

March 21, 2019

House Committee on Energy and the Environment Chair Ken Helm 900 Court St. NE Salem, OR 97301

Dear Chair Helm, Vice-Chairs Schouten and Reschke, and members of the committee,

The Oregon Solar Energy Industries Association (OSEIA) is a trade association founded in 1981 to promote clean, renewable, solar technologies. OSEIA members include businesses, non-profit groups, and other solar industry stakeholders. We provide a unified voice of the solar industry and focus exclusively on the solar value chain; from workforce development to permitting, advocacy, policy, and regulation for manufacturing, residential, commercial, community, and utility scale solar projects on the local, state and regional level.

OSEIA shares the underlying concerns that HB 3325 addresses and we look to this committee to remedy current barriers to solar in Oregon. Interconnection is a highly technical issue and the difficulties to fixing the problem are many. However, there are a few simple things that can move Oregon in a better direction, some of which are in the bill before you.

All solar projects, whether they are on your roof or in a field, need to be connected to the grid. The utilities own the grid infrastructure and do no t publicly share information about it. When solar projects want to connect to the grid, they are faced with a black box; does the nearby substation have enough capacity to take on the project? If not, how much capacity needs to be added? Is the current infrastructure old and will it need a major overhaul? Or has it been upgraded in some form already would only need minor upgrades?

The utility conducts a necessary study to determine the level of upgrade for the interconnection. Unfortunately, the utilities often require multiple studies, with the solar project picking up all the costs, and it is often unclear why the first study wasn't sufficient.

After studies are completed the utilities put together a cost estimate of the work to be done. The cost estimates are often not accurate. In some cases, the original cost estimate is much lower than the final bill, resulting either in a very high project cost or the project becomes too expensive to build. In other cases, the original estimate is much higher, including upgrades above and beyond what is needed for the project. While sometimes the costs can be negotiated and changed, most often the project must absorb the high costs or forgo the project all together.



One unfortunate example of this broken process is a project recently completed by Energy Wise, an Oregon company. Energy Wise had four projects in Southern Oregon, located near a Pacific Power transformer. Pacific Power initially said the interconnection upgrades on transformers would be about \$10,000 per project. Energy Wise built the projects and was ready to connect them to the grid. A few months later, Pacific Power came back and said that the system was big enough to require an additional study. A year later, the study said that \$160,000 would be needed for upgrades on one project, instead of \$10,000. Energy Wise requested time to raise the additional funds, 16 times the initial cost estimate. Six months later, Energy Wise came back with the funds, but was told that too much time had passed and an additional study was required. This study came back with a cost estimate of \$250,000 for interconnection costs, 25 times the initial estimate and one and a half times more than the second estimate. During this time the panels sat idle in the field, waiting to be turned on to produce clean power and earn income for the farmer. In the end, Energy Wise ended up physically pulling out all the panels, loading them up, and installing them at another location that had a lower interconnection cost.

It is useful to look at projects larger than this bill addresses in order to fully understand the challenges that interconnection poses. A project in Pilot Rock Oregon was quoted at \$40 million for interconnection fees. The project would have produced 6 mW of power, \$40Kyearly in property taxes and \$20K yearly in leasing costs to the City of Pilot Rock. In comparison, a project producing 15mW in another jurisdiction only cost \$500K in interconnection upgrade costs: more than twice the power produced cost 80 times less in interconnection costs. Even taking into consideration the different location and power load of the area, this is absurd. Needless to say, the project was not built and Pilot Rock will not receive the \$60K/year, and Oregonians will not receive that clean energy.

The solar industry is concerned that the forward-thinking policy the Oregon legislature has passed and will pass cannot be fulfilled due to technical issues like interconnection. The Public Utility Commission has been alerted to these issue for years, and after years of inaction, they are starting to consider the issue this spring, but only in a limited way, one that would not address the projects this bill addresses. The PUC has also started a larger process around distributed system planning, but that has only just started and it is unclear how that will overlap with interconnection. In short, while they have started to consider the issue, the PUC is years away from solving the problems. Legislation this body passed in 2016, which created community solar, may be stalled until interconnection issues are resolved. Legislative intent is not being fulfilled due to interconnection issues.

This bill raises some excellent potential solutions that the legislature should consider. The first is timelines. Utilities have timelines put forward in rules that they must follow. In some cases, the timelines are followed but it means that the process is rushed, and cost estimates are wildly off. In other cases, timelines are not followed and projects are delayed, increasing costs for all parties. Other



states have solutions for these issues; California requires reporting quarterly on utility performance on adhering to interconnection timelines and Massachusetts assesses a penalty when timelines are not met.

This bill also addresses potential solutions to cost estimate problems, an issue that other states have addressed. In Massachusetts and in California, the developer for small commercial projects is only responsible for costs up to 25% over the initial estimate, requiring the utility to pay for the balance. Minnesota requires that the estimates be within 20% of actual costs and requires reporting. In California, utilities have a budget for line extension projects, since that benefits the utilities in the long run. The developer pays part of the cost as does the utility.

In sum, interconnection issues are a huge challenge for solar projects, large and small, in every corner of the state. The utilities have no incentive to connect solar projects to the grid; they are required to by law, but do so reluctantly, since the projects bring no gains to their shareholders. This creates an incentive for utilities to delay solar projects and increase the cost of those solar projects. The system is broken and requires intervention. OSEIA implores this committee to critically examine this issue and work together with all stakeholders to find solutions that benefit customers, keep rates low, and clean up our energy supply.

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