be irretrievably committed.

- 2-12) Refer to Section 24.3 of the Application.
 - a) If the cables are going to be placed underground, please explain what inspections will be performed by trucks monthly?
 - b) How will a visual inspection ensure that the transmission line is fully functional?
 - c) How does "vegetation encroach so as to violate required clearances" on an underground transmission line?

As most of the transmission line will be underground, the majority of the transmission line will not be inspected visually or by truck. Only the portions of the transmission line that are aboveground, where they connect to the solar arrays and the substation, would be inspected. Lookout Solar plans to monitor vegetation encroachment at the solar generating facility, the substation and any aboveground stretches of transmission lines that could be affected by overgrowth.

2-13) Pursuant to ARSD 20:10:22:34, please provide a description of plans for stabilization and weed control.

During the construction of the transmission line, the Project will comply with local policies for weed control, such as cleaning vehicles and equipment arriving from areas with known invasive species and using locally sourced topsoil. Stabilization materials, such as crushed rock, will be used as needed during installation of the transmission line.

2-14) Refer to Section 25.1 of the Application. Please explain how underground transmission lines are impacted by heavy ice storms.

Ice storms are not expected to have any impact on the underground transmission line.

2-15) Pursuant to 49-41B-7, when does the Applicant anticipate the local review committee with complete its assessment and provide any formulate mitigation measures for Commission consideration?

Lookout Solar anticipates that the local review committee will submit its report to the Commission in July 2019 or sooner.

2-16) Please refer to Page 5, lines 29-30 of Mr. Steffen Steinel's pre-filed testimony. Please provide a copy of the Oglala Sioux Tribe's resolution supporting the project.

The Oglala Sioux Tribe resolution is attached. Although the owner of the Project has changed since 2016, the Project is substantially the same as when it was proposed in 2016 and the Oglala Sioux Tribe has continued to express support for the Project.

2-17) Refer to WIRCON's Presentation filed on December 17, 2018. Has WIRCON developed any solar or wind project in the United States? If yes, please provide a project listing.

Wircon has not yet completed construction on or operated a wind or solar project in the United States. However, Wircon also is developing a solar project in Texas. Wircon has extensively development experience outside of the United States, including the development of a wind farm in Ontario, Canada.

2-18) Please provide a list of any known private landowner concerns and the Applicant's plan to address those concerns.

At public meetings on the scoping for the Environmental Assessment to comply with the requirements of the National Environmental Policy Act ("NEPA"), a few private landowners raised concerns regarding the Project's impacts to roads and whether the Project will generate excessive dust during construction. Another concern raised by landowners was whether existing utilities in the Custer County right of way will be damaged during construction. The Project plans to restore roads to a pre-construction state at the end of construction. The Project also is working with local utilities to obtain as-built diagrams of existing utilities and water lines and the Project will file a request with South Dakota One Call prior to construction to have existing utility lines.

2-19) Please provide copies of agency correspondence, such South Dakota Game, Fish, and Parks, State Historic Preservation Office, and Custer County.

Lookout Solar has attached the comments the Company received from state agencies and Custer County during the public comment period on the scoping for the NEPA review. Lookout Solar will supplement this response with any additional correspondence the Project later receives or identifies.

2-20) What is the projected average annual output of the facility in MWh? Please provide the assumed net capacity factor.

The annual output of the Project will be approximately 232,000 MWh.

2-21) Please provide the estimated annual landowner lease payments for the project.

The rent payment to the landowner of the Project Area is \$1,000 per year during the development period. The rent payment to the landowner of the Project Area is \$40 per acre once the option to lease has been executed.

2-22) Please explain the safety features of the project. For example, will the project have fencing surrounding the perimeter or security cameras?

The project will have security fencing around the perimeter of the Project Area and signs stating that trespassing is not permitted and warning signs indicating the potential danger from electrical facilities associated with the Project.

2-23) How far away is the closest residence to the edge of the solar array? Will the sound emitted from the inverters cause any noise impacts for area residents? Please explain.

At a distance of about 300 feet, Lookout Solar anticipates that the inverters will have a sound pressure level of about 45dB. This is approximately the amount of noise generated by a refrigerator. As the closest residents are more than 300 feet away, Lookout Solar does not anticipate that the Project will have any significant noise impacts on nearby residents. 4163-2676-3803.5

2-24) Please explain whether reflection from the solar panels will cause a visual impact.

Glare and glint are not concerns with modern solar panels, as the U.S. Department of Energy has noted in its guidance. See Department of Energy, Solar PV and Glare Factsheet, <u>https://www.energy.gov/eere/solar/downloads/solar-pv-and-glare-factsheet</u>. This has allowed solar projects to be built in areas where glare and glint are a concern, like near airports. See Solar Power World, 7 Cool Solar Installations at U.S. Airports, <u>https://www.solarpowerworldonline.com/2016/03/7-cool-solar-installations-at-u-s-airports/</u>.

Dated this 21st Day of March 2019.

Christian Bohn CFO Lookout Solar Park I, LLC

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

* IN THE MATTER OF THE SUPPLEMENTAL RESPONSE TO * APPLICATION OF LOOKOUT SOLAR **STAFF'S FIRST SET OF DATA** * PARK I, LLC FOR A PERMIT OF A REOUESTS * **SOLAR ENERGY FACILITY IN** * OGLALA LAKOTA COUNTY EL18-059 * * June 13, 2019

Below, please find Lookout Solar Park I, LLC's ("Lookout Solar" or "Company") supplemental responses to the Staff's First Set of Data Requests regarding the Lookout Solar Project (the "Project"). Christian Bohn is responding to each of the interrogatories on behalf of Lookout Solar. Lookout Solar will supplement responses for which it currently does not have complete information.

1-1) Pursuant to ARSD 20:10:22:14(2), please provide a topographic map of the plant and transmission site.

Please see attached Figures 2-1 and 2-2.

1-2) Pursuant to ARSD 20:10:22:14(3), please provide a map of cross-sections showing bedrock geology and surficial geology to depict the major subsurface variations in the siting area.

Please see attached Figure 3-1.

1-3) Pursuant to ARSD 20:10:22:14(4), please provide "a description and location of economic deposits such as lignite, sand and gravel, scoria, and industrial and ceramic quality clay existent within the plant, wind energy, or transmission site." If no economic deposits exist, please identify such.

No economic deposits exist within the Project Area.

1-4) Pursuant to ARSD 20:10:22:14(6), please provide "an analysis of potential erosion or sedimentation which may result from site clearing, construction, or operating activities and measures which will be taken for their control."

The soils in the Project Area are moderately susceptible to erosion. The soils have K Factors ranging from 0.05 to 0.4. ¹ *The Project Area slope ranges from 0 to 30 percent.*

¹ Erosion factor K indicates the susceptibility of a soil to erosion Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt,

1-5) Pursuant to ARSD 20:10:22:14(7), please provide information on subsidence potential and slope instability for the plant and transmission site.

The risk for subsidence and slope instability within the Project Area and the Transmission Line Route is minimal. Pierre Shale and Eolian deposits form the bedrock and are present at the surface, or beneath a thin veneer of residual soil, throughout a vast majority of the Project Area. This type of bedrock does not exhibit karst topography or contain layers or members susceptible to dissolution by water.

1-6) Pursuant to ARSD 20:10:22:15(1), please provide "a map drawn to scale of the plant, wind energy site, or transmission site showing surface water drainage patterns before and anticipated patterns after construction of the facility."

Surface water drainage patterns will be the same before and after construction of the Project. Please see the attached Aquatic Resources Report for maps and descriptions of drainage patterns in the Project Area and the Transmission Line Route.

1-7) Pursuant to ARSD 20:10:22:15(2), please provide "... indication on a map drawn to scale of the current planned water uses by communities, agriculture, recreation, fish, and wildlife which may be affected by the location of the proposed facility and a summary of those effects."

Please see Figures 3-4 (cropland and pastureland), 3-12 (soil resources), and 3-14 (raptor nests).

1-8) Pursuant to ARSD 20:10:22:18(1), please provide a map of the project site using the landuse classifications identified as occurring in the project area found in section 15.1 of the Application.

Please see Figures 3-4 (cropland and pastureland), 3-12 (soil resources), and 3-14 (raptor nests).

1-9) Pursuant to ARSD 20:10:22:23(1), please provide "a forecast of the impact on commercial and industrial sectors, housing, land values, labor market, health facilities, energy, sewage and water, solid waste management facilities, fire protection, law enforcement, recreational facilities, schools, transportation facilities, and other community and government facilities or services."

There is likely to be a minor increase in demand for temporary housing during construction as a result of construction workers that do not live locally. The Project would not have

sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion by water.

impacts on long-term housing or land values. The Project is not expected to increase demand for public services, such as energy, sewage, solid waste management, police, fire protection, schools, or other community, government, or recreational facilities due to the short-term duration of the construction activities. No significant increase in permanent population of local communities would be expected from construction and operation of the facility, and the construction workforce would not create any measurable impact to the local government, utilities, or community services.

1-10) Pursuant to ARSD 20:10:22:23(2), please provide "a forecast of the immediate and long-range impact of property and other taxes of the affected taxing jurisdictions."

Over the life of the Project, the Project is projected to provide over \$24 million in direct payments:

- Approximately \$1.3 million in lease payments to landowners, or \$44,400 annually;
- Approximately \$3 million to the Oglala Sioux Tribe²;
- Approximately \$5.4 million to Custer County, \$180,000 annually from taxes;
- Approximately \$5.4 million to area school district(s), or \$180,000 annually from taxes paid; and
- *Approximately* \$9 *million to the State of South Dakota, or* \$300,000 *annually from taxes paid.*³
- 1-11) Pursuant to ARSD 20:10:22:23(4), please provide "a forecast of the impact on population, income, occupational distribution, and integration and cohesion of communities."

The Project is not expected to have significant impacts on the population, occupational distribution, and integration and cohesion of communities. The Project will have temporary minor impacts on the population during construction due to the presence of construction workers. Local businesses, such as restaurants, grocery stores, hotels, and gas stations, would see increased business during this phase from construction-related workers. Local industrial businesses, including aggregate and cement suppliers, welding and industrial suppliers, hardware stores, automotive and heavy equipment repair, electrical contractors, and maintenance providers, would also likely benefit from construction of the Project. The Project would not impact occupation distribution long-term because only a few employees are required for the operation of the Project. The Project is not expected to have impacts on the integration and cohesion of communities because the Project is located on private land in a remote location.

² The estimated tax payment to the Oglala Sioux Tribe is based on the Tribe collecting the sales/services or use tax on materials and construction services for the generating facility portion of the Project.

³ The estimated tax payment to the state, Custer County and the school districts is based on the assumption that the Project will pay the nameplate and production taxes to the state, a portion of which will then be distributed to the County and school districts. The state would also collect the sales/services or use tax on materials and construction services for the transmission line and substation portions of the Project.

1-12) Pursuant to ARSD 20:10:22:23(5), please provide "a forecast of the impact on transportation facilities."

The primary access to the Project Area is via BIA Route 2. The Transmission Line Route follows Riverside Road, 148th Avenue, and Cottonwood Cutoff. These roads are all gravel roads. Custer County and Oglala Sioux County gravel roads would be maintained by the Project's contractor during construction, at the Project's expense. Paved roads would be returned to preconstruction condition if damage occurs. During construction, it is anticipated that several types of light, medium, and heavy-duty construction vehicles would travel to and from the site, as well as private vehicles used by the construction personnel. The movement of equipment and materials to the site would cause a relatively short-term increase in traffic on local roadways during the construction period. Most equipment (e.g., heavy earthmoving equipment) would remain at the site for the duration of construction activities. Shipments of materials, such as gravel, concrete, and water would not be expected to substantially affect local primary and secondary road networks. At the completion of each construction phase, this equipment would be removed from the site. The Project would not result in any permanent impacts to the area's ground transportation resources.

1-13) Pursuant to ARSD 20:10:22:24, please provide "[...] the estimated number of jobs and a description of job classifications, together with the estimated annual employment expenditures of the applicants, the contractors, and the subcontractors during the construction phase of the proposed facility" and "[...] the same data with respect to the operating life of the proposed facility, to be made for the first ten years of commercial operation in one-year intervals."

Lookout Solar estimates that up to 150 people would be employed during the peak construction phase⁴ of the Project and two to three people during the operation of the Project. It is likely that general skilled labor is available in Custer and Oglala Sioux Counties, or the State, to serve the basic infrastructure and site development needs of the Project. Specialized labor will be required for certain components of Project construction, which may be imported from other areas of the State or from other states, as the relatively short duration of construction makes special training of local or regional labor impracticable. The estimated number of jobs by classification and annual employment expenditures are included in the tables below.

Job Classification	Number	Estimated Annual Salary
Civil Workers	80	\$85,000
Construction Managers	12	\$110,00
Collection Workers	15	\$65,000

Table 1: Anticipated Construction Jobs and Employment Expenditures

⁴ The average jobs during construction may be lower than the peak number of construction jobs.

Transmission Workers	16	\$75,000
Substation Workers	15	\$80,000
Foundation Workers	12	\$70,000

Table 2: Anticipated Operation Jobs and Employment Expenditures

Job Classification	Number	Estimated Annual Salary
Facility Manager	1	\$70,000
Solar Project Technician	1	\$60,000
Administrative	1	\$30,000

1-14) Please provide the information required in ARSD 20:10:22:32.

In the context of solar panels, efficiency means the ability of the solar panel to convert sunlight into electricity.⁵ Most solar panels have a panel conversion efficiency between 15% and 20%. Lookout Solar has not yet entered into a contract for solar panels and therefore cannot provide the exact efficiency of the solar panels at this time, but is plans to use Tier 1 solar panels.

1-15) Pursuant to ARSD 20:10:22:35(3), please provide a map of the proposed transmission site and major alternatives considered for the route.

A map of the current Transmission Line Route is attached as Figure 1. No major alternatives for the route were considered. The current route was selected due to Custer County having entered into agreements with private landowners for a right of way for utilities along Riverside Road and the County's statutory right of way for utilities in county roads on section lines, such as 148th Avenue and Cottonwood Cutoff.

1-16) Pursuant to ARSD 20:10:22:35(7), please provide the depth of burial, distance between access points, conductor configuration and size, and number of circuits for the proposed transmission line.

The transmission line will be buried at least 48 inches below the surface. Lookout Solar would place the transmission line deep enough to ensure that the thermal discharge from the transmission line would not melt snow and any hillside slopes during the winter. The final designs for the transmission line have not yet been completed at this time, so Lookout Solar is not able to provide the exact distance between access points, conductor configuration and size, and number of circuits at this time.

⁵ See, e.g., Energy Sage, *What are the most efficient solar panels on the market? Solar panel efficiency explained*, <u>https://news.energysage.com/what-are-the-most-efficient-solar-panels-on-the-market/</u>.

1-17) Referring to a question asked by Commissioner Nelson at the Public Input Hearing, please identify the project's benefits for the tribe. Further, please identify what taxes will be paid to the tribe, if any.

The Project currently anticipates that the sales/services or use tax on materials and construction services will be paid to the Tribe for the generating facility portion of the Project.

Dated this 13 day of June 2019.

/s/ Christian Bohn

Christian Bohn CFO Lookout Solar Park I, LLC



Kristie Fiegen, Chairperson Gary Hanson, Vice Chairperson Chris Nelson, Commissioner

February 19, 2019

Jim Lintz Chairman Custer County Commission 420 Mount Rushmore Rd. Custer, SD 57730-1934 jlintz@custercountysd.com

Joe Falkenburg Chairman Fall River County Commission 906 North River St. Hot Springs, SD 57747 <u>frcaud@gwtc.net</u>

Wendell Yellow Bull Chairman Oglala Lakota County Commission 906 North River Street Hot Springs, SD 57747 wicasamaza2@yahoo.com

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Dr. Anthony Fairbanks Superintendent Oglala Lakota County School District 206 School St. PO Box 109 Batesland, SD 57716 anthony.fairbanks@k12.sd.us

EL18-059 - In the Matter of the Application of Lookout Solar Park I, LLC for a Permit of a Solar Energy Facility in Oglala Lakota County

On March 29, 2018, I sent you a letter regarding Lookout Solar Park I's Notification of Intent to Apply for a Permit for an Energy Conversion Facility. Lookout Solar Park I has now filed its Application with reference to this matter with the Public Utilities Commission.

The Application is on file in the Commission's office in the Capitol Building in Pierre and may also be accessed on the Commission's Web site at www.puc.sd.gov under "Commission Actions," "Commission Dockets," "Electric Dockets," "2018 Electric Dockets," "EL18-059."

Please do not hesitate to contact me should you have any questions or concerns.

Sincerely,

amarda M. Ress

Amanda M. Reiss Staff Attorney

enc.

cc/enc. - Service list EL18-059



FALL RIVER COUNTY COMMISSIONERS OFFICE COURTHOUSE 906 NORTH RIVER ST HOT SPRINGS, SOUTH DAKOTA 57747 PHONE: (605) 745-5130 FAX: (605) 745-6835

6-5-19

Jeremy Duff Taylor Law Firm, LLC 4820 E. 57th St Sioux Falls, SD 57108

Re: Authorization of representative for Fall River County, SD Lookout Solar Project

Dear Mr. Duff,

Please accept this letter as my authorization, as Chairman of the Fall River County Commission, to have Paul Nabholz, Fall River County Commissioner, represent me and our county at the Local Review Committee Meeting, and possible future meetings. The upcoming meeting will be held in Hot Springs, SD at the Mueller Civic Center – Annex Room.

If this authorization is not accepted please let me know through our County Auditor at <u>sue.ganje@state.sd.us</u>.

Sincerely,

alkenbuch

Joe Falkenburg Chairman of the Board Fall River County