

Department of Land Conservation and Development

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January 10, 2019

TO: Land Conservation and Development Commission

FROM: Jim Rue, Director Jon Jinings, Community Services Specialist Rob Hallyburton, Rural Policy Analyst

SUBJECT: Agenda Item 6, January 24-25, 2019, LCDC Meeting

RULEMAKING – SOLAR FACILITIES ON HIGH-VALUE FARMLAND

I. AGENDA ITEM SUMMARY

This agenda item is for the Land Conservation and Development Commission (LCDC or commission) to consider and possibly adopt amendments to Oregon Administrative Rules (OAR) 660-033-0130(38), which contains the criteria for conditional use approval of photovoltaic solar power generating facilities on lands zoned exclusive farm use (EFU), and related amendments to continue a temporary rule.

The proposed revisions limit, but do not prohibit, solar development on high-value farmland located in EFU zones the Willamette Valley and elsewhere in Oregon. They include siting criteria, guiding solar development away from Oregon's most productive agricultural soils. Put another way, the best of the best soils would no longer be available for solar development through a simple conditional use process. The rest of the best agricultural soils remain candidates for conditional use applications. Further, the exceptions process would still be available for an applicant to make a case that their specific project should be allowed to be sited on the best of the best soils.

The proposal, in Attachment A, includes a new provision that would limit siting of new solar facilities on Class 1 and 2 soils and those classified as prime or unique by the Natural Resource Conservation Service. Regulations for siting a facility on Class 3 and 4 high-value farmland would be unaffected. The new limitations would be partially offset by an allowance for projects that are larger than what is currently allowed on high-value farmland when the project includes farm use on the solar-facility site.

The proposed revisions will not affect the more than 80 sites and about 950 acres in the Willamette Valley that have obtained conditional use approvals or are pursuing conditional use approvals under the existing rule provisions.

For further information about this report, please contact Jon Jinings, Community Services Specialist, at jon.jinings@state.or.us.

II. BACKGROUND

As explained in more detail in later sections of this report, the commission initiated this rulemaking project at its September 2018 meeting and appointed a rulemaking advisory committee (RAC) to advise the Department of Land Conservation and Development (DLCD or department) in formulating recommended administrative rule amendments. The department met with the RAC four times and had follow-up communications after the last meeting. Written comments and testimony addressed to the commission and received before issuance of this report are included in Attachment B. A list of terms and acronyms to assist the commission is included as Attachment F.

A. REASON FOR RULEMAKING PROJECT

The need for the rulemaking was discussed in the <u>department's September 13, 2018</u> <u>report1</u> to the commission regarding initiation of the rulemaking project. That report stated:

In 2011, LCDC adopted rule amendments regulating photovoltaic solar power generation facilities in exclusive farm use zones... The amendments included a requirement that limited photovoltaic solar power generation facilities to 12 acres on high-value farmland soils, 20 acres on arable farmland that is not high-value, and 100 acres on nonarable farmland. Approval of projects larger than these thresholds requires an exception to Statewide Planning Goal 3. The amendments were adopted to discourage development on highly productive farmland and to encourage their placement on lands with lower agricultural or wildlife habitat value.

During the original process, the RAC spent seven months diligently considering multiple, complex siting issues associated with establishing commercial solar power generation facilities on Oregon's farm and ranch lands. The RAC members unanimously agreed that there is a place for solar development within Oregon's agricultural areas. The RAC members also agreed that protecting Oregon's best farmland soils and valuable wildlife habitat makes good policy sense. Beyond those two points there were few easy answers. Sincere concerns and a variety of perspectives made striking

¹ https://www.oregon.gov/LCD/Commission/Documents/LCDC_Meetings/2018-09/2018-09_Item_5_Staff_Report_SolarRulemaking.pdf

a balance difficult. At the end of the RAC's final meeting, the members agreed that, even though complete consensus was not present, forwarding the draft rule to the commission was appropriate.

The final result was adoption of OAR 660-033-0130(38) in October 2011. The commission has made minor adjustments in response to various statute changes (*e.g.*, increasing the project-size threshold on nonarable lands to 250 and finally 320 acres, high-value farmland in an American Viniculture Area, etc.). However, the majority of rule language remains unchanged and un-reviewed since the original adoption.

The commission received an October 17, 2016, letter from the Oregon Board of Agriculture expressing concern over how the solar rule was being applied with regard to high-value farmland and requesting the commission engage in an evaluation of OAR 660-033-0130(38). Discussion between department staff and staff of the Oregon Department of Agriculture, Oregon Department of Energy and Oregon Department of Fish and Wildlife indicated that a review of the rule was a worthwhile endeavor. This and other input from stakeholders led to the matter being included on the department's 2017-2019 policy agenda.

Also, for reasons explained in a <u>July 12, 2018 department report</u> to the commission,² the commission adopted a temporary amendment to OAR 660-033-0130 in July 2018 to address a specific issue of rule interpretation. That temporary rule will expire on January 25, 2019. The purpose of this rulemaking project includes consideration of whether to adopt those changes as permanent rules.

The project also included consideration of whether to repeal or change a sunset provision relating to a wildlife-habitat conservation section of the rule that applies to nonarable land. Therefore, even though the sunset does not occur until January 1, 2022, considering it now is recognition of efficiency; including it in this process will prevent the need to have a single-purpose rule amendment later.

B. CURRENT POLICY REGARDING SOLAR FACILITIES ON FARMLAND

Oregon Revised Statutes (ORS) 215.213(2)(g) and 215.283(2)(g) list "commercial utility facilities for the purpose of generating power for public use by sale" as a use that county may permit on land zoned EFU. That means that a county may list the use in its EFU zone and accept an application for a proposed facility. The county may approve the application if it finds the proposal complies with relevant criteria in statute, administrative

² https://www.oregon.gov/LCD/Commission/Documents/LCDC_Meetings/2018-07/2018-

⁰⁷_Item_6_StaffReport-TempRulemaking_Solar.pdf

rule, and the county's zoning ordinance. The rule does not apply to siting of noncommercial facilities that a farm may construct for onsite use.

ORS 215.213(2)(g) and 215.283(2)(g) also provide that, "if the area zoned for exclusive farm use is high-value farmland, a photovoltaic solar power generation facility may be established as a commercial utility facility as provided in ORS 215.447." ORS 215.447 provides criteria that are only relevant to an area known as the Columbia Valley viticultural area, so it is not relevant to this rulemaking project.

As explained in the previous subsection, the commission has adopted rules interpreting and implementing ORS 215.213(2)(g) and 215.283(2)(g) as they apply to solar facilities. The rules provide different criteria depending on the capability of the land for farm use. The most capable, "high-value farmland," is the most limited in terms of the size of a solar-facility development, while the least capable, "nonarable land," allows the largest facilities.

C. OREGON'S FARMLAND PROTECTION POLICIES

Oregon's policy regarding farmland protection begins in statute; SB 101 in 1973 included the following policy, which has remained unchanged since.

ORS 215.243 Agricultural land use policy. The Legislative Assembly finds and declares that:

(1) Open land used for agricultural use is an efficient means of conserving natural resources that constitute an important physical, social, aesthetic and economic asset to all of the people of this state, whether living in rural, urban or metropolitan areas of the state.

(2) The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources and the preservation of such land in large blocks is necessary in maintaining the agricultural economy of the state and for the assurance of adequate, healthful and nutritious food for the people of this state and nation.

(3) Expansion of urban development into rural areas is a matter of public concern because of the unnecessary increases in costs of community services, conflicts between farm and urban activities and the loss of open space and natural beauty around urban centers occurring as the result of such expansion.

(4) Exclusive farm use zoning as provided by law, substantially limits alternatives to the use of rural land and, with the importance of rural lands to

the public, justifies incentives and privileges offered to encourage owners of rural lands to hold such lands in exclusive farm use zones.

Section (2) is the most relevant portion of this policy for the present rulemaking project. While it does not commit the state to no farmland loss, it does encourage minimal conversion. The commission must assess whether the existing rule preserves "a maximum amount" of farmland, and, if not, what amendments would achieve conformity with this policy.

Oregon's land use policy regarding farmland is further explained in Statewide Planning Goal 3, "Agricultural Land," which is, "To preserve and maintain agricultural lands." The goal also provides:

Agricultural lands shall be preserved and maintained for farm use, consistent with existing and future needs for agricultural products, forest and open space and with the state's agricultural land use policy expressed in ORS 215.243 and 215.700.

This policy is carried out through EFU zoning, which protects lands for agricultural use by limiting the nonfarm uses that may be developed. The first task to protect farmland is to identify and zone farmland while providing land in other zones that allow those uses limited on farmland. However, zoning land EFU only protects that land for farm use, if the land use regulations prevent development of uses that convert farmland or conflict with farm use. The second task, then, is thoughtful limitation of and siting standards for non-farm uses in the EFU zone to carry out the state's farmland policies. This task necessarily includes consideration of the needs expressed in other state land use planning goals, and other state policies, such as those related to solar discussed below.

D. OREGON'S SOLAR POWER POLICY

Oregon has no comprehensive policy regarding solar power. However, mention of renewable energy is found in multiple locations in state law and Oregon's Climate Agenda. These provisions do not specifically address where a solar facility is allowed or prohibited, but in some instances the laws and programs do influence the solar industry's demand for certain locations.

1. Renewable Portfolio Standard

The Oregon Legislature enacted targets for how much of the electricity we use will come from renewable resources.³ The most recent legislative action on this front came

³ Renewable energy sources include wind; solar photovoltaic and solar thermal; wave, tidal, and ocean thermal; geothermal; certain biomass products, including woody biomass and animal manure; landfill gas and other biogases; small hydropower; and thermal energy.

as SB 1547 (2016). The provisions of this law are codified in statute (ORS chapter 469A), which, among other things, call for 50 percent of Oregon's electricity needs to be met by renewables by 2040. The statute does not set standards for individual renewable energy sources and it does not establish a requirement or preference for generation sources located within the state. In other words, Oregon's RPS could be entirely satisfied by out of state renewable energy sources.

2. Community Solar Program

SB 1547 also directed the Public Utility Commission of Oregon (PUC) to adopt rules establishing a program for the procurement of electricity from community solar projects.⁴ The law identifies several items to be included in the PUC rules, including provisions to require electric companies to enter into a 20-year power-purchase agreement with a certified community solar project and to determine a methodology by which 10 percent of the total generating capacity of the community solar projects operated under the program will be made available for use by low-income residential customers of electricity. The PUC is also obligated determine the resource value of solar energy.

Furthermore, the bill, now at ORS 757.386(3), provides:

A community solar project:

- (a) Must have at least one solar photovoltaic energy system with a minimum generating capacity of 25 kilowatts;
- (b) Must be located in this state; and
- (c) May be located anywhere in this state.

The PUC rulemaking is ongoing. Specifically, the PUC has yet to "determine the resource value of solar energy." However, rules have been adopted to implement other provisions of SB 1547. PUC has restricted the initial program capacity tier of community solar projects to 2.5 percent of the 2016 systems peak load of affected utilities (Portland General Electric (PGE), Pacificorp and Idaho Power Company). <u>OAR 860-088-0060</u>.⁵ Cumulatively, this amounts to 161 megawatts (MW).

Individually, the three affected utilities would have an obligation to purchase 23.29 MW (PGE), 16.15 MW (Pacificorp) and 0.82 MW (Idaho Power Company) from community solar projects. Eventually the obligations increase to a total of 93.15 MW (PGE), 64.60 MW (Pacificorp) and 3.27 MW (Idaho Power Company). The PUC has the authority to adopt successive program capacity tiers. OAR 860-088-0060(3).

⁴ ORS 757.386(1)(a) provides that: "'Community solar project' means one or more solar photovoltaic energy systems that provide owners and subscribers the opportunity to share the costs and benefits associated with the generation of electricity by the solar photovoltaic energy systems."

⁵ https://secure.sos.state.or.us/oard/view.action?ruleNumber=860-088-0060

PUC rules also establish that, to participate in the Community Solar Program, a project must be located within the Oregon service territory of an electric company and have a nameplate capacity of 3 MW or less. OAR 860-088-0090(1) provides that:

Subject to the conditions in this rule, a retail electricity customer of an electric company may acquire an ownership interest in, or subscribe to, one or more projects that are located in the service territory of the electric company serving the retail electricity customer.

Read together, these PUC rule provisions establish that a community solar project must be located in the service territory of the specific utility whose customers are accessing the project, rather than "anywhere in this state" as identified in SB 1547.

PUC Order No. 17-232⁶ (June 2017) provides the following explanation:

Paragraphs 22(3)(b) and (c) of SB 1547 state that a project participating in the community solar program "[m]ust be located in this state; and [m]ay be located anywhere in this state." Under the proposed rules, projects must be located within the service territory of an electric company and participants are limited to projects located in their same contiguous service territory. At hearing, Staff explained these limitations are based on practical and policy reasons. These include aligning the program with net metering principles, reflecting the vision of "community," and ensuring that bill credits accurately reflect the resource value of solar. Staff further cautioned that these limitations ensure this program is not used by larger customers in lieu of direct access, which has built-in protections to ensure costs are not shifted to customers who remain on the utility system. Stakeholders respond that the restriction to a participant's same "contiguous" service territory severely limits project options for some customers, particularly PacifiCorp customers in load pockets. Staff recommends in its final comments removing the "contiguous" requirement but retaining the constraint that a project be located in a participant's same service territory.

3. Oregon Climate Agenda

Governor Brown issued the <u>Oregon Climate Agenda</u>: A Strong, Innovative, Inclusive Economy While Achieving State Climate Emissions Goals on November 18, 2018. The agenda includes "Strategies to Achieving Our Climate and Economic Goals," which address a range of climate-change mitigation measures. Strategies in the agenda may be relevant to this rulemaking project.

⁶ https://apps.puc.state.or.us/orders/2017ords/17-232.pdf

Strategy Three is to "decarbonize the electricity system." The full strategy states: "Achieve the state's renewable energy targets and encourage grid modernization while maintaining affordable and competitive electricity rates." This strategy relates to the Renewable Portfolio Standard and other clean-energy initiatives. It does not address solar energy specifically or include any statements that would guide facility-siting decisions.

Strategy Four of the agenda is to "expand access to clean energy services." The full strategy states:

Expand opportunities for residential, municipal, and commercial customers to access clean energy services from their utilities while ensuring utility regulation is designed to support the utility system and does not preference new customers over existing ones.

This strategy does not address solar power separately from other sources of renewable energy except to recognize increasing demand for rooftop collectors. The strategy does not include statements or policies that guide siting decisions.

Strategy Seven is "Invest in Climate Solutions That Foster Resilience." The full strategy states: "Pursue climate solutions that benefit rural communities and Tribes, support working lands, and foster resilience to climate change." One of the objectives enumerated under this strategy states that the Governor is committed to:

Working with landowners, producers, and stakeholders to keep agricultural lands in production and avoid the conversion to more emissions-intensive uses.

In a section titled "Oregon's Leadership and Legacy," the agenda states:

Oregon has already taken important steps to reduce climate emissions and build a clean energy economy. Some of the foundational legislation addressing climate change in Oregon includes:

• Land use: Oregon's nationally renowned land use planning program (SB100) laid the groundwork for mitigation and adaptation in Oregon for 45 years by creating dense, livable communities and protecting farms, forests, and natural areas from development.

The Governor's climate change agenda reflects the tension between farmland protection and promotion of a robust, growing solar-energy industry in Oregon. Like the Governor, the department supports both and has recommended a rule that it believes appropriately considers both objectives.

None of these sources include requirements or guidance that specifically affect solarfacility siting decisions, but they do, as a group, show a commitment on the part of the state of Oregon to promote clean energy. This is important context for the commission to consider in this rulemaking effort.

E. NEED FOR THE AMENDMENTS

Information collected by the department indicates that as many as 140 proposals for photovoltaic solar power generation facilities have been submitted for approval. Applications for conditional use approval account for most of the requests, but a few applications have been for exceptions to Goal 3, and a very small number have been, or are being, prepared for EFSC review. Only a small number of projects have actually been constructed.

According to information the department provided to the RAC at its November 2018 meeting (Attachment C), 86 projects have been proposed in Willamette Valley EFU zones (including those under review, already approved, and already constructed). Eighty of these are on high-value farmland. If constructed, these 80 projects would occupy 957 acres. This is the best data the department could collect, but not all information has been reported by counties.

About 53 projects in EFU zones have been proposed in eastern and central Oregon and three have been submitted in southern Oregon. If constructed, these 53 projects would occupy over 17,000 acres. Although Willamette Valley counties contain the majority of the state's proposals, the amount of land proposed to be occupied is far less than what is proposed in eastern and central Oregon. In eastern Oregon, it appears that less than five percent of proposals would be sited on high-value farmland.

The projects approved on high-value farmland account for a small percentage of the high-value farmland in the state and for any individual county. However, the department believes that this is not the appropriate measure for whether the agricultural land use policies to preserve "a maximum amount of the limited supply of agricultural land" and for farmland to be "preserved and maintained for farm use, consistent with existing and future needs for agricultural products" have been advanced. Using similar reasoning, high-value farmland accounts for only a small percentage of land available for solar facility development. The department understands, however, that this may not be important when proximity to a power-transmission facility with adequate capacity is important in facility-siting decisions.

The report to the commission explaining the proposed new solar rule in June 2011 states that the provisions of what is now the existing rule were "deliberately structured to discourage development on high-value farmland soils and to encourage their placement on lands with the least importance for either agriculture or wildlife habitat." Approval for conversion of nearly 1,000 acres of high-value farmland in a relatively short period of time suggests that the existing rule has not achieved this purpose. The department

heard from RAC members that not all of the approved projects will be built, and that projected demand will not lead to considerably more acreage converted than is already approved. The department notes, however, that the solar power-generating industry is young and the laws and incentives that influence where projects get built continue to evolve, making forecasts tenuous.

The majority of the approved solar power-generating capacity in the state is in eastern and central Oregon and not on high-value farmland, suggesting that perhaps the rule has achieved its purpose of directing projects to appropriate areas. The department does not agree with this view because the impacts on high-value farmland in certain local agricultural areas have been disproportionate and are obscured by examination of statewide data. In the context of the policy to preserve that maximum amount of a limited supply of farmland, the department has found that the existing rule is too permissive on high-value farmland.

F. ADVISORY COMMITTEE PROCESS

The RAC was comprised of 18 members representing solar power development, farming, county, utility, land-use, and tribal interests. The Oregon departments of Agriculture, Energy, and Fish and Wildlife also had seats on the committee. The commission chair served as the LCDC liaison. The member representing tribal interests did not attend any of the meetings or otherwise participate, and the department considered this a withdrawal from the committee. This left 17 members involved in the deliberations.

The RAC met four times from early October to early December 2018. The agendas included a tour of a 12-acre solar facility near Sheridan, discussion of solardevelopment requirements (especially regarding proximity to transmission facilities with adequate capacity), the impact of solar development on farms and farming, state land use policy, county application review procedures, and appropriate rule provisions addressing the various interests represented on the RAC.

At its first meeting, the RAC agreed to a set of operating principles that included the committee purpose, the organizational structure, attendance at and conduct of meetings, and formulation of a committee recommendation. The RAC members understood that the committee's advice was to the department. The principles called for the RAC to "strive to operate by consensus," and defined "consensus" as "all RAC members can live with the recommendation or decision." A RAC member stating that they could "live with" an amendment did not mean that the member supported the proposal, but rather that they did not oppose it. That is, a member may be neutral, or even have significant concerns, on many of the proposed amendments, but lack of dissent would contribute to consensus on that item.

Just about every agenda item over the course of 18 hours of meeting took longer than expected. This resulted in RAC consideration of draft rule language being delayed until

the final meeting. The department prepared revised draft rule amendments based on the RAC input at that meeting and circulated it to committee members for comment via email. Those comments were considered by the department in development of the recommended rule amendments.

The department attempted to communicate with individual RAC members subsequent to the final committee meeting. These discussions were to ensure accurate identification of the members' various positions on the recommended draft rule amendments. Most of the RAC members chose to engage in the requested communication.

G. ADVISORY COMMITTEE OUTCOME

Few proposed amendments found consensus among the 17 attending RAC members. The positions of those members who did not indicate concurrence with the proposed language are discussed in the following section of this report. The ODOE member has indicated to the department that his department has no position on the various rule amendment proposals. Several amendments proposed by the department in early drafts were unpopular and are not included the department's recommendation; those deletions received consensus support.

III. PROPOSED AMENDMENTS

The amendments to OAR 660-033-0130 recommended by the department are included in Attachment A. The proposal includes changes to sections (17), (22), and (38), with most of the changes in section (38). The draft includes several minor amendments to correct inconsistent use of terms in the existing rule. Those amendments are shown in Attachment A but are not discussed here.

A. USE, OCCUPY, OR COVER

The commission adopted a temporary rule on July 27, 2018 to correct what the commission believed to be multiple misapplications of provisions regarding to the acreage thresholds established in the rule. Specifically, the bolded language in OAR 660-033-0130 below was at issue:

Permanent features of a power generation facility **shall not preclude more than 12 acres from use as a commercial agricultural enterprise** unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4. * * *

This language has applied to commercial energy facility development on high-value farmland, including solar development since at least 1994. It was deliberately established to limit commercial energy development allowed through a conditional use proceeding. A nearly identical provision, different only in specifying 20 acres rather than

12 acres was established for non-high-value farmland. Both thresholds, as well as, a limitation designed for nonarable lands were incorporated into the original solar rule.

The department became aware of two different interpretations that served to undermine these longstanding rule provisions. The first such interpretations was that if there was no commercial agricultural enterprise being conducted on the property, such an activity could not be "precluded" and, therefore, a larger solar project could be allowed. To the extent it occurred, this type of application occurred more often in central and eastern Oregon and did not always involve high-value farmland.

The second interpretation was that if at least some level of agricultural activity was maintained, no preclusion of a commercial agricultural enterprise was occurring and, therefore, a larger solar project could be allowed. To the extent it occurred, this type of application was most common in the Willamette Valley and southern Oregon.

Because these interpretations were inconsistent with the rule intent and purpose, the commission adopted the following language as a temporary rule:

(17) Permanent features of a power generation facility shall not [preclude] **use, occupy, or cover** more than 12 acres [from use as a commercial agricultural enterprise] unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4

The "use, occupy or cover" language has been replicated at every relevant location in division 33. The temporary rule is scheduled to expire on January 25, 2019 – 180 days from adoption.

The department believes the language in the temporary rule should be made permanent. The revisions are shown in Attachment A for:

OAR 660-033-0130(17) - p. 1, lines 3-4 (applies to "commercial utility facilities for the purpose of generating power for public use by sale, not including wind power generation facilities or photovoltaic solar power generation facilities" on high-value farmland)

OAR 660-033-0130(22) - p. 1, lines 15-16 (applies to "commercial utility facilities for the purpose of generating power for public use by sale, not including wind power generation facilities or photovoltaic solar power generation facilities" not on high-value farmland)

OAR 660-033-0130(38)(g) –p. 2, lines 29-30 (applies to solar facilities on high-value farmland)

OAR 660-033-0130(38)(i) –p. 5, lines 2-3 (applies to solar facilities on arable land)

OAR 660-033-0130(38)(j) -p. 6, lines 7-8 (applies to solar facilities on nonarable land)

The department did not receive a consensus recommendation from the RAC on these amendments. The members representing Cypress Creek Renewable, the Oregon Solar Energy Industries Association, and Renewable Northwest indicated that they did not agree with the amendments as part of the proposed package of amendments. Department efforts to determine the reasons for the dissent, or the circumstances that would lead to consensus, were unsuccessful.

While other members of the RAC indicated that they could "live with" the amendments, several expressed reservations related to the uncertainty around new language, and no member expressed *support* for the change. For example, one RAC member asked, "Do those three terms [use, occupy, and cover] mean the same thing? If not, what are the differences and why?" and "Does a generation tie-line that goes between the solar facility and the nearest substation 'cover' or 'occupy' land as it is strung over that land? Such a line is included in the definition of 'PV solar generation facility.' If so, how much? The whole right of way?" These concerns are not unfounded, but experience with the existing language indicates it needs to be updated.

B. DUAL-USE

Dual-use, sometimes referred to as "co-location" or "agrivoltaics" is the concept that a specific site will be used for both solar energy generation and farm use. First and foremost, nothing in the existing rules prohibit or even discourage dual-use. This development arrangement is and has been available. Therefore, the conversation is not about whether dual-use should be allowed but whether this development arrangement should be rewarded.

The solar industry representatives on the RAC advocated that a dual-use proposal should receive a "credit" to allow a larger development footprint. This concept received a good deal of attention and discussion during the RAC process. Most of the RAC members expressed interest, although agricultural representatives tended to remain skeptical. In addition, there were several questions about administrative items as well as how any such terms would be enforced,

Ultimately, the department found the concept of dual-use intriguing but is reluctant to establish rules mandating that counties apply a development credit for dual-use proposals. Instead, the proposed amendments would allow a county flexibility to establish a dual-use option that could allow a project with a nameplate capacity of up to 3 MW (typically larger than 12 acres) but not to exceed 20 acres with appropriate safeguards and assurances. A county would accomplish this through a legislative amendment to its land use regulations.

The 3 MW threshold was selected because that amount of output is the ceiling for Qualifying Projects under Oregon's rules implementing the federal Public Utility Regulatory Policies Act. Projects larger than 3 MW are not subject to the guaranteed avoid cost pricing established by PUC rule in accordance with federal law and are less likely to be proposed under any condition.

The companion 20-acre threshold was established based on the understanding that 12acre projects in the Willamette Valley commonly produce a maximum output of 2.0-2.2 MW. These number indicate projects with a nameplate capacity of 3 MW could require 16 to 18 acres. The department considered 20 acres sufficient to provide development footprint that can be designed to accommodate farm equipment and agricultural practices.

A provision identifying the county option to adopt a dual-use credit is proposed at OAR 660-033-0130(38)(g)(C). Attachment A, p. 2-3. The proposal is:

(g) [(f)] For high-value farmland described at ORS 195.300(10), a photovoltaic solar power generation facility shall not [preclude] use, <u>occupy, or cover</u> more than 12 acres [from use as a commercial agricultural enterprise] unless [an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4 or the requirements of paragraph (G) are met. The governing body or its designate must find that]:

- (A) An exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4;
- (B) The provisions of paragraph (h)(H) are satisfied; or
- (C) A county adopts land use provisions authorizing projects subject to a dual-use development plan. Land use provisions adopted by a county pursuant to this paragraph may not allow a project with a nominal electric generating capacity greater than 3 MW or in excess of 20 acres. Land use provisions adopted by the county must require sufficient assurances that the farm use element of the dual-use development plan is established and maintained so long as the photovoltaic solar power generation facility is operational or components of the facility remain on site.

A proposed definition for dual-use is established at OAR 660-033-0130(38)(c). Attachment A, p. 1. The proposed definition is:

(c) "Dual-use development" means developing the same area of land for both a photovoltaic solar power generation facility and for farm use. The department did not receive a consensus recommendation from the RAC on these amendments. The members representing the Farm Bureau, individual farm property ownership, and the Oregon Department of Agriculture expressed skepticism regarding the ability of a county to ensure continued farm use of the site. Counties did not express support or opposition to the concept but expressed concerns regarding their ability to enforce dual-use plans and requested a flexible program.

The members representing Cypress Creek Renewable, the Oregon Solar Energy Industries Association, and Renewable Northwest agreed with the concept but did not indicate concurrence with the proposed language. A proposal offered at the last RAC meeting is included as Attachment D. The proposal, explained in more detail in a comment letter from Renewable Northwest (Attachment B, pp. 36-37), presents an option that would continue to allow 12-acre solar facilities without the proposed limitation on Class 1 and 2, prime, and unique soils if the facility is developed as a dualuse project. The proposal would also calls for an increase in the allowable size of a solar facility on arable land if it is a dual-use project. The RAC did not have an opportunity to study the proposal or, therefore, engage in meaningful conversation of the option. The department considered the proposal in making its recommendation but opted to propose the soil limitation for all projects.

C. PROTECTION OF HIGH-VALUE FARMLAND SOILS

The department presented the RAC with two possible rule amendments to further protect high-value farmland. One possible rule amendment was to replace the "materially altered" provision located in the draft rule at OAR 660-033-0130(38)(h)(G) (Attachment A, p. 4). This provision requires the establishment of a study area of lands within one-mile of a proposed solar project. If at least 48 acres of photovoltaic solar power generation facilities have been constructed or received land use approvals and obtained building permits within the study area, the local decision makers must apply a test to determine if the photovoltaic solar power generation facility "will materially alter the stability of the overall land use pattern of the area…" as part of reviewing the proposal.

"Materially altered" tests are challenging to administer. Determining when the balance has been tipped away from commercial agriculture involves much discretion. There is no bright line to indicate when a project should or should not be approved. Additionally, this provision in the solar rule has rarely been triggered.

The department offered a proposal that would replace the discretionary materially altered test with a clear and objective one-mile separation requirement for photovoltaic solar power generation facilities to the RAC for consideration. While several members of the RAC did not appear to favor the existing provision, no members of the RAC supported a one-mile separation requirement and the concept was not pursued.

The second proposal, which is included in the draft rule, focuses on the protection of certain high-value soils. This concept came about through discussions identifying that there are locations within tracts of high-value farmland that could be suitable for commercial solar development, especially those with lower quality soils.

Rather than proposing all high-value farmland soils be unavailable for solar development through a conditional use proceeding, the department offered a concept that would furnish additional protections for the best soils for RAC consideration. A natural way of describing the best soils was to rely on the best soils identified in the definition of high-value farmland at OAR 660-033-0020(8)(a), which includes:

- (A) Irrigated and classified prime, unique, Class I or II; or
- (B) Not irrigated and classified prime, unique, Class I or II.

These Class I and II, prime and unique soil types are common in the Willamette Valley but do not constitute the entirety of high-value farmland soils located in the region. They are present but less common in other regions of the state. Overall, these soil types represent subset of lands zoned EFU statewide and they are irreplaceable. See Section IV.A, below, regarding continued availability of sites.

A provision removing the best soils from candidacy for simple conditional use proposals is included in the draft rule at OAR 660-033-0130(38)(h)(E). Attachment A, p. 3. Corresponding provisions are includes at OAR 660-033-0130(38)(i)(A), as well as OAR 660-033-0130(j)(A). Attachment A, p. 5 and p. 6, respectively.

The department did not receive a consensus recommendation from the RAC on this proposed amendment. The members representing Cypress Creek Renewable, the Oregon Solar Energy Industries Association, and Renewable Northwest believe that the rule would effectively prohibit new facilities on all high-value farmland and they could not agree to the change. The Association of Oregon Counties member does not support the proposed provision because it does not provide sufficient flexibility for county decision-makers. The members representing the Oregon Winegrowers Association and farm owners indicated that they do not support any option that would allow new solar facilities on any high-value farmland. The members representing individual counties did not strongly support the proposed provision, but indicated they could make it work. The Farm Bureau and Oregon Department of Agriculture and 1,000 Friends indicated the proposed amendment is a "good start" for better protection of high-value farmland.

D. WILDLIFE HABITAT PROTECTION

During the original solar rulemaking of 2011, RAC members expressed concern that wildlife habitat that was not inventoried in local comprehensive plans could be vulnerable to conflicting uses. While it was generally appreciated wildlife habitat is a Goal 5 resource and the rule under consideration helped to implement Goal 3, the commission responded adopting language that is included in the draft rule as OAR 660-

033-0130(38)(j)(f). This provision facilitates coordination with the Oregon Department of Fish and Wildlife (ODFW) and, if necessary, can lead to project specific mitigation requirements.

The commission also continued to recognize that updating local wildlife programs under Goal 5 and OAR chapter 660, division 23 remained the most desirable way to handle conflicts between development and wildlife. It was hoped that local plans would be updated and protections for wildlife would not be needed in the commission's agricultural lands rule. With this in mind, applicability of these provisions was scheduled to expire in 2022.

In the years following the original rule adoption very little time, energy and funding have been available to help counties update local wildlife programs. Therefore, the sunset provision is proposed to be removed. Please see Attachment A, p. 7.

The proposal to delete the sunset date for the wildlife-habitat protection provision received a consensus recommendation from the RAC. The Department of Fish and Wildlife and 1,000 Friends of Oregon, in particular, expressed concerns regarding the effect of the proposed rule amendments on wildlife habitat. They also advocated for better alignment of the rule ODFW programs, but the department determines this was outside the scope of the rulemaking.

The commission received written testimony regarding other aspects of the wildlife habitat provisions in OAR 660-033-0130(38) from the Defenders of Wildlife. Attachment B, pp. 31–33. Some of this testimony addresses parts of the rule that the commission did not include in the rulemaking project and, again, are therefore outside the scope of the proposed amendments.

E. RESPONSE TO QUESTIONS

The department received several questions from RAC members after the recommended rule amendment draft was issued. The draft in Attachment A includes newly proposed amendments in response to these issues.

1. Scope of Rule

Multiple members of the RAC asked the department whether the rule applied to all solar facilities, including small panels for powering onsite facilities such as barn lights and electric fences. The rule implements and provides criteria for approving uses listed in ORS 215.213(2)(g) and ORS 215.283(2)(g): "Commercial utility facilities for the purpose of generating power for public use by sale." Solar installations sited for other purposes are not affected by the existing or amended rule.

2. Opportunity for an Exception to Goal 3

A few RAC members expressed concern that the ability to take an exception to the soils had been removed. That is not the intent of the rule revisions. Stated positively, it is the department's recommendation to retain the option for an applicant to seek an exception for either the acreage or soil thresholds in the rule.

Specifically, all references to taking an exception in the existing rule are proposed for deletion and a new provision at OAR 660-033-0130(38)(k) added. The new provision expressly allows an exception to be taken for any of the acreage and soil thresholds in the rule. Thus, for example, an applicant could seek an exception to Goal 3 to site a solar facility on Class I and II soils, which is otherwise not allowed. Likewise, an exception for a larger solar facility on nonarable land could be sought if the proposed site contained patches of high-value soils in excess of the standard 12-acre threshold. These changes are marked in the draft rule in Attachment A (additions in <u>bold and</u> <u>double-underscore</u>; and deletions [doublestruck]), together with explanatory notations in the margin.

IV. EFFECTS OF PROPOSED AMENDMENTS

A. AVAILABILITY OF HIGH-VALUE FARMLAND

Most of the foreseeable projects that would be affected by the proposed amendments are located in the northern Willamette Valley and generate power that is sold to PGE. The proposed amendments, if adopted, will reduce the amount of land eligible for siting under the conditional use process. The commission has received testimony that the changes would amount to a prohibition on new facilities.

The department assembled a case study to help determine the effect of the proposed limitation on new solar facility siting on certain soils. The cases are in northern Marion County. This area was chosen because it has proven to be a desirable location for solar facilities (Marion County has approved several facilities within the study area); this is presumably due to proximity to transmission infrastructure such as substations. In addition, the department has access to land-ownership information for Marion County, which is needed to identify high-value farmland.⁷

The maps in Attachment E show locations that would be eligible for approval of a solar facility under the proposed rules. That is, the locations include 12 acres or more of high-value farmland that is not Class 1 or 2, prime, or unique soil. This is not intended to be an inventory of eligible sites, but rather an indication of whether sites that could

⁷ High-value farmland is partly defined as a "tract" that is "predominantly composed" of certain soils that are especially suitable for agriculture. A "tract" is the entirety of the contiguous ownership. Therefore, defining high-value farmland required information on the boundary of a contiguous ownership and then determining whether the tract is more than 50 percent high-value farmland soils.

potentially gain approval for a solar facility exist. The department concludes that such sites do exist and the proposed rule amendments would not constitute a prohibition on new facilities on high-value farmland. The department does not suggest any of the case-study sites are available for lease or within the preferred distance of existing infrastructure, but it is an area that received enough approvals that the county chose to prohibit any more.

Compare the proposal with OAR 660-023-0180, "Mineral and Aggregate Resource," which allows another natural resource – aggregate – on high-value farmland, but not everywhere and only under certain conditions. This balancing of the needs of one resource – farmland – with other needed resources has precedent in Oregon's land use regulatory scheme. For the reasons stated in subsection II.E, "Need for the Amendments," above, there is evidence that the existing rule does not strike the appropriate balance.

B. COMMUNITY SOLAR PROGRAM

The department and commission also received comments and testimony that the proposed rule amendments will hamper implementation of Oregon's <u>Community Solar</u> <u>Program</u>.⁸ These comments do not explain why the program cannot be carried out in locations other than the best farmland, and they are based on an assumption that the rules amount to ban on new facilities on farmland in the Willamette Valley. The comments were made in reaction to an earlier draft of the rule amendments. Attachment B, pp. 1–24.

The department's research has not found a reason that the proposed rule amendments would undermine implementation of the Community Solar Program. The program focuses on 25 Kw to 3 MW projects, up to the limits explained in subsection II.D.2 of this report. Therefore, facilities will range from small installations that can fit into urban setting up to arrays larger than 12 acres. The EFU rule, therefore is relevant to siting facilities under the program; as explained in earlier sections of this report, the rule will continue to provide for sites that can be approved for solar facilities in EFU zones, even on high-value farmland. Formerly approved sites could be eligible for use in the Community Solar Program, as well.

V. RECOMMENDED ACTION/CONCLUSION

The department recommends that the commission approve the proposed amendments to OAR 660-033-0130 as proposed.

Recommended motion: I move the commission adopt amendments to OAR chapter 660, division 33 as recommended by the department.

⁸ https://edocs.puc.state.or.us/efdocs/HAH/um1930hah111115.pdf

Optional approval motion: I move the commission adopt amendments to OAR chapter 660, division 33 as recommended by the department with the following changes: [*changes*].

VI. <u>NEXT STEPS</u>

The department recognizes that the solar industry is changing and developing, and is an important element of the renewable energy sector. Therefore, the department recommends that the commission periodically seek updates to evaluate whether its land use regulations are achieving desired outcomes. In addition, the department will continue to support interagency discussions to align policies related to renewable energy and the role of resource lands

VII. ATTACHMENTS

- A. Proposed amendments to OAR 660-033-0130
- B. Written comments and testimony
- C. Solar facility approval data
- D. Dual-use proposal
- E. Case studies of rule application
- F. List of terms and acronyms

Agenda Item 6 Attachment A Proposed Rule Amendments

Recommended Amendments to OAR 660-033-0130

1	* * *
2	
3	(17) Permanent features of a power generation facility shall not [precide] use, occupy, or
4	<u>cover</u> more than 12 acres [from use as a commercial agricultural enterprise] unless an exception is
5	taken pursuant to ORS 197.732 and OAR chapter 660, division 4. A power generation facility
6	may include on-site and off-site facilities for temporary workforce housing for workers
/	constructing a power generation facility. Such facilities must be removed or converted to an
8	allowed use under OAR 660-033-0130(19) or other statute or rule when project construction is
9	complete. Temporary workforce nousing facilities not included in the initial approval may be
10	considered through a minor amendment request. A minor amendment request shall be subject
11	to 660-033-0130(5) and shall have no effect on the original approval.
12	* * *
13	* * *
14 1 F	(22) Dermonent features of a neuror generation facility shall not [producted] use essentiate
15 16	(22) Permanent reactives of a power generation facility shall not (precidee) <u>uses, occupy, or</u>
10 17	taken purcuant to OPS 107 722 and OAP chapter 660, division 4. A power generation facility
10	may include on site and off site facilities for temperary workforce housing for workers
10 10	constructing a nower generation facility. Such facilities must be removed or converted to an
2 0	allowed use under OAP 660.022.0120(10) or other statute or rule when project construction is
20 21	complete. Temporary workforce bousing facilities not included in the initial approval may be
21 22	considered through a minor amendment request. A minor amendment request shall be subject
22	to 660-033-0130(5) and shall have no effect on the original approval
23	
25	* * *
26	
 27	(38) A proposal to site a photovoltaic solar power generation facility shall be subject to the
28	following definitions and provisions:
29	······································
30	(a) "Arable land" means land in a tract that is predominantly cultivated or, if not currently
31	cultivated, predominantly comprised of arable soils.
32	·····// F ·····
33	(b) "Arable soils" means soils that are suitable for cultivation as determined by the governing
34	body or its designate based on substantial evidence in the record of a local land use application,
35	but "arable soils" does not include high-value farmland soils described at ORS 195.300(10)
36	unless otherwise stated.
37	
38	(c) "Dual-use development" means developing the same area of land for both a photovoltaic
39	solar power generation facility and for farm use.
40	

Additions <u>bold and underscored</u>, deletions [struck] Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck]

(d) [(c)] "Nonarable land" means land in a tract that is predominantly not cultivated and
 predominantly comprised of nonarable soils.

3
4 (e) [(d)] "Nonarable soils" means soils that are not suitable for cultivation. Soils with an NRCS
5 agricultural capability class V–VIII and no history of irrigation shall be considered nonarable in
6 all cases. The governing body or its designate may determine other soils, including soils with a
7 past history of irrigation, to be nonarable based on substantial evidence in the record of a local
8 land use application.

9

32

or its designate must find that]:

10 (f) [(e)] "Photovoltaic solar power generation facility" includes, but is not limited to, an 11 assembly of equipment that converts sunlight into electricity and then stores, transfers, or both, that electricity. This includes photovoltaic modules, mounting and solar tracking 12 13 equipment, foundations, inverters, wiring, storage devices and other components. Photovoltaic 14 solar power generation facilities also include electrical cable collection systems connecting the 15 photovoltaic solar generation facility to a transmission line, all necessary grid integration 16 equipment, new or expanded private roads constructed to serve the photovoltaic solar power 17 generation facility, office, operation and maintenance buildings, staging areas and all other 18 necessary appurtenances. For purposes of applying the acreage standards of this section, a 19 photovoltaic solar power generation facility includes all existing and proposed facilities on a 20 single tract, as well as any existing and proposed facilities determined to be under common 21 ownership on lands with fewer than 1320 feet of separation from the tract on which the new 22 facility is proposed to be sited. Projects connected to the same parent company or individuals 23 shall be considered to be in common ownership, regardless of the operating business structure. 24 A photovoltaic solar power generation facility does not include a net metering project 25 established consistent with ORS 757.300 and OAR chapter 860, division 39 or a Feed-in-Tariff 26 project established consistent with ORS 757.365 and OAR chapter 860, division 84. 27 28 (g) [{f}] For high-value farmland described at ORS 195.300(10), a photovoltaic solar power 29 generation facility shall not [preclude] use, occupy, or cover more than 12 acres [from use as a 30 commercial agricultural enterprise] unless [an exception is taken pursuant to ORS 197.732 and 31 OAR chapter 660, division 4 or the requirements of paragraph (G) are met. The governing body

33	[(A) An exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4 ;
34	(A)[B] The provisions of paragraph (h)(H) are satisfied; or
35	(B)[(C)] A county adopts, and an applicant satisfies, land use provisions authorizing
36	projects subject to a dual-use development plan. Land use provisions adopted by a
37	county pursuant to this paragraph may not allow a project with a nominal electric
38	generating capacity greater than 3 Mw or in excess of 20 acres. Land use provisions
39	adopted by the county must require sufficient assurances that the farm use element

Additions to existing rule <u>bold and underscored</u>, deletions [struck] Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck] **Commented [CM1]:** Exceptions provisions have been moved to subsection (k) of this section.

The purpose of the revision is to make clear that an exception may be taken to any of the acreage or soil thresholds in this section (38) concerning photovoltaic solar power generation facilities.

Commented [CM2]: Clarifying that the adopted provisions must be applied and satisfied.

1	of the dual-use development plan is established and maintained so long as the
2	photovoltaic solar power generation facility is operational or components of the
3	facility remain on site.
4	(h) The following criteria must be satisfied in order to approve a photovoltaic solar power
5	generation facility on high-value farmland described at ORS 195.300(10).
6	
7	(A) The proposed photovoltaic solar power generation facility will not create
8	unnecessary negative impacts on agricultural operations conducted on any portion of
9	the subject property not occupied by project components. Negative impacts could
10	include, but are not limited to, the unnecessary construction of roads dividing a field or
11	multiple fields in such a way that creates small or isolated pieces of property that are
12	more difficult to farm, and placing photovoltaic solar power generation facility project
13	components on lands in a manner that could disrupt common and accepted farming
14	practices;
15	
16	(B) The presence of a photovoltaic solar power generation facility will not result in
1/	unnecessary soil erosion or loss that could limit agricultural productivity on the subject
18	property. This provision may be satisfied by the submittal and county approval of a soil
19	and erosion control plan prepared by an adequately qualified individual, showing now
20	unnecessary soil erosion will be avoided or remedied (and now topsoil will be stripped,
21	stockpried and clearly marked. The approved plan shall be attached to the decision as a
22	
23	(C) Construction or maintenance activities will not result in unnecessary soil compaction
25	that reduces the productivity of soil for crop production. This provision may be satisfied
26	by the submittal and county approval of a plan prepared by an adequately gualified
27	individual, showing how unnecessary soil compaction will be avoided or remedied in a
28	timely manner through deep soil decompaction or other appropriate practices. The
29	approved plan shall be attached to the decision as a condition of approval;
30	
31	(D) Construction or maintenance activities will not result in the unabated introduction
32	or spread of noxious weeds and other undesirable weed species. This provision may be
33	satisfied by the submittal and county approval of a weed control plan prepared by an
34	adequately qualified individual that includes a long-term maintenance agreement. The
35	approved plan shall be attached to the decision as a condition of approval;
36	
37	(E) The project is not located on those high-value farmland soils [defined] listed in
38	<u>OAR 660-033-0020(8)(a);</u>
39	
40	(F) [(E)] The project is not located on <u>those</u> high-value farmland <u>soils <mark>[defined</mark>] listed in</u>
41	OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that:
42	
43	(i) Non high-value farmland soils are not available on the subject tract;

Commented [CM3]: Inserted reference to high-value farmland definition (note: same as for subsection (g)).

Commented [CM4]: The cited subsection of the rule is better described as a <u>list</u> of soils.

Commented [CM5]: The cited subsection of the rule is better described as a <u>list</u> of soils.

Additions to existing rule <u>bold and underscored</u>, deletions [struck] Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck]

1	
2	(ii) Siting the project on non high-value farmland soils present on the subject
3	tract would significantly reduce the project's ability to operate successfully; or
4	
5	(iii) The proposed site is better suited to allow continuation of an existing
6	commercial farm or ranching operation on the subject tract than other possible
7	sites also located on the subject tract, including those comprised of non high-
8	value farmland soils; and
9	
10	(G) ((F)] A study area consisting of lands zoned for exclusive farm use located within one
11	mile measured from the center of the proposed project shall be established and:
12	
13	(i) If fewer than 48 acres of photovoltaic solar power generation facilities have
14	been constructed or received land use approvals and obtained building permits
15	within the study area, no further action is necessary.
16	
17	(ii) When at least 48 acres of photovoltaic solar power generation <u>facilities</u> have
18	been constructed or received land use approvals and obtained building permits,
19	either as a single project or as multiple facilities within the study area, the local
20	government or its designate must find that the photovoltaic solar [energy]
21	power generation facility will not materially alter the stability of the overall land
22	use pattern of the area. The stability of the land use pattern will be materially
23	altered if the overall effect of existing and potential photovoltaic solar [energy]
24	power generation facilities will make it more difficult for the existing farms and
25	ranches in the area to continue operation due to diminished opportunities to
26	expand, purchase or lease farmland or acquire water rights, or will reduce the
27	number of tracts or acreage in farm use in a manner that will destabilize the
28	overall character of the study area.
29	
30	(H) (G) A photovoltaic solar power generation facility may be sited on more than 12
31	acres of high-value farmland described in OKS 195.300(10)(f)(C) without taking an
32	exception pursuant to URS 197.732 and UAR chapter 660, division 4, provided the land:
33	(1) to make the same of with the three densities of the trainer time of the distribution
34	(I) Is not located within the boundaries of an irrigation district;
35	
36	(II) is not at the time of the facility's establishment, and was not at any time
5/ 20	during the 20 years immediately preceding the facility's establishment, the place
20	or use of a water right permit, certificate, decree, transfer order or ground water
39 40	registration authorizing the use of water for the purpose of irrigation;
4U 41	(iii) Is located within the convice area of an electric utility described in ODS
41 40	
4Z 12	403A.032(2),
40	

Additions to existing rule <u>bold and underscored</u>, deletions [struck] Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck]

1	(iv) Does not exceed the acreage the electric utility reasonably anticipates to be	
2	necessary to achieve the applicable renewable portfolio standard described in	
3	ORS 469A.052(3); and	
4		
5	(v) Does not qualify as high-value farmland under any other provision of law; or	
6		
7	(i) [(g)] For arable lands, a photovoltaic solar power generation facility shall not [preclude] use .	
8	occupy or cover more than 20 acres [from use as a commercial agricultural enterprise unless	
q	an exception is taken pursuant to ORS 197 732 and OAR chapter 660, division 4	Commented [CM6]: Exceptions provisions have been
10	body or its designate must find that the following criteria are satisfied in order to approve a	moved to subsection (k) of this section.
11	nhotovoltais solar nower generation facility on arable land:	
12	photovoltale solar power generation racinty on arable land.	The purpose of the revision is to make clear that an
12	(A) The purplest is not leasted on these kisk value females its [defined] listed in	exception may be taken to any of the acreage or soil thresholds in this section (38) concerning photovoltaic solar
13	(A) The project is not located on those high-value farmland soils [defined] listed in	power generation facilities.
14	<u>UAR 660-033-0020(8)(a);</u>	Commented ICM71: The cited subsection of the rule is
15		better described as a list of soils.
16	(B) The project is not located on those high-value farmland soils [defined] listed in OAR	Commonted (CM9): The cited subsection of the rule is
17	<u>660-033-0020(8)(b)-(e)</u> or arable soils unless it can be demonstrated that:	better described as a list of soils.
18		
19	(i) Nonarable soils are not available on the subject tract;	
20		
21	(ii) Siting the project on nonarable soils present on the subject tract would	
22	significantly reduce the project's ability to operate successfully; or	
23		
24	(iii) The proposed site is better suited to allow continuation of an existing	
25	commercial farm or ranching operation on the subject tract than other possible	
26	sites also located on the subject tract, including those comprised of nonarable	
27	soils:	
28		
29	(C) [(B)] No more than 12 acres of the project will be sited on high-value farmland soils	
30	described at QRS 195.300(10) [unless an excention is taken pursuant to 197.732 and	
31	$\frac{OAB \text{ chanter 660 division 4}}{OAB \text{ chanter 660 division 4}}$	Commented [CM9]: Exceptions provisions have been
32		moved to subsection (k) of this section.
22	(D) [(C)] A study area consisting of lands zoned for exclusive farm use located within one	
24	<u>(D)</u> ((C)) A study and consisting of failed solution exclusive failing as to be active within one mile measured from the center of the proposed project shall be established and:	The purpose of the revision is to make clear that an
34 2E	The measured from the center of the proposed project shall be established and.	exception may be taken to any of the acreage or soli thresholds in this section (38) concerning photovoltaic solar
35	(i) If forwar than 90 across of photovoltais solar newer generation facilities have	power generation facilities.
30	(i) if rewer that so acres of photovoltaic solar power generation facilities nave	
3/	been constructed or received land use approvals and obtained building permits	
38	within the study area no further action is necessary.	
39		
40	(II) When at least 80 acres of photovoltaic solar power generation <u>facilities</u> have	
41	been constructed or received land use approvals and obtained building permits,	
42	either as a single project or as multiple facilities, within the study area the local	
43	government or its designate must find that the photovoltaic solar [energy]	
44	power generation facility will not materially alter the stability of the overall land	

Additions to existing rule <u>bold and underscored</u>, deletions [struck] Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck]

power generation facilities will make it more difficult for the existing farms and ranches in the area to continue operation due to diminished opportunities to expand, purchase or lease farmland, acquire water rights or diminish the number of tracts or acreage in farm use in a manner that will destabilize the overall	
character of the study area; and	
<u>(E)</u> [(D)] The requirements of OAR [660-033-0130(38)(f)] <u>660-033-0130(38)(h)</u> (A), (B), (C)	
and (D) are satisfied.	
(j) [(h)] For nonarable lands, a photovoltaic solar power generation facility shall not [preclude]	
use, occupy, or cover more than 320 acres [from use as a commercial agricultural enterprise	
unless an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4. The	Comme
governing body or its designate must find that the following criteria are satisfied in order to	moved t
approve a photovoltaic solar power generation facility on nonarable land:	The purp
	exceptio
(A) The project is not located on those high-value farmland soils [defined] listed in	power g
<u>OAR 660-033-0020(8)(a);</u>	Comme
	better d
(B) The project is not located on those high-value farmland soils defined listed in OAR	Comme
<u>660-033-0020(8)(b)-(e)</u> or arable soils unless it can be demonstrated that:	better d
(I) Siting the project on nonarable soils present on the subject tract would significantly	
reduce the project's ability to operate successfully; or	
(II) The proposed site is better suited to allow continuation of an existing commercial	
farm or ranching operation on the subject tract as compared to other possible sites also	
located on the subject tract, including sites that are comprised of honarable soils;	
(C)[(D)] No means them 12 percent the president will be sited on block value formland as it.	
<u>[C]</u> [(U)] No more than 12 acres of the project will be sited on high-value farmland soils described at OPS 105 200(10).	
uescribed at OKS 195.300(10);	
$(\mathbf{D})[(C)]$ No more than 20 acros of the project will be sited on arable solutions and	
[U] [U] No more than 20 acres of the project will be sited on a able solis[unless an	Comme
$\frac{1}{2}$	moved t
(E)((D)) The requirements of OAP [660.022.0120(28)(f)(D)] 660.022.0120(28)(b)(D) are	
<u>ITI(Hay</u>) The requirements of OAK (000-033-0130(30)(1)(Hy)) 000-033-0130(30)(1)(Hy) are satisfied.	The purp
satisfieu,	threshol
(E)[(E)] If a photovoltaic solar power generation facility is proposed to be developed on	power g
$\frac{1}{1}$	
and the plan does not address conflicts between energy facility development and the	
and the plan does not address connicts between energy facility development and the	
recource the applicant and the county together with any state or todoral agoncy	
resource, the applicant and the county, together with any state or federal agency	
	 (i) Siting the project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (ii) The project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (iii) The project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (iii) The project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (ii) The project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (ii) The project is not located on those high-value farmland soils [defined] listed in OAR 660-033-0020(8)(b)-(e) or arable soils unless it can be demonstrated that: (ii) The project on nonarable soils present on the subject tract would significantly reduce the project's ability to operate successfully; or (iii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract as compared to other possible sites also located on the subject tract as compared to nonarable soils described at ORS 195.300(10); (iiii) The requirements of OAR (660-033-0130(38)(f)(D)] 660-033-0130(38)(h)(D) are satisfied; (iiii) The proposed site is better suited to allow continuation of an existing commercial farm or ranching operation on the subject tract as compared to other possible sites also located on the subject tract, including sites that are comprised of nonarable soils; (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii

 Additions to existing rule bold and underscored, deletions [struck]
 ATTACHMENT A – 6

 Additions to draft proposed rule bold and double underscored, deletions [double struck]
 ATTACHMENT A – 6

Commented [CM10]: Exceptions provisions have been moved to subsection (k) of this section.

The purpose of the revision is to make clear that an exception may be taken to any of the acreage or soil chresholds in this section (38) concerning photovoltaic solar power generation facilities.

Commented [CM11]: The cited subsection of the rule is better described as a <u>list</u> of soils.

Commented [CM12]: The cited subsection of the rule is better described as a list of soils.

Commented [CM13]: Exceptions provisions have been moved to subsection (k) of this section.

The purpose of the revision is to make clear that an exception may be taken to any of the acreage or soil thresholds in this section (38) concerning photovoltaic solar power generation facilities.

1	cooperatively develop a specific resource management plan to mitigate potential
2	development conflicts. If there is no program present to protect the listed Goal 5
3	resource(s) present in the local comprehensive plan or implementing ordinances and
4	the applicant and the appropriate resource management agency(ies) cannot successfully
5	agree on a cooperative resource management plan, the county is responsible for
6	determining appropriate mitigation measures; and
7	
8	(G)[(+)] If a proposed photovoltaic solar power generation facility is located on lands
9	where, after site specific consultation with an Oregon Department of Fish and Wildlife
10	biologist, it is determined that the potential exists for adverse effects to state or federal
11	special status species (threatened, endangered, candidate, or sensitive) or habitat or to
12	big game winter range or migration corridors, golden eagle or prairie falcon nest sites or
13	pigeon springs, the applicant shall conduct a site-specific assessment of the subject
14	property in consultation with all appropriate state, federal, and tribal wildlife
15	management agencies. A professional biologist shall conduct the site-specific
16	assessment by using methodologies accepted by the appropriate wildlife management
17	agency and shall determine whether adverse effects to special status species or wildlife
18	habitats are anticipated. Based on the results of the biologist's report, the site shall be
19	designed to avoid adverse effects to state or federal special status species or to wildlife
20	habitats as described above. If the applicant's site-specific assessment shows that
21	adverse effects cannot be avoided, the applicant and the appropriate wildlife
22	management agency will cooperatively develop an agreement for project-specific
23	mitigation to offset the potential adverse effects of the facility. Where the applicant and
24	the resource management agency cannot agree on what mitigation will be carried out,
25	the county is responsible for determining appropriate mitigation, if any, required for the
26	facility.
27	
28	[(G) The provisions of paragraph (F) are repealed on January 1, 2022.]
29	
30	(k) An exception to the acreage and soil thresholds in subsections (g), (h), (i), and (j) of this
31	section may be taken pursuant to ORS 197.732 and OAR chapter 660, division 4.
32	
33	(L)((+)] The county governing body or its designate shall require as a condition of approval for a

33 (L)(4) The county governing body of its designate shall require as a condition of approval of a photovoltaic solar power generation facility, that the project owner sign and record in the deed records for the county a document binding the project owner and the project owner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from farming or forest practices as defined in ORS 30.930(2) and (4).

39 (m)[(;)] Nothing in this section shall prevent a county from requiring a bond or other security
 40 from a developer or otherwise imposing on a developer the responsibility for retiring the
 41 photovoltaic solar power generation facility.

42

43 (<u>n)[(k)]</u> If ORS 469.300(11)(a)(D) is amended, the commission may re-evaluate the acreage
 44 thresholds identified in subsections [(f)] (g), [(g)] (i) and [(h)] (j) of this section.

Additions to existing rule <u>bold and underscored</u>, deletions [struck] ATTACHMENT A – 7 Additions to draft proposed rule <u>bold and double underscored</u>, deletions [double struck] **Commented [CM14]:** The purpose of this subsection is to make clear that an exception may be taken to both the acreage and soils thresholds contained in:

- •Subsections (g) and (h): acreage and soils thresholds for high-value farmland
- •Subsection (j): acreage and soils thresholds for arable lands.

•Subsection (k): acreage and soils thresholds for nonarable lands

As an example, the intent of this subsection is that an applicant could seek an exception to site a photovoltaic solar power generation facility on Class I, II, prime or unique soils.



PO Box 65491 Washington, DC 20035 202-888-6252 info@communitysolaraccess.org communitysolaraccess.org Item 6 Attachment B Public Comment

December 10, 2018

To:

Commissioners, Land Conservation and Development Commission

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

Dear Commissioners,

The Coalition for Community Solar Access (CCSA) provides this written testimony to encourage the Land Conservation and Development Commission and associated decision makers to encourage the Department of Land Conservation and Development (DLCD) Staff to reconsider the draft rules proposed under the Solar Rulemaking to OAR 660-033-0130, and to provide more discussion and deliberation ahead of any future decision.

CCSA is a business-led trade organization, comprised of over 40 member companies, that works to expand access to clean, local, affordable energy nationwide through community solar. CCSA's mission is to empower energy consumers, including renters, homeowners, businesses and households of all socio-economic levels, by increasing their access to reliable clean energy. CCSA, in partnership with a thriving network of non-profits, affiliate trade associations, and allied stakeholders, serves as the central voice for the community solar industry in developing vibrant and sustainable markets for community solar. CCSA members are active nationwide and have been engaged in the community solar program development efforts in Oregon to date.

Community solar offers the opportunity for all electricity customers to participate in and benefit economically from a solar project, without needing to install solar at their home or business. It brings clean, local power to the grid and economic development to communities where projects are sited. The Legislature established a community solar program in Oregon in 2016 under SB 1547; the Oregon Public Utility Commission (PUC) developed and issued rules for the program in June of 2017 and is currently finalizing program details with stakeholders.

CCSA is deeply concerned with the potential impacts of the draft Solar on High-Value Farmland rules. As written, these rules have the potential to undermine the future of Oregon's Community Solar Program and directly conflict with the objectives outlines in Governor Kate Brown's Oregon Climate Agenda.

These draft rules could significantly hamper the ability of community solar to get off the ground. Many early community solar projects for Portland General Electric customers will likely be developed in the Willamette Valley, and by essentially banning solar development on Class I and Il soils, these proposed rule amendments effectively prohibit such development. In turn, many residents in the Valley and urban areas will not have the opportunity to participate in this unique State program.

The DLCD Rulemaking webpage and associated meeting materials lack clear justification for why a ban has been proposed. No clear data has been presented detailing the negative impacts from solar on high-value farmland. Without such justification, any proposal to ban solar is inappropriate.

Finally, the draft rules as written run counter to the objectives detailed in Governor Kate Brown's Oregon Climate Agenda (November 28, 2018). Importantly, the Agenda says,

"Oregon has long been a national and world leader in demonstrating the Oregon Way: policies that preserve our natural environment while also supporting long-term economic competitiveness and business growth. The world is at a crossroads on climate policy, and Oregon must continue to pursue solutions that reduce emissions while creating good jobs and building a clean energy economy."

The Department of Land Conservation and Development should be forward-looking and consider ways to meet these objectives. These extremely prohibitive rules do not accomplish that objective and have the potential to undermine our state's strong climate leadership.

We request that these rules be re-evaluated, and we plan to closely watch future discussions of this draft rule and any DLCD consideration.

Thank you.

/s/ Brandon Smithwood Policy Director Coalition for Community Solar Access Brandon@communitysolaraccess.org



December 10, 2018

Land Conservation and Development Commission

Dear Commission members,

The Oregon Clean Power Cooperative has been developing community-financed solar projects for nonprofits, churches, schools and local governments throughout Oregon for the past two years. We have been planning for three years to participate in the SB 1547 Community Solar program, and are disturbed at the potential negative impact on the program of the rules proposed by the Land Conservation and Development Commission

We do not understand the rationale for treating solar differently than other non-food crops on farmland. In addition, we are deeply concerned that the proposed changes to the existing rules on solar discriminate unfairly against smaller community solar projects and run at cross-purposes to the intent of the Oregon Legislature as expressed in SB 1547.

For example:

1) The one-mile limit (Item G) appears arbitrary, and fails to take into account the basics of the architecture of the electric grid. Smaller solar projects need to interconnect at or near an electric substation, making it likely that projects will need to be clustered near substations. We would suggest eliminating this provision in the vicinity of electrical substations, and instead establishing a limit of no more than five solar projects within one mile of substations.

2) The proposed 10% bond requirement for dual-use projects in Item H (vi) creates an unfair burden on smaller projects. The economics of smaller community solar projects are extremely tight, and this additional burden could tip the scales enough to make them not financially viable. The Commission should be doing everything possible to encourage projects where agriculture and solar co-exist, particularly in light of the research being done at Oregon State University.

While it is not clear to us why the Commission is proposing increasing the financial burden on dual-use projects rather than providing incentives for them, at a minimum we would suggest:

- a) reducing the overall amount of the bond;
- b) reducing the amount of bond required after the farm use has been established;



c) not requiring a bond for projects under the 360 kW limit.

Sincerely,

Da Ouzo

Dan Orzech General Manager Oregon Clean Power Cooperative (541) 230-1259 (o) dan@oregoncleanpower.coop

cc:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development



December 10, 2018

To: Commissioners, Land Conservation and Development Commission

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

Dear Commissioners,

The Oregon Solar Energy Industries Association (OSEIA) is a trade association founded to promote clean, renewable, solar technologies, to build a well-trained and sustainable local workforce, and to increase the penetration of solar in the state of Oregon. OSEIA members include businesses, nonprofit groups, and other solar industry participants. OSEIA provides a unified and respected voice for the solar industry and focuses on the solar value chain; from workforce development to permitting, advocacy, policy, and regulation for residential, commercial, community, and utility scale solar stakeholders. More information on OSEIA can be found at www.oseia.org.

OSEIA is deeply concerned with the potential impacts of the draft Solar on High-Value Farmland rules. As written, these rules have the potential to undermine the future of Oregon's Community Solar Program and directly conflict with the objectives outlines in Governor Kate Brown's Oregon Climate Agenda.

We request that these rules be re-evaluated, and we plan to closely watch future discussions of this draft rule and any Land Conservation and Development Commission consideration.

Beyond the many other negative impacts these draft rules have the potential to create, they could significantly hamper the ability of community solar to get off the ground. Many early community solar projects for Portland General Electric customers will likely be developed in the Willamette Valley, and by essentially banning solar development on Class I and II soils, these rules effectively prohibit such development. For projects developed on rooftops in Portland, or elsewhere in Oregon, a prohibition on projects in the Valley means fewer overall projects to share community solar's administrative start-up costs; this means higher costs for projects.

PO Box 14927, Portland, OR 97293-0927 Email: admin@oseia.org www.oseia.org



Renewable energy projects, specifically large scale and community solar, create high paying local jobs sourced by Oregon-based companies. To reach our state clean energy goals by 2027, the Oregon solar industry will need to grow to more than 4,500 positions, and fair and reasonable land use policy that allows for a variety of solar applications is critical.

Sincerely, Kendra Hubbard Board President, OSEIA 503.504.6603

> PO Box 14927, Portland, OR 97293-0927 Email: admin@oseia.org www.oseia.org



December 10, 2018

Land Conservation and Development Commission,

Thank you for your work in addressing how agriculture and renewable energy can coexist. The Bonneville Environmental Foundation is committed to a healthy environment that works for communities both urban and rural. However, we are concerned that the draft rules conflict with several other State programs and objectives around clean energy and climate.

These rules will substantially restrict development of solar projects while hampering the ability to meet the State's climate and energy goals. Increasing complexities needed to scope, develop, and operate a solar photovoltaic system will lead to increased costs for Oregonians.

The DLCD Rulemaking webpage and associated meeting materials lack clear justification for why a ban has been proposed. No clear data has been presented detailing the negative impacts from solar on high-value farmland. A hasty rulemaking without a quantified justification for a ban is inappropriate.

Finally, the draft rules as written run counter to the objectives detailed in Governor Kate Brown's Oregon Climate Agenda (November 28, 2018). Importantly, the Agenda says,

"Oregon has long been a national and world leader in demonstrating the Oregon Way: policies that preserve our natural environment while also supporting long-term economic competitiveness and business growth. The world is at a crossroads on climate policy, and Oregon must continue to pursue solutions that reduce emissions while creating good jobs and building a clean energy economy."

The Department of Land Conservation and Development should be taking a more holistic approach to integrating renewable energy into our Oregon lands. These prohibitive rules do not accomplish that objective, and additionally have the potential to inhibit climate action goals and economic development for Oregonians.

Sincerely,

Evan Ramsey Director, Renewable Energy Group Bonneville Environmental Foundation 503-248-1905 eramsey@b-e-f.org

Renewable Northwest Members

174 Power Global 3Degrees 7Skyline, LLC American Wind Energy Association Avangrid Renewables onneville Environmental Foundation Center for Energy Efficiency & Renewable Technologies Clearway Energy Group Climate Solutions Columbia Gorge Community College Community Renewable Energy Association Cypress Creek Renewables Davis Wright Tremaine LLP DNV GL EDF Renewable Energy **EDP** Renewables Environment Oregon Environment Washington Erwin Legal Eurus Energy America Geothermal Resources Council Green Mountain Energy HDR Engineering, Inc. Idaho Conservation League Invenergy K&L Gates Kapla Law PLLC Latitude45 Associates ΜΔΡ Montana Environmental Information Center MontPIRG National Grid Natural Resources Defense Council Neoen U.S. Inc. NextEra Energy Resources Northwest Environmental **Business Council** NW Energy Coalition **OneEnergy Renewables** Oregon Citizens' Utility Board Oregon Solar Energy Industries Association OSPIRG Oregon Tech Orion Renewable Energy Group Pattern Energy Scout Clean Energy Sempra Renewables Solar Oregon Spark Northwest Stoel Rives, LLP Sulus Solar SunPower Corporation SWCA Environmental Consultants Tetra Tech Vestas Americas Warm Springs Power & Water Enterprises Washington Environmental Council WashPIRG

Western Resource Advocates

421 SW 6TH Ave, Suite 975 Portland, OR 97204 www.RenewableNW.org



December 10, 2018

TO: Commissioners, Land Conservation and Development Commission

CC: Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

FR: Nicole Hughes, Executive Director, Renewable Northwest

RE: Comments on Draft Solar Rules

Dear Commissioners,

Renewable Northwest was invited to participate in the Rules Advisory Committee (RAC) considering the existing provisions of OAR 660-033-0130(38). The RAC was tasked with convening in October, November, and December, and DLCD Staff was to propose any necessary rule language change at a hearing in January 2019.

Renewable Northwest and other stakeholders have raised concerns over the fairness, transparency and pre-determined outcomes of the rulemaking process since its inception. These concerns have been raised vocally at meetings and directly to the Chair of the Land Conservation and Development Commission (LCDC).

The RAC was approved by LCDC to consider the following:

- Consider adopting as permanent the temporary rule adopted by LCDC on July 26, 2018, regarding the "use, occupy or cover" language applied to acreage thresholds employed in OAR chapter 660, division 33 for energy facility siting.
- Consider if minor amendments to the definition of "photovoltaic solar power generation facility" would be helpful in applying the "use, occupy or cover" language established by the temporary rule, which is proposed to be make permanent as part of this rulemaking.
- Consider whether the current provisions of OAR 660-033-0130(38) adequately protect high-value farmland. After careful consideration of the facts the department shall either recommend that no changes are necessary or, if the department believes that the current provisions are not adequately protecting high-value farmland, propose a remedy for LCDC consideration.

• Consider whether to retain, revise or remove the sunset date for the wildlife habitat provisions included at OAR 660-033-0130(38)(h)(F).

Draft rules were issued on December 5, 2018, which are in some cases outside the scope of the issues approved by LCDC to consider and are drastically out of proportion to any real or perceived threat to Oregon's farmland. Importantly, the Department has failed to clearly identify how the current provisions do not adequately protect high-value farmland.

The draft rules issued on December 5 result in the following:

• **Ban solar development on Class I, II soils** (most soils in the Willamette Valley currently fall under this classification, and the level of detailed mapping is not available to adequately microsite to consider these soils). Likewise the state has not considered how soil classifications have and will change with global warming, and conducted the necessary updates to the current maps. Finally, restrictions based on soil classifications will result in unnecessary fragmentation of agricultural lands and limit the ability of landowners to determine which tracts are the most productive on their lands.

• **Restrict solar development on Class III, IV soils under some circumstances**. This restriction has implications outside of the Willamette Valley and potentially for projects under the jurisdiction of EFSC.

• Are not consistent with the Governor's Climate Agenda issued on November 28, 2018.

• **Establishes more restrictive land use requirements on solar** than uses such as gravel mining, single family dwellings, and golf courses, which all have a much more intensive and permanent impact on Oregon farmland.

• Set a 1-mile cumulative impacts zone (2,000 acres) whereby no new projects can be developed. The existing language sets a safe harbor of 48 acres developed within a 1-mile area. This has been tested a few times and is proving to be successful. There is no justification for changing the rule to limit development within the 1-mile research area as the existing rules are adequate to protect against cumulative impacts. Furthermore, it is generally best practice to site projects as close to existing infrastructure as possible. This rule would force the construction of new infrastructure to interconnect projects, likely resulting in increased impacts.

• **Could affect existing projects** whose Conditional Use Permits are up for review, if they do not retroactively comply with the current rules.

• Are disproportionate to the actual acreage currently impacted, which is as follows, as prepared by Staff:
Table 1 below was provided by Staff upon request to show the current impacts to high value farmland in Oregon.

Table 1. Solar acreage	as a percent of HVF
Benton County	0
Clackamas County	0.23
Lane County	0
Linn County	0
Marion County	0.10
Multnomah County	0
Polk County	0.03
Washington County	0
Yamhill County	0.07
Willamette Valley	0.05

Renewable Northwest and others supportive of responsible solar siting in Oregon have been consistent in providing requested documentation needed for evaluation of potential impacts. Our presentations and documentation provided to date have not been posted on the Agency's website for public viewing. We feel this one of many examples of how data relevant to determining the potential impacts to farmland in Oregon have been omitted from the record, resulting in confusion over what information is being used to determine that drastic limitations on siting solar projects in Oregon are needed. These omissions are misleading to the public and violate basic good government standards that Oregon Agencies should uphold. Additionally, we have requested in writing and at RAC meetings that DLCD provide evidence that farmlands are not adequately protected under the current rules and have not been provided such evidence. We highlight that Staff was directed to carefully consider the facts and determine the need to make changes to the rules based on these facts. To date there has been no information shared with RAC members demonstrating facts related to negative impacts of solar sited on farmland in the state.

Renewable Northwest also points out that the draft rules are inconsistent with the Governor's Climate Agenda dated November 28, 2018, which includes the following goals:

- Expand opportunities for residential, municipal, and commercial customers to access clean energy services from their utilities.
- Pursue climate solutions that benefit rural communities and Tribes, support working lands, and foster resilience to climate change.

Oregon's ability to meet these goals will be significantly hindered by adoption of the current draft rules. Additionally, the following existing policies and programs which are designed to address climate change and are supported under the Governor's Climate Agenda will be impacted:

- Renewable Portfolio Standard (ORS 469A.052)
- Net Energy Metering (OAR 860-039)
- Energy Trust of Oregon incentive to offset cost of installing solar (ETO)
- Direct Access allows customers to buy from a supplier rather than utility, while paying a utility a transition charge (OAR 860-038)

- Green Tariff Allows non-residential customers to buy renewable energy product from a utility (pending HB 4126 (2014))
- Community Solar allows subscribing customers to pay for solar project in exchange for bill credit (pending SB 1547 § 22 (2016))
- Integrated Resource Planning requires utility to plan for meeting customer demand with least-cost, least risk energy supply (OAR 860-027-0400
- PURPA requires utility to purchase renewable energy that costs less that the utility's "avoided cost" (16 USC § 824a-3)

Finally, Renewable Northwest points out that one important voice in determining the impact on Oregon's farmland has been left out of the discussion. Landowners who support solar development and have found significant benefit to diversifying their agricultural investment in the state were not invited to participate in the RAC and have not been consulted on the draft rules. The draft rules take an important voice of Oregon's most knowledgeable land stewards out of the process and rely on perceived threats raised by a very narrow contingent of Oregon stakeholders to effectively ban the opportunity for landowners to consider development on their least productive lands. Oregon's agricultural industry relies very heavily on non-farm income, and with all the other threats to agriculture we are currently seeing, including the effects of climate change, it is not appropriate to limit a farmer's ability to utilize their land in a way that has not been demonstrated to have a negative impact on the overall agricultural economy in Oregon.

Renewable Northwest recommends that LCDC decline to adopt the current draft rules and extend the RAC process in order to gather the necessary data to demonstrate whether or not changes to the existing rules are needed, as per the original tasks assigned to Staff. Further we recommend that a landowner who represents farmers interested and supportive of solar energy be included on the RAC. Renewable Northwest also recommends oversight by the Governor's office in order to ensure a fair and transparent rule making process is followed. Finally, Renewable Northwest requests that all documentation provided by RAC members be provided on the website for public viewing and that all relevant data used to determine any proposed rule language be considered and made available to the public.

Sincerely, Nicole Hughes Executive Director



12/11/2018

Board of Directors

Elaine Albrich Board Chair Davis Wright Tremaine LLP

Robin Boies Rancher

Gary Burnett Heart of the Rockies Initiative

Jay Coalson Cambia Health Solutions

Jessamine Fitzpatrick Capital management & investments

Martin Goebel Moebius Partners

Dr. Norman K. Johnson Oregon State University

Bobby Levy Eastern Oregon Women's Coalition

Jeff Nuss GreenWood Resources

John Rose Microsteam, Inc.

Dudley Slater EQT Partners

Russ Vaagen Vaagen Brothers Lumber Co. Commissioners, Land Conservation and Development Commission 635 Capitol Street NE, Suite 150 Salem, Oregon 97301-2540

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office

Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

RE: Comments on Draft Solar Rules

Dear Commissioners,

Sustainable Northwest appreciates the opportunity to submit comments regarding the Solar on High-Value Farmland draft rules. For 25 years, Sustainable Northwest has been dedicated to maintaining and supporting working lands across Oregon. This includes supporting sustainable agricultural and forestry operations, deploying local renewable energy generation, and ensuring healthy watersheds for fish and people.

Sustainable Northwest and our coalition of clean energy leaders, collectively known as *Making Energy Work for Rural Oregon*, have actively participated in the recent Community Solar rulemaking process, and see this emerging program as a means to support local economies, reduce fossil fuel emissions, and create resilient rural communities.

For this reason, we are deeply concerned with the potential impacts of the Solar on High-Value 1 Farmland rules, which could undermine years of collaborative progress made by Community Solar stakeholders and energy advocates to meet our state's increasing renewable energy needs. A complete solar development ban on Class I and II soils, and restricted development on Class III and IV soils will also limit revenue diversification opportunities for landowners and the ability to maintain Oregon's working lands.

Identifying solutions to protect Oregon's agricultural productivity while remaining committed to our Renewable Portfolio Standard is a complex issue meriting thoughtful and measured deliberations. Sustainable Northwest recommends that LCDC decline to adopt the current draft rules, and extend an inclusive and robust RAC process that engages Oregon's working lands community and a broad spectrum of interests and expertise.

We look forward to working with the Commission and impacted stakeholders in the near future to identify a balanced approach that maintains working agricultural lands, local decision-making authority, and a renewable energy economy for Oregon.

Sincerely,

Greg Block/President Sustainable Northwest

1130 SW Morrison, Ste 510 Portland, Oregon 97205 MAIN LINE (503) 221-6911 SOCIAL @SustainableNW SustainableNorthwest.org

Sta SW Washington, Ste 700 Portland, Oregon 97205 MAIN LINE (503) 221-6911 FACSIMILE (503) 221-4495 SustainableNorthwest.org



Creating clean energy communities

December 11, 2018

To: **Commissioners**, Land Conservation and Development Commission

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

Dear Commissioners,

Spark Northwest is a regional non-profit organization working accelerate the shift to clean energy one community at a time for over 15 years. Our programs make affordable, locally-controlled clean energy more accessible for all. Through renewable energy projects and policy reform, we envision a region powered entirely by clean energy. Over the past 4 years, we have been active in supporting and advocating for an effective, equitable community solar program in Oregon, ensuring that people can participate and benefit from solar energy, including those who are renters, have lower incomes, or cannot install solar where they live.

Since our inception, Spark Northwest has provided technical assistance to farmers and rural small businesses to overcome the technological and economic hurdles of implementing onsite renewable energy projects. With funding from the United States Department of Agriculture's Rural Energy for America Program, we have partnered with state governments in Oregon and Washington to provide renewable energy feasibility studies and grant writing for farmers and rural small businesses. We have helped over 100 farmers and rural small businesses reap the benefits of their clean energy installations. Through these projects, farmers can reduce their energy use, generate revenue, and make their operations more sustainable.

Spark Northwest is deeply concerned with the potential negative impacts of the draft Solar on High-Value Farmland rules. As written, these rules have the potential to harm small farmers' opportunities to lower their energy costs, undermine the future of Oregon's community solar program, and directly conflict with the objectives outlines in Governor Kate Brown's Oregon Climate Agenda.

We request that these rules be re-evaluated, and we plan to closely watch future discussions of this draft rule and any Land Conservation and Development Commission consideration.

The structure of community solar creates a path forward for many people to benefit from solar development who have previously been excluded from solar opportunities. The rules for community solar allow participants to sign up for projects located in the service territory of the investor-owned utilities,



1402 3rd Ave, Suite 901 Seattle, WA 98101

sparknorthwest.org ATTACHMENT B - P. 20



Creating clean energy communities

including Portland General Electric (PGE), Pacific Power, and Idaho Power. The community solar program also has an inclusionary goal that 10% of program capacity serve low-income Oregonians, and many people in rural communities could directly benefit from cost-effective community solar projects through credits on their utility bills. It is likely that community solar projects for PGE customers will seek to be located in the Willamette Valley, benefiting the rural landholders, adding to the tax base, and providing clean energy to customers. By essentially banning solar development on Class I and II soils, these rules effectively prohibit such development in much of the Willamette Valley. For projects developed on rooftops and elsewhere in Oregon, a prohibition on projects in the Valley means that there will be higher costs.

There are many examples around the United States and around the globe where solar and productive farmland are completely compatible and help diversify and contribute to agricultural activities. In Colorado, Illinois, and Minnesota for instance, new standards for pollinator-friendly solar development have been adopted, helping enhance habitat for bees and other beneficial pollinators. The DLCD Rulemaking webpage and associated meeting materials lack clear justification for why a ban has been proposed. The baseline assumption that solar should be banned in high-value farmland is not rooted in facts about potential impacts and benefits of solar. Nor is use of a land for some solar modules and associated racking a permanent use or conversion of land. After the life of the project, the solar modules can be removed and land returned to the previous use. No clear data have been presented detailing the negative impacts from solar on high-value farmland. Without such justification, any proposal to ban solar is inappropriate.

Finally, the draft rules as written run counter to the objectives detailed in Governor Kate Brown's Oregon Climate Agenda (November 28, 2018). Importantly, the Agenda says,

"Oregon has long been a national and world leader in demonstrating the Oregon Way: policies that preserve our natural environment while also supporting long-term economic competitiveness and business growth. The world is at a crossroads on climate policy, and Oregon must continue to pursue solutions that reduce emissions while creating good jobs and building a clean energy economy."

The Department of Land Conservation and Development should be forward-looking and consider ways to meet these objectives. These extremely prohibitive rules do not accomplish that objective and have the potential to undermine our state's strong climate leadership.

Thank you for your consideration,

Sincerely,

Jaimes Valdez, Policy Manager (206) 914-3510 | jaimes@sparknorthwest.org



1402 3rd Ave, Suite 901 Seattle, WA 98101

sparknorthwest.org ATTACHMENT B - P. 21



December 11, 2018

To:

Commissioners, Land Conservation and Development Commission

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

Dear Commissioners,

The Community Renewable Energy Association (CREA) works with local communities, counties, state and federal agencies, Congress, the Oregon Public Utilities Commission and the Legislature to advocate for improved policies that support development of more community renewable energy in Oregon.

CREA is deeply concerned with the potential impacts of the draft Solar on High-Value Farmland rules. As written, these rules have the potential to undermine the future of Oregon's Community Solar Program and directly conflict with the objectives outlines in Governor Kate Brown's Oregon Climate Agenda.

The proposed rules lack justification as to why this ban has been proposed. No clear data has been presented detailing the negative impacts from solar on high-value farmland. Without such justification, any proposal to ban solar is inappropriate.

We request that these rules be re-evaluated, and we plan to closely watch future discussions of this draft rule and any Land Conservation and Development Commission consideration. These rules significantly hamper the ability of Oregon residents to develop community solar. Solar projects for Portland General Electric customers will, under rules by the Oregon Public Utility Commission, be developed in the Willamette Valley. By essentially banning solar development on Class I and II soils, these rules effectively prohibit such development.

The draft rules as written run counter to the objectives detailed in Governor Kate Brown's Oregon Climate Agenda (November 28, 2018). Importantly, the Agenda says,

"Oregon has long been a national and world leader in demonstrating the Oregon Way: policies that preserve our natural environment while also supporting long-term economic competitiveness and business growth. The world is at a crossroads on climate policy, and Oregon must continue to pursue solutions that reduce emissions while creating good jobs and building a clean energy economy."

The rules also frustrate the Legislature's intent under its renewable portfolio law which calls for8% of Oregon load being served by small scale community renewable projects.

The Department of Land Conservation and Development should acknowledge these directives and integrate their own statutory mandates with these renewable energy development policies. These extremely prohibitive rules do not accomplish that objective and have the potential to undermine our state's strong climate leadership.

Sincerely,

Brian Skeahan Executive Director CREA

From:	<u>Vito Cortese</u>
To:	Lidz, Jerry; McArthur, Robin; Cribbins, Melissa; Hallova, Anyeley; Lamb, Sherman; Pearmine, Katie; Rue, Jim;
	Janine.Benner@oregon.gov; Jason.MINER@oregon.gov; Amira.streeter@oregon.gov;
	<u>kristen.sheeran@oregon.gov; Jinings, Jon; Hallyburton, Rob</u>
Subject:	Draft Solar Opposed
Date:	Wednesday, December 12, 2018 11:49:32 AM

To:

Commissioners, Land Conservation and Development Commission

CC:

Jim Rue, Director, Department of Land Conservation and Development Janine Benner, Director, Oregon Department of Energy Jason Miner, Natural Resources Policy Manager, Office of Governor Kate Brown Amira Streeter, Natural Resources Policy Advisor, Office of Governor Kate Brown Kristen Sheeran, Energy, and Climate Change Policy Advisor, Office of Governor Kate Brown; Director of Carbon Policy Office Jon Jinnings, Department of Land Conservation and Development Rob Hallyburton, Department of Land Conservation and Development

Dear DLCD Rules Advisory Committee,

As a landowner in the state of Oregon and in favor of solar siting within the state on all classes of soil, I oppose the draft solar siting rule as proposed and will be watching this closely.

The current solar siting rules are working, and I am opposed to the draft rule as proposed. No evidence has been provided to ensure that a rule change is needed and the consequences of the proposed change have not been analyzed. Therefore, the draft rules represent a pernicious attempt to limit and degrade landowner property rights.

Please take a holistic and reasonable approach as you consider this issue.

Kind Regards,

Vito Cortese 11856 SW 175th AVE Beaverton, OR 97007 (503) 616-5476

Nicole Hughes
Hallyburton, Rob
Jinings, Jon; Brendan McCarthy; Doris Penwell; Rikki Seguin; Max Greene; Evan Bixby; Amy Berg Pickett; Lidz.
Jerry
Re: Solar RAC follow-up
Thursday, December 20, 2018 8:07:13 AM

Rob, I strongly disagree with the fiscal statement that the draft rules will have no impact on small business. Just because none of the RAC members are classified as small businesses does not mean that others aren't affected.

ORS 183.310(1) defines "small business" as "a corporation, partnership, sole proprietorship or other legal entity formed *for the purpose of making a profit*, which is independently owned and operated from all other businesses*and which has 50 or fewer employees.*"

There are several small businesses potentially affected, including:

Small business solar developers in Oregon as well as supporting companies like engineers, planners, environmental and legal consultants, insurance providers

Other affected small businesses include those small business farms which may want to consider incorporating solar into their business.

Finally, small businesses that are interested in participating in Oregon's community solar program will definitely be negatively affected by this as the draft rules will significantly hinder the opportunity for PGE customers to participate.

I urge you to update the fiscal statement to include these considerations.

Can you also please include this message in the public record.

Nicole



Northwest Office 4110 SE Hawthorne Blvd. PMB 922 Portland, OR 97214 tel 971-254-3217 www.defenders.org

January 5th, 2019

Members of The Land Conservation and Development Commission Attn: Amie Abbott, Commission Assistant Department of Land Conservation and Development 635 Capitol Street NE, Suite 150 Salem, Oregon 97301-2540

Re: Comments on Solar Facilities on High-Value Farmland Rulemaking

Chairperson Lidz and Members of the Land Conservation and Development Commission:

Thank you for considering input from Defenders of Wildlife on the Land Conservation and Development Commission's (LCDC) pending revision of its Solar Rule (OAR 660-033-0130(38)).

Defenders of Wildlife ("Defenders") is dedicated to protecting native animals and plants in their natural communities. Founded in 1947, Defenders is a national conservation organization with more than 1.8 million members and supporters dedicated to wildlife and habitat conservation and protecting biodiversity across the nation.

We support responsible energy development on public and private lands, including in Oregon, that balances conservation, recreation and other uses of the lands. We believe energy projects must be sited in a manner that avoids or minimizes impacts to wildlife and wild habitat and that unavoidable impacts should be offset through compensatory mitigation. Renewable energy development provides benefits such as reducing greenhouse gas emissions, generating jobs and revenue for communities, and lowering the cost of electricity for ratepayers. We support responsible development of solar energy projects in Oregon that continue to provide these benefits.

In September 2018, LCDC initiated a rulemaking to clarify current regulations related to siting of photovoltaic solar energy facilities on various types of farm lands in Oregon and to revisit the sunset clause related to the wildlife provision in the rule under OAR 660-033-0130(38)(h). The LCDC also appointed a rulemaking advisory committee (RAC) to advise the Department of Land Conservation and Development (DLCD) in the development of amendments to existing rules.

We offer the following comments to the LCDC Commission related to the wildlife provision in the Solar Rule:

1. Sunset date for wildlife provision

Under the current rule, the wildlife provision at OAR 660-033-0130(38)(h)(F) is set to expire on January 1, 2022. See OAR 660-033-0130(38)(h)(G).

Defenders recommends that the wildlife provision be made permanent. The provision is essential to ensuring that energy facility siting considers and alleviates impacts to wildlife, a goal shared by stakeholders involved in responsible renewable energy development. It is unclear how state or federal special status species would be protected on non-arable lands where photovoltaic solar energy development might be developed following expiration of the wildlife provision. It is also not clear what role the Oregon Department of Fish and Wildlife (ODFW) would play after January 1, 2022, in helping to properly site photovoltaic solar energy projects on non-arable lands. As non-arable lands in Oregon are important to wildlife and ODFW's role is important in preserving and protecting wildlife in non-arable lands, we urge the LCDC to make wildlife provision in the current Solar Rule permanent. This will also ensure more consistency and clarity for developers plan and implement projects in different counties.

Recommendation 1: Delete OAR 660-033-0130(38)(h)(G).

2. Applicability of wildlife provision to arable lands

The wildlife provision in the Solar Rule appears to apply only to non-arable lands as defined at OAR 660-033-0130(38)(a) and not to high value farmland or arable lands. Further, there does not seem to be common understanding of the applicability of the wildlife provision to these additional land types. If the provision only applies to non-arable lands, we request that the RAC recommend that it also apply to arable lands. Wildlife movement, dispersal and habitat use during vulnerable life stages such as breeding or nesting is not restricted to non-arable lands in Oregon. Making the wildlife provision applicable to arable lands will help ensure more uniform and effective use, benefitting wildlife without compromising the ability to develop solar energy resources on arable or non-arable lands.

Recommendation 2: Clarify whether the wildlife provision applies only to non-arable lands.

Recommendation 3: If the wildlife provision applies to only non-arable lands, extend it to non-arable lands.

3. Mitigation under the current rule

The wildlife provision requires consultation with ODFW when proposed photovoltaic solar energy development on non-arable lands is determined to adversely affect state or federal special status species (threatened, endangered, candidate, or sensitive) or habitat, big game winter range or migration corridors, golden eagle or prairie falcon nest sites or pigeon springs. Additionally, if ODFW, after sitespecific assessment, finds that there will be adverse effects to special status species or wildlife habitats, the proposed project will be designed to avoid such adverse effects. Furthermore, if adverse effect cannot be avoided, mitigation measures must be adopted to offset any potential adverse effects.

We support avoidance and mitigation measures to reduce adverse impacts of development on state or federal special status species. ODFW should have a role in decision-making on project siting, through consultation and project assessment, to help conserve state and federal special status species. However, we have noted some issues with how ODFW might continue to serve that purpose. First, the current rule does not accommodate ODFW's general mitigation policy for project development on all land types. The rule also specifically does not mention "minimization" as a planning and development requirement before mitigation, which is the standard under ODFW's habitat mitigation policy.¹ And finally, ODFW's mitigation policy only applies to projects occupying more than 320 acres that are not under the jurisdiction of LCDC.

Whatever the jurisdiction, it is important that development impacts to wildlife and other resources first be avoided, then minimized and then, if and where development occurs, mitigated. We encourage the LCDC to ensure that ODFW's habitat mitigation policy applies to all renewable energy projects under the jurisdiction of the Commission, as follows.

Recommendation 4: Apply ODFW's fish and habitat mitigation goals and standards at OAR 635-415-0025(1) through (6) for all projects under LCDC's jurisdiction at OAR 660-033-0130(38).

Recommendation 5: Alternatively, the wildlife provision in the Solar Rule should prioritize minimization of impacts to wildlife habitats before any mitigation is considered. Specifically, we suggest following revision to the Solar Rule:

"...Based on the results of the biologist's report, the site shall be designed to avoid <u>or minimize</u> adverse effects to state or federal special status species or to wildlife habitats as described above, per the Oregon Department of Fish <u>and Wildlife's mitigation policy under OAR 635-415-0005</u>. If the applicant's site-specific assessment shows that adverse effects cannot be avoided, the applicant and the appropriate wildlife management agency will cooperatively develop an agreement for project-specific mitigation to offset the potential adverse effects of the facility..."

Thank you for the opportunity to provide input to the on the LCDC Solar Rulemaking, and for keeping wildlife considerations while planning for sustainable renewable energy development in Oregon

Sincerely,

Svisti Kamal

Sristi Kamal, PhD Senior Northwest Representative Tel: 971-254-3217 Email: skamal@defenders.org

3 Pathypaniya-

Rupak Thapaliya Renewable Energy & Wildlife Policy Analyst Tel: 202.772.3217 Email: rthapaliya@defenders.org

¹ See <u>https://www.dfw.state.or.us/lands/mitigation_policy.asp.</u>

Renewable Northwest Members

174 Power Global **3Degrees** 7Skyline, LLC American Wind Energy Association Avangrid Renewables Bonneville Environmental Foundation Center for Energy Efficiency & Renewable Technologies Clearway Energy Group **Climate Solutions** Columbia Gorge Community College Community Renewable Energy Association Cypress Creek Renewables Davis Wright Tremaine LLP DNV GL EDF Renewable Energy **EDP** Renewables Environment Oregon **Environment Washington** Erwin Legal Eurus Energy America Geothermal Resources Council Green Mountain Energy HDR Engineering, Inc. Idaho Conservation League Invenerav K&L Gates Kapla Law PLLC Latitude45 Associates ΜΔΡ Montana Environmental Information Center MontPIRG National Grid Natural Resources Defense Council Neoen U.S. Inc. NextEra Energy Resources Northwest Environmental **Business Council** NW Energy Coalition **OneEnergy Renewables** Oregon Citizens' Utility Board Oregon Solar Energy Industries Association OSPIRG Oregon Tech Orion Renewable Energy Group Pattern Energy Scout Clean Energy Sempra Renewables Solar Oregon Spark Northwest Stoel Rives, LLP Sulus Solar SunPower Corporation SWCA Environmental Consultants Tetra Tech Vestas Americas Warm Springs Power & Water Enterprises Washington Environmental Council WashPIRG Western Resource Advocates

421 SW 6TH Ave, Suite 975 Portland, OR 97204 www.RenewableNW.org



08 January 2018

Land Conservation and Development Commission Commission Chair, Jerry Lidz *submitted electronically*

Chair Lidz,

Renewable Northwest ("RNW") urges the Land Conservation and Development Commission ("LCDC" or "the Commission") to reject the proposed draft rules, which would pose a substantial obstacle toward achieving the state's clean energy goals as outlined in the Governor's November 2018 Climate Agenda, would harm the people who work in Oregon's solar industry, and would likely prevent Portland General Electric from meeting renewable energy goals including the successful launch of its community solar program, among other harms.

The comments below first outline a compromise proposal that addresses concerns raised by the Oregon Department of Agriculture and the Oregon Farm Bureau over protecting Oregon's most important agricultural lands. Next, the comments set forth a detailed explanation of the impact on future solar development in Oregon if the Commission adopts the proposed solar siting rules. The comments go on to highlight conflicts between the proposed rules and several other important Oregon policy goals. Finally, the comments conclude by reiterating RNW's willingness to continue working collaboratively to identify rules that will work for all stakeholders.

We lead our comments with a compromise suggestion because we remain committed to collaborating with stakeholders to identify workable siting rules. We are concerned that the current draft rules are the product of a rushed process that was not consensus based. We therefore request that, in addition to rejecting the current proposal, the Commission direct DLCD staff to reconvene the RAC and bring in a neutral facilitator. RNW is confident that with direct guidance from the Commission, DLCD staff and the RAC members can work together to prepare draft rules that address the concerns of the agricultural community while preserving the right of landowners to diversify the use of their land and supporting Oregon's transition to clean energy.

I. RNW's PROPOSAL

RAC member OSEIA, represented by Evan Bixby from Pinegate Renewables, presented at one of the RAC meetings on the concept of dual use solar projects. Examples of dual use solar projects that are currently under development in Oregon include planting seed crops between panel rows and planting pollinator habitat to support pollination of nearby crops. There is a significant amount of research that shows the benefits of dual use solar projects including benefits to soil such as preventing erosion, preventing the spread of invasive weeds, carbon sequestration, increasing soil nitrogen content, and maintaining habitat for pollinators and other native species.

The Oregon Department of Agriculture and Oregon Farm Bureau have both raised concerns over protecting Oregon's most valuable soils and the potential impacts to Oregon's agricultural economy if farmland is converted to solar development. RNW believes dual use solar projects address both concerns. To that end, we proposed the following compromises to the draft rules at the final RAC meeting:

- Maintain the existing 12 acre limit on high value farmland and require projects proposed on high value farmland soils (Class I and II) to be developed as dual use projects.
- Require a developer to prepare a dual use development plan which is part of their conditional use permit application and which becomes a condition of approval.
- Allow counties to require financial security for successful implementation of the dual use development plan.
- On arable lands increase the threshold for requiring a goal 3 exception to 100 acres if the developer develops the project as dual use. Retain the 20 acre threshold for projects not incorporating dual use development.

A definition of dual-use development is provided in the proposed draft; RNW recommends only one minor change and that is the addition of the italicized text in the following: "Dual-use development' means developing the same area of land for both a photovoltaic solar power generation facility and for farm use *or other compatible agricultural uses* in a manner that promotes responsible land stewardship and does not detract from the local agricultural area." We also recommend removing the 3 MW limit on dual use projects, as solar panel efficiency is rapidly improving and a limitation on resource capacity (rather than acreage) does not make sense as a land-use standard.

RNW feels this proposal constitutes a very generous compromise on the part of climate-oriented nonprofits and the renewable-energy industry in a process where compromise has been lacking. The proposal reflects a sincere effort to balance the concerns raised by agricultural advocates with the need to decarbonize our energy sector, and it encourages developers to incorporate components into their projects that will have an overall net benefit to the agricultural community and protect valuable soils.

An edited copy of the draft rule language is attached to this letter for review.

II. RNW'S RESPONSES TO DLCD'S PROPOSED RULES

The following sections highlight how the proposed draft rules would significantly damage Oregon's solar industry and are in direct conflict with the state's policies and agendas for promoting clean energy and addressing climate change.

A. Current and Projected Conversion of Farmland to Solar in Oregon Does Not Justify a Ban

Total acreage is less than a tenth of a percent

There are 1,459,588 acres of high-value farmland in the Willamette Valley. Of those, 954 acres less than 0.07%—are subject to active applications for solar facilities, many of which will never result in actual project construction.

Renewable Northwest, at the request of the Rulemaking Advisory Committee ("RAC"), prepared an analysis that shows the largest-practicable build out scenario for solar in Oregon as a result of current and proposed policies and utility IRP and PURPA programs. Our analysis shows that the potential greatest solar build out scenario in Oregon would result in an impact of .0007% (1,104 acres) of Oregon's high value farmland (Table 1). This figure was prepared with the intent to be conservative; indeed, at a RAC meeting, an Oregon Department of Energy staff member commented that Renewable Northwest's acreage figure was likely higher than one would

reasonably expect to see, as the efficiency of solar development on a megawatts-per-acre basis has been improving considerably in recent years. In addition, figures regarding current solar installations in the Willamette Valley were provided by DLCD (Table 2) and demonstrate that solar currently represents less than ½% of the total amount of high value farmland in any county. Despite negligible current and projected impacts, and without demonstrable evidence that there is any concrete harm that warrants revising the rules, DLCD staff has drafted rule revisions that effectively ban development in the Willamette Valley.

Source*	Year	MWa**	мw	Likely solar?	Likely OR?	Acres***	Notes
PGE IRP - Capacity	2025	-	628	Ν	N	2,512	From 2019 IRP preliminary draft. Only
PGE IRP - Energy	2025	173	-	Ν	Ν	4,152	2 of PGE's 27 draft portfolios in 2019 IRP feature new solar; PGE's model likely to select wind, though
PGE IRP - RECs	2032	422	-	Ν	Ν	10,128	procurement will be technology-neutral.
PAC IRP - Capacity	2036	-	239	Y	Ν	956	From 2017 IRP preferred portfolio.
PAC IRP - Energy	2027	0	-	-	-	0	Capacity figure reduces 1040 MW aggregate solar addition by the 77% planned to be located in Utab. PAC
PAC IRP - RECs	2036	0	-	-	-	0	modeled Southeastern OR solar.
PGE PURPA Queue****	2019	-	276	Y	Y	1,104	See footnote.
PAC PURPA Queue*****	2019	-	98	Y	Y	392	See footnote.

 Table 1. Potential Solar Build Out in Oregon

*** Because capacity, energy, and REC needs can be met by the same resources, acreage figures should not be aggregated. The highest acreage figure within each box represents the likely worst-case scenario for solar buildout. MWa-to-acreage conversion was determined by multiplying MWa by 24 based on PGE's suggestion that non-central Oregon solar with a nameplate capacity of approximately 60 MW translates to 10 MWa. 1 MWa x 6 MW/MWa x 4 acres/MW = 24 acres per 1 MWa.

**** PGE PURPA Queue figure derived from PGE's May 30, 2018 Small Generator Interconnection Report, with all projects labeled "withdrawn" removed from the total, rounded to the nearest MW. Note that the PGE IRP figures above are derived from the assumption that only projects with executed contracts are built. According to PGE, if even 50% of the projects without executed contracts in PGE's queue are built, the utility's resource needs go down and its REC deficit year is pushed out to 2035.

***** PAC PURPA Queue figure derived from PAC's April 24, 2018 Small Generator Interconnection Report, with all projects labeled "withdrawn" removed from the total, rounded to the nearest MW. Notably, as of 2015, PURPA projects in PAC's Queue had approximately a 10% completion rate resulting in only 1.3% of proposed MW.

County	Solar acreage as a % of HVF
Benton	0

Clackamas	.23
Lane	0
Linn	0
Marion	.10
Multnomah	0
Polk	.03
Washington	0
Yamhill	.07

B. The Draft Rules Would Effectively Ban Solar Development in Parts of Oregon

The current rules allow development of a solar facility on 12 acres or less of high value farmland. Anything above 12 acres requires a Goal 3 exception, which is decided by the local government typically with support from DLCD staff.

The draft rules add a key new limitation on the development of a solar facility on high value farmland. Although the draft rules still nominally allow a project to be developed on 12 acres or less of high value farmland, the draft rules bar development on "those high-value soils defined in OAR 660-033-0020(8)(a)." The addition of the high value farmland soil definition to the lands that are off limits to solar development could remove 4 million acres of land in Oregon for development of small-scale solar projects. More specifically, the draft rules ban solar development on "soils that are: Irrigated and classified prime, unique Class I or II; or Not irrigated and classified prime, unique, Class I or II." And the draft rules could be construed to ban solar development even on an entire "tract composed predominantly of" Class I or II soils due to an ambiguity in the rule language. The image below, Figure 1, shows the Class I and II irrigated and non-irrigated prime and unique soils in the Willamette Valley. The green, blue, and purple colors represent areas that would be completely off-limits to solar development in the Willamette Valley under the draft rules. The image also could underestimate the lands off limits to solar development if the rules are applied to ban solar development on tracts composed predominantly of Class I or II soils. According to DLCD the predominance measurement is 50%. Therefore, if a tract of land contains 50% or more of the high value soils defined above, the entire tract is off-limits to solar development.

Figure 1



Figure 2 shows the Class I and II Prime and Unique soils in Marion County. The image demonstrates the predominance of land that would be off-limits to solar development under the draft rules. According to the figure notes, 87.2% of Marion County EFU lands will be taken out of consideration for solar development permanently. The proposed rules also eliminate the opportunity for Goal Exception review that would allow projects on Class I or II soils, eliminating discretion and flexibility at the county level.



Figure 2

C. The Draft Rule Would Undermine Oregon Energy Policy and Result in Economic Impacts to the Solar Industry, Counties and Oregon Farmers

Based on all of the above figures and analysis, Renewable Northwest has concluded that the draft rules are not only unjustified but will result in significant impacts to the solar industry in the state and will prevent the state from meeting its clean energy goals as outlined in the Governor's Clean Energy Agenda released in November 2018. Likewise, the draft rules will likely prevent Portland General Electric from meeting some of their mandated and voluntary renewable energy goals. And the draft rules will likely undercut other key Oregon policy goals as well.

1. Impacts to the solar industry

Oregon's solar industry currently represents over \$1.9 billion in capital investments, \$582,000 in public revenue and over 4,509 jobs. The proposed draft rules will severely limit installations in the Willamette Valley which will reduce and, in some cases, eliminate revenue and will decrease job opportunities.

2. Conflict with the Governor's Climate Agenda

Governor Brown's Oregon Climate Agenda states that "[t]he world is at a crossroads on climate policy, and Oregon must continue to pursue solutions that reduce emissions while creating good jobs and creating a clean energy economy." Under the principles set forth in the Governor's Climate Agenda, the proposed rules would be a significant step in the wrong direction. Specifically, the rules conflict with Climate Objective #3 ("Decarbonize the electricity sector by achieving the state's renewable energy targets and encouraging grid modernization, while maintaining affordable and competitive electricity rates"), #4 ("Expand opportunities for residential, municipal, and commercial customers to access clean energy services from their utilities while ensuring utility regulations support the utility system and does not preference new customers over existing ones"), and #7 ("Pursue climate solutions that benefit rural communities and Tribes, support working lands, and foster resilience to climate change.")

3. Harm to community solar

The Oregon Public Utility Commission's Community Solar Program Rules require a community solar project participant to be located in the same utility service territory as the project itself. As a result, community solar projects serving Portland General Electric customers must be located in counties within that utility's service territory. Many of these counties have very significant levels of Class I and II soils, as discussed above; most notably, given the extent of Class I and II soils in Washington, Yamhill, Polk, Marion, and Clackamas counties, the proposed rules would effectively ban solar development in those counties. Additionally, banning solar development on Class I and II soils could stop the community solar programming from benefiting even urban customers. This is because community solar program costs are distributed among projects, and urban projects typically have narrow margins. If projects cannot be developed outside of urban areas to serve the community solar program, then it is possible that projects will not be developed at all.

4. Additional policy conflicts

Additionally, the broad restriction on solar development represented by the draft rules threatens to undermine the suite of policies summarized in Table 3.

Table 3. OREGON SOLAR - POLICY DRIVERS							
Policy	State/Federal	Applications	Status	Source			
Renewable Portfolio Standard	State	Requires utilities to serve customers with renewable energy, up to 50% in 2040	Active	ORS 469A.052			
Net Metering	State	Nets solar production against energy use on a customer's bill for homes up to 25 kW and businesses up to 2 MW	Active	OAR 860- 039			
Direct Access	State	Allows customers to buy from supplier rather than utility, while paying utility a transition charge		OAR 860- 038			
Green Tariff	State	Allows nonresidential customers to buy renewable energy product from utility	Pending	HB 4126 (2014)			
Community Solar	State	Allows subscribing customers to pay for solar project in exchange for bill credit	Pending	SB 1547 § 22 (2016)			
PURPA	Federal/State	Requires utility to purchase renewable energy that costs less than the utility's "avoided cost"	Active	16 USC § 824a-3			

5. Farm policy conflicts

While farming interests were represented by others on the RAC, RNW nevertheless has concerns that the proposed rules might undermine the farming community and Oregon's farmland-conservation goals. A farm must generate about \$250,000 in sales to net enough to support a family, without outside income from another source. Only about 7 percent of Oregon's farms meet that measure. Most farms rely on off-farm income to support the family and provide medical insurance. Small scale solar projects represent an opportunity for farmers to diversify their income and bring some of the off-farm income onto the farm. A farmer can lease their least productive soils to a solar developer, bringing in additional income to support their overall farm operation. In some cases, this additional income stream may be the opportunity that allows a farmer to keep their farm. Limiting a farmer's ability to diversify and minimize risk to support their farm will undoubtedly have an impact in the long term on whether or not some farmers choose to maintain their farms or sell their land. The draft rules unfairly limit Willamette Valley farmers' ability to lease portions of their property to solar developers, supporting Oregon's energy and farmland-conservation goals at the same time.

D. Climate Change Will Negatively Affect Oregon Agriculture Substantially More than Solar Development

The effects of climate change in Oregon's agricultural industry are already evident. While some crops are benefiting from warmer winters and longer growing seasons, over the long term, increased heat and drought stress, water shortage, and pressure from pests and diseases will likely supersede the positive benefits of near-term increased crop yield. As demonstrated previously, the potential impact of solar development on Oregon farmland is minimal compared to the potential impacts related to climate change. While it has been argued that the size and number of proposed projects in the Willamette Valley will not make a difference in meeting Oregon's climate goals, RNW disagrees. Distributed generation projects are key to balancing the electric grid such that we can successfully rely on clean energy in the future instead of fossil fuels.

E. The Importance of Distributed Energy Resources

Distributed Energy Resources are those energy projects that connect directly to a utility's distribution system, as opposed to that utility's transmission system. The distribution system is the system lower-voltage poles and wires that are primarily used to deliver electricity to end-users; the

transmission system is the higher-voltage towers and lines that are primarily used to conduct electricity across longer distances. The majority of the interconnection options in the Willamette Valley are to the distribution system as there are not many high-voltage transmission lines in this region. This scarcity of transmission assets is a major reason for the interest in small scale projects in this area. Larger scale projects must be interconnected to the higher voltage transmission system.

The Willamette Valley, being PGE's primary service territory, has a robust electrical distribution system which is key to integrating renewables in a manner that ensures reliability while providing clean energy for PGE's customers. Oregon's utilities have acknowledged that the state will not be able to meet its clean energy goals without distributed energy resources. Additionally, As communities consider local energy resiliency initiatives, distributed scale and community solar projects are vital to providing solutions to grid resiliency. The draft rules would greatly impact solar development on the PGE distribution system and could effectively kill the PGE Community Solar program.

III. CONCLUSION

RNW thanks you for your careful evaluation of the draft rule's potential impacts to Oregon's solar industry and, more importantly, our state's likelihood of meeting its climate and clean energy goals and mandates. Additionally, we thank you for consideration of our proposed compromise to require dual use solar development on our most important agricultural lands. RNW is committed to supporting the state to ensure solar projects are developed in a manner that is complementary to agriculture and are confident we can work collaboratively with DLCD staff and other RAC members to come to a solution that protects high value farmland and better supports Oregon's solar industry than the current draft proposed rule language.

Respectfully,

XT.OA

Nicole Hughes Executive Director

Renewable Northwest suggested edits to draft rule language

(38) [as in draft]

(a) [as in draft]

(b) [as in draft]

(c) "Dual-use development" means developing the same area of land for both a photovoltaic solar power generation facility and for farm use *or other compatible agricultural uses* in a manner that promotes responsible land stewardship and does not detract from the local agricultural area.

Note: This is an important addition in order to allow dual use projects such as pollinator habitat which will have significant soil benefits as well as benefits to apiaries and nearby farm operations, but which is not currently covered under farm use.

(d) Dual-use development plan means a plan for dual-use development which shall be subject to approval by the county. The plan shall outline a schedule, itemized cost estimate and success milestones for implementation of the proposed dual-use development, and shall address how the proposed dual-use development meets the criteria set forth in subsection (h) below. The plan shall be considered a condition of approval and shall be maintained through the life of the project. The plan shall be reviewed no later than the 3rd year of project operation to ensure successful implementation. The county may require a third party evaluator to review the implementation of the plan and may charge the developer a reasonable fee for such review. The county shall determine an appropriate schedule for re-evaluation of the plan throughout the life of the project based on the approved schedule and success milestones.

(e) [(d) in draft rules; otherwise as in draft]

(f) [(e) in draft rules; otherwise as in draft]

(g) [(f) in draft rules; otherwise as in draft]

(h) [(g) in draft rules; otherwise as in draft, until paragraph (A)]

(A) The Proposed photovoltaic solar power generation facility will not create *unnecessary* negative impacts on agricultural operations... [otherwise as in draft]

Note: As discussed in the meeting held on December 11, 2018 and supported by the counties, this term is important to retain in order to set a standard for the acceptance of impacts related to solar, which otherwise cannot be avoided as they are necessary to the successful development of a project. Without this qualifier, a county may be able to deny a project based on ANY potential impact.

(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied through techniquest that will enhance soil-building by restoring native vegetation that increases organic matter and nitrogen content and assist in carbon sequestration and improve future arability. An approved dual-use development plan may also

be used to satisfy this provision. The approved plan shall 26 be attached to the decision as a condition of approval;

Note: As discussed in the meeting, this may cause conflicts with existing landowner operations. Striking this was supported by the farm bureau and the remaining RAC members were neutral on the subject. Renewable Northwest also points out that the condition is overly subjective and it is not clear how proving carbon sequestration or other measures listed will be measured.

- (C) [as in draft]
- (D) [as in draft]

(E) The project is not located on high-value farmland soils defined in OAR 660-033-0020(8)(a) unless the project is developed as a dual-use project with an approved dual-use development plan.

(F) [as in draft]

(G) [A study area consisting of] No other photovoltaic solar power generation facility has been constructed or received land use approvals and obtained building permits on lands zoned for exclusive farm use within one mile measured from the center of the proposed project.

Note: Renewable Northwest supports leaving the original language discussing the 48 acre survey area for cumulative impacts, only if projects are allowed to go forward on HV farmland as proposed in (38)(E). Renewable Northwest finds if no projects are allowed to go forward, as the DLCD staff drafting of (38)(E) suggests, that a cumulative impacts survey area is meaningless.

(vi) is subject to a dual-use development plan with a nominal electric generating capacity of no more than 3MW that is approved by the county and attached to the decision as a condition of approval. A county must require a bond for at least 10 percent of the overall project cost, which shall be forfeited in the event the farm use element of the approved dual-use plan is not established within one year of the photovoltaic solar power generation facility being completed or if farm use of the site ceases for a period exceeding two years while the photovoltaic solar power generation facility is operational or components of the facility remain on site.

Note: RNW does not support the proposed dual use language above as generally we do not favor land use limitations which are based on project output as the output of the project has no bearing land use, it is the footprint that should be the driver. If DLCD believes a 3 MW project is more likely to represent the current size of projects in the Willamette Valley, this would (under current solar panel efficiency) relate to an approximately 30 acre site. As written in 38 (E) RNW supports leaving the 12 acre threshold in place and proposes to allow projects on all high value farmland. Projects that are on soil classification I and II (high value farmland soils) would only be allowed if developed as a dual use project.

(H) [as in draft]

(vi) Is subject to a dual-use development plan with a nominal electric 14 generating capacity of no more than 3 Mw that is approved by the county and 15 attached to the decision as a condition of approval. A county must require a 16 bond for at least 10 percent of the overall project cost, which shall be forfeited 17 in the event the farm use element of the approved dualuse plan is not 18 established within one year of the photovoltaic solar power generation facility 19 being completed or if farm use of the site ceases for a period exceeding two 20 years while the photovoltaic solar power generation facility is operational or 21 components of the facility remain on site.

(i) [h in draft rules] For arable lands, a photovoltaic solar power generation facility shall not use, occupy, or cover more than 20 acres unless *either* an exception is taken pursuant to ORS 197.732 and OAR chapter 660, division 4, *or the project is developed as a dual-use development with an approved dual-use development plan. A dual-use development on arable lands with an approved dual-use development plan may use, occupy, or cover up to 100 acres. The governing body or its designate must find that the following criteria are satisfied in order to approve a photovoltaic solar power generation facility on arable land: [as in draft]
(i) [(i) in draft rules; at hereing as in draft]*

(j) [(i) in draft rules; otherwise as in draft]

(k) [(j) in draft rules; otherwise as in draft]

Note: new section added at (38)(I)(see below)

(I) A county may require financial security for ensuring successful implementation of a dual-use development plan. Such financial security shall be based solely on the cost of implementation of the development plan and shall be re-evaluated on a schedule agreed upon by the county and the developer not to exceed three year increments At each re-evaluation period, portions of security representing items on the implementation plan which have been successfully implemented shall be released from bonding. The county may accept a letter of credit, parent guarantee or other form of financial security deemed reasonable to ensure funds are available in the event of non-compliance with the dual-use development plan.

(m) [(k) in draft rules; otherwise as in draft]

(n) [(l) in draft rules; otherwise as in draft]

SOLAR ON EFU DATA

	High-value Farmland				Non-High-value EFU					
	Approv	ved	Under re	view	Approv	ved	Under re	view Total		tal
County	Projects	Acres	Projects	Acres	Projects	Acres	Projects	Acres	Projects	Acres
Benton	0	0	0	0	0	0	0	0	0	0
Clackamas	23	294	2	24	4	104	1	98	30	520
Lane	0	0	0	0	0	0	0	0	0	0
Linn	0	0	0	0	0	0	0	0	0	0
Marion	26	295	4	44	1	20	0	0	31	359
Multnomah	0	0	0	0	0	0	0	0	0	0
Polk	4	48	0	0	0	0	0	0	4	48
Washington	3	36	1	12	0	0	0	0	4	48
Yamhill	10	120	7	84	0	0	0	0	17	204
Total	66	793	14	164	5	124	1	98	86	1,179

Table A-1. Photovoltaic Solar Facility applications on EFU in the Willamette Valley, 2012 - 2018

Table A-2. Acres of High-Value Farmland Soils and American Viticultural Area on EFU in the
Willamette Valley

		Additional acres of			Percent of EFU
		High-Value			that is High-
	Acres of High-	American	Total High-	Total EFU	Value Soils or
County	Value Soil	Viticultural Area	Value Acres	Acres	AVA
Benton	93,990	10,805	104,795	126,197	83%
Clackamas	118,833	6,750	125,583	149,941	84%
Lane	136,863	19,686	156,549	197,813	79%
Linn	299,559	21,476	321,035	355,152	90%
Marion	286,411	10,921	297,331	331,972	90%
Multnomah	25,907	845	26,752	34,359	78%
Polk	119,975	24,787	144,762	180,669	80%
Washington	114,317	2,912	117,229	133,866	88%
Yamhill	154,951	10,600	165,552	193,172	86%
Total	1,350,806	108,782	1,459,588	1,703,141	86%

Table A-3. Percentage of Solar Facility approvalsvalue Farmlandin the Willamette Valley, 2012 - 2017

	Approved
High-Value Farmland projects	90%
Non High-Value Farmland projects	10%
High-Value Farmland acres	89%
Non High-Value Farmland acres	11%

	High-Value Farmland				Non High-Value EFU					
	Approved Under review			Approved Under review				Total		
County	Projects	Acres	Projects	Acres	Projects	Acres	Projects	Acres	Projects	Acres
Baker					1	25			1	25
Benton									0	0
Clackamas	23	294	2	24	4	104	1	98	30	520
Clatsop									0	0
Columbia									0	0
Coos									0	0
Crook					7	1,864			7	1,864
Curry									0	0
Deschutes	1	3			4	445			5	448
Douglas									0	0
Gilliam							1	640	1	640
Grant									0	0
Harney					2	540			2	540
Hood River									0	0
Jackson	1	90	1	80	1	68			3	238
Jefferson					2	180			2	180
Josephine									0	0
Klamath			1	94	10	654			11	748
Lake					9	1,645	2	9,091	11	10,736
Lane									0	0
Lincoln									0	0
Linn									0	0
Malheur					6	450			6	450
Marion	26	295	4	44	1	20			31	359
Morrow	1	798			1	99	2	388	4	1,285
Multnomah									0	0
Polk	4	48							4	48
Sherman					1	100			1	100
Tillamook									0	0
Umatilla	2	85							2	85
Union									0	0
Wallowa									0	0
Wasco									0	0
Washington	3	36	1	12					4	48
Wheeler	ľ								0	0
Yamhill	10	120	7	84					17	204
Total	71	1,769	16	338	49	6,194	6	10,217	142	18,518

Table A-4. Photovoltaic Solar Facility applications on EFU in Oregon, 2012 - 2018

Note: Global change of HV farmland references from ORS 195.300(10) to OAR 660-033-0020(8)(a)

(38) [as in draft]

(a) [as in draft]

(b) [as in draft]

(c) "Dual-use development" means developing the same area of land for both a photovoltaic solar power generation facility and for farm use *or other compatible agricultural uses* in a manner that promotes responsible land stewardship and does not detract from the local agricultural area.

Note: This is an important addition in order to allow dual use projects such as pollinator habitat which will have significant soil benefits as well as benefits to apiaries and nearby farm operations, but which is not currently covered under farm use.

(d) Dual-use development plan means a plan for dual-use development which shall be subject to approval by the county. The plan shall outline a schedule, itemized cost estimate and success milestones for implementation of the proposed dual-use development, and shall address how the proposed dual-use development meets the criteria set forth in subsection (h) below. The plan shall be considered a condition of approval and shall be maintained through the life of the project. The plan shall be reviewed no later than the 3rd year of project operation to ensure successful implementation. The county may require a third-party evaluator to review the implementation of the plan and may charge the developer a reasonable fee for such review. The county shall determine an appropriate schedule for re-evaluation of the plan throughout the life of the project based on the approved schedule and success milestones.

(e) [(d) in draft rules; otherwise as in draft]

(f) [(e) in draft rules; otherwise as in draft]

(g) [(f) in draft rules; otherwise as in draft]

(h) [(g) in draft rules; otherwise as in draft, until paragraph (A)]

(A) The Proposed photovoltaic solar power generation facility will not create *unnecessary* negative impacts on agricultural operations... [otherwise as in draft]

Note: As discussed in the meeting held on December 11, 2018 and supported by the counties, this term is important to retain in order to set a standard for the acceptance of impacts related to solar, which otherwise cannot be avoided as they are necessary to the successful development of a project. Without this qualifier, a county may be able to deny a project based on ANY potential impact.

(B) The presence of a photovoltaic solar power generation facility will not result in unnecessary soil erosion or loss that could limit agricultural productivity on the subject property. This provision may be satisfied by the submittal and county approval of a soil and erosion control plan prepared by an adequately qualified individual, showing how unnecessary soil erosion will be avoided or remedied through techniquest that will enhance soil-building by restoring native

vegetation that increases organic matter and nitrogen content and assist in carbon sequestration and improve future arability. An approved dual-use development plan may also be used to satisfy this provision. The approved plan shall 26 be attached to the decision as a condition of approval;

Note: As discussed in the meeting, this may cause conflicts with existing landowner operations. Striking this was supported by the farm bureau and the remaining RAC members were neutral on the subject. Renewable Northwest also points out that the condition is overly subjective and it is not clear how proving carbon sequestration or other measures listed will be measured.

- (C) [as in draft]
- (D) [as in draft]

(E) The project is not located on high-value farmland soils defined in OAR 660-033-0020(8)(a); The project is not located on land on a_tract predominantly comprised of the high-value farmland soils described at OAR 660-033-0020(8)(a)(A) and (B), unless the photovoltaic solar power generation facility is a dual-use development.

-(F) [as in draft]

(G) [A study area consisting of] No other photovoltaic solar power generation facility has been constructed or received land use approvals and obtained building permits on lands zoned for exclusive farm use within one mile measured from the center of the proposed project.

(vi) is subject to a dual-use development plan with a nominal electric generating capacity of no more than 3MW that is approved by the county and attached to the decision as a condition of approval. A county must require a bond for at least 10 percent of the overall project cost, which shall be forfeited in the event the farm use element of the approved dual-use plan is not established within one year of the photovoltaic solar power generation facility being completed or if farm use of the site ceases for a period exceeding two years while the photovoltaic solar power generation facility is operational or components of the facility remain on site.

Note: Renewable Northwest supports leaving the original language discussing the 48 acre survey area for cumulative impacts, only if projects are allowed to go forward on HV farmland as proposed in (38)(E). Renewable Northwest finds if no projects are allowed to go forward, as the DLCD staff drafting of (38)(E) suggests, that a cumulative impacts survey area is meaningless.

(H) [as in draft]

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- (j) [(i) in draft rules; otherwise as in draft]
- (k) [(j) in draft rules; otherwise as in draft]

Note: new section added at (38)(I)(see below)

(I) A county may require financial security for ensuring successful implementation of a dual-use development plan. Such financial security shall be based solely on the cost of implementation of the development plan and shall be re-evaluated on a schedule agreed upon by the county and the developer. At each re-evaluation period, portions of security representing items on the implementation plan which have been successfully implemented shall be released from bonding. The county may accept a letter of credit, parent guarantee or other form of financial security deemed reasonable to ensure funds are available in the event of non-compliance with the dual-use development plan.

(m) [(k) in draft rules; otherwise as in draft]

(n) [(l) in draft rules; otherwise as in draft]

Item 6 Attachment E

Case Study of Proposed Rule Application














LIST OF TERMS AND ACRONYMS

This list includes terms the commission may encounter in discussions of energy production and regulation. The first section includes terms used in the report with subsequent sections including other important terms.

Terms Used in the Department Report to the Commission

Avoided Cost: The price utilities must pay for energy generated from a "qualifying facility" under PURPA For solar projects in Oregon to be eligible to receive the avoided cost rate they must have a nameplate capacity of 3 MW or less. The Oregon PUC provides the following definition:

"Avoided costs" means the electric utility's incremental costs of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, the electric utility would generate itself or purchase from another source, including any costs of interconnection of such resource to the system.

Community Solar Project: One or more solar photovoltaic energy systems that provide owners and subscribers the opportunity to share the costs and benefits associated with the generation of electricity by the solar photovoltaic energy systems. In Oregon, community solar projects must be between 25KW and 3 MW in size.

Megawatt (MW): A unit of power equal to one million watts. One MW can be produced by a facility of about six to nine acres, depending on the technology employed (<u>https://www.renewableenergyworld.com/articles/2013/08/calculating-solar-energys-land-use-footprint.html</u>).

Oregon's Renewable Portfolio Standard (RPS): State law setting a requirement for how much of the electricity the state uses use must come from renewable resources. SB 1547 set the requirement at 50% by 2040.

Power Purchase Agreement (PPA): A contract between two parties, one which generates electricity (the seller) and one which is looking to purchase electricity (the buyer). The PPA defines all of the commercial terms for the sale of electricity between the two parties, including when the project will begin commercial operation, schedule for delivery of electricity, penalties for under delivery, payment terms, and termination..

Public Utilities Regulatory Policy Act of 1978 (PURPA): The Public Utility Regulatory Policy Act (PURPA) was passed in 1978. In the midst of the energy crises that ripped through industrial world economies. Faced with predictions that the price of oil would rise to \$100 a barrel, Congress acted to reduce dependence on foreign oil, to promote alternative energy sources and energy efficiency, and to diversify the electric power industry. Although a federal law, PURPA is implemented by individual states. For more information:

https://www.greentechmedia.com/articles/read/purpa-is-causing-conflict-inmontana#gs.CUPmj8bo

Qualifying Facility (QF): A power generating facility that receives special rates and regulatory treatment under PURPA and may be either a cogeneration facility or a small power production facility, which includes solar, wind, biomass, waste, water power geothermal or any combination thereof with a power production capacity of 80 MW or less.

SB 1547: The so-called "coal to clean" energy bill signed into law by Governor Brown in 2016. Among other things, SB 1547 requires Oregon to stop using electricity generated from coal by 2030, establishes the most recent Renewable Portfolio Standards (RPS) and directs the establishment of a community solar program.

General Terms

Distributed Generation: Also known as "distributed energy," "on-site generation (OSG)" or district/decentralized energy is electrical generation and storage performed by a variety of small, grid connected devices referred to as distributed energy resources (DER).

Energy Facility Siting Council/EFSC (pronounced Eff-Sec): Oregon's Energy Facility Siting Council is made up of seven volunteer members who are appointed by the Governor and confirmed by the Senate. The Energy Facility Siting Council is responsible for overseeing the development of large electric generating facilities, high voltage transmission lines, gas pipelines, radioactive waste disposal sites, and other projects.

Wheeling: In electric power transmission, wheeling is the transportation of electric power over transmission lines of the grid. A power generation facility does not have to own power transmission lines; only a connection to the network or grid is required.

Wheeling Fee (Wheeling Charges): The cost a facility owner must pay to the owner of the transmission line based on how much power is being moved and how congested the line is. Wheeling fees add additional costs and are a primary reason why smaller projects prefer to locate within the service territory of the utility purchasing their power. Using the infrastructure of the purchasing utility allows these costs to be avoided. Larger projects can benefit from an economy of scale and are sometimes able to absorb Wheeling fee expenses.

Oregon's Three Investor-Owned Utilities

Idaho Power Company (Idaho Power, IDC): Idaho Power Company is a regulated electrical power utility. Its business involves the purchase, sale, generation, transmission and distribution of electricity in eastern Oregon and southern Idaho. It is a subsidiary of IDACORP, Inc. The company's 24,000-square-mile service area generally follows the area around the Snake River and its tributaries

Pacific Power: Pacific Power is based in Portland, Oregon and provides electric service to 756,000 customers in Oregon, Washington and California. Pacific Power operates as part of Pacificorp, which serves 1.9 million customers in six western states.

Portland General Electric (PGE): Portland General Electric is a Fortune 1000 public utility based in Portland, Oregon. It distributes electricity to customers in parts of Multnomah, Clackamas, Marion, Yamhill, Washington, and Polk counties – 44% of the inhabitants of Oregon.

Technology and Innovations

Agrivoltaics: Synonymous with the term "dual-use" as used in the draft rule. This is the concept of co-developing the same area of land for both solar photovoltaic power and conventional agriculture. A report released by Oregon State University in November 2018 indicates that locating solar panels on pasture or agricultural fields could increase crop yields on non-irrigated lands by providing shade, which helps to retain water. For more information:

https://today.oregonstate.edu/news/solar-arrays-could-be-used-resources-plantproductivity-study-shows

Bi-Facial Modules: Solar panels that produce power from both the front and back sides. Traditional solar panels produce power from the front side only. Some manufactures claim that their bi-facial modules can increase efficiency up to 30% under the right circumstances.

Floatovoltaic: This term is basically what it sounds like: photovoltaic solar panels floating on a lake, river, pond, etc. For more information:

https://www.greenbiz.com/article/will-floatovoltaics-become-next-big-thing

SolarCulture: A concept originated by Pine Gate Renewables based in Charlotte, North Carolina (OSEIA Rep on the RAC). According to the company website:

SolarCulture is an initiative developed by Pine Gate Renewables (PGR) to enhance environmental stewardship, promote sustainable agriculture, and collaborate with the community to support research with a goal of encouraging smarter solar through science.