March 23, 2021

To: Representative Pam Marsh, Chair, House Committee on Energy and Environment
Members, House Committee on Energy and Environment
From: Max Greene, Regulatory & Policy Director, Renewable Northwest
Re: Conditional Support for HB 2021

Dear Chair Marsh and Members of the Committee,

Renewable Northwest is a regional, non-profit renewable energy advocacy organization based in Oregon, dedicated to decarbonizing the region by accelerating the transition to renewable electricity. Our members are a combination of renewable energy businesses and environmental and consumer groups. **Renewable Northwest conditionally supports HB 2021, which would require Oregon electricity providers to supply 100% clean electricity by 2040, subject to amendments that are currently under negotiation.**

Renewable Northwest Supports an Emissions-Plus-Planning Approach to 100% Clean Electricity

HB 2021-1 would establish an emissions-plus-planning approach to achieving 100% clean electricity, under which electricity service providers would be required (1) to reduce their system emissions in order to conform with defined targets and (2) to establish plans every two years demonstrating how they will achieve those targets. Renewable Northwest supports this approach because it will create very significant opportunities for renewable energy development, will appropriately tie electricity resource decisions to the imperative to address climate change, and will afford some flexibility in how electricity service providers achieve emissions reductions using a combination of renewables, storage resources, efficiency, demand-side resources, and legacy hydroelectric generation.

The tie between an emissions-plus-planning approach and renewable energy development opportunities rests on the Oregon Public Utility Commission's ("PUC") planning framework. While planning can mean different things at different agencies, at the PUC planning directly flows through to utility resource procurement and ultimately to utility rate recovery. Specifically, for investor-owned utilities ("IOUs"), HB 2021-1 would link implementation of the emission targets to a utility's integrated resource plan ("IRP") process. In the words of a recent PUC order, "consistency with an acknowledged IRP is evidence to support favorable ratemaking treatment."[1] In other words, when an IOU concludes in its IRP that it should buy new renewables, and the PUC acknowledges that IRP, then it is easier for the IOU to recover the cost of those new renewables in customer rates.

As to procurement, the Commission has provided that a Request for Proposals ("RFP") for a new resource "should be aligned with the need identified in the IRP to be addressed by the resource,"[2] and that an IOU that procures a new resource outside of a properly conducted RFP "will need to justify that decision during

[1] Oregon Public Utility Commission, Docket No. UE 374, Order No. 20-463 at 55 (Dec. 18, 2020); *see also* Order No. 07-002 at 24 (quoting Order No. 89-507 at 7).
[2] Oregon Public Utility Commission, Docket No. AR 600, Order No. 18-324 at 8 (Aug. 30, 2018).

a subsequent rate proceeding."[3] In other words, through the lens of procurement, planning determinations again have a direct influence on an IOU's ability to recover costs.

Requiring that IOUs prepare clean energy plans to achieve this policy's emission targets, and establishing PUC acknowledgment of those plans, should flow through to cost recovery in the same way that IRPs and RFPs flow through. Put more simply, an IOU's ability to achieve the targets will affect its ability to recover costs in customer rates, and the generally avoid investments for which they cannot recover their costs.

An Emissions-Plus-Planning Approach Will Lead to Significant Development Opportunities

The upshot of the mechanism outlined above is that the combination of binding emission targets and PUC-acknowledged clean energy plans will result in opportunities for project development at the multiple-gigawatt scale. For context, PGE's and PacifiCorp's combined peak demand in Oregon is around 7.5 GW.[4] Looking ahead, that number could grow as IOUs may need additional energy generation to charge storage resources that can meet demand at all hours – and as other sectors electrify (although some of that potential additional demand may be offset by efficiency, demand response, and load flexibility).

To put a finer point on the potential for renewables development and focus on the next 9 years, a dive into PacifiCorp's and PGE's 2019 IRPs may be helpful. Those IRPs show that PacifiCorp and PGE, respectively, are on a trajectory to reduce emissions 55% and 38% below 2010-2012 levels by 2030. Accelerating that number to 80% will require transformative change.

While the modeling that will determine how utilities would meet their targets is complicated, here's some back-of-the-envelope math to help show the tie between emissions reductions and procurement:

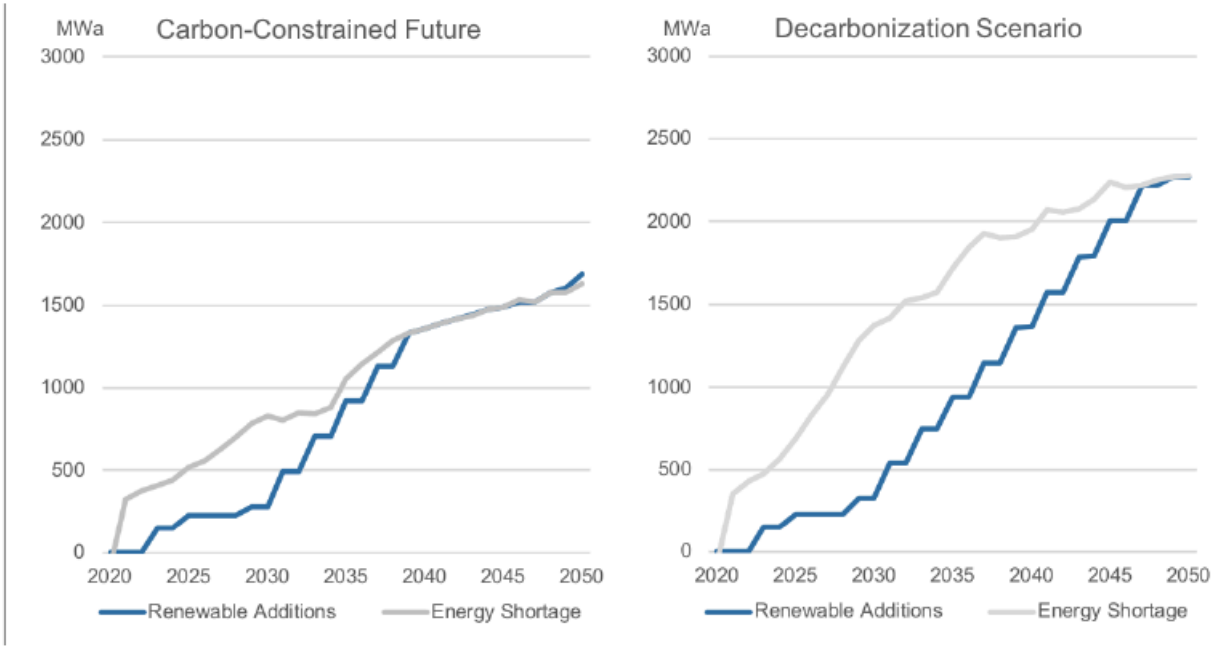
From 2019-2024, PacifiCorp's 2019 IRP shows an emissions reduction of about 25% relative to the baseline. That window corresponds with PAC's ongoing procurement of about 4 GW of renewables to serve its entire multi-state service territory through a 2020 All-Source RFP and the accelerated retirement of 1.5 GW of coal units. The step from 55% to 80% would represent another 25% reduction and likely would correspond to another significant procurement. Granted Oregon is only about a quarter of PacifiCorp's load, so a reasonable procurement estimate resulting from the 2030 target in this policy may be on the order of 1 GW. To meet the 2030 timeline, PacifiCorp would need either a series of procurements throughout the 2020s or a large RFP by the mid-2020s.

From 2020-2025, PGE's 2019 IRP shows an emissions reduction of about 13% relative to the baseline. That reduction corresponds with PGE's planned 150 MWa renewable procurement in 2021. To get from a 38% reduction to an 80% reduction will be a tall order and will likely require PGE to go forward with staged procurements throughout the 2020s. Indeed, PGE's 2019 IRP included analysis of a "carbon-constrained future" with 80% emissions reductions by 2050 and associated renewable additions throughout the 2020s and 2030s summing to about 1300 MWa by 2040 (Fig. 7-24 below[5]). Again, that figure represents an 80% by 2050 target. A more aggressive target would likely result in more aggressive renewable additions.

---

[3] *Id.* at 3.
[4] *See* Oregon Department of Energy, 2020 Biennial Energy Report at 111 n.8 (Nov. 2020).
[5] PGE's 2019 Integrated Resource Plan at 207. Note that the "Decarbonization Scenario" depicted in Figure 7-24 reflects accelerated electrification of other energy end uses.

FIGURE 7-24: Decarbonization Scenario renewable additions



These IRPs show us that renewables are already "least cost, least risk" resources, and Oregon has excellent resource potential for renewable energy development (though we may need additional policy changes, land use changes, and infrastructure development to fully realize that potential). But despite significant utility procurements for new renewables that are already planned and underway, we're not moving fast enough. This bill would change that.

100% Clean Electricity Is Achievable, Reliable, and Cost-Effective

Some common concerns about 100% clean electricity policies are feasibility, system reliability, and cost. We are at a flashpoint where new developments every month continue to mitigate these concerns. Renewable Northwest is working with the Clean Energy Transition Institute, GridLab, and Evolved Energy (which produced the analysis reflected in PGE's figure above) on a study to demonstrate the feasibility of transitioning to 100% clean electricity by 2040. While the study is still underway, preliminary results suggest not only that we can achieve 100% but also that a robust 100% policy may help spur a significant floating offshore wind industry in Oregon. As to reliability, this Committee already heard from an expert at the Rocky Mountain Institute, which is leading national work on meeting system reliability requirements with clean energy portfolios of renewables, storage, and demand-side resources such as flexible load. And as to cost, the industry-standard Lazard's Levelized Cost of Energy version 14.0 shows not only that renewables are generally the most cost-effective resources on an unsubsidized basis,[6] but also that "[c]ertain renewable energy generation technologies have an LCOE [levelized cost of energy] that is competitive with the marginal cost of existing conventional generation."[7] In other words, building new renewables is cheaper in some instances than keeping existing fossil resources in operation.

[6] Lazard's Levelized Cost of Energy version 14.0 at 2 (Oct. 2020), *available at* https://www.lazard.com/media/451419/lazards-levelized-cost-of-energy-version-140.pdf.
[7] *Id.* at 7.

Should unexpected setbacks arise, however, HB 2021-1 includes offramps to ensure that the transition to 100% clean happens without compromising grid reliability or imposing excessive cost burdens on ratepayers. Similar constructs exist in Oregon's Renewable Portfolio Standard ("RPS"),[8] but they have yet to be invoked, as meeting the RPS has occurred cost-effectively and without affecting reliability. The same result will likely prove out with these offramps.

The Emissions-Plus-Planning Approach Builds on Existing Programs

Because the emissions-plus-planning approach builds on two existing programs – the emissions accounting program administered by the Department of Environmental Quality ("DEQ") under ORS 468A.280 and the IRP process outlined above – it should be straightforward to implement. In fact, a similar construct underlies the RPS. For RPS purposes, the Oregon Department of Energy administers "a system of renewable energy certificates [RECs] that can be used by an electric utility or electricity service supplier to establish compliance with the applicable renewable portfolio standard" under ORS 469A.130(1), while the PUC oversees Renewable Portfolio Implementation Plans under ORS 469A.075. These plans are mandatory under ORS 469A.075(1) and are subject to PUC acknowledgment under ORS 469A.075(3). Just as REC accounting at ODOE and RPS planning at the PUC works for the RPS, so emissions accounting at DEQ and emissions planning at the PUC should work for Oregon's 100% clean electricity program.

Additional Amendments Are Necessary

While, for the reasons set forth above, Renewable Northwest supports the core program of HB 2021-1, we also wish to highlight that several additional amendments are necessary to address concerns with the language as drafted. Without listing all of the specific language we hope will be addressed in future amendments, some specific concerns include the following:

- In Section 3, the 2040 target should be mandatory and eliminate the "seek to" qualifier;
- In Section 4, clean energy plans' annual targets and goals should include short and long duration storage and renewables;
- In section 5, the language should be amended to ensure a robust acknowledgment standard;
- Section 6 must be eliminated to avoid devaluing RECs associated with Oregon projects and to ensure the core 100% clean electricity policy is robust;
- Section 9 should be amended to strengthen the incremental cost language from investments "related to compliance" to investments "for the purpose of compliance," and the list of specific investments or costs should be eliminated altogether or significantly streamlined to remove costs unlikely to be for the purpose of compliance;
- Section 23 does not reflect the current efforts of a development-and-labor workgroup that has been meeting to discuss labor standards for construction of renewable energy projects.

We understand that many of the sections between 12 and 30 are being actively negotiated by other parties and we may wish to comment on the results of those negotiations in future amendment language

[8] *See* ORS 469A.062 & 469A.100.

as well. Relatedly, Renewable Northwest has been involved in conversations with a number of stakeholders to address the above concerns as well as those of other stakeholders, and we are optimistic that updated amendment language will address the points we have raised above and result in a broad coalition supporting this bill.

At its core, the policy this bill represents will work — it will decarbonize our electricity system, it will drive development in new renewable energy projects, and it will make Oregon a national leader in clean energy again. For that reason, we offer our support for the concept and look forward to continued efforts to reach consensus amendment language.

Sincerely,

Max Greene
Regulatory & Policy Director
Renewable Northwest