

Small Scale Renewable Energy Projects Study

Background for Barriers and Opportunities Workshop on June 3, 2022

Background

Small scale and community-based renewable energy projects present an opportunity to diversify energy resources in Oregon and provide benefits to Oregon communities. To date, widespread development of these projects has faced a variety of financial, interconnection and policy related barriers. This workshop will seek to identify and describe promising small-scale renewable energy development opportunities as well as barriers that are limiting widespread project development. Related topics, such as ownership models and project benefits are the subject of additional workshops.

Policy Landscape

Project development opportunities and barriers are affected by local, state, and national laws and regulatory policies. Projects must gain approval for siting, interconnection, contracting, and other milestones prior to construction and operation. Some barriers have specific policy objectives and serve to ensure safe and responsible development. Similarly, some policies that were originally designed to create opportunities for small-scale project development may also be seen as barriers. The following policies are presented as topics for discussion in the opportunities and barriers workshop:

Public Utility Regulatory Policies Act (PURPA) of 1978 (PURPA): The Public Utility Regulatory Policies Act (PURPA) of 1978 was established after the US energy crises of the 1970s to encourage development of small, non-utility power facilities, defined as facilities under 80MW in size that use renewable resources. PURPA gives Qualifying Facilities (QF) the right to interconnect with the utility-controlled grid and requires these utilities to purchase QF-generated energy at an avoided cost rate.³ In Oregon, utilities establish different avoided costs rates based on the technology installed on their system. Certain facilities can qualify for standard contracts, specifically solar facilities smaller than 3MW and other renewable facilities smaller than 10MW. PURPA provides an avenue for renewable energy development – particularly small projects – allowing developers to sell, and requiring utilities to purchase, output from QFs to utilities at an avoided cost rate under standard contracts.

Power Purchase Agreements: Projects that exceed the thresholds for standard PURPA contracts may still deliver energy to a utility through a power purchase agreement (PPA). For example, solar facilities larger than 3MW but smaller than 20MW would still be considered small-scale facilities for this study and for interconnection purposes but would be ineligible for the community solar program or a standard PURPA contract. Like PURPA QFs, these facilities deliver renewable energy and the benefits of decarbonization to the bulk power system.

Direct Access: Chapter 865, Oregon Laws 1999 describes direct access options in Oregon. Direct access enables certain nonresidential electricity consumers to purchase electricity from an electricity service supplier (ESS) other than their electric utility. Electricity service providers must gain certification by the Oregon Public Utility Commission or the governing body of a consumer owned utility. Within direct access contracts, the electricity service supplier is responsible for generation and transmission of electricity, but the electric utility retains responsibility for distribution of services.

Net Metering: ORS 757.300 describes Oregon’s net metering laws.⁴ Since 1999, Oregon law has required electric utilities to offer net metering to Oregon customers for renewable energy systems up to 25 kilowatts (kW) in size. This law was amended in 2005, enabling the Oregon Public Utility Commission to adopt rules allowing customers of investor-owned utilities to install larger systems. In 2007, the Oregon PUC adopted net metering rules for Oregon investor-owned utilities, including an allowance for non-residential net metered projects up to 2 megawatts (MW) in size. For consumer-owned utilities, net metering policies are developed by each COU’s governing body or board.

Community Solar Program: Oregon Laws 2016, Chapter 28 (SB 1547)⁵ directs the OPUC to establish Oregon’s Community Solar program to enable owners and subscribers of a community solar project to share in the costs and benefits of the project. The program is available to customers of PGE, PacifiCorp, and Idaho Power, and enables subscribers to realize electric bill savings associated with a share of a community solar facility. The bill requires that at least 10 percent of allocated capacity be made available to low-income customers.

County Permitting Practices: While there are moratoriums on solar over 2 MW in two Willamette Valley counties, and land use restrictions mentioned below for projects over 2 MW in much of the Valley, there are opportunities for projects over 2 MW in counties on the east side of the state. Counties have permitting jurisdiction over most projects under 1280 acres in size and some projects between 1280-1920 acres.

Oregon Statewide Land Use Planning Goals: OAR 660-015-0000(13) describes Goal 13, Energy Conservation. This is the only land use planning goal directly related to energy and is limited in scope to energy efficiency guidelines and provisions for recycling facilities. Goal 13 was adopted in 1974 and has never been updated. Goal 13 does not include any language related to renewable energy, statewide clean energy targets, climate change or energy facilities development.

Goal 3 is related to the preservation of agricultural lands and is often sited in relation to renewable energy developments.

Other Policy Considerations

- ***Fee in Lieu of Taxes***
- ***Transmission / Interconnection Constraints***
- ***Renewable Energy Development (RED) Zones***
- ***Renewable Portfolio Standard (RPS) / HB 2021***
- ***Community Renewable Energy Grant Program***
- ***Oregon Solar + Storage Rebate Program***
- ***Energy Trust of Oregon Programs***
- ***Federal Investment Tax Credit (ITC)***
- ***Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC) funding***
- ***Other Federal Funds?***

Additional Opportunity Considerations

- Tapping underdeveloped resources like micro hydro, geothermal, or biomass
- Using renewable energy and storage or other technologies to provide backup power to critical infrastructure
- Making use of previously disturbed land and combining renewable power with other land uses
- Deploying small scale projects within communities where certain additional benefits may be realized

Additional Barrier Considerations

- Upfront cost
- Cost relative to lower cost options
- Local opposition / NIMBY
- Local staff capacity and lack of technical assistance to develop and manage projects

Discussion Questions

1. What is the state of small-scale and community based renewable energy development in Oregon?
2. What are the most promising deployment opportunities for small scale and community based renewable energy projects in Oregon?
3. What are the barriers to developing small scale and community based renewable energy projects in Oregon?
4. What are the policy objectives associated with barriers?
5. What are Oregon's goals and policies that support small scale and community-based projects?
6. What policy recommendations would work group members recommend?

7. What barriers exist for projects in the Oregon Community Solar Program?
8. What are the market barriers?
9. What are the land use barriers?
10. What opportunities are unique to small scale / community-based projects
11. What is the role of grant and other incentives to overcome financial barriers? Are there non-incentive options?

Crossover Questions Parking Lot

1. What specific benefits enhance opportunities to develop community-based projects?
2. What is the impact to all ratepayers associated with overcoming barriers?