April 5, 2021

Chair Marsh, Vice Chair Brock Smith, Vice Chair Helm, and members of the committee,

Thank you for the opportunity to provide comments on HB 3180. For the record, my name is Brittany Andrus. I am an independent consultant performing energy industry research and analysis in the Pacific Northwest, having spent 17 years with the Bonneville Power Administration, followed by 8 years at the Oregon Public Utility Commission (PUC).

I am a passionate believer in the need to take real steps ***now*** to mitigate climate change, and this decade is absolutely critical. I am also an analyst, at my core. I always have viewed my job as providing analysis, not to favor a particular option. I provide information with full disclosure of sources, methods and assumptions, sometimes to my various managers' dismay - and I bring that same objectivity to my consulting work, regardless of who the client may be.

Accelerating the RPS path in Oregon is the most logical, effective and efficient way to move our electric sector toward more decarbonizing, more quickly. HB 3180 does this by setting additional higher renewable compliance obligations in this decade, and by encouraging the development of our deep bench of resource opportunities in Oregon, much of which is in the queue and ready to be displacing fossil fuel generation by 2023, 2024, 2025.

Cost impacts to ratepayers are always of concern, as they should be. I have worked with E3 and others to calculate impacts of an accelerated RPS, and cost differentials for in- vs out-of-state resources, taking into account transmission, differences in resource performance, and costs. The conclusion is that building some of these renewables at scale in Oregon absolutely can be done economically.

For example, according to the PUC 2019 statistics book, the average IOU residential customer uses 10,000 kWh per year, and pays about $1,200. I have heard second-hand that IOUs and other organizations have raised ratepayer cost concerns regarding an increased RPS in the 2020s, and renewables located in Oregon. However, I have not seen others offer ***specific numbers***. In my work with E3 and that of others,[1,2] in some scenarios the incremental cost of building in Oregon is negligible or even zero. We built a model using the utilities' integrated

[1] Charles Teplin, Rocky Mountain Institute; "Numerous, rigorous studies show decarbonization is possible – and not expensive:
• Greater-than-forecasted cost declines of wind, solar, storage, EVs have helped reduce expected costs…
• The next steps are no-regrets & low cost"
https://olis.leg.state.or.us/liz/2021R1/Downloads/CommitteeMeetingDocument/235095

[2] JP Batmale, Oregon Public Utility Commission; "RPS costs to ratepayers have not been an issue. Over the past decade, neither PGE nor PAC have approached the annual cost ceiling of the RPS's cost containment mechanism. The lower than expected cost of the RPS is entirely due to the rapidly declining costs of two eligible, renewable generation technologies: wind and solar,"
https://olis.oregonlegislature.gov/liz/2019I1/Downloads/CommitteeMeetingDocument/226232

resource planning numbers, assuming about half of incremental renewables are built in Oregon, and found that the estimated cost per residential customer for HB 3180 is ***well under*** a dollar per month during the 2020s, which is less than one percent of the total bill, and under $2 by the mid-2030s. And in doing so, the economic benefits to the people of this state are ***enormous***, as will be explained further by ECONorthwest. As you can imagine, there are a host of assumptions included in a model of rate impacts. I would very much welcome the opportunity to review these models with other stakeholders. It's worth noting that we have reached out to do so, with no response. We anxiously await those conversations. It is well past time to get to specific cost and ratepayer impact calculations.

In addition to urging you to act now, not just years into the future, I strongly urge this committee to keep clean energy legislation SIMPLE. Utilizing the existing RPS path is the best way for utilities to procure more renewable resources, many of which are cost-effective and ready to go, and recover their costs under the increased statutory requirement. HB 3180 adds RPS milestones in 2023 and 2024, providing the "need" to acquire, and those new resources ***will begin displacing fossil fuel generation the very first day they are online*** and generating electricity.

Portland General Electric is in the early stages of its next integrated resource plan to be issued in 2022, so an RPS change can easily be incorporated now; additionally, PGE could make a filing to increase quantities for procurement in its anticipated 2021 RFP given new legislation.

PacifiCorp will issue its IRP in September and while it may not be fully incorporating an updated RPS in that document, unlike PGE, it has ***thousands of MW of cost-effective resources*** lined up from its recent RFP, enabling it to contract for incremental renewables in the very near-term.

I'd like to emphasize the contrast I have observed between my years with public power, and those as a utility regulator. While visiting and working with dozens of public utilities throughout Washington and Oregon - coops, PUDs and municipalities - I saw that accountability is clear and direct: the customers are the owners, or members of, or constituents of, their electric provider. Processes and data are generally transparent, not confidential, and not "too complex" to be understood. The dialogue is relatively open, and direct community benefits achieved by way of a healthy, local electric utility is the goal.

In contrast, the investor-owned utilities have the resources and the shareholder-returns motivation to ensure that rulemakings and other proceedings result in them adding resources to the "rate base" on which shareholders earn a return. They use multiple complex, sometimes proprietary models to arrive at their planning and procurement results, making it difficult or impossible for many stakeholders to participate as more than an observer. They also naturally seek to ensure that any rules provide them with the maximum autonomy, which means fewer

hard targets, more discretion on implementation paths, and plenty of opportunity for obscuring or changing the goal posts.

Some people may ask, why is that bad? Isn't it good enough if the Oregon legislature sets a target sometime in the future, and allows the utilities to determine when and where and how decarbonizing will happen? Isn't it good enough that at some point in the future some renewables are built somewhere in the western United States? Shouldn't we just have faith that utilities will do the right thing? For three critical reasons, the answer is an ***absolute no, that is not good enough.***

First, any legislation should be kept simple and straightforward. Seemingly small changes to existing legislation in the past has resulted in resource-intensive rulemakings that remain open for multiple years. I have attached a list of regulatory rulemakings at the PUC involving the RPS and renewable resource procurement, in which utilities and stakeholders have spent untold hours wrangling over the necessary details of implementing a program and policy. Logic dictates that any new program and policy will be take even longer and be more resource-intensive. My estimate of a multi-year delay inherent in other decarbonization approaches is based on my experience in the front row viewing this dynamic, and the evidence is in the attached recent electric utility regulatory history.

I'll cite one specific example: SB 1547 in 2016 changed the 8% community renewable energy target to a requirement. A rulemaking was opened in 2018 to delineate the specific requirements, and define tracking and reporting processes. That rulemaking remains open, AR 622, and the last substantive activity was in 2019 when PUC staff provided a matrix explaining several complex issues contained in a seemingly simple change to a statute. This is in no way due to a shortage of brainpower or diligence at the PUC. It is a demonstration of the IOU-stakeholder dynamic in this state, and the challenge the PUC faces in managing it.

You can be assured that any policy giving broad discretion to the investor-owned utilities will be fraught with conflict as rules and filings are thrashed through in years of regulatory proceedings. We absolutely ***need to*** leverage the existing statutory and regulatory frameworks to make actual progress in the near term.

Second, our state *must* reap some of the economic benefits of decarbonizing, especially in rural areas, and especially as we recover from the COVID pandemic. I worked with ECONorthwest as they developed the economic development report on HB 3180, which you will hear about next (edit: The committee chair did not allow either myself or ECONorthwest to present at the public hearing). They are real, and substantial, and geographically diverse. And as I stated earlier, the rate impacts resulting from HB 3180 are small, which makes this investment in our state a truly winning proposition.

Third, the most simple reason: we all share the responsibility for taking real actions now. Although I'm here speaking as an analyst, I'm also a single mom to two daughters graduating college this year. I want us all to be able to say that our state met the challenge of ensuring ***real, achievable decarbonization actions throughout this decade***; that the ***Oregon Legislature sets the path for our electric industry*** to follow, with regular near-term milestones and development of renewables in our state, to be ***executed*** by the investor-owned utilities and ***overseen*** by the regulator. Utilities cannot be assured of cost recovery without a clear mandate to acquire renewable resources, and increasing the RPS in 2023, 2024 and throughout the 2020s to a level above a mere 27% is the best way to do that in this decade.

Finally, I urge you to *not* underestimate the complexity of this sector. Please do not underestimate challenges inherent in the PUC's regulation of a powerful monopoly while trying to maintain some measure of competition in the marketplace, and dealing with high staff turnover. Please do not think that programs such as community solar can be executed within just a year or two as may be assumed when developing legislation; just a few weeks ago we saw the very first community solar program project certified, five years after the legislative session.

Please do not underestimate the very real climate risks of leaving near-term targets blank.

HB 3180 provides for real near-term progress in decarbonizing the power grid beyond the status quo. It ensures renewables development will occur in virtually every area the state of Oregon, helping to revitalize our rural economies and build a resilient grid, at a minimal cost premium.

Thank you very much.

Brittany Andrus

AndrusPDX

Attachment (2 pgs): Oregon PUC Proceedings for Implementing RPS and Resource Procurement Legislation

Oregon PUC Proceedings for Implementing RPS and Resource Procurement Legislation

Docket	Proceeding	Opened	Status	Duration	Description
AR 600	Rulemaking Regarding Allowances for Diverse Ownership of Renewable Energy Resources	5/20/2016	Complete Order No. 18-324 8/30/2018	27 months	Opened to implement SB 1547[1] provisions regarding competition in resource development; rules were based on then-existing guidelines, as modified during the rulemaking (Docket No. 1182 Competitive Bidding Guidelines).
AR 610	Rulemaking Regarding the Incremental Cost of Renewable Portfolio Standard Compliance	4/5/2017	Open	48+ months	Opened as a broad RPS rulemaking; in April 2018 the scope was limited to incremental cost calculations: https://apps.puc.state.or.us/orders/2018ords/18-128.pdf Most recent substantive[2] activity: Staff workshop 6/9/2020
AR 616	Rulemaking Regarding Renewable Portfolio Standard Planning Process and Reports	4/10/2018	Open	36+ months	Opened when AR 610 scope was narrowed. Most recent substantive activity: Comments received 10/22/2020
AR 617	Rulemaking to Address Renewable Energy Certificate (REC) Issues in Renewable Portfolio Standard (RPS)	4/10/2018	Nearly complete	36 months	Rulemaking opened when AR 610 scope was narrowed. Rules sent to Secretary of State 3/31/2021.
AR 622	Small Scale Renewable Energy Projects Rulemaking	8/28/2018	Open	31 months	Requested by Staff: "In order to clearly define what is meant by community-based, renewable energy projects, and to determine how the mandate in ORS 469A.210 will both be implemented and evaluated, Staff recommends that the Commission open this rulemaking." Order No. 18-322: https://apps.puc.state.or.us/orders/2018ords/18-322.pdf Staff matrix issued 2/25/2019 illustrates complexities with implementing seemingly minimal changes to an electric utility-related statute: https://edocs.puc.state.or.us/efdocs/HAH/ar622hah14357.pdf Last substantive activity: 2/25/2019

[1] SB 1547 passed in 2016 increased RPS to 50% by 2040, changed REC treatment, disallowed recovery of coal generation costs beginning 2030 (exception for PGE Colstrip by 2035), established community solar program with resource value of solar (RVOS).

[2] Non-substantive activity includes service list changes and other routine administrative actions.

Oregon PUC Proceedings for Implementing RPS and Resource Procurement Legislation

Docket	Proceeding	Opened	Status	Duration	Description
AR 629	Rulemaking to Address Dispute Resolution for PURPA Contracts[3]	7/30/2019	Complete Order No. 21-076 3/9/2021	19 months	Rulemaking led by Administrative Hearings Division.
AR 631	Rulemaking to Address Procedures, Terms, and Conditions Associated with Qualifying Facilities (QF) Standard Contracts	7/30/2019	Open	20+ months	Rulemaking is broad in scope; a complex and lengthy proceeding was anticipated. Most recent substantive activity: Comments filed 3/30/2021
AR 630	Rulemaking to Address Templates for Standard Avoided Cost Inputs and Outputs	7/30/2019	Open	20+ months	No activity.
AR 613	Rules Regarding Community Solar Projects	7/28/2016	Rules adopted 6/29/2017	11 months for rules	Example of a new program that proceeded through rulemaking smoothly, then encountered obstacles during implementation (e.g., utility interconnection practices, procurement processes) that significantly delayed the program.
UM 1930	Community Solar Program Implementation	1/25/2018	Implementation docket open	54 months total to implement	First project certified 2/11/2021 https://apps.puc.state.or.us/orders/2021ords/21-042.pdf
UM 1716, UM 1910-12	Investigation to Determine the Resource Value of Solar[4]	1/27/2015	Complete	48 months	RVOS elements ("straw proposal") adopted 9/15/2017; first utility RVOS values adopted 1/22/2019

[3] Order No. 19-254, Docket No. UM 2000 adopted and modified Staff recommendations:
"Staff recommends the Commission approve the scope and process of the investigation into PURPA implementation in Oregon contained in Staff's white paper included as Attachment A. Staff recommends that the Commission adopt Staff's proposal through the following actions:
• Open a rulemaking to address templates for standard avoided cost inputs and outputs;
• Open a rulemaking to address procedures, terms and conditions associated with QF standard contracts;
• Open a rulemaking led by the Administrative Hearings Division to address dispute resolution for PURPA contracts;
• Open a separate docket to investigate the treatment of network upgrade costs for QFs;
• Open a separate docket to investigate the treatment of QFs in the utility IRP process;
• Develop and release an RFP to help expedite the avoided cost methodology investigation by providing research and recommend improvements to Oregon's QF avoided cost methodology and process. Staff recommends all issues not listed above continue to be addressed in Docket No. UM 2000."

[4] Opened prior to SB 1547; SB 1547 attached RVOS rate to the Community Solar Program.