



December 3, 2021

VIA ELECTRONIC FILING
Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-3398

RE: UM 2198— Oregon Coast Energy Alliance Network (OCEAN)
Oregon Solar + Storage Industries Association (OSSIA) comments on PacifiCorp's Oregon
Distribution System Plan Report – Part 1

Oregon Coast Energy Alliance Network and Oregon Solar + Storage Industries Association appreciate this opportunity to comment on the PacifiCorp's DSP Report Part 1 (Report). As noted in our comments expressing our enthusiastic support for the adopted Guidelines for Distribution Systems Planning (Guidelines) developed by UM2005, we were particularly pleased with the extensive consideration given by those Guidelines to the community engagement process, enhanced transparency through rate-payer access to data and decision making and acknowledgement of the need for planning to integrate the dramatic and rapidly evolving trajectories of our climates, technologies and projected future grid conditions. It is with this lens that we offer this summary and attached comments on PacifiCorp's Report submitted in October of this year in response to the OPUC adopted DSP Guidelines.

Community Engagement Plan

We note that PacifiCorp has already taken strides toward implementing the strategy of "Reinvention the Future Through Collaboration" as evidenced through the series of plan development workshops which provided an open forum for stakeholders to better understand PacifiCorp's existing and planned systems, processes and protocols. We further note that, during those workshops, staff was made available and appeared receptive to stakeholder comments and suggestions for future improvement. We view this as a good start upon a path of collaborative and thoughtful overhaul of processes and systems critical to the wellbeing of ratepayers and communities. We continue to observe, however, that stakeholder participation in these meetings remains limited to those of us regularly engaged in energy regulatory proceedings which is, clearly, a very narrow set of perspectives that is not fully representative of those who will be most deeply impacted by distributions system planning and management.

As such, we commend the development of a Community Input Group (CIG) and acknowledge the efforts made to identify the makeup of a representative group of community representatives. Based on the critical role of our distribution systems in surviving and recovering from catastrophic and other climate induced events, however, we encourage the addition of a representative of the Emergency Management community on the CIG.



OSSIA AND OCEAN echo the comments of Verde, Coalition of Communities of Color (CCC) and Institute for Market Transformation (IMT) that DSPs should be human-centered.

Specifically, equity indicators should be included in any HCA in order to ensure that grid modernization is prioritized in communities that have been left behind. In addition, we support Verde, CCC and IMT's comments to include using a community benefits screening as opposed to a traditional cost-effectiveness tool, as cost-effectiveness alone will not provide a full understanding of community benefits.

We would like clarification in subsequent plan reports as to the mechanism for infusing diverse, equitable, informed engagement into all aspects of plan development, a strategy that continues to swim upstream into the problem statement and solution identifying phases including:

- Substation Forecasting
- Risk Evaluation
- Opportunity Identification
- Solution set portfolio development

Rate payers, utility staff and investors alike will benefit from the expanded input of perspectives, knowledge and priorities available through collaboration with the communities served, trade allies and other non-utility stakeholders.

We encourage PacifiCorp to supplement its community engagement plan with targeted, "in-situ" engagement designed to meet rate payers where they regularly congregate and feel comfortable. This may be accomplished through one-on-one information and listening sessions with service organizations, tribal councils, local commission meetings as well as planning for a presence at local community cultural events such as festivals, parades and other traditional celebrations representative of the community served.

Baseline Data and System Assessment & Long-term Distribution System Plan

The success of our transition to an equitable, clean, affordable and secure western energy grid will hinge upon our collaborative, thoughtful integration of the best resources and technology to meet our individual and collective energy needs. Accordingly, any forecasting and portfolio refinement efforts should be amplified through collaborations with the work of our National Labs and industry trade allies whom are actively engaged in applying best science to available technology based on transparent, third party vetted data sets and methodologies. Regularly scheduled, regenerative refinements for updating the portfolio of newly available advanced clean energy technologies must be imbedded into the foundational cycles for management of the distribution system. We urge that all subsequently developed plans will incorporate this best practice for equitable, transparent and data driven grid planning.



It is a frequently stated or otherwise assumed that local generation is generally not the lowest cost, lowest risk solution. This misrepresentation is rooted in the outcomes of evaluation tools and planning forecasts currently used by our investor owned utilities to do not consider 1) the savings to rate payers of deferring or negating new transmission investments required to import larger quantities, 2) the loss of electricity through our transmission along import lines (as much as 1/3rd of our electricity is wasted through potentially wildfire inducing heat losses along transmission corridors between resources located out of state and the electrically isolated south coast of our state), 3) the reduced risk of wildfire through reduced reliance on transmission of imported electricity (direct business and property loss as well as loss of life), and 4) the reduced exposure to service interruptions due to transmission failure or preventative safety shut offs (which result in loss of commerce, education, safety and healthcare services).

Fortunately, other jurisdictions, our national labs and trade allies have been successfully developing modern, robust and transparent assessment and planning tools capable incorporating these fiscal and grid resilient implications based on a more comprehensive and accurate evaluation of costs and values of our contemplated energy investments. For example, we refer again to a recent study funded by Vote Solar and others with the use of a sophisticated grid modeling tool, called WIS:dom-P which is an acronym for “weather-informed energy systems for design, operations and markets planning”.

The study examined and quantified the opportunities to reduce electric system costs created by smart development and use of distributed generation as well as modifications to customer demand these technologies enable. Cost reduction opportunities include transmission and distribution infrastructure deferrals, reduced utility-scale capacity and generation, peak load reduction and increased customer load factors. The cumulative system-wide savings across the United States through 2050 ranged from \$301 billion to \$473 billion depending on societal decarbonization goals adopted through 2050. WIS:dom-P was developed by Vibrant Clean Energy LLC. and is but one example of a readily available tool that “uses more and better data, analyses the total costs of the energy we put on the grid and accurately values local resource and storage to help regulators make informed decisions about the right energy mix...” PUC staff should have the resources regularly available to provide independent assessment of grid planning and investment done on behalf of Oregon’s ratepayers. This assessment and planning tool should be nimble, articulate, affordable, updated and able to reflect the full costs and values of individual and community level energy security and climate adapted grids.

Distribution system plans and forecasts will need to take into account localized exposure to climate vulnerabilities and the weaknesses of existing infrastructure. We envision that the community engagement processes outlined in Part 1 will improve understanding and reflection of local community risks, culture and priorities, particularly if that engagement occurs early in the risk assessment, forecasting and solution set identification stages of regular planning.



In order to compliment deeper engagement with community members, we also urge that the GIS based mapping tools provided as steps toward Hosting Capacity Analysis will be rapidly refined or transitioned toward frameworks capable of supporting regular data sharing between grid assessment and planning platforms used by utilities and those employed by our agencies and accessible to the public. These include Oregon Department of Energy GIS based Oregon Renewable Energy Sighting Assessment tool slated for public release in mid-2022, catastrophe response planning GIS platforms used by Department of Defense and Oregon Office of Emergency Management, and Oregon's Department of State Land Conservation and Development OroWind Mapper. The collaborative inputs of community voices and accessible, transparent, and timely data sets will result in greatly enhanced capabilities in planning for and responding to community vulnerabilities based on common metrics, comprehensive inputs and the best available information. This sharing will also result in savings of time and resources for rate and tax payers as a means of expediting the triage of priorities for collaborative funding and leveraging of IOU, agency and private resources.

Hosting Capacity Analysis

We appreciate the efforts invested by PacifiCorp in this first information sharing step toward Hosting Capacity Analysis. We strongly urge the Commission and staff to maintain high levels of expectation for the utilities to rapidly transition to fully accessible Hosting Capacity Analysis. While we recognize the weight of this lift, we view it as both essential and reasonable. In the interests of efficacy, efficiency and affordability, we encourage consideration of standards successfully adopted in other jurisdictions, such as California, and those outlined in Interstate Renewable Energy Council's recently published "Key Decisions For Hosting Capacity Analysis" (attached).

Part 2

In the spirit of collaborative support for a rapid and just transition, we offer the following suggestions for utility staff as they continue their work in development of Part 2 of the Distribution System Planning Report.

Forecasting of Load Growth, DER Adoption and EV Adoption

As expressed during the PacifiCorp Plan development workshops, we continue to hold concerns that Legacy based forecasting, while of some value, will result in upgrade planning that only strengthens the inequitable access and level of services between communities with traditionally higher levels of DER adoptions due to income levels. Forecasting should be informed by new and emergent policy and market supports as well as equitable remote system performance tracking and management capable of providing a fair and equitable access for all rate payers to systems capable of supporting DERs.

Planning for the evolution of the distribution system needs to take into account anticipated changes in the built environment, including the projected electrification of transportation. The



importance of an accessible, robust electric distribution system will only grow as electricity becomes the fueling system for a much larger portion of the economy. For this reason we look forward to the inclusion of Transportation Electrification in part 2 of the Plan.

However, we also urge the commission and utility planners to retain a rigorous diligence in perceiving, understanding, and integrating other rapidly emergent technologies. For example, while not part of the traditional solution set, technologies such as electrolysis for Green Hydrogen production are already being integrated into global grid systems at scales ranging from residential to utility scale and are projected to play a significant role in a decarbonized Western energy grid and transportation system. This technology represents both a new load to plan for as well as a new tool for greatly enhancing grid flexibility by providing both energy storage and clean transportation values. When paired with strategically located renewables such as wind and solar, the integration of electrolysis into our distribution systems will greatly impact the synergistic value of holistic solution sets that should be reflected in portfolio development. As our National Labs and industry allies continue to rise to the challenges of a just, clean energy transition through the development, assessment, and manufacturing of solutions, so too should our planning mechanisms be designed for regular, systemic access to refreshed portfolios of both readily available and pilot scale clean energy technologies.

Grid Needs Identification

This potential for systemic underserving of marginalized communities is enhanced in areas where SCADA has not been deployed. As such, we assert that equitable grid needs identification be served by a SCADA infused system and that an aggressive strategy for universal SCADA deployment be prioritized.

Grid resilience is an essential element in providing Safe and Reliable electricity. Therefore, distribution and feeder level grid resilience must be, at a minimum, designed to continue to support the energy dependent services of Tribal, community and public facilities necessary for shelter, health and safety even when some sections of the grid are either forced out of service or deliberately shut off to prevent worse catastrophes. We urge staff to establish and retain a very high standard in regard to this life dependent aspect of Distribution System management.

Solution Identification

“Robust engagement with communities, stakeholders and regulators to ensure access to new datasets and technologies...” is a stated core principle of the plan. The CIG members presented in the plan represent end users of the critical services that our distribution systems provide. It cannot be expected that community leaders will bring with them a fluency in energy systems, advanced energy technologies or progressive solutions sets. It was apparent through the UM 2005 process that Oregon’s stakeholders and utility staff would greatly benefit from access to technology experts proficient in advanced and emerging technology solutions successfully employed elsewhere. With this in mind, we strongly urge that CIG engagement include the



services of a technology advocate to better facilitate the integration of community priorities with the DSP core principle of “technology adoption at a pace customers can afford and the company can perform.” This may be the intent of the reference to “expert advisors” that will be working with Regional Business Managers (RBM). However we believe that the CIG should have firsthand access to the full suite of affordable, modern technologies and management strategies available. The RBM should not be viewed as a representative of the communities being served, though we hope that they will, over time, become well informed advocates of community values and priorities through enhanced exposure to CIG and other members of the rate-paying public.

Near Term Action Plan

With respect to providing fully accessible hosting capacity analysis, PacifiCorp has suggested that complexities or expenses of tens of millions of dollars for implementation might render this transition overly burdensome to ratepayers. We offer the observation that the estimates for a full deployment based on California requirements and implementation in that vastly more expansive and complex market appear to render that estimate to be off by an order of magnitude.

Given the urgency of our needs to update our grid in support of truly safe and reliable power and the critical role that transparent and comprehensive data sets play in that collaborative transition, we hereby request that staff confer with counterparts at the California PUC regarding the efficacy and affordability of implementing and maintaining fully transparent and accessible modern Hosting Capacity Analysis. We also suggest that staff consider a workshop in UM2005 in the first quarters of 2022 where stakeholders, staff and commissioners could benefit from overviews and findings of rapidly emergent and readily available DSP, TSP and HCA standards and tools adopted by other jurisdictions facing similar statutory and code objectives.

To conclude our comments, we want to reiterate our shared desire with staff that planning reports developed under the newly adopted Guidelines will enable the commission to have a better understanding of utility distribution planning processes and the need for future investments. This understanding will enable Oregon to build a vibrant electrified economy that is resilient, equitable and supports a livable planet for future generations.

We encourage the Commission to uphold the highest standards and expectations for a rapid transition to DSP best practices as outlined in the Guidelines and stand ready to collaborate with staff, utilities, and other stakeholders throughout this process.

Respectful submitted,

A handwritten signature in black ink that reads "Angela Crowley Koch".

Angela Crowley Koch
Executive Director
Oregon Solar Storage Industry Association

A handwritten signature in black ink that reads "Shannon Souza, PE".

Shannon Souza, PE
Executive Director
Oregon Coast Energy Alliance Network