

# March 5, 2020

Welcome to this month's issue of *Solar Newsbriefs*, brought to you by the Washington State University Energy Program. Please feel free to forward this issue to those of your colleagues interested in solar energy. For archives of past *Solar Newsbriefs*, visit <a href="http://www.energy.wsu.edu/solarnewsbriefs.aspx">http://www.energy.wsu.edu/solarnewsbriefs.aspx</a>

# **Oregon News**

## **Oregon Invests in Resilient Energy**

In Oregon, resilient power is increasingly being recognized as an emergency preparedness and mitigation tool as state leaders and emergency managers prepare for the next Cascadia event, an anticipated magnitude 9.0 earthquake to occur along the Cascadia Subduction Zone fault line, which stretches from Canada's Vancouver Island to Northern California. Statewide, a newly released rebate program incentivizes solar photovoltaics and battery storage for residents and low-income service providers. As for critical facilities, the local utility, Portland General Electric (PGE), is partnering with Portland and surrounding cities to build community resiliency with strategically placed microgrids—Marriele Mango, Clean Energy Group, February 25, 2020: <a href="https://www.cleanegroup.org/oregon-invests-in-resilient-energy/">https://www.cleanegroup.org/oregon-invests-in-resilient-energy/</a>

### SPI Energy Announces Submission of Projects to Oregon Community Solar Program

SPI Energy Co., Ltd., a global provider of photovoltaic ("PV") solutions for business, residential, government and utility customers and investors, today announced the submission of the previously closed solar projects (18MW) in the Oregon Portfolio to the newly formed Oregon Community Solar Program. Following the acceptance and approval from the Public Utility Commission of Oregon, SPI, through its wholly owned subsidiary Solar Town, will begin offering Community Solar Subscriptions to Businesses, Non-Profits & Homeowners in the Portland General Electric (PGE) utility territory. Electricity users will be able to save up to 10% on their electricity bills from the off-site solar gardens—Intrado, February 11, 2020: <a href="https://www.globenewswire.com/news-release/2020/02/11/1982823/0/en/SPI-Energy-Announces-Submission-of-Projects-to-Oregon-Community-Solar-Program.html">https://www.globenewswire.com/news-release/2020/02/11/1982823/0/en/SPI-Energy-Announces-Submission-of-Projects-to-Oregon-Community-Solar-Program.html</a>

Salem Electric's Billing Changes for Home Solar would Penalize Early Adopters, Critics Say
Brent Morace wanted solar power for his West Salem home. Morace is concerned about global

warming and his impact on the environment, which is why he wanted solar panels to have his home produce as much energy in a year as his family uses. Bill Poehlaer, *Statesman Journal*, February 24, 2020: <a href="https://www.statesmanjournal.com/story/news/2020/02/24/billing-rate-changes-solar-customers-impacted-salem-electric/4791573002/">https://www.statesmanjournal.com/story/news/2020/02/24/billing-rate-changes-solar-customers-impacted-salem-electric/4791573002/</a>

### The Grid is at Capacity for Solar Power in Parts of Oregon

Scott Zollinger was well on his way to building a new barn on his property in Marion County and putting enough solar panels on top of it to offset the cost of electricity for his family's home. Then he got a report from his utility, Portland General Electric. The report was filled with technical terms, but it ultimately concluded that he couldn't connect his 24.8 kilowatts of solar power to PGE's system until significant upgrades had been made to the grid.—by Cassandra Profita, *The Bulletin*, February 27, 2020: <a href="https://www.bendbulletin.com/localstate/the-grid-is-at-capacity-for-solar-power-in-parts/article\_ca6d4504-407f-11ea-b2e3-c377a862bab1.html">https://www.bendbulletin.com/localstate/the-grid-is-at-capacity-for-solar-power-in-parts/article\_ca6d4504-407f-11ea-b2e3-c377a862bab1.html</a>

#### Avangrid Renewables Developing Largest Solar Project in Oregon for PGE

Portland General Electric and Avangrid Renewables, a subsidiary of Avangrid, Inc., announced an agreement to purchase power from a new 162-megawatt solar generation facility — the largest in Oregon — to be developed and built in Eastern Oregon. The new facility will supply power and the accompanying renewable energy credits to PGE's Green Future Impact customers, helping them source up to 100% of their energy from a local renewable energy resource—by Kelsey Misbrener, *Solar Power World* February 12, 2020: <a href="https://www.solarpowerworldonline.com/2020/02/portland-general-electric-avangrid-renewables-solar-project/">https://www.solarpowerworldonline.com/2020/02/portland-general-electric-avangrid-renewables-solar-project/</a>

## **Local Disability Support Organization Gifted Solar Panels by UO Students**

Independent Environments, a non-profit that supports adults who experience developmental disabilities, unveiled newly donated solar panels at one of its residential homes February 14 that will help reduce utility costs for the organization. The solar panels were donated by the University of Oregon's branch of RE-volv, a student-led group that provides solar panels to other non-profit groups—Carrington Powell, *The Daily Emerald*, February 21, 2020: <a href="https://www.dailyemerald.com/news/local-disability-support-organization-gifted-solar-panels-by-uo-students/article\_27232e08-545d-11ea-95e7-d31c54474cf2.html">https://www.dailyemerald.com/news/local-disability-support-organization-gifted-solar-panels-by-uo-students/article\_27232e08-545d-11ea-95e7-d31c54474cf2.html</a>

## Each of these Oregon Homes will Feature Solar Off-Grid Microgrids

The 140,000-acre Silvies Valley Ranch, formerly a dude ranch outside of Burns, Oregon, is an eco-friendly ranch and luxury resort. Silvies Valley Ranch is developing 600 homes that will be between 2,000 to 6,000 square feet each. They will be built in three phases of 200 homes (pictured) over the next two to three years—Michelle Lewis, *Electrek*, February 11, 2020:

https://electrek.co/2020/02/11/egeb-oregon-solar-off-grid-microgrids-los-angeles-green-new-deal-doj-automaker-lawsuit-dropped/

### **Prineville Installing Solar Panels at Wastewater Treatment Plant**

One small Oregon town hopes to cut down on energy costs by "going solar" at one key public facility. Leaders in Prineville say they will install solar panels at the town's wastewater treatment plant. The solar panels will take up roughly seven acres of land—FM News 101, KXL, February 25, 2020:

Soltage and Basalt Enter Oregon Market with 40MW Solar Portfolio for Portland General Electric Soltage LLC, a leading independent power producer, and Basalt managed funds announce their entrance into the Oregon power market with a 40-megawatt (MW AC) solar portfolio. The first 10 MW solar facility was energized in December and the remaining 30 MW are under construction and planned to be placed in service prior to Summer 2020. The portfolio was acquired from NewSun Energy, a leading Pacific Northwest energy developer—New Kerala.com, February 28, 2020: <a href="https://www.newkerala.com/news/2020/26513.htm">https://www.newkerala.com/news/2020/26513.htm</a>

# **Washington News**

# Financial Barriers for Solar Power Lowered for King County Families Thanks to Multicultural Project Focused on Environmental Justice

Eleven families in King County are starting off 2020 as a new kind of a homeowner, ones that now get their electricity from the sun. Thanks to a project called "Solarize the Land Trust", these homeowners, all low to moderate income, were recently able to install residential solar systems at their homes at either very little or no cost to them. For more info: Patranya Bhoolsuwan, *International Examiner*, February 24, 2020: <a href="https://iexaminer.org/financial-barriers-for-solar-power-lowered-for-king-county-families-thanks-to-multicultural-project-focused-on-environmental-justice/">https://iexaminer.org/financial-barriers-for-solar-power-lowered-for-king-county-families-thanks-to-multicultural-project-focused-on-environmental-justice/</a>

How King County, Wash., Overcame Income, Language Barriers to Install 11 New Home Solar Systems
For many families, solar can seem beyond reach because of upfront costs, home prices, or language
barriers. To overcome these obstacles over the summer of 2019, Spark Northwest and
Homestead Community Land Trust launched Solarize the Land Trust, holding workshops in King County,
Wash. Here, homeowners could learn about solar, financing and the Solarize opportunity from a team
of solar experts, affordable homeownership providers, multicultural communicators and funders—Chris
Crowell, Solar Builder, February 17, 2020: <a href="https://solarbuildermag.com/news/how-king-county-wash-overcame-income-language-barriers-to-install-11-new-home-solar-systems/">https://solarbuildermag.com/news/how-king-county-wash-overcame-income-language-barriers-to-install-11-new-home-solar-systems/</a>

#### **PUD's Arlington Microgrid Construction Moves Forward**

Construction is underway on the next phase of Snohomish County PUD's Arlington Microgrid and Clean Energy Technology Center project. Moon Construction broke ground recently on the tech center and Modular Data Center, both of which will be located on the same site as the PUD's Community Solar array and future Arlington Microgrid east of Arlington Municipal Airport—*The Arlington Times*, February 11, 2020: <a href="https://www.arlingtontimes.com/news/puds-arlington-microgrid-construction-moves-forward/">https://www.arlingtontimes.com/news/puds-arlington-microgrid-construction-moves-forward/</a>

#### Port of Bellingham Welcomes Silfab Expansion

The Washington State Department of Commerce and Port of Bellingham announced that Silfab Solar, North America's leading solar manufacturer, has committed to expanding its current operations on the Bellingham waterfront. Silfab plans to invest at least \$4 million to add more state-of-the-art manufacturing equipment to address growing demand for its American-made ultra-high-efficiency premium monocrystalline photovoltaic (PV) modules. Commerce provided a \$250,000 economic

development grant to the Port of Bellingham to assist the expansion: February 20, 2020: *Tacoma Daily Index*: <a href="http://www.tacomadailyindex.com/blog/port-of-bellingham-welcomes-silfab-expansion-new-clean-tech-jobs/2446170/">http://www.tacomadailyindex.com/blog/port-of-bellingham-welcomes-silfab-expansion-new-clean-tech-jobs/2446170/</a>

This Richland Solar Farm with Cutting-Edge Energy Storage will Bring 100s of Workers to Train Construction has begun on a 20-acre solar project that will be paired with batteries to power 600 Richland homes as soon as this summer. Energy Northwest expects the project to draw national attention as utilities watch to see how a megawatt-scale project integrates with battery storage for renewable energy sources—Annette Cary, *Tri-City Herald*, February 26, 2020: <a href="https://www.tri-cityherald.com/news/local/article240669286.html">https://www.tri-cityherald.com/news/local/article240669286.html</a>

## **Dual Land Use: Co-Location of Solar and Farm Land**

#### **Solar Panels Provide Cow Comfort**

Research from the University of Minnesota on solar panels on dairy farms is leading to some interesting results. The panels produce electricity to run the farm, but also provide shade for the dairy cattle – thus improving cattle comfort—RussQuinn, *Progressive Farmer*, February 10, 2020:

https://www.dtnpf.com/agriculture/web/ag/equipment/article/2020/02/10/solar-panels-can-provide-energy-cows?referrer=email#.XljHSagVmNU.email

And video: https://www.youtube.com/watch?time\_continue=26&v=ba1ACaGXADA&feature=emb\_logo\_

## **How Community Solar Supports Rural Communities and Farmers**

This short paper explains the community solar model, describes the typical arrangements farmers enter into with companies that build these projects, presents five case studies from different states showing the ways in which agricultural operations have benefited from community solar on their property, and offers resources to help landowners and solar farms. SEIA intends to update this document periodically and add new case studies from across the country—SEIA website, February 2020:

https://www.seia.org/research-resources/how-community-solar-supports-american-farmers

## **Industry News**

'This is Going to be a Very Big Deal' — Coronavirus Poised to Disrupt Storage, Solar Sectors

Measures to control the spread of coronavirus in China could significantly affect the country's storage and solar sectors, according to analysts — but the impact on the United States' power sector is mixed—

Kavya Balaraman, *Utility Drive*, February 20, 2020: <a href="https://www.utilitydive.com/news/coronavirus-solar-storage-power-sector/572326/">https://www.utilitydive.com/news/coronavirus-solar-storage-power-sector/572326/</a>

#### Coronavirus Could Slow the World's Solar-Energy Revolution

The coronavirus outbreak is threatening to slow the global solar energy revolution as it cuts the supply of key equipment for solar and wind farms in China and beyond. As cases of the disease mounted over the last week, manufacturers including Trina Solar Ltd. sounded the alarm over production delays while developers such as Manila Electric Co. in the Philippines said projects would be held up—*Bloomberg News*, February 27, 2020: <a href="https://www.bloomberg.com/news/articles/2020-02-27/coronavirus-is-starting-to-slow-the-solar-energy-revolution">https://www.bloomberg.com/news/articles/2020-02-27/coronavirus-is-starting-to-slow-the-solar-energy-revolution</a>

#### **National News**

#### Solar Jobs Up Nationwide and in 31 States after Two Years of Losses

The U.S. solar industry employed nearly 250,000 workers in 2019, an increase of more than 5,600 jobs (or 2.3%) since 2018, according to the 10th annual <u>National Solar Jobs Census</u> released today by The Solar Foundation. This marks a resurgence in solar industry employment following two years of job losses in 2017 and 2018—*The Solar Foundation*, February 19, 2020:

https://www.thesolarfoundation.org/solar-jobs-up-nationwide-and-in-31-states-after-two-years-of-losses/

## **Reports**

## Prevention through Design (PtD) to Make Solar-Ready Houses Safe for Solar Workers

Although solar-ready designs have become a new standard for residential houses in preparation for the installation of a roofing solar system, information regarding the safety of the workers while installing the solar panels has been insufficient. This study focuses on the development of a Prevention through Design (PtD) checklist and Building Information Modeling (BIM) models for new solar-ready houses with the aim of reducing or eliminating worker injuries—Hyun Woo Le (UW), John Gambatese (OSU), Yohan Min (Clean Energy Institute, UW). *The Center for Construction, Research and Training*, February 6, 2020: <a href="https://www.cpwr.com/publications/prevention-through-design-ptd-make-solar-ready-houses-safe-solar-workers">https://www.cpwr.com/publications/prevention-through-design-ptd-make-solar-ready-houses-safe-solar-workers</a>

# Solar Under Storm: Designing Hurricane-Resilient PV Systems Parts I and II: Best Practices for Solar PV installations Facing hurricane-Force Winds.

RMI, in partnership with Clinton Foundation and FCX Solar, set out to answer the question of why some solar PV systems survive hurricanes virtually unscathed while others suffer extensive damage. The Solar Under Storm reports discuss the root causes of PV system failures from hurricanes and describe recommendations for building more resilient solar PV systems. Rocky Mountain Institute, February 2020: For more info and to down load reports here: <a href="https://rmi.org/insight/solar-under-storm/">https://rmi.org/insight/solar-under-storm/</a>

#### **Could Solar Panels Make Greenhouses Energy-Neutral?**

Greenhouses are an increasingly large slice of American agriculture. There are plenty of advantages to growing crops in greenhouses, but one downside is the energy needed to, most importantly, keep them at a preferred temperature. A new study from North Carolina State University finds that next-generation solar panels might hold the key to solving that problem. Greenhouse agriculture costs more up front in terms of construction, but the advantages are tantalizing. Temperatures can be controlled, prolonging the growing season. Because they're a closed environment, the need for pesticides is dramatically lowered—Dan Nosowitz, *Modern Farmer*, February 12, 2020:

https://modernfarmer.com/2020/02/could-solar-panels-make-greenhouses-energy-neutral/

# **Upcoming Conferences and Workshops**

### GoGreen Conference, Seattle, WA, April 9

GoGreen empowers business decision makers with sustainability strategies, tools and connections to create positive change within their organizations by facilitating environmental, economic and social

performance improvement through the topics and best practices covered at each conference. Join them for an action packed day of driving social and sustainable change in your organization. To learn more and to register: <a href="http://seattle.gogreenconference.net/">http://seattle.gogreenconference.net/</a>

# Oregon Solar Energy Conference: Portland Crowne Place, April 28-30, 2020

In 2019, Oregon Solar Energy Conference hosted over 500 attendees representing over 220 companies. There were over 30 exhibitors & sponsors and 57 sessions ranging from technical training to business training to solar policy. The conference offered over 20 hours registered for NABCEP CE. Join them in 2020. To submit session proposals and to register see: <a href="https://www.oseia.org/osec">https://www.oseia.org/osec</a> Click here to register for the concurrent and FREE Oregon Solar Career Expo, April 28, 2020: <a href="https://www.oseia.org/osec/careerexpo">https://www.oseia.org/osec/careerexpo</a>

### Solar & New Construction Networking Event (Bend), April 16, 2020

Are you a builder or developer who is curious about installing solar and achieving net zero for your projects? Or perhaps you are a solar contractor looking to create more connections with the building community? For more information on this free event:

 $\frac{https://www.eventbrite.com/e/solar-new-construction-networking-event-bend-tickets-95957869571?aff=erelexpmlt}{2}$ 

Want to Contribute? If you have information on events, publications or other solar topics that you would like mentioned in an upcoming issue of Solar Newsbriefs, please contact Anne Whitney at <a href="https://www.whitneya@energy.wsu.edu">whitneya@energy.wsu.edu</a>

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