

#### **Avangrid Renewables**

## Badger Mtn. Solar Energy Project

**November 17th, 2021** 





## **Avangrid Renewables**

- Aurora Solar LLC, a wholly owned subsidiary of Avangrid Renewables, headquartered in Portland, OR is one of the leading developers of wind and solar projects in the U.S. and has more than 7,000 MW of owned and controlled wind and solar generation in the U.S.
  - Includes the Lund Hill Solar 150MW ac (Klickitat County WA) and Gala Solar 56MWac (Crook County OR)
  - Successful development and operations of wind projects in Washington since 2004. Big Horn I & II (249.5 MW) and Juniper Canyon (151.2 MW)
- Avangrid Renewables is a subsidiary of AVANGRID and part of the IBERDROLA Group. IBERDROLA has one of the largest renewable asset base of any company in the world, with more than 32,000 megawatts (MW) of renewable energy spread across a dozen countries.
- Avangrid Renewables is involved in all phases of wind and solar development:
  - · Meteorological prospecting
  - Wildlife and environmental assessments
  - Permitting
  - Executing agreements with communities and individual landowner
  - · Overseeing project construction
  - Managing daily wind/soar project operations
  - · Marketing the power produced.

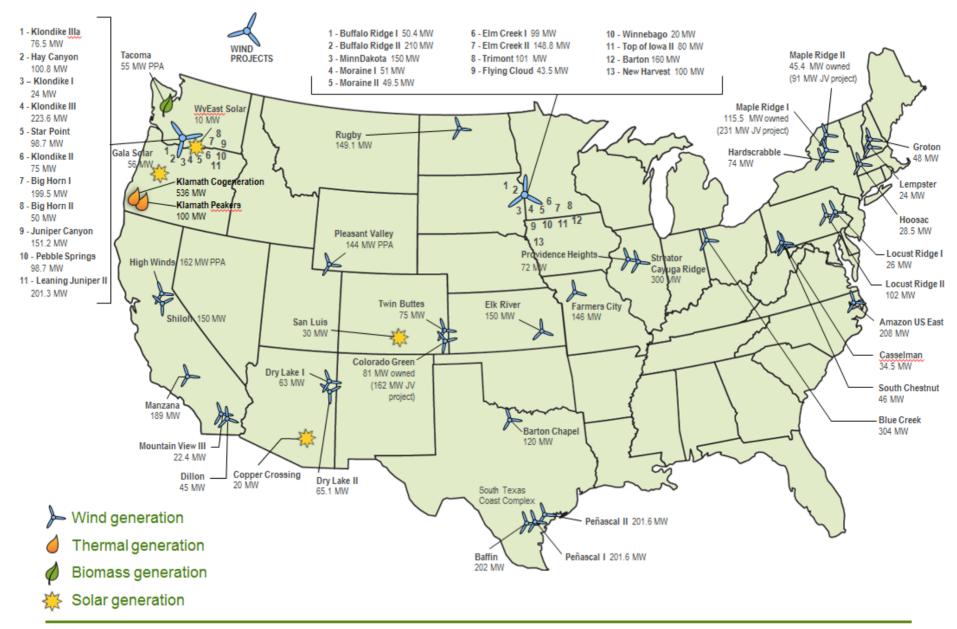








## Avangrid Renewable U.S. Power Assets







Land use	Dryland agricultural, rangeland, undeveloped land, local roads and existing electrical utility infrastructure
Utility Interconnection	Puget Sound Energy (PSE) 230-kV Bonneville Power Administration (BPA) 230-kV
Project Size	200MW AC
Technology	Single-axis tracking ground mounted solar PV

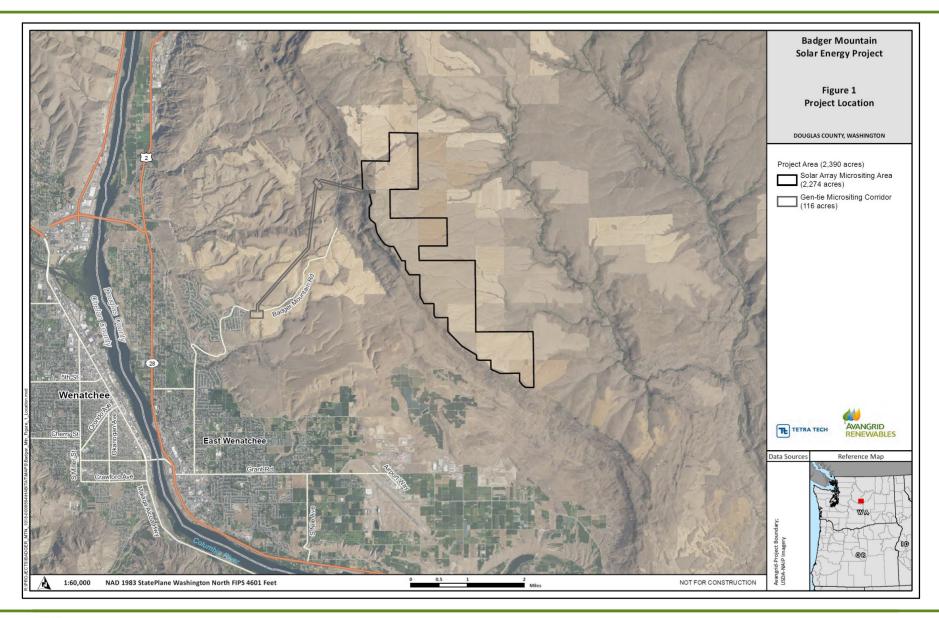
Location	Douglas County, WA approximately 3.5 miles east of East Wenatchee		
Landowners	<ul><li>21 privately owned parcel</li><li>5 Landowners</li><li>2 state owned parcels</li></ul>		
Site acreage	Project leased boundary: Solar array micrositing area: Gen-tie micrositing corridor: Total project footprint:	4,399 acres 2,274 acres 116 acres 1,338 acres	
Site control	Long term land lease and transmission easements		







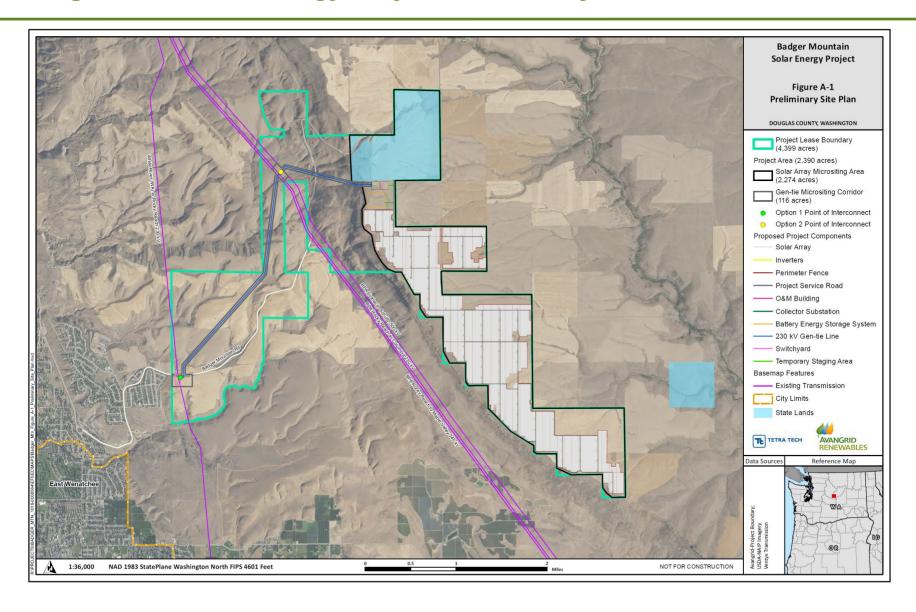
## Badger Mtn. Solar Energy Project Location







#### Badger Mtn. Solar Energy Project Preliminary Site Plan







## **Badger Mtn. Solar Energy Project Characteristics**



- Project will avoid talus slopes
- Potential impact to shrub-steppe habitat have been minimized
  - Less then 3% of the project area
- Continuing consultation with area tribes
- Potential visual impacts will largely be screened from population centers by existing topography
- No wetlands, intermittent or perennial streams occur in the Project area.
- Vast majority of the Project area is on nonirrigated agricultural land (87%)
  - Representing less than 1% of dryland wheat in Douglas County.

- Development initiated in 2017
- Ideal Solar location
  - Proximity to existing electrical transmission.
     PSF and BPA Lines available
  - Abundant Solar Exposure
  - Compatible topography
  - Adequate available nonirrigated agricultural and undeveloped land
  - Ag land designated as not commercially significant
  - Project has support of participating landowners on private land.



#### Consultation

#### **Agency Consultations are ongoing with:**

- U.S. Fish and Wildlife Service (USFWS)
- Washington Department of Fish and Wildlife (WDFW)
- Washington Energy Facility Siting Evaluation Council (EFSEC)
- Washington Department of Ecology
- Washington Department of Natural Resources (WDNR)
- Washington Department of Archaeology and Historic Preservation (DAHP)
- Tribal Consultation with Colville Confederated Tribes, Spokane Tribe, Confederated Tribes and Bands of the Yakama Nation
- Douglas County Department of Transportation and Land Service
- Douglas County Planning Department





## **Surveys and Studies Completed**

#### Part 1

#### **Farth**

#### Geotechnical

 Field surveys completed in Spring 2020: Geotechnical Engineering Report completed Spring 2021

#### Water

#### Wetland Study

Spring 2021- Wetland Delineation complete. No wetlands in the Project area.

#### FEMA -Floodplains

 Completely outside any FEMA-designated flood hazard area or area with high flood risk.

#### Water Quality/Stormwater Runoff

- Spring 2020- Stage 1 Report of Expected Geotechnical Conditions
- Spring 2021- Geotechnical Engineering Report
- Spring 2020- Preliminary Stormwater Management Plan
- Fall 2020- Preliminary Hydrology Report





## **Surveys and Studies Completed**

#### Part 2

#### **Habitat, Plants, and Animals**

- Spring 2021- 2021 Rare Plant Survey
- Spring 2021- 2021 Wildlife and Habitat Survey
- Spring 2019- 2019 Raptor Nest Survey
- Spring 2020- 2020 Raptor Nest Monitoring Report
- Spring 2021- 2021 Eagle Nest Monitoring Report
- Spring 2021- Wetland Delineation

#### **Noise**

Fall 2021- Acoustic Assessment Report

#### **Light, Glare and Aesthetics**

- Fall 2021- Visual Impact Assessment
- Fall 2021- Solar Glare Report
- Fall 2021- Federal Aviation Administration (FAA) Notice Criteria Tool





# **Surveys and Studies Completed Part 3**

Archaeological and Historical Resources

- Fall 2021- Cultural Resources Survey Report
- Upcoming (Spring 2022) Traditional Use Study (Colville Confederated Tribes)





## What Does Commercial Solar Development Look Like?



Fixed-Tilt System

Single-Axis Tracking





## **Single Axis Tracking**





## **Solar Array**





## **Battery Storage Facility Example**







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**Questions?** 



