Commercial (no exception): \$8800



Crook County Community Development

300 NE 3<sup>rd</sup> Street, Room 12, Prineville Oregon 97754 Phone: 541-447-3211 Ext. 1 / Fax: 541-416-2139

Email: plan@co.crook.or.us / Website: www.co.crook.or.us

## **CONDITIONAL USE - ENERGY FACILITY**

NOTICE TO ALL APPLICANTS: The Crook County Community Development, Planning Division is required to review all applications for accuracy and to determine whether the staff and/or Planning Commission have the information needed to make a decision. Crook County Code (C.C.C.) allows 30 days to determine whether the application is complete. If the Planning Division determines that your application is incomplete, you will be requested in writing to provide the necessary missing information, and a decision on your application will be postponed until the information is received. State Law requires that information to support an application be available for public inspection at our office 20-days before a public hearing. Any information submitted after this date may require a postponement of the hearing date if necessary. Make sure your application is complete. The burden of proof lies with the applicant.

<u>IMPORTANT</u>: In addition to this form, a detailed explanation of the use and how the applicable standards and criteria are satisfied is required. Please refer to the Crook County Code, Title 18 for the applicable standards and criteria.

#### PROPERTY OWNER:

Last Name: Raasch	First Name: Ronald
Mailing Address: PO BOX	11
City: Powell Butte	State: Oregon Zip: 97753
Day-time phone: ()	Cell Phone: ()
Email:	
	(Will need to fill out Authorization Notice form
Last Name: Stephens	First Name: Jacob
Mailing Address: 2033 E	Speedway Blvd, Suite 200
City: Tucson	State: AZ Zip: 85716 1 8094 Cell Phone: (520) 981 - 7303
Day-time phone: (520) 26.	1 - 8094 Cell Phone: (520) 981 - 7303
Email:	
PROPERTY LOCATION:	
Township 15 South, Range	15 Fast WM, Section 23 , Tax Lot 1228
Township South, Range	East WM, Section, Tax Lot res Zoning: EFU3 PRINEVILLE, OR 97754
Size of property: $\underline{^{156}}$ ac	res Zoning: EFU3
Physical address:XXXX	PRINEVILLE, OR 97/54
Subdivision name, if applicable:	

## **EXPLAIN YOUR REQUEST**

Please see accompanying attachment, Exhibit A: Main
Proposal
ACCESS / ROADS
Explain how you will access your property for the proposed structure:
Will you ACCESS this property from an existing access? YesNo
** If accessing from State Highway, an "approved" ODOT permit must be attached with this application: No Exceptions!
Oregon Department of Transportation (Contact Robert Morrow at ODOT - Bend Office) Phone: 541.388.6169 Email: Robert i.morrow@odot.state.or.us
*** If accessing from a county maintained or public road, a road approach application is required.
FLOOD ZONE
s the property located within a Flood Zone? YesNo f yes, a "Special Flood Hazard Area Development Permit" is required to be submitted at the same ime.
See Exhibit A: Main Proposal

## **DOMESTIC WATER**

Water will be supplied by: (check only one)

An existing individual well	
A proposed individual well	
4 to 14 dwellings on one well State re	egulated system.
Shared well (Number of dwellings	)
If shared well, indicate the location of well and o	
well as a copy of a recorded "Shared Well Agre	
dwellings on one well un-regulated system.	
X Other: Please explain See Exh	ibit A: Main Proposal
Community Water System: Name	
PWS#	
Community Water System Authorization	
Print Name:	Daytime phone:
Authorization Signature:	Date:
(or) a signed authorized letter must be attached to thi	
	The same of the sa
**********	*******

## Before you DIG ~ Call 811 ~ it's the LAW

Website: www.digsafelyoregon.com

Phone: (503) 232-1987 / 800-332-2344

The applicant and/or agent shall be responsible for contacting 811 to locate underground utilities, as well as Ochoco Irrigation District and/or the Central Oregon Irrigation District for any underground utilities

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## **IRRIGATION WATER RIGHT**

Please indicate the location of all existing water rights, number of acres, and proposed division of water rights. If you don't have irrigation water rights, please answer questions A, D and E. If the property has irrigation water rights, who is the supplier: \_Central Oregon Irrigation District: Phone (541) 548-6047 / Fax (541) 548-0243 Address: 1055 SW Lake Ct, Redmond, OR 97756 Ochoco Irrigation District: Phone (541) 447-6449 / Fax (541) 447-3978 Address: 1001 N Deer Street, Prineville, OR 97754 Water Resources Department: Phone (541) 306-6885 / Fax (541) 388-5101 Address: 231 SW Scalehouse Loop, Bend, OR 97702 People's Irrigation District: Phone (541) 417-7797) Other: A. Does the property have irrigation water right? Yes \_\_\_\_ No \_x B. If yes, what is the amount of acres of irrigation water right? \_\_\_\_\_ acres C. Amount of water right acres to be transferred? \_\_\_\_\_\_ acres D. Is there an irrigation ditch and/or an underground pipeline that runs through the property? Yes \_\_\_ No \_X E. Is there a distribution point for irrigation located on the property? Yes \_\_\_\_ No x Watermaster Signature: \_\_\_\_\_\_ Date: \_\_\_\_\_ Print Name Clearly: \_\_\_\_\_ Phone: \_\_\_\_\_ Irrigation District Signature: \_\_\_\_\_\_ Date: \_\_\_\_\_ Print Name Clearly: \_\_\_\_\_ Phone: \_\_\_\_ COMMENTS: 

#### WILDLIFE

ODF&W, Prineville Field Office, 2042 SE Paulina Hwy, Prineville, OR 97754 Phone: (541) 447-5111 Fax: (541) 447-8065

Is the subject property located within a "Wir	nter Wildlife" overlay zone? Yes No
If yes, please check the appropriate box(s):	
Critical Deer Winter Range General Deer Winter Range Elk Winter Range X Antelope Winter Range	See Exhibit E
Is the subject property located within a "Sens ODF&W COMMENTS:	sitive Bird Habitat" zone? Yes No _X_
ODF&W Signature:Print Name:	Date:

## **SUPPLEMENTAL INFORMATION**

The information requested in this application is the minimum information necessary. This application requests information that will assist Crook County planners in evaluating whether your proposal meets these criteria. Failure to complete applicable portions of this application form may result in the County <u>not</u> accepting your application or denying your application for failure to demonstrate that the criteria have been met. The County can assist you by providing such information from the Crook County Assessor, Crook County Clerk's, and the Crook County GIS Department. However, the burden of proof lies on you, the applicant, to demonstrate that the criteria have been met. In many cases, you may wish to provide information in addition to that requested to support your application.

### **SIGNATURES**

I agree to meet the standards governing the laws for "Site Plan Reviews" as outlined in the State of Oregon's OAR, ORS, Crook County Code, and Crook County – Prineville Comprehensive Plan. I agree that all the information contained in this application is true to the best of my knowledge.

Print name clearly:	See Agent A	Authorization	Form	Date
Property Owner Signature: Print name clearly:	See Agent A	Authorization	Form	Date
Agent/Representative Signatu Print name clearly:			· <u>-</u> · · · · ·	Date
(Note: If an agent/representative is submitting your application on behalf of the property owner, the "Authorization Form" must be completed and attached to this application)				

## **CHECK LIST OF REQUIREMENTS**

- > A completed application form with the appropriate signatures.
- A copy of the Tax Lot Card. (Available from the Crook County Community Development Department)
- A copy of the current owners Warranty Deed.
- ➤ A signed copy of a "Statement of Understanding"
- ➤ A signed Authorization Form; if applicable.
- A detailed "Plot Plan/Site Plan" of the subject property. (See below for detailed information)
- An <u>approved Road Access Permit</u>, if applicable, from the Community Development Department for County Maintained Roads and Public Roads, or the Oregon Department of Transportation for access from State Highways.
- A copy of the irrigation map for the area and historical water rights information on the subject property. (Available from the Irrigation District); if applicable.
- > Special Flood Hazard Area Development Permit; if applicable
- Comments & signature from ODF&W
- > Supplemental Information
- > Submit the correct application fee.

## **DETAILED PLOT PLAN REQUIREMENTS**

The detailed "Plot Plan" must be drawn on at least 8 ½ x 11 paper, but no larger than 8 ½ x 14.

A parcel that is 2 acres or less in size must be drawn to scale, and all dimensions and boundaries must be shown.

A parcel that is more than two acres in size does not have to be drawn to scale, however, all dimensions and boundaries must be shown and all information must be accurate.

## The detailed "Plot Plan/Site Plan" must include the following:

- Scale of map not greater than one inch per 400 feet.
- North arrow
- Dimensions and boundaries of the property
- Location of <u>all</u> easements and names, and the right-of-way widths of existing roads and easements or right-of-way for any proposed roads, utilities, bikeways, and access corridors.
- > If the parcel or lot has irrigation water right, indicate the area of the water right with the number of irrigated acres. In addition, submit a copy of a water right map from the district.
- Names and locations of all roads adjacent to the property
- Location of <u>driveways</u> or <u>other roads</u> on the property, existing and proposed
- Location of all public utility easements. In addition, attach copies of the recorded utility easement that indicates easement widths.
- Distance (setbacks) from <u>all</u> structures to all property lines
- ➤ Location of all major features (canals, irrigation ditches, rock ledges, etc)
- Location of rimrock, if applicable
- Location of all drainage, creeks, springs, etc., with distance to the proposed development site.
- ➤ Indicate location of all "EXISTING" and "PROPOSED" structures: Dwellings, Garage, shops, lean-to, barns, etc. Indicate on the plot plan if existing or proposed with dimension size.
- > Location of the proposed Energy Facility on the subject property.



## STATEMENT OF UNDERSTANDING

Site Plan Review - Energy Facility - Updated - FEE ONLY - October 11, 2018	Page 8			
Property Owner Signature:	Date:			
Property Owner Signature:	Date:			
City:State:AZ	_ Zip:87516			
Mailing Address: 2033 E Speedway Blvd, Suite 2	00			
Property Owner Name: See separately filed Agent Au	thorization Form			
If the land use permit is not granted, no refund will be given evaluation, plan review or permit fees already paid.	for any land use, site			
If the land use permit is not granted, the other permits applied issued.	ed for will not be			
The land use permit may not be granted if the required approval criteria are not met.				
No other permits will be issued until the land use permit has be	peen granted.			
In addition, in making this request, I understand and agree t	hat:			
I understand that State law does not allow Crook County to issue a septic or building permit before the County has determined that the proposed development complies with all County land use regulations.				
I wish to develop the property described as Map Tax Lot No in a way that requires permits from Crook County, including septic site evaluation and/or septic permits, and building ar construction permits.	land use approval, a			

## Crook County Community Development Department 500 NE 3" Street Prineville, CR 97154

Phone: (541) 447.8156 / Fax: 541-416-2139

Email: plan@co.crook.or us / Website: www.co.crook.or.us

#### **AUTHORIZATION FORM**

Let it be known that	Jacob Stephens
	(Print name clearly)
	zed agent to perform all acts for development on my property noted below: These ice, filing applications and/or other required documents relative to all Permit
Physical address of property: 6310 5 CROOK COUNTY as:	SW HWY 126 PRINEVILLE, OR 97754, and described in the records of
Township 15 South, Range 15 South, Range	East, Section 15.14.22Tax lot 1223 East, Section Tax iot
The costs of the above actions, which owner.	are not satisfied by the agent, are the responsibility of the undersigned property
	(Piese Print Clearly)
Signature:	TOUSTHS Date: 7-26-19
Print Name. Ronald Rass	ch (Authorized Representative)
Mailing address: PO Box 1	77. A. A
City: Powell Butte	State: OR Zip: 97753
	Cell Phone: ()
Email: rar97753@gmail.com	
individual(s)	
Corporation;	
Limited Lizbility Corporation;	
rust	

ENFORCENT ROLL, indicate vinetale, property is coined in individue, name(s), or by a business of other entity (e.g. Corporation, Limited Hability Company, or Trust). If property is owned by an entity, include names of all authorized ventry for Evan of,

if the owner is a Corporation, Limited Liability Corporation or Trust, the following information is required as part of this form.

If a Corporation - please provide the name of President or other authorized signor(s).

If a <u>Limited Liability Corporation</u> ~ provide names of <u>ALL</u> members & <u>managers</u>. If a <u>Trust</u> ~ provide the name of current Trustee(s)

In addition, you will need to include a copy of Bylaws (Corporations); an Operating Agreement (Limited Liability Company); or Certificate of Trust (Trusts) that verifies authority to sign on behalf of the entity

Signature.		Dec. 7/24/19
Print Name: Jacob Stephens		
Mailing address: 2033 E Speedway Blv	d, Suite 200	
City:Tuscon	State: AZ	Zip: 87516
Home Phone: (520) 261 _ 8094	Ceil Phone: (520) 981	7303
Email: jstephensénewsumenergy.	iet	



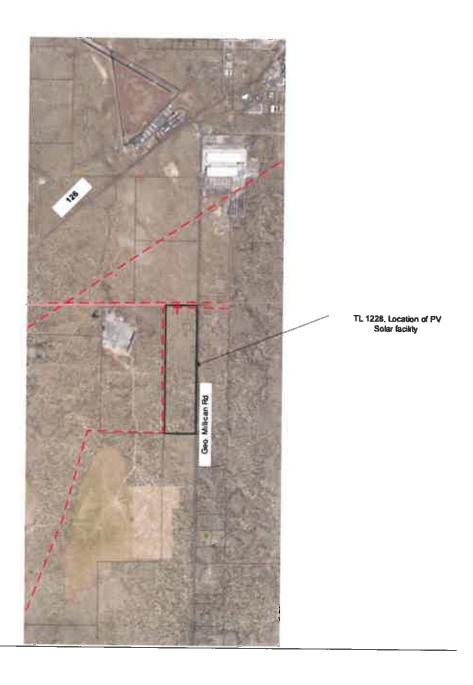
See Exhibit B Site Plans

## **Exhibit A Main Proposal**

(Explain Your Request Attachment)

In support of Crook Flat Solar Farm LLC Conditional Use Permit Application

## Site Plan: Present Overview TL 1228



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#### Overview

This Application requests a Conditional Use Permit of "Solar PV Facilities" as defined in OAR 660-033-0130(38)f and associated transmission lines (ATL) for its Site (as further described below) for uses including conventional technology for the commercial sale of electricity. Permit application is for the development, design, construction, maintenance, operation, repair, removal, and updates of all proposed and permitted facilities. Solar PV Facilities and Associated Transmission Lines are permitted uses on farmland zoned EFU-3 under applicable Crook County and state ordinance. The Crook Flat Solar Farm (hereinafter, the "Facility" or "Project") is proposed to operate for up to 40 years.

#### Location:

The subject facility property is located on TL 1228 in Crook County, OR, off of SW George Millican Road, Prineville, OR, approximately four miles SW from the center of Prineville, OR.

NOTE: More detailed/zoomed images of several maps below are also provided in Exhibit B – Site Plans. See Appendix C for tax lots and maps.

#### Zoning:

The property included as part of this application is zoned EFU-3 (Exclusive Farm Use) (Crook County Code 18.24.) Applicable Tax Lot number is TL 1228. TL 1208 may be used for associated transmission lines to connect to Utility Transmission Lines and/or Substation as needed. Applicant has Authorized Agent authority for TL 1228 (see ownership, below).

#### Summary Description:

The proposed facility will consist of photovoltaic panels, inverters, mounting infrastructure using fixed tilt or single axis tracker system, an electrical collection system, a substation, an energy storage system, operation and maintenance facility, private access roads, fencing, and associated transmission lines to connect to the utility facility. Electricity generated by the facility will be transmitted to a facility substation, where it will be increased to appropriate transmission line voltage levels per BPA requirements. Applicant has successfully filed an interconnect request with BPA and PAC and provided evidence to Crook County Planning as such, which has been accepted by the respective utilities. A possible BPA interconnect is presently in the study phase for interconnect with Ponderosa substation. Ponderosa substation is immediately adjacent to TL 1208. An alternative interconnection with Pacificorps (PAC) is also under study for connection to either the Corral Substation or the immediately adjacent 115kV transmission line physically located on the north part of the parcel and parallel to the Portay Gravel pit ride. Please see Exhibit B Site Plan and the more detailed facility description of Solar PV Facilities below.

The overall design and construction of the project will be carried out in accordance with all applicable engineering codes and standards, including considerations for the results of any floodplain, wildlife impact mitigation findings and recommendations, wetland and riparian area analyses, or cultural surveys as required by Crook County and other regulatory agencies such as Oregon Department of Fish and Wildlife (ODFW) and Oregon State Historic Preservation Office (SHPO).

Construction will be performed by licensed and qualified contractors and their subcontractors, following an extensive vetting and bid process. Following Construction, all on-site disturbances will be restored with native vegetation pursuant to county storm water discharge requirements, and Crook County Weedmaster consultation as applicable.

#### Facility Size:

The Solar Facility in Crook County will use up to 156 acres. Again, see Exhibit B site plan, which identifies the proposed PV Facility Siting Area relative to the overall size of the tax lot acreage. Please note that while the PV Facility Siting Area shown shows less than the full acreage of the Site (approximately 156 acres), the final Solar Facility will conform to Crook County setback standards for parcels zoned EFU-3 and will not exceed 156 acres.

#### **Present Property Description:**

TL 1228 is bounded by George Millican Highway along the eastern portion of the parcel. Portay Gravel Pit Road and TL2300 form the northern boundary, which is an uninhabited M-1 (Light Industrial) vacant lot owned by DSL. The entire western boundary is owned by the Portay Northwest company, which owns and operates a gravel pit on the land. The southern border is owned by Ronald Raasch. TL 1228 does not have irrigation rights and has not been irrigated in the past.

The property is uncultivated, and non-irrigated; it is composed of primarily sagebrush steppe, juniper steppe woodland with some grasslands.

The property is traversed by a PAC 115kV transmission line and associated easement on the north side within parcel, and along the west side of the parcel on the Portay Northwest property. These transmission line ROWs (or corridors) are identified in Exhibit B Site Plan.

#### Surrounding Land Uses:

None of the immediately adjacent properties surrounding TL 1228 have existing residences. Adjacent to the west of the site is the Powell Butte Aggregate Pit, operated by Por-Tay Northwest LLC, on TL1231 which is also zoned EFU-3. The property to the east of George Millican Road has been approved for an energy facility (Tango Solar LLC), but has not yet undergone any further development. The DSL parcel (TL 2300) is zoned M-1 and is undeveloped. The Raasch property to the south is also undeveloped EFU-3 land.

#### Soils:

A Custom Soil Resource Report for the Applicant property was prepared using data from the USDA National Cooperative Soil Survey.

Corresponding to this mapping, non-irrigated class soils are broken down into the following categories as shown in Table 1.

The mapping indicates the soils on the site are Class 6.

Summary by Map Unit — Prineville Area, Oregon (OR654)

, , , , , , , , , , , , , , , , , , , ,				J. (00 i)
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
143	Stukmond-Lickskillet- Redmond complex, 0 to 8 percent slopes	6	13	7.90%
144	Redmond-Stukmond complex, 0 to 8 percent slopes	6	152.3	92.10%
Totals	for Area of Interest		165.3	100.00%

Please see Exhibit F-Soils for additional information and a map of soil locations.

The proposed facility will not occur on any high-value farmland, will not exceed 20 acres of Class 4 or below soils, and will be less than 320 acres in total.

#### Ownership:

The site land is wholly owned by Ronald A. Raasch and Susan L. Raasch, Trustees of the Raasch Family Trust. Authorized Agent for the property owners of TL 1228 is Jacob Stephens. See Exhibit C Deeds and Legal for details regarding land ownership.

#### Water Rights:

The subject property has no water rights and the site has not been irrigated in the past.

There are no FEMA Special Flood Hazard Area (SFHA) Zones on this property.

#### Wildlife

In summary, at present wildlife impact concerns are considered to be minimal. Initial evaluations, and consultation with applicable state agencies (ODFW) and planning department staff support this, as discussed below. Proposed use is permitted for agricultural zone land per applicable state and Crook County Ordinances, as discussed in Exhibit D.

The subject property is in an area that is not identified as winter range for elk and deer in the County's Goal 5 big game habitat inventory (Winter Wildlife overlay zone), nor identified as Sagebrush Grouse habitat (Sensitive Bird Habitat zone. The Applicant has and will continue to work with ODFW to ensure best practices for wildlife and resource management during construction and operation.

The site however has been identified as being within pronghorn antelope winter range. The Applicant is working with ODFW and will work to incorporate mitigation recommendations similar to plans for other solar facilities in the area. Applicant will continue to engage with ODFW and the county to address their concerns for wildlife preservation.

#### Cultural Resources:

Applicant has initiated consultation with OR State Historic Preservation Office (SHPO) to review issues and perform a database review and will coordinate appropriate confirmation that there are no sites of cultural or historical significance in accordance with SHPO policies and procedures.

During construction, procedures shall be in place that reflect generally accepted practices will be implemented for cultural discoveries during the construction period. Applicable regulations will be followed, including implementation of an Inadvertent Discovery Plan (IDP) prior to construction, including notification of applicable authorities if any discoveries of significance are found. Continued correspondence with SHPO and the county will be maintained.

#### Airports:

The Project is located near but not adjacent to or within the control zone of any airport. The Applicant has consulted with the Prineville Airport manager and has submitted an FAA No Hazard Determination request to demonstrate how it will not adversely impact airport operations. Given that there are existing transmission lines along the northern property line that

are taller than any proposed structures associated with the project, it is expected that a No Hazard Determination will be obtained. A survey of the literature suggests that airports themselves are integrating solar PV into their own site plans, and the FAA has issued guidelines for this. Major airports like the Denver International Airport have PV facilities on airport property. as does the airport in Lakeview, OR.

#### Access:

The Solar PV Facility will be accessed by a modified access road off of the existing private road from George Millican road, as designated in Exhibit B Site Plan (P2 of 3) showing the entryway off the highway. As part of on-going development, any alternative entrances and/or additional road access permits will be obtained as necessary from the County or ODOT as applicable.

#### Water Supply:

Water for construction and operation may be purchased from the City of Prineville or procured from a water well on the property (in accordance with ORS 537.545(1)(f)), or a combination of both. The Applicant and its subcontractors will ensure that if water is procured from a new or existing well in the area that the well provider has the appropriate license from the Oregon Water Resources Department to utilize groundwater from a well for construction purposes.

#### Fire Protection:

The subject property is located inside the Crook County Fire and Rescue District. Provisions for wildfire prevention and control shall be included in an Emergency Management Plan to be presented to Crook County Fire and Rescue for review and approval. See Exhibit J of this application for an example EMP which may be adapted with site specifics and submitted for review and approval to Crook County Fire and Rescue as part of the on-going development.

#### Construction Facilities:

Applicant proposes to establish temporary construction facilities on the site in accordance with state and county regulations. These temporary buildings will house construction management and site personnel offices adjacent to a parking area and laydown yards, typical of a construction site. There are two areas proposed, both towards the southern portion of the site. See Exhibit B – Site Plan (P2 and 3) for proposed details. The final location of these temporary construction facilities is subject to applicant's final site design.

#### Facilities and Structures Overview:

This section provides a narrative overview of the proposed use and structures for the Site under the Application. Additional supporting layout and (larger) supporting diagram images are provided in Exhibit B - Site Plans, Maps, and Elevations.

#### Solar PV Facilities:

The primary structures of the proposed Facilities will be the Solar PV Facilities. Solar PV Facilities will be predominantly comprised of commercially-available solar photovoltaic "PV" panels (or "modules") mounted to racking systems (described below) generally arranged in long rows with the modules wired together (in "strings") to collect DC power they generate at a desired voltage to either store or deliver to inverters which then in turn convert DC power to AC power, with related hardware and equipment. AC power is collected from inverters and stepped up to a collection voltage (nominally 34.5 KV) via transformers (generally pad-mounted) for delivery through switching and/or substation facilities. Facilities will include communications and control equipment, including to provide for remote and on-site monitoring and operations of facilities, including as required by the interconnecting utility, whether through radio

-6-

communications, fiber optics, and/or conventional telephony. PV modules are typically antireflective, in order to maximize absorption of solar energy for generation of power and maximize efficiency for direct use or commercial scale of resultant electricity.

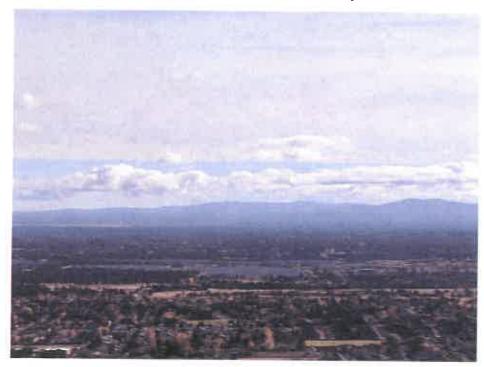


Image A-2 - PV Facility in central OR

#### Racking Structures:

Racking structures for PV module may be either "fixed tilt" (stationary) or "single axis tracking". They are generally steel, ground-mounted structures less than 15' tall, located up to 25' apart. Final racking, modules, inverters, and other equipment selection will be subject to final design considerations before construction (and may be updated from time to time over the life of the facility) based on commercially available products and other related commercial considerations. Spacing of rows and blocks of rows on the property will be interdependent with and subject to the acreage limitations and proposed shared use with continued agricultural use proposed herein. Sometimes modules are landscape or portrait mounted on racks; sometimes there are multiple rows of panels on the racking structures. Sometimes different racking structures may be use for different parts of a site due to design limitations, civil and geotechnical concerns, configurational issues, or other concerns.



Figure A-3 - PV Module Array strings on single axis tracking racking (central OR)

#### No reflection or glare issues:

Solar radiation, glare, and glint concerns will not be an issue of material concern (if any) with either a fixed tilt or single axis tracking system, and as demonstrated by other similar solar PV projects in the Oregon area and elsewhere nationally. Solar PV modules do not concentrate solar radiation, so that inadvertent reflection or misdirection from such a concentrated focal point is not feasible. The facility will use commercially available modules treated with absorbent and anti-reflective coatings. These coatings help to absorb sunlight and minimize glare. Key finding from several Glint and Glare studies for private entities as well as performed at National Laboratories such as NREL and Sandia National Labs can be summarized: "Flat-plate photovoltaic solar panels are engineered to absorb, not reflect, sunlight. A panel with a single layer of anti-reflective coating reflects less than 10% of the sunlight striking it. By way of comparison agriculture vegetation reflects between 18 and 25% of solar radiation."

#### AC Collection, Associated Transmission Lines, and Interconnection:

Energy will be delivered to/from Solar PV Facilities as applicable to and through the associated transmission lines for connection to the interconnection facilities interfacing with applicable utilities' infrastructure in the area. Utility infrastructure nearby the Property includes facilities owned by Bonneville Power Administration ("BPA"), Pacificorps, and Central Electric Cooperative. Interconnection with these electric utilities will provide for any auxiliary power and/or charging needs of the facilities and for the delivery of energy for commercial sale.

AC Collection at (nominally) 34.5kV of several feeder circuits from power collection stations within the PV facility is accomplished with underground direct burial cables. AC feeders are tied

into the main low side feeder system inside the additionally fenced in substation yard. The separately fenced substation yard contains all equipment relating to breakers, switching, and transforming power to associated transmission line level voltage, to meet BPA requirements at the Point of Interconnection ("POI"). A typical substation elevation drawing is included in Exhibit B - Site Plans. Fencing for the facility substation used will be a minimum of 8 ft tall chain link fence.



Figure A-4 Power Collection Station example in central Oregon.

Factory pre-built power collection stations may be installed throughout the site and are typically mounted on steel foundation supports similar to site module racking and tracker systems. Power collection stations are usually comprised of an inverter made by a qualified solar inverter OEM such as SMA or Power Electronics, a step up transformer, typically 1000 or 1500V:34.5kV. Inverters typically include their own DC combiner cable inputs. Stations also include AC breaker cabinets, local house power transformer and distribution, and specialized equipment for tracker controls, network communications, and meteorological equipment. See Figure A-5 showing a typical station.

Power Collection stations may be installed onto their foundations with the use of cranes.

Substation equipment consists of a multi-element protection and relay system for 34.5 kV feeders, main power transformer, and breaker relays, metering, and plant control and monitoring systems. It may also house the energy storage feeder and system equipment, examples of which are shown in Figure A-5 below (which might also be located elsewhere in the Site).



Figure A-5. Example inside substation, showing modular energy storage equipment, 34.5 kV transformers, breaker cabinets, and ancillary equipment on concrete mounted pads.

#### Fencing:

Various approaches for fencing may be implemented and will take into account final design and operational considerations. It is anticipated that the solar field enclosure will be completely fenced at a minimum height of 8 feet using a chain-link fence. Secured gates will be in place at the Project entrance(s).

The substation(s) for the Facilities, however, will be separately fenced within the larger fenced area(s) for security and public safety reasons and security gated. There will be no public access to the Solar PV Facilities and substation equipment. Solar O&M personal will be given access to the site.

#### Supporting Documents and Plans:

Supporting documents are included as part of this application in later exhibits. These documents may be updated with site specifics as continuing facility development progresses. Applicant has drafts available as part of this permit application and on-going facility development: Exhibit J Emergency Management Plan, Exhibit G Erosion Control Plan, Exhibit H Weed Control Plan, Exhibit I-1 to I-3 Decommissioning Plan, Exhibit L, Informal Traffic Assessment. As part of continuing development, these plans are subject to change; they will be adapted with site specifics and submitted for review to Crook County Planning and Development, Crook County Weedmaster, Crook County County Fire and Rescue, ODFW and other regulatory agencies as appropriate. Additionally, other supporting exhibits have been submitted that contain support materials for Soil, Wildlife and Biological evaluation studies, and socioeconomic impacts.

A mutually acceptable Covenant Not to Sue, similar to Exhibit K Covenant is under evaluation by Applicant and applicant will work to provide a mutually acceptable covenant as part of the on-going development process. As part of a condition of approval, Applicant will provide for a cost estimate and method for meeting decommissioning requirements acceptable to Crook County as part of continued development.

#### <u>Timeline & Process – Development, Construction, Operations:</u>

<u>Development:</u> Initial facility development activities have commenced and will be on-going over the next several months and/or years. Development work includes and/or may include various studies, investigations, power and power purchase agreement (PPA) contracting, system and site design and engineering, establishing interconnection energy delivery and rights-of-way, and further entitlement and permitting. These initial and ongoing development activities require substantial investment and will continue through construction.

<u>Construction</u>: Once a qualified EPC (Engineering, Procurement and Construction) firm is contracted and mobilized, construction may take approximately 4-8 months. Additional retrofit, modification and possible capacity expansion may occur subsequent within the scope of the permit, subject to applicable building permit requirements, for repairs, upgrades and/or expansions, if applicable. Subject to final design and EPC construction plan.

Construction of the solar field is usually comprised of applicable site prep (civil work if needed and fencing), driving piles (or otherwise installing foundations structures, like ground screws) to which racking systems are mounted by manual labor, with surrounding electrical connections and conduit for collection. Installation of substation, interconnection facilities, and associated transmission lines is comparable to other power plants for the voltage involved. Dust control as needed will occur.

Traffic during the construction period is addressed in Exhibit L, informal Traffic Assessment. Applicant staff has experience with on-site construction of solar facilities ranging in size from rooftop solar on existing buildings to large scale buildout of facilities comprising over 1000 acres. The informal traffic assessment addresses the amount and types of traffic that can be expected during peak construction periods for a facility comprising up to 320 acres, both for equipment deliveries and construction workers. Worker commuter travel is expected to peak for a period of 8-12 weeks in duration the overall construction period of 4-8 months. This informal assessment is based on prior assessments performed for similarly sized permitted and constructed solar facilities projects in Crook County.

Operations: During normal operations that will take place over the following 20-40 years after commercial operations of Solar PV Facilities has been achieved, the site will be locally and remotely monitored as needed and routinely inspected and maintained. Solar energy facilities typically require weekly on-site activity or disturbances during normal operations. Service will be provided by a qualified Operations and Maintenance organization and supporting OEM contractors that may reside local to the area and service other nearby solar sites. During normal operations, solar specific site traffic will be typically one or two site visits by solar O&M personnel per week. Basic maintenance activities include weed maintenance, occasional cleaning of modules (if rains aren't adequate), repair or replace of equipment as needed from time to time. PV facilities are based on solid state devices (the PV modules) which degrade very slowly over time and degrade at less than 1% per year of production (and are generally warrantied as such for 20+ years). Solar modules may be washed and cleaned on an as needed basis only (1-2x annually, if required), using generally only water and no solvents. Water use is fractional in this regard, relative to other types of energy generating facilities. No other water use is generally required for solar PV sites. Facility life may extend further including through repairs and retrofit of equipment.

#### Review of Applicable Criteria

Applicant has and will continue to use the following Criteria to meet Conditional Use Permit requirements. Criteria assessment is included as Exhibit D Local Crook County and State Criteria Review submitted as part of this application.

#### **APPLICABLE CRITERIA:**

CCC Title 18, Chapter 18.24 Exclusive Farm Use, EFU-3

18.24.020 Conditional Uses Permitted

18.24.025 Commercial and Non-Commercial Energy Criteria

18.24.040 Limitations of Specific Conditional Uses

OAR 660-033-0120 Uses Authorized on Agricultural Lands

OAR 660-033-0130 Minimum Standards Applicable to the Schedule of

Permitted and Conditional Uses

CCC Title 18, Chapter 18.160, 161 Conditional Uses

18.160.010 Authorization to Grant or Deny Conditional Uses

18.160.020 General Criteria 18.160.030 General Conditions

18.160.050 Standards governing Conditional Uses
18.160.0500(19) Commercial Power Generating Facilities

18.161 <u>Commercial Power Generating Facilities</u>
18.161.010(2) Commercial Photovoltaic Energy Systems

Crook County Transportation System Plan (TSP) - Section 7.1.7 (now part of CCC Title18.180)

Oregon Enrolled House Bill (HB) 2329

# Crook County Community Development Department 300 NE 3<sup>rd</sup> Street, Prineville, OR 97754 Phone: (541) 447.8156 / Fax: 541.416-2139 Email: plantic crook or us / Website: www.co.crook.or us

#### **AUTHORIZATION FORM**

Let it be known that	Jacob H. Stephens		
(Print name clearly)			
has been retained to act a acts include: Pre-applica applications	as my authorized agent to perform all acts for development on a stion conference, filing applications and/or other required documents.	ny property noted below: These nents relative to all Permit	
Physical address of prope CROOK COUNTY as:	ity:	, and described in the records of	
Township 15 South,	Range         15         East, Section         23         Tax lot         1228           Range         East, Section         , Tax lot		
The costs of the above accowner.	tions, which are not satisfied by the agent, are the responsibility	of the undersigned property	
PROPERTY OWN	ER (Please Frint Clearly)		
Signature:		Date: 3/12/2020	
Print Name: Ronald	d Raasch (Authorized Representative)		
Mailing address: PO B	Sox [1	144	
City: Powell Butte	State: OR Zi	p: <u>97753</u>	
Home Phone: (541)	447 - 1992 Cell Phone: () -		
Email: rar97753@gma	ail.com		
☐ Individual(s)			
Corporation;			
Limited Cability Corpo	ration;		
Trust SUSAN	L. RAASON- TIZUSTES		
MPORTANT NOTE: Incorporation, Limited Liebi	dicate whether property is owned in individual name(s), or by a lity Company; or Trust)—If property is owned by an entity, inc	business or other entity (e.g.	

signers. For Example:

If the owner is a Corporation, Limited Liability Corporation or Trust, the following information is required as part of this form.

If a <u>Corporation</u> ~ please provide the name of President or other authorized signor(s).

If a Limited Liability Corporation ~ provide names of ALL members & managers.

If a Trust ~ provide the name of current Trustee(s)

<u>In addition</u>, you will need to <u>include</u> a copy of Bylaws (Corporations); an Operating Agreement (Limited Liability Company); or Certificate of Trust (Trusts) that verifies authority to sign on behalf of the entity.

AGENT OSHX		
Signature:		Date: 3/12/2020
Print Name: Jacob H. Stephens		
Mailing address: 2033 E. Speedway Blvd, Suite 200	)	
City: Tucson	State: AZ	Zip: 85716
Home Phone: (520) 261 _ 8094	Cell Phone: (520 ) 981 -	7303
Email: jstephens@newsunenergy.net		