Oregon

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To: Senate Committee on Environment and Natural Resources

From: Todd R. Cornett, Energy Siting Division Administrator

Re: HB 2820-B Relating to the Energy Facility Siting Council Solar Siting Thresholds

Introduction

This bill does three primary things: (1) resolves two existing contradictory Energy Facility Siting Council (EFSC) solar siting jurisdictional thresholds (2) creates different EFSC jurisdictional thresholds for concentrated solar facilities and solar photovoltaic facilities; and (3) establishes different acreage thresholds for solar photovoltaic facilities primarily based on agricultural productivity.

The Energy Facility Siting Council is a 7 member board appointed by the Governor and has responsibility to review and approve or deny all "Energy Facilities" as they are defined in ORS 469.300(11). Council members are chosen to represent geographic and professional diversity within the state. The Siting Division of the Oregon Department of Energy provides staff support to the Energy Facility Siting Council.

Discussion

Concentrating Thermal Vs. Solar Photovoltaic

See pages 5-6.

Current Conflicting Thresholds for EFSC Jurisdictional Solar Energy Projects

-Two state jurisdictional thresholds for solar energy facilities – located in statutory definition of "Energy Facility" - ORS 469.300(11).

(D) 100 Acres
-10 – 20 MW for both Concentrating solar and Solar PV
-Established 1975

(J) 35 MW average generating capacity = 105 MW maximum generating capacity
-525 – 1050 Acres for both Concentrating Solar and Solar PV
-Established in 1991 as a 25MW threshold with no change to the 100 acre standard
-Changed in 2001 to the current 35MW threshold with no change to the 100 acre threshold.

-No legislative intent to determine if one is meant for concentrated solar and one is meant for solar Photovoltaic.

-Lacking legislative intent and with no legal testing, the trigger is currently 100 Acres because that will be triggered well before 35 MW Avg/105 MW Max.

Prior Working Group and Language in HB 2820-B

House Interim Committee on Energy, Environment and Water established a Solar Work Group Chaired by Rep. Boone. The Jurisdictional subgroup focused on the issues in HB 2820. Group was broadly representative and included most if not all groups who have an interest is solar siting. While there was no voting there was general consensus on several important issues.

Consensus that concentrating solar facilities should have a separate jurisdictional threshold than Solar PV because of the different ways they are operated.

HB 2820-B creates separate jurisdictional thresholds. Because of the similarities of impacts with other thermal plants, concentrating solar was relocated to (A) of the definition which has a 25 MW jurisdictional threshold.

(D) is now specifically for Solar PV

(J) solar is removed

Consensus that an acreage threshold is appropriate for Solar PV because it is primarily a footprint impact.

HB 2820-B includes only acreage thresholds for Solar PV

Consensus that the acreage threshold should be varied based on the specific circumstances on the ground. The discussion focused on agricultural productivity.

HB 2820-B has three subsections which are largely related to soil productivity.
-High Value farmland which refers to existing statute (See Page 7)
-Arable lands – new definition included because this is defined in DLDC Solar Siting Rule. See proposed amendment for more information about this
-Other lands – This was originally Non-Arable lands but that was removed to eliminate the creation of a new statutory definition and accommodate all other zoning designations.

Consensus that the acreage threshold should be 100 acres on high value and arable lands.

HB 2820-B does has 100 acres as the threshold for high valued and arable lands. It should be noted that this leaves the state threshold at where it is today under current statutes.

Consensus that the non-arable acreage threshold should be based on how land is typically divided and utilized where the larger facilities would be located which is in Eastern Oregon.
That is based on sections which are equivalent to one square mile or 640 acres.

No Consensus on what the acreage threshold should be for non-arable lands. However, because this is non-productive farmland, this is where large scale solar development needs to occur and through the regulatory process we should try to incentivize developers choosing these areas.

HB 2820-B has a threshold of 320 Acres for solar PV on all other lands. This is equal to a half section. All other lands refers to all other zoning designations. Based on this proposed language there is the opportunity to site up to 320 acres of solar PV by a local jurisdiction in the following zones:

-Industrial	-Rural Residential	-Commercial
-Forest	-Residential	-Non-Resource

Proposed Amendment to HB 2820-B

After further evaluation and discussion with DLCD, ODOE is proposing two amendments to HB-2820 B related to the use of the term "Arable Land".

1. Remove the following definition of "Arable Land"

~~*(3) 'Arable land' means land, other than high-value farmland as defined in ORS 195.300, in a tract, as defined in ORS 215.010, that is:*~~
~~*(a) Predominantly cultivated; or*~~
~~*(b) If not currently cultivated, predominantly composed of soils that are in capability classes I to IV, as specified by the National Cooperative Soil Survey operated by the Natural Resources Conservation Service of the United States Department of Agriculture*~~

A different definition currently exists in OAR 660-33-013(38) which is the DLCD Solar Siting rule. The definition's purpose in this rule is to establish which standards apply to the solar facility application. The important part of this definition in relation to how it will not work with HB 2820-B is the following language:

"...as determined by the governing body or its designate based on substantial evidence in the record of a local land use application...."

This language has the effect of requiring a local land use decision to determine what is "arable land", and probably more importantly, what is "non-arable land". This is based on the fact that not all soil classes are equally productive or non-productive, and a local determination takes into account site specific circumstances. While this language is important in the current DLCD rule, it would create uncertainty if it functioned as the jurisdictional threshold. This is why the current definition in HB 2820 is written differently. However, we think different definitions will generate inconsistency and confusion and that is why we are proposing to remove it. However, in order to ensure an objective jurisdictional threshold, we propose to include much of the language from this definition into the actual threshold.

2. Amend the solar photovoltaic threshold by inserting language from the current HB 2820-B definition of "Arable Land"

(D) A solar {- collecting -} {+ photovoltaic power generation +} facility using more than {- 100 acres of land. -}
{+ :
(i) 100 acres located on high-value farmland as defined in ORS 195.300;
(ii) 100 acres located on ~~**arable**~~ *land:*
(I) That is predominantly cultivated; or
(II) If not currently cultivated, predominantly composed of soils that are in capability classes I to IV, as specified by the National Cooperative Soil Survey operated by the Natural Resources Conservation Service of the United States Department of Agriculture.
(iii) 320 acres located on any other land +}

In addition to establishing the threshold for when solar facilities come to the Energy Facility Siting Council, this statutory change will also alter when they go to local jurisdictions. As previously mentioned, counties currently have the ability to determine local variation in soil productivity based on the existing DLCD solar siting rule. The current HB 2820 definition of "Arable Land" does not include that language and neither does the proposed threshold language. While it is not the intended purpose to eliminate the ability for a local government to make land use decision on local soil productivity, it is the purpose to establish a clear and objective jurisdictional threshold in order to ensure predictability for a solar applicant. If a solar applicant were required to go through local land use decision in order to determine jurisdiction it would expose them to added risks, uncertainties and costs.

Concentrating Solar vs. Solar Photovolatic

Concentrating Solar (Thermal Solar): A system that uses mirrors or lenses to concentrate a large area of sunlight, or solar thermal energy, onto a small area. Electrical power is produced when the concentrated light is converted to heat, which drives a heat engine (usually a steam turbine) connected to an electrical power generator.

Solar Photovoltaic (PV): Method of generating electrical power by converting solar radiation into direct current electricity using semiconductors that exhibit the photovoltaic effect

ORS 195.300– Just Compensation for Land Use Regulation

(10)"High-value farmland" means:

(a) High-value farmland as described in ORS 215.710 that is land in an exclusive farm use zone or a mixed farm and forest zone, except that the dates specified in ORS 215.710 (2), (4) and (6) are December 6, 2007.

(b) Land west of U.S. Highway 101 that is composed predominantly of the following soils in Class III or IV or composed predominantly of a combination of the soils described in ORS 215.710 (1) and the following soils:

(A) Subclassification IIIw, specifically Ettersburg Silt Loam and Croftland Silty Clay Loam;

(B) Subclassification IIIe, specifically Klooqueth Silty Clay Loam and Winchuck Silt Loam; and

(C) Subclassification IVw, specifically Huffling Silty Clay Loam.

(c) Land that is in an exclusive farm use zone or a mixed farm and forest zone and that on June 28, 2007, is:

(A) Within the place of use for a permit, certificate or decree for the use of water for irrigation issued by the Water Resources Department;

(B) Within the boundaries of a district, as defined in ORS 540.505; or

(C) Within the boundaries of a diking district formed under ORS chapter 551.

(d) Land that contains not less than five acres planted in wine grapes.

(e) Land that is in an exclusive farm use zone and that is at an elevation between 200 and 1,000 feet above mean sea level, with an aspect between 67.5 and 292.5 degrees and a slope between zero and 15 percent, and that is located within:

(A) The Southern Oregon viticultural area as described in 27 C.F.R. 9.179;

(B) The Umpqua Valley viticultural area as described in 27 C.F.R. 9.89; or

(C) The Willamette Valley viticultural area as described in 27 C.F.R. 9.90.

(f) Land that is in an exclusive farm use zone and that is no more than 3,000 feet above mean sea level, with an aspect between 67.5 and 292.5 degrees and a slope between zero and 15 percent, and that is located within:

(A) The portion of the Columbia Gorge viticultural area as described in 27 C.F.R. 9.178 that is within the State of Oregon;

(B) The Rogue Valley viticultural area as described in 27 C.F.R. 9.132;

(C) The portion of the Columbia Valley viticultural area as described in 27 C.F.R. 9.74 that is within the State of Oregon;

(D) The portion of the Walla Walla Valley viticultural area as described in 27 C.F.R. 9.91 that is within the State of Oregon; or

(E) The portion of the Snake River Valley viticultural area as described in 27 C.F.R. 9.208 that is within the State of Oregon.