



## **Comments of the NW Energy Coalition**

### **PacifiCorp – Distribution System Plan – Part 2 Docket No. UM 2198**

The NW Energy Coalition (NVEC) is very pleased to submit these comments on the PacifiCorp (d/b/a Pacific Power) Distribution System Plan, Part 2, filed on August 15, 2022.

NVEC appreciates the extended efforts by PacifiCorp, stakeholders, and the Oregon Public Utility Commission have brought us to the final stage of the first full cycle of a new approach to distribution system planning (DSP).

We view the Company's combined DSP filing as a major step forward in achieving a more balanced and in-depth approach to distribution system planning and operation that will bring substantial benefits to customers and help achieve the State of Oregon's clean energy and climate goals.

In these comments we summarize some observations on the Part 2 filing and the potential direction going forward.

#### **Community Engagement**

NVEC appreciates the amount of effort and thought that PacifiCorp has incorporated into its community engagement plan. NVEC is aware that community engagement is nascent work for utilities and can be challenging to get right. We recognize all the work that PacifiCorp has accomplished in the Distribution System Planning process so far and encourage PacifiCorp to continue and advance its engagement and collaboration with its communities.

NVEC would like to point out and discuss some critical points on community engagement included in PacifiCorp's plan.

#### ***Transitional Study Areas and Grid Needs***

NVEC applauds PacifiCorp for its robust engagement with the Klamath Falls community. NVEC encourages collaboration at this level and believes this is a step in the right direction that we would like to see utilities engage in throughout the DSP process, and to expand the efforts for co-developed projects between PacifiCorp and its communities within transitional study areas.

PacifiCorp states that transitional study areas are identified based on four criteria:

- Distributed generation (DG) capacity readiness (SCADA availability, DG protection measures, daytime minimum load)
- Study Cycle timing
- Historical distributed energy resource (DER) project activity
- Area demographics and characteristics (suburban/rural)

NWEC believes that these are good starting criteria. However, we encourage PacifiCorp to include criteria that specifically target and prioritize historically underinvested-in communities and other communities that are disproportionately negatively impacted by the current energy system.

These communities may not always be readily identified by the existing selection criteria. For example, historically underinvested communities may not be identified as a priority since many of these communities do not have a long history of DER activity. Going forward, the DSP process should include ways to identify these communities and prioritize their needs through co-developed solutions for an equitable, safer, and reliable energy future for which they would not otherwise have access. This would only be possible if the inclusion of these communities is prioritized in the project identification and determination of selection criteria phases.

NWEC is also concerned about communities that may not necessarily be “DG ready,” for example, communities where PacifiCorp does not have SCADA systems in place. We would like to understand PacifiCorp’s process for identifying these communities through the DSP process and understand how benefits may be brought to these communities so that they are not excluded or deprioritized due to PacifiCorp’s current technological constraints.

### ***Community Input Group***

NWEC agrees that it would be a good idea to have one community input group (CIG) to assist PacifiCorp across multiple planning dockets. NWEC believes that this would relieve community based organization (CBO) resource constraints and would allow for more streamlined community input across several dockets. NWEC would like to stress the importance of this group and the value of the input that it will bring to PacifiCorp’s processes if PacifiCorp prioritizes it.

We support PacifiCorp in this endeavor and we urge PacifiCorp to stand up this group as soon as possible in a thorough and meaningful manner, so that the CIG is involved in PacifiCorp’s multiple planning activities sooner so that they still a full opportunity to shape the work and influence decisions in these dockets, as opposed to reacting to pre-determined actions.

We encourage PacifiCorp to commit to outcomes from its community engagement, to ensure that participation is meaningful and worthwhile for the public. This should include a concerted effort to listen to feedback from stakeholders in its processes, and to incorporate that feedback by changing its planned actions to meet community needs and priorities. Individuals and

organizations will be asked to dedicate a significant amount of time and resources to participating in PacifiCorp’s advisory group meetings and public meetings. This investment should be rewarded with tangible results in the form of changes to PacifiCorp’s plans based on their input. This will require PacifiCorp to fundamentally alter the way it conducts its planning efforts. This evolution will take time.

### ***Customer Survey***

NWEC thanks PacifiCorp for including its customer survey results within its DSP. NWEC believes there is a lot of valuable information from this survey and would like the Company to provide more detail on what it plans to do with this information. PacifiCorp highlights some key findings, including that customers are most concerned about economic impacts, affordability and climate change as it relates to resilience and the need to transition to a cleaner energy system. This information is not surprising; in fact, it only reaffirms the need for Oregon utilities to transition to a cleaner energy future in a way that provides shared benefits and impacts among all energy system users – a critical element of a just transition.

That said, NWEC would also like to understand how PacifiCorp plans to respond to its customers concerns as have been identified through this survey. We understand that this will take thoughtful and meticulous review, and we would like to ensure that these survey results and uncovered concerns are appropriately addressed, not only with words but with specific actions and projects.

As mentioned in PacifiCorp’s DSP, there is room for overlap in the DSP process with other planning and procurement processes such as the CEP, IRP, WPP, and RFP. We understand that, in accordance with Commission Staff guidance in the CEP process, utilities will be undertaking Community Based Renewable Energy (CBRE) studies to identify opportunities and acquisition targets. We encourage PacifiCorp to seriously and meticulously conduct this study and collaborate with their communities to identify potential CBRE projects. This process should not be overlooked; instead, it must be prioritized as it addresses many of PacifiCorp’s customer concerns, including economic impacts and benefits, resilience, and the transition to a cleaner energy future. NWEC encourages the prioritization of this work across the several planning dockets in a streamlined and systematic way.

### ***Further Action***

In sum, NWEC believes that PacifiCorp is taking steps in the right direction in its Distribution System Planning process. However, we encourage PacifiCorp to ramp up its community engagement and equity considerations in this docket while streamlining this work with other appropriate dockets. We continue to push PacifiCorp to engage with its stakeholders in co-developing projects from the solution identification phase through the project implementation phase. NWEC appreciates PacifiCorp’s work thus far in this docket and is always available to collaborate with PacifiCorp regarding community engagement and equity considerations.

## **Load Forecast, Grid Needs and Solutions**

Concerning the many in-depth technical aspects of the DSP Part 2 filing, NWECC offers the following comments.

### ***Load Forecast***

On load forecasting, we recognize the intricate effort required for standard distribution load forecasting is now being enhanced with more data-intensive analysis in response to new demand drivers that are creating an even more dynamic load environment going forward. For the first time in decades, in response to changes in technology, policy and markets, major new load is poised to come on the system from transportation and building electrification.

In our view, the time, effort and cost involved in staying ahead of these developments is essential to assuring the full availability of the distribution system to provide increased reliability and resilience, new forms of customer participation, improved operational flexibility, reduced stress on distribution system components, and overall customer benefits. While this is sometimes characterized as “moving to a 2-way grid,” as we have already learned in the DSP effort, export of customer-generated energy to the distribution system is just one part of the changes in daily and seasonal load shape and associated customer side resource capabilities.

In addition to the time component, we are learning the importance of spatially explicit load forecasting. The PacifiCorp DSP filing is full of useful new insights in this regard, for example, the mapping of electric vehicle (EV) registrations to feeders in the system (Figure 12) can help identify charging infrastructure needs and opportunities for managed charging.

### ***Grid Needs and Solutions***

NWECC greatly appreciates the very thorough and detailed step-by-step discussion of grid needs and solutions in the DSP Part 2 report. In particular, the Crystal Springs (Klamath Falls) case study provides many insights on the elements required for identifying grid needs in an increasingly dynamic context and expanding the range of possibilities that can be considered in selecting the best available solutions.

We have two main observations about this part of the report. First, it highlights the much wider range of solution sets available; and second, it illustrates the value of effective community engagement in setting a clear direction that is responsive to community needs and builds local support for solutions that require active customer involvement.

The Klamath study project also produced numerous specific findings. For example, demand changes from specific drivers like transportation electrification are not generic. There is a significant difference in the effects that light/medium duty EVs and heavy duty EVs have, and for individual versus fleet managed EVs.

Likewise, load changes from building usage vary considerably from single and small multi-family residences (effectively “nonpoint sources”) to more concentrated load effects from large multi-family buildings and major commercial and industrial loads such as office campuses, data centers or food processing. In many cases, load growth on specific feeders or areas may have significant components of several of these categories.

While these factors are well known to distribution system planners, the ability of customers to provide load management adds new dimensions. For example, as we learned from this Klamath study process, farming and ranching can provide opportunities for demand response from irrigation pumping as well as distributed generation and storage from solar PV and batteries. It is only through community engagement that the more fine-grained possibilities can be worked out effectively.

Furthermore, as technology evolves and costs decline, there will be an ongoing need to reanalyze the potential for non-wires solutions. For example, even in the time since the Commission began Docket No. UM 2005, the availability and affordability of battery storage has dramatically increased, and Oregon has now adopted a mandatory standard for CTA-2045 enabled controls in new electric water heaters, providing vendor-agnostic grid management where customers agree to do so.

An additional lesson we learned from the Klamath study is that customer side resources are varied and have overlapping potential. So in assessing whether a non-wires solution is superior to a more traditional wires approach, there is an increasing sense that single-measure solutions will generally fall short of the real potential of combining multiple measures. For example, solar with storage alongside demand response via HVAC and EV load management may be a good choice to address anticipated needs on a given feeder.

However, multiple-measure solutions also require additional data and more analysis. We think that for many projects in the medium range (for example, from \$300,000 to \$3 million), it may be important to build in a standard element of community engagement. This might not be as in-depth as the Crystal Springs process, but could become part of the “standard toolkit” that will enable better management of distribution solutions.

Next, there is clearly a tradeoff between the timeline for distribution actions and the range of available options. With more time available to address needs, measures can be included that need longer development time but have strong benefits, such as advanced energy efficiency. This puts even more of a premium on refining load forecasting at the local level down to feeders and circuits.

Finally, we see high value in direct collaboration with customers and community based organizations. Groups with subject matter expertise, like NWECC and the Energy Trust of Oregon, can only provide part of what is needed to assess and prioritize distribution needs and solutions. The Crystal Springs review process demonstrates the necessity of effective community engagement to identify and implement the best solution sets.

### ***Next Steps***

First, it will be important to address the overlap of reliability and resilience in ongoing DSP work, particularly integration of these efforts with the Wildfire Protection Plan.

Second, in addition to customer-sited resources, community solar and substation (“front of the meter”) resources, particularly battery storage, and microgrids will likely play a prominent role in DSP work going forward.

Third, it may be time to rethink cost-effectiveness metrics for DSP purposes. It was notable that several of the solutions reviewed for Crystal Springs had very large differences between the utility cost test (UCT) vs. the participant cost test (PCT) and total resource cost test (TRC). And we see from this example how explicit valuation of emissions reduction can dramatically increase the value of customer-side clean energy resources.

NWEC also notes that one key finding of the Klamath review is that non-wires approaches Xn offer more overall system value than traditional wires solutions (including reduction of marginal emissions, achieving state policy goals, and so on). That result has both cost and non-cost aspects that will take some effort to incorporate appropriately into DSP assessments. These blended solutions offer significant benefits to both the utility and to customers.

Finally, we strongly encourage PacifiCorp to include an in-depth community engagement process in an urban setting – for example, Medford and Portland -- as part of its next steps. The much higher system density and differences in solar availability and other factors will likely result in different potential solution mixes and outcomes.

Dated: October 12, 2022

/s/

Fred Heutte  
Senior Policy Associate, NWEC

Marli Klass  
Senior Policy Associate, NWEC

Jeff Bissonnette  
Consultant, NWEC