

Schnebly Coulee Solar Energy Project Response Comments

Introduction

The Schnebly Coulee Solar Energy Project (Project) Conditional Use Permit (CUP) Application (Application) was submitted April 9, 2024 and deemed complete by the Kittitas County Community Development Services (Staff) May 6, 2024 (CU-24-00003). Kittitas County Community Development Services provided a Notice of Application on May 28, 2024 and requested comments by June 12, 2024. Staff provided comments received to the Project on June 17, 2024, and requested any responses by July 5, 2024 which was subsequently extended to July 26, 2024. In the Notice of Application, Staff noted that the County expects to issue a Determination of Non-Significance (DNS) for the Project. These response comments seek to supplement the record for why a DNS is still appropriate and how the Project meets all CUP criteria for approval.

Kittitas PUD

The Project does not currently expect to impact any Kittitas PUD facilities but will notify and coordinate with Kittitas PUD regarding any alterations or work near or within the ROW of existing distribution lines prior to construction.

Kittitas County Assessor's Office

The Project will contact the Kittitas County Assessor's Office to coordinate the land tax classification prior to construction.

Confederated Tribes of the Colville Reservation (CTCR), Yakama Nation, Department of Archaeology & Historic Preservation (DAHP)

The Project has and will continue to collaborate with the CTCR, Yakama Nation, and DAHP to protect cultural resources. The Project has incorporated their input on the Cultural Resource Inventory (submitted under separate cover for confidentiality; originally submitted as Application Appendix G) and updated Section 13.a of the SEPA Checklist (attached). If further edits are requested, the Project will work to address. In addition, the Project will implement an Unanticipated Discovery Plan (UDP) to help ensure protection of cultural resources during construction per Section 13.d of the SEPA Checklist.

Kittitas County Department of Public Works

The Project understands that access and grading permits are required and included these in the list of permits that will be needed for the proposal in SEPA Checklist Section 10. The Project also understands that new Project roads greater than 150' in length are required to provide a fire apparatus turnaround and these are shown on the Application Site Plan. In addition to these commitments provided in the Application, the Project agrees to coordinate with the Department of Natural Resources and the National Geodetic Survey if any survey monuments need to be removed for construction.

Regarding transportation impacts to County roads, the Project has submitted a traffic scoping letter to the Kittitas County Department of Public Works on September 13, 2023, detailing the estimated traffic volumes and peak times during the construction and operation of the solar facility (attached), and is glad to address any follow-up questions the Department might have.

Washington State Department of Ecology

The Project will prepare a Stormwater Pollution Prevention Plan and seek a NPDES Construction Stormwater General Permit application before ground disturbance activities (SEPA Checklist Section 10). The Application included a preliminary plan (Appendix E).

Schnebly Coulee Solar Energy Project Response Comments

Washington State Department of Transportation

While it is near to I-90, the Project will not require any direct access to it; primary access will be via I-90 exit 115 (SEPA Checklist Section B.14.a). The Project will also not require a utility crossing or have any signs that would be visible from I-90. The Project will direct all lighting downward and will only be on if motion-activated (SEPA Checklist Section B.11.a).

Puget Sound Energy

The Project will indeed connect to the Puget Sound Energy (PSE) transmission system (SEPA Checklist Section A.11). PSE Transmission Planning and Engineering groups have been studying and planning the connection into the Poison Spring Substation, and the Project executed a Large Generation Interconnection Agreement (LGIA) with PSE in April 2024.

Washington Department of Fish and Wildlife

As noted by the Washington Department of Fish and Wildlife (WDFW) in their June 12, 2024 comments, the Project has been coordinating with WDFW since 2018 to proactively avoid and minimize impacts to shrub steppe habitat and associated species. As part of this coordination, the Project has agreed to update the Habitat Management Plan (HMP; originally submitted as Application Appendix A) to address mitigation and conservation (see attached updated HMP Section 7). In addition, the location of the transmission line is shown on the updated HMP and the acreage impacts are included in Table 7.1.

Kittitas Audubon Society

The Project has committed to report on success of improving shrub steppe lands in the conservation easement areas created under compensatory mitigation (see HMP Section 7.2). This report will be available to Kittitas County, WDFW, and the landowner, and adaptive measures may be put in place if success criteria is not met.

Public

The Project appreciates recognition of its environmental and economic benefits in comments submitted by local landowners. These comments support Project statements in the Application (Compliance Narrative Section 1) regarding reliable income stream for participating landowners and other economic benefits such as increased tax revenue and employment opportunities without significant adverse impacts.

Some questions and concerns regarding land use compatibility and potential adverse impacts were raised in the comments. While the Application has already addressed several of these, some elaboration is provided below.

Land Use (SEPA Checklist Section B.8)

Solar Power Production Facilities (SPPFs) are permitted as conditional use on Rural Working lands zoned Agriculture 20 in the Kittitas County Code (KCC) Section 17.15.050. A main element of the County's Rural Working designation is landowners' ability to use their land to generate income. The Project exemplifies the type of revenue-based land use permitted in the Rural Working zones, as it offers participating landowners an opportunity to derive income from their property without foregoing future agricultural use. Further, the Project is in Solar Overlay Zones 2 and 3, as permitted under KCC 17.61C.050 (see Compliance Narrative Figure 3). The County Commissioners, after a substantial process with extensive public involvement, chose to allow SPPFs as a conditional use in these zones, finding that the regulations permitting such land use would preserve rural character and resource lands [Kittitas County, Wash., Ordinance No. 2018-018 (Oct. 2, 2018); Kittitas County, Wash., Ordinance No. 2019-004 (May 7, 2019)].

Schnebly Coulee Solar Energy Project Response Comments

While the County prohibits SPPFs in Zone 1 to fully preserve agricultural land in those areas, it allows SPPFs in Zones 2 and 3, understanding that SPPFs may operate in harmony with agricultural use of the land in these areas.

The intent of the Agricultural 20 zone as stated in KCC 17.29.010 is to, “preserve fertile farmland from encroachment by nonagricultural land uses; and protect the rights and traditions of those engaged in agriculture”. The Project does not encroach on neighboring landowners’ ability to continue using their land for agricultural activities. SPPFs are a low-intensity, passive use of the land. Unlike other land uses that are sensitive to or can conflict with agricultural use, SPPFs are unaffected by possible impacts of traditional rural working activities and do not create impacts of their own (e.g. sound, light, odor, etc.) that affect long-term viability of designated resource lands.

The Project is in harmony with the rural character of the surrounding neighborhood and is designed to ensure it does not disrupt or impede the existing rural working land use in the area. The Project avoids impacts to irrigated land, ensuring it does not hinder or diminish agricultural output in the community, particularly crop farming. Further, the lands associated with the Project, primarily used for livestock grazing, are not irrigated, so they will not divert any resources from surrounding agricultural activities. Additionally, SPPFs can act as a buffer against urban sprawl that could threaten the neighborhood’s rural character, as they offer landowners a suitable and economically viable option to generate revenue from their land in a way that does not result in the conversion of undeveloped land into long-term, low-density development. The Applicant is not purchasing or subdividing the land, so it guards against even the potential for construction of additional residences or the fragmentation of landholdings.

The Project is a temporary use of undeveloped ranching land, and includes a decommissioning plan as required by KCC 17.61C.110. Decommissioning plans ensure that, at the end of a project’s life, all facilities are removed and the land on which the project is sited will be restored to its prior condition. The Project’s decommissioning plan includes disassembly and recycling or disposal of all built components, re-grading of land to its original contours or contours advantageous for agricultural use, and revegetation consistent with a Vegetation and Soil Management Plan approved by the County.

The Growth Management Act (GMA) defines “rural character” as areas where open space, the natural landscape, and vegetation predominate over the built environment. RCW 36.70A.030(35). Rural character is judged in comparison to all rural lands in the county, not just the immediate neighborhood or project area. One Energy Development, LLC. V. Kittitas County, 9 Wn. App. 2d 1057 (Wash. Ct. App. 2019). The open space, natural landscape, and vegetation of rural lands throughout Kittitas County will continue to predominate over the components of the Project that constitute a “built” environment. Out of the 370,327 acres designated as “rural” in the County, 328,754 acres are specifically “Rural Working”, and the Project will cover roughly 1,300 acres (695 of which will make up the fenced in area or “buildable area”).

The Project plan consolidates solar panel arrays within the northwest portion of the Project area to conserve larger contiguous swaths of shrub-steppe within the site. Nearly half of the Project site will remain in its current state, leaving a substantial amount of unbuilt, open space within the Project area (see Site Plan and Habitat Management Plan Fig. 5.1) The Applicant plans to preserve these unfenced sections within the Project site through conservation easements, restricting use of the area for the life of the Project to ensure the biological integrity of the landscape. Working closely with the landowner and WDFW, conservation easements would also allow grazing at or below current levels. Further, the Project would implement several uplift measures within the conservation easements to enhance value for

Schnebly Coulee Solar Energy Project Response Comments

wildlife and plant communities, and to meet WDFW standards. When compared to its broader surroundings, the Project will not detract from the overall open space, natural landscape, and vegetation throughout the County.

The legislative intent behind the GMA is that counties foster land use patterns and develop a local vision of rural character that will, among other things, help preserve rural-based economies and traditional rural lifestyles, encourage the economic prosperity of rural residents, and foster opportunities for small-scale, rural-based employment and self-employment. RCW 36.70A.011. The Project aligns with these values as it preserves current use of the neighboring land for grazing and other agricultural activities while also allowing participating landowners in rural areas to retain ownership of their land and providing them an opportunity to supplement their seasonal grazing and other income sources for the duration of the Project's life.

Some comments suggested their property may be less valuable with the Project built. While this is not a standard for review, the Project is aware of the concern and can make at least one study available to show that this correlation has not been shown. A detailed regional market impact analysis for the western region was conducted in various states including Arizona, Colorado, Idaho, Nevada, Oregon, Texas, and Utah [Regional Market Impact Analysis: Solar Impact in the Western Regions of the United States of America. Marous & Company (2019)]. The analyses used a methodology known as matched pair analysis, which compares the sale of properties near solar panels to similar properties sold under similar market conditions but without proximity to solar panels. This match pair analyses made qualitative adjustments for superior and inferior property characteristics, ensuring that the comparisons were fair and accurate. The studies conducted in these states did not find any instances where the proximity of solar panels had a negative impact on property values.

Many factors are considered when siting a solar project including topography, access to transmission infrastructure, willing landowner participation, site access, wildlife impacts, and current land uses. The proposed Project location was selected through coordination with landowners who were willing to participate, site topography and access, and land use designation. This location also serves as a buffer between farmland to the west of the project and shrub steppe habitat to the east. The Project has executed lease agreements for the entire site. The first lease agreement was executed in May 2017, with the memorandum of this agreement being recorded and made public in August 2017. The land is zoned as Agriculture-20 but is neither used for farming nor does it have irrigation rights. The extent of agricultural use on the lands is limited to seasonal grazing. Lack of existing water rights prohibits any present or future farming use of these lands by the landowner. As stated in Poison Springs LLC's May 31, 2024 comment, the Facility will not impact the agricultural uses of the land and will provide an additional revenue source to the landowner.

One comment proposed the use of the Rye Grass landfill facility instead of the current Project location. This facility was approved for closure by the end of 2025 but currently remains an active landfill. Neither the Project nor its affiliates have any information on whether this facility is available for lease as a solar project either now or in the future. In addition, in general, building on active or former landfills provides additional permitting and regulatory challenges including environmental and hazardous waste considerations, soil stability and contamination challenges, and comes with additional economic considerations, all of which can increase energy prices and/or supply uncertainty. Regardless, the Project has met the County's criteria for approval and therefore should proceed on its own merits. There is not currently a standard that requires alternatives analysis.

Schnebly Coulee Solar Energy Project Response Comments

Earth (SEPA Checklist Section B.1) and Plants (SEPA Checklist Section B.4.b)

Vegetation will be maintained across the site to the maximum extent possible. Where vegetation disturbance is required, drive-and-crush will be implemented. This method involves contractors driving over the vegetation, which crushes the plants without causing permanent damage. The crushed vegetation is expected to recover and regrow naturally. This approach retains the native vegetation, topsoil, and seedbank in place within the soils, thereby preserving the ecological integrity of the site. Subsequent maintenance will involve grubbing, mowing, and trimming to ensure the vegetation achieves and maintains the desired heights and sizes. This technique minimizes ecological disruption while accommodating necessary construction activities.

Prior to construction, topsoil will be measured by a qualified ecologist, or soil scientist, by physically measuring topsoil depths in discrete areas throughout the buildable area. All identified topsoil within the proposed grading areas will be stripped from the soil surface prior to disturbance activities. Topsoil will be stockpiled in nearby designated work areas, or permitted areas, for temporary stages during construction. Stockpiled topsoil will be immediately replaced once the final grade has been achieved.

Shallow basalt bedrock on-site was carefully considered in the project design. The Project completed preliminary geotechnical testing, including 129 test pits to map the depth to bedrock across the site. Areas with undulating terrain and shallow bedrock were avoided to the greatest extent possible to minimize grading on bedrock. Prior to construction, additional geotechnical testing will be performed to inform the grading strategy. While Bedrock makes grading more challenging, it does provide a benefit for the structural integrity of the project, allowing for a solid structure for foundations to anchor onto.

The Project Vegetation Management Strategy (Application Appendix D) further addresses the methods that will be used to preserve, establish, and maintain desired vegetative species throughout the Project layout. Existing vegetation will be preserved, to the extent practicable, to protect topsoil resources, minimize wind erosion, and to prevent the introduction of invasive and/or noxious weeds. Prior to construction, the Project will develop a more detailed Vegetation and Soil Management Plan that will use site-specific assessments, such as weed survey, vegetation inventory, and soil sample analysis, to prescribe seed mixes, revegetation steps, and management activities to promote desired vegetation.

Animals (SEPA Checklist Section B.5)

The Project conducted detailed field studies to identify threatened, endangered, and sensitive (TESS) wildlife species and map associated habitats at the Project. Results of these studies are documented within the Wildlife and Habitat Survey Report (Application Appendix C). Surveys included searches for all TESS species within the Project Area, including federally listed, state listed (endangered, threatened, candidate, and sensitive), Washington priority habitat and species (PHS), and non-listed/sensitive species. Targeted species-specific surveys were conducted for species of interest identified by WDFW at the Project including Townsend's ground squirrel, burrowing owl, and pauper milkvetch. These species are known to be present in adjacent habitats and have the potential to inhabit the Project Area. As such, best management practices (BMPs) and conservation measures were adopted by the Project to minimize the potential impacts to these species during construction and operational phases of the Project as outlined within HMP. Additionally, the Project addresses direct and indirect impacts to all small mammals, birds, big game species, and aquatic resources within the HMP, regardless of listing status.

Habitat within the Project is categorized as shrub steppe (i.e. priority habitat) and therefore where avoidance and minimization could not be achieved, the Project worked closely with WDFW to develop a

Schnebly Coulee Solar Energy Project Response Comments

mitigation strategy to offset impacts to native shrub steppe habitat and associated species. The mitigation plan includes compensatory mitigation where conservation easements were established at a minimum 2:1 mitigation ratio for permanent impacts consistent with WDFW recommendations. Further, the HMP has been revised to include mitigation for the transmission line at a 2:1 ratio and additional detail regarding conservation easement management. As noted in the WDFW response above, WDFW has acknowledged that the Project has done due diligence to assess and minimize impacts to wildlife, and the Project will continue to coordinate with WDFW to finalize the mitigation plan and terms of the conservation easements to maximize the preservation of shrub steppe adjacent to the Project area.

The Project will implement a wildlife response and reporting system during Project construction and operations which will allow the Project to assess wildlife impacts (HMP Section 7.2). The wildlife response and reporting system incorporates an electronic communication pathway that uses a software program to expedite the transfer of wildlife data from the field staff to environmental managers. This system includes operations staff training, monitoring for wildlife incidents (e.g., injured animals or carcasses) by operations staff, and active reporting of and potential response to wildlife incidents.

In consultation with WDFW, the Project identified elk movements as a potential resource concern early in the planning process. Since 2018, the Project has developed measures to avoid and minimize overall habitat loss to elk and facilitate wildlife movement. These measures include avoiding state designated big game migration corridors and winter ranges, consolidating the solar panel array to allow for more unfenced/unbuilt areas within the Project site, implementing WDFW recommendations for fencing design/specifications, and coordination with Kittitas Reclamation District (KRD) to ensure alignment with KRD's exclusionary elk fence along the canal west of the Project.

The Project coordinated with WDFW and KRD to modify fencing design to include a 1,300-ft-wide big game and wildlife movement corridor aligning with KRD elk fence jump out location, design specifications to extend perimeter fencing to abut KRD elk fence and install easy open gates in the northern portion of the Project adjacent to the KRD fence. The movement corridor and fence modifications were designed to facilitate elk movement east, west, and around the southern portion of the Project while safely excluding elk from the facility and allowing for safe and quick egress of big game if, under unforeseen circumstances, they manage to ingress the Project fence. Additionally, the Project will implement WDFW-preferred elk and wildlife friendly fencing specifications as feasible. Specifications include an 8-ft high elk fence without barbed wire at the top, and composed of 12 inch (in) horizontal openings with vertical openings tapering from 8 in at the bottom and top to 3 in at the middle to allow small mammals and birds to enter/exit and to keep big game safely out.

These BMPs will be implemented to avoid and minimize impacts to elk and other big game during construction and operational phases of the Project. Further, approximately 1,400 acres of conservation easements are established on nearby lands to mitigate potential impacts to native habitats and associated wildlife including elk.

Fire Protection (SEPA Checklist Section B.15.a) and Environmental Health (SEPA Checklist Section B.7.a) Solar panels do not pose any unique fire risk and are made almost entirely out of non-flammable materials. Like any other utility scale electricity generation facility, solar energy projects must comply with National Electric Code standards, local fire codes, and any other relevant safety standards. The Project will work with local first responders to create an Emergency Response Plan and a Fire Management Plan, ensuring personnel are trained and equipped to prevent and handle any issue that may come up on the Project.

Schnebly Coulee Solar Energy Project Response Comments

Solar projects can significantly reduce the risk of wildfires by adhering to strict vegetation management requirements, which minimizes the amount of available fuel for fires. This includes regular trimming and clearing of noxious and undesired weed species, including cheatgrass. Additionally, the creation of firebreaks using internal service and access roads can effectively prevent the spread of fires. By implementing these measures, solar projects not only reduce the risk and/or spread of wildfire, but also contribute to the overall safety of the surrounding area.

During construction, contractors will follow all relevant Occupational Safety and Health Administration and National Fire Protection Act requirements related to fire hazards including: no smoking outside of designated areas, no idling of vehicles, hazardous materials and combustible storage areas, pre-task planning to assess fire risks, relevant fire awareness trainings, and lockout-tagout requirements. Vehicles will be equipped with fire extinguishers, first aid kits, and spill kits. During periods of heightened wildfire risk, open communication will be maintained between construction contractors and local fire department and emergency response personnel. Prior to Project commissioning, joint training with the local fire and emergency response personnel will be offered to familiarize the personnel with the site and equipment. When wildfire risk is heightened due to weather conditions, hot work will be kept to a minimum and onsite water trucks used for dust suppression will maintain ground moisture. Any hot work which is required will be performed on surfaces cleared of vegetation, and the on-site safety supervisor must be notified in advance. These and any other applicable commitments that come from coordinating with applicable personnel will be documented in the Project Fire Management Plan put in place in conjunction with the building permit application per KCC 17.61C.090 (9).

Solar farms won't pollute the environment for several reasons. Firstly, solar panels are non-hazardous and do not pose a threat to human or animal health. The materials used in solar panels, such as silicon, glass, and certain metals, are insoluble and non-volatile under ambient conditions. This means they do not dissolve in water or evaporate into the air, minimizing any risk of environmental contamination.

Moreover, these materials are securely encased in tempered glass, which is designed to withstand high temperatures and harsh weather conditions further preventing any release of substances into the environment [Rebutting 33 False Claims About Solar, Wind, and Electric Vehicles, Sabin Center for Climate Change Law, April 2024 (revised June 2024)]. The racking systems that support solar panels, along with the wiring that transmits electricity, are constructed from common and stable metals like aluminum, steel, and copper. These metals are widely used and are known for their durability and safety.

In addition to the inherent stability of the materials used, the production and operation of solar farms generate minimal emissions. Unlike fossil fuel-based power generation, solar energy systems do not produce air pollutants or greenhouse gases during operation. This contributes to a cleaner atmosphere and helps mitigate climate change.

Furthermore, advancements in recycling technologies ensure that at the end of their life cycle, solar panels can be effectively recycled, reducing waste and promoting sustainable practices. The Project will comply with all applicable laws as it relates to takeback and recycling of materials. At decommissioning, solar panels and equipment are easy to disassemble and recycle. The bulk of a solar panel's weight is glass and aluminum, materials commonly recycled in the U.S. with current technology, up to 95% of semiconductor material and 90% of glass used in panels can be recycled. The Project will bear all decommissioning costs and provide a bond equating to 125% of the engineer's estimated cost as outlined in the Decommissioning Plan submitted with this application.

Schnebly Coulee Solar Energy Project Response Comments

Finally, solar projects do not generate significant electromagnetic fields (EMF) beyond their boundaries [Rebutting 33 False Claims About Solar, Wind, and Electric Vehicles, Sabin Center for Climate Change Law, April 2024 (revised June 2024)]. The inverters used in solar facilities emit EMF levels comparable to those of common household appliances. These EMFs can only be detected within approximately 150 feet of the inverters. Due to the relatively low voltages used in solar facilities, there is no concern of negative health impacts from the electric fields generated by a solar facility.

Noise (SEPA Checklist Section B.7.b)

Sound generated by project construction is expected to vary depending on the construction phase but will primarily occur during weekday daytime hours. Maintenance of the facility would produce minimal noise, consisting of regular inspections. Equipment may occasionally require repair or replacement, requiring additional staff or equipment on site temporarily. All phases of the Project will comply with applicable noise regulations stated in KCC9.45 and WAC 173-60-040.

Aesthetics (SEPA Checklist Section B.10)

Solar panels will have a maximum height of 15 feet at full tilt. Due to the area's undulating topography, most panels are at the bottom of slopes and would not adversely impede the overarching view of the surrounding environment.

Light and Glare (SEPA Checklist Section B.11)

Solar panels are designed to absorb the sun's rays, and not reflect them. Solar panels have an anti-glare coating on the surface to capture and retain as much of the solar spectrum as possible. This glass has less reflectivity than water or glass used in residences or on vehicles. Furthermore, the solar panels will be mounted on a tracking system which rotates throughout the day to track the sun's movement. The panels will always be tilted directly at the sun, preventing glare in any direction.

As for raising temperature, like any structure, solar panels can raise the temperature immediately around them by a few degrees while the sun is shining on them, but temperatures quickly return to ambient away from the panels and can no longer be measured 100 feet away. They also return to ambient temperatures at night. Panel spacing and the vegetation below and around the panels also help maintain ambient temperatures. One source of information on this is a study done by Columbia University [Analysis of the Potential for a Heat Island Effect in Large Solar Farms. Conference Record of the IEEE Photovoltaic Specialists Conference. 3362-3366. (2013)]. For clarification, photovoltaic solar farms, which convert sunlight directly into electricity using solar panels, do not cause birds to burst into flames. This misconception is likely due to confusion with solar thermal projects, which use mirroring to concentrate sunlight and generate high temperatures to produce steam and electricity.

Location (SEPA Checklist Section A.12)

The Site Plan is based on a completed land survey, which is a comprehensive boundary survey adhering to the standards set by the American Land Title Association (ALTA). ALTA surveys are highly detailed and precise, incorporating title research, property boundary lines, and improvements on the property. This process ensures that all boundary information is accurate and reliable. However, for clarity, the thick, black, dashed lines denote the sheet boundary as opposed to the Project Boundary.