





December 3, 2021 [via electronic mail]

# Re: UM 2005, and UM 2197/UM 2198 - Portland General Electric and Pacific Power Distribution System Planning Proposals

Portland General Electric

Attn: Distribution System Planning Team

Pacific Power

Attn: Distribution System Planning Team

Public Utility Commission of Oregon

Attn: Filing Center

# <u>Introduction</u>

Coalition of Communities of Color (CCC), Verde, and the Institute for Market Transformation (IMT) appreciate the opportunity to engage in the groundbreaking proceedings around distribution system planning (DSP) in Oregon, and in particular, to provide comments on the initial draft plans from Portland General Electric (PGE) and Pacific Power (PAC). As organizations who advocate for racial, economic, and environmental justice, we work to improve health and social outcomes and help build wealth for the communities we serve - low-income, Indigneous, Black, and Brown communities. We see the distribution system planning process as a critical opportunity to ensure the grid infrastructure responds to our communities needs and does not perpetuate the historical and present imbalances of benefits and burdens in our energy system. We want to acknowledge the tremendous amount of work from staff at both utilities and the substantial contributions from other stakeholders that informed these plans. This is a landmark step in utility planning in Oregon, and one that should be honored, especially for its intended focus on human-centered approaches. That said, we feel the plans could do more to lay out critical details regarding the progressive approaches that will be taken to ensure a more equitable distribution system and to realize the Commission's intent to develop a transparent, robust, and holistic regulatory planning process.<sup>1</sup> We acknowledge that some of this will become more clear in the Phase Two filings, and it is with that in mind that the undersigned organizations offer these comments.

<sup>&</sup>lt;sup>1</sup> UM 2005, Order No. 19-104, March 22, 2019: https://apps.puc.state.or.us/orders/2019ords/19-104.pdf

Throughout the greater DSP proceeding, CCC, Verde, and IMT have advocated for a "human-centered" approach to this work - one that begins with community need and the principles of targeted universalism<sup>2</sup> and combines it with grid/technical capabilities that directly improve people's lives. The purpose of the grid and the state-sanctioned, regulated monopolies that manage the grid are to serve people; therefore, utility investments should be designed to benefit people.

We are heartened that a human-centered approach to DSP was internalized and integrated into the Oregon Public Utility Commission (PUC) Staff's (Staff) comments and in both the PGE and Pacific Power undertakings.<sup>3</sup> But the continued development and implementation of the DSPs will be the true test of how committed the PUC, PGE, and PAC are to a human-centered framework. One notable exception to this is the experience of the frontline community-based organizations in this process, such as CCC, who felt negative impacts from the lack of understanding for a human-centered DSP expressed by some stakeholders. We believe there is room for growth, however, and CCC, Verde, and IMT endeavor to support PGE, Pacific Power, and the PUC through these comments and through future DSP plan development. We seek to ensure community priorities are elevated and we also intend to hold both utilities accountable to their commitments and their obligations to the PUC quidelines for a human-centered approach to DSP.<sup>4</sup>

Verde and IMT submitted pre-filing comments with regard to PGE's process and possible filing results. We made recommendations with regard to 1) layering hosting capacity analysis (HCA) mapping with equity indicators, 2) replacing cost-effectiveness tests for grid improvements with a community benefits test, and 3) investing in non-wires solutions (NWS) that directly reduce energy burden and improve housing quality and resiliency. The comments presented here will primarily evaluate the Phase 1 filings for both PGE and Pacific Power through a lens of the Verde/IMT pre-filing comments which also reflect the perspectives of CCC. We will begin by sharing the values framework that informs a human-centered DSP approach, then share the main principles of the pre-filing comments, and finally, evaluate the PGE and Pacific Power plans with regard to how well they carry out what we view to be the optimal approach to a just and equitable distribution system and its modernization.

<sup>&</sup>lt;sup>2</sup> https://belonging.berkeley.edu/targeted-universalism

<sup>3</sup> CITE

<sup>&</sup>lt;sup>4</sup> Order No. 20-485: DISPOSITION: STAFF'S RECOMMENDATION ADOPTED WITH MODIFICATION, 12/23/2020. "These guidelines for community engagement are intended to foster a developing process that supports a human-centered approach to DSP."

#### Framework: A Human-Centered Approach to Distribution System Planning

A human-centered approach to DSP is rooted in Verde's mission to build environmental wealth for communities through organizing, advocacy, and social enterprise. It is also aligned with CCC's mission to improve outcomes for communities of color by addressing the socioeconomic disparities, institutional racism, and inequities of services experienced by our communities. It is a path to increase investments in under-resourced and marginalized communities through needed grid upgrades that improve resilient infrastructure, reduce energy burden, and allow for more community-based generation. These are examples of environmental wealth building within our future energy system. Traditionally, frontline communities are more likely to live directly adjacent to substations but less likely to benefit from net-metering or other distributed energy resources.<sup>5</sup>

A classic example of environmental injustice in the distribution system occurred in Cully, the Portland neighborhood where Verde does its work. Pacific Power reactivated the Kennedy Substation to account for increased load, mostly driven by housing redevelopment that displaced lower-income community members and replaced many older homes with much larger, less-efficient structures. Older homes on this feeder are also more likely to need weatherization and drive higher energy bills with poor structural quality and smaller floor area ratio. The substation itself is located near more lower- and middle-income families living in aging housing as opposed to the wealthier energy users on the feeder. The adjacent community members reacted negatively to reactivation and the noise, light, and health impacts were of great concern. They also felt that their needs were not sufficiently considered and did not receive any notice from Pacific Power of the substation repowering. While the new guidelines for distribution planning address the baseline requirement for utilities to "conduct focused community engagement for planned distribution projects", 6 there is opportunity to go further to explore distribution solutions that are community-based and community-benefiting.

An approach to DSP that put the community members impacted by the Kennedy Substation first and focused on load reduction and flexibility may have helped to avoid the problems associated with reactivation. NWS investments can also help reduce building energy load to alleviate capacity constraints and improve the safety and comfort of housing. Other distributed energy resources (DERs) – including demand response and storage technologies – can support local balancing for

<sup>&</sup>lt;sup>5</sup>https://www.wbur.org/cognoscenti/2019/09/18/environmental-justice-boston-climate-resiliency-roseann-bongiovanni-john-walkeu

<sup>&</sup>lt;sup>6</sup> Order No. 20-485: DISPOSITION: STAFF'S RECOMMENDATION ADOPTED WITH MODIFICATION, 12/23/2020.

voltage, reliability, and other grid concerns.<sup>7</sup> These are the types of solutions that are essential to a human-centered distribution system plan. Below we outline three ways that these principles can be executed easily and effectively in practice. All strategies contrast a traditional, techno-centric approach to distribution upgrades that focuses on the grid alone with a more human-centric approach that integrates and leads with community benefit.

#### Pre-Filing Recommendations for a Just and Equitable Approach to Distribution System Planning

Adding Equity Indicators to Hosting Capacity Analysis: HCA is a useful tool for understanding the capabilities of a particular feeder and can help developers to understand ideal locations for projects. But this approach is inherently technical in nature and lacks a sense of the community need or the experience of those living and using energy on the feeder. In addition to hosting capacity itself, a more human-centered map must communicate who lives on each feeder, how people are living their lives, and the benefits or burdens associated with the energy infrastructure. Factors such as these are the kinds of community data (publicly available and anonymous through the Census and other sources) that can be mapped to create a more integrated picture:

- Race/ethnicity demographics
- Total cost burden
- Energy/utility cost burden
- Housing age or other quality-related data
- Eviction rates
- Health outcomes data
- Natural disaster risk<sup>8</sup>

By valuing both grid- and community-level data, the utilities, developers, and stakeholders can prioritize feeder-level investment in the most underinvested buildings and communities and the places where it will have the biggest impact both on the grid and community stability, resiliency, and health. Ultimately, providing a more nuanced and holistic approach to data mapping can merge two known data sets – one technical and grid-centered, and one human-centered – to help create a better understanding of what is not known. Understanding how these two data sets interact can drive solutions grounded in targeted universalism.

<sup>&</sup>lt;sup>2</sup>https://www.hawaiianelectric.com/documents/clean\_energy\_hawaii/integrated\_grid\_planning/stakeholder\_engagement/working\_groups/distribution\_planning/20200602\_dpwg\_non\_wires\_opportunity\_evaluation\_methodology.pdf

<sup>&</sup>lt;sup>8</sup> Which can be obtained from local, state, or federal resilience mapping, such as the City of Portland Flood Plain Resilience Project (<a href="https://www.portland.gov/bps/environ-planning/floodplain-project/services">https://www.portland.gov/bps/environ-planning/floodplain-project/services</a>) or the Oregon Resilience Plan

Utilize a Community-Benefits Screening as Opposed to Traditional Cost-Effectiveness: At present, the cost-effectiveness screening practices that form the foundation of the cost-benefit analysis for NWS do not include a lens of community benefit or human-centered value. Cost-effectiveness screenings take a limited approach to the scope of the benefits they assess, while encompassing a wider range of costs. They value energy savings or improvements against the cost of a particular technology, but not whether there is broader benefit from a health, comfort, economic, or social perspective. This is concerning, because cost-effectiveness screenings are likely to underlie all the decisions to redirect distribution funding (whether via discreet NWS projects or routine distribution/interconnection solutions). It is inherently techno-centric because it values the technology itself and the market worth rather than human impact. The current approaches to DER implementation and interconnection do not include community context for the program or interconnection; that is to say, they do not provide any sense for how the necessary technological improvements will impact people directly.

While the undersigned theoretically support adding or amplifying non-energy benefits within cost-effectiveness screening models, we find that these efforts fall short on a number of levels. They still exclude non-technical stakeholders from the process and inevitably still center the analysis from a strictly technical point of view that puts grid benefit first and simply adds coefficients for ancillary human benefits. A preferable option to cost-effectiveness tests is the development of a Community Benefits Screening as the, or a, key resource test that strives to maximize community benefits through a human-centered analysis. The equity factors described as HCA layers (Solution 1) could set baselines for community need and be incorporated into the test to value impacts to those baselines. This would be an effective way to determine which potential feeder improvements could provide maximal community benefit, and an ideal test would be designed flexibly to account for different baselines or community needs with a goal of a set improvement factor that aggregated the value of different community benefits that stem from different investments.

Maximize Redirection of Distribution Spending and Interconnection Efforts Toward Community Beneficial Solutions: PGE spends an average of about \$300 million per year on distribution system upgrades, and Pacific Power spends an average of about \$170 million, all of which is rate based and recovered through customer bills, with an additional regulated rate of return. Distribution system planning is designed to reduce these costs by targeting utility upgrades on key feeders and spurring

<sup>9</sup> https://www.nationalenerauscreeningproiect.ora/wp-content/uploads/2021/04/OR-Info-Factsheet.pdf

<sup>10</sup> https://downloads.ctfassets.net/416uwc1laqmd/5qXwnnXA03JMpHnv0qmjVM/74a1c5ea62b4fc7461660d308d3eb703/DRAFT\_Baseline\_requirements\_version\_0.xlsx

development where it provides maximum grid benefit. The human-centered DSP approach championed in this proceeding pivots this assessment to also consider maximum community benefit.

The goal is to make a fundamental shift away from a techno-centric approach, which seeks to upgrade equipment or add specific technology to create new capacity. These upgrades are designed to solve the perceived problem that current equipment is not sufficient to handle new load or generation. This is an expansion model rather than an improvement model exemplified by building new or reactivating old substations like Kennedy. In contrast, a targeted universalism approach would create additional capacity on existing equipment by improving the buildings and community resiliency of the most energy burdened and underinvested communities on a feeder. A human-centric view of grid constraints shows that historical underinvestment in certain buildings and communities have led to inefficient levels and patterns of energy use; human-centric solutions are designed to address the human root of the issues. These social and energy inefficiencies constrain both the grid and the ability for communities to build wealth and live improved lives as they intersect with high energy bills, poor health, and lack of comfortable homes. Focusing on community investments in addition to grid needs is also a way to ensure that all future DERs are community-benefiting projects, and avoid perpetuating inequities caused by the simultaneous exclusionary and unjust histories of housing development, zoning, and energy infrastructure.

# General Comments on PGE and Pacific Power Phase 1 Distribution System Plans

There are two primary observations that can be applied to both the PGE and Pacific Power DSPs. First, neither plan affords an avenue for community input to be translated into technical recommendations. Nor is there a clear path through which community-driven recommendations can be put into practice through process changes to distribution planning, operation, and investment. Further, engagement with regard to distribution system planning has been one way, with utilities receiving feedback from stakeholders rather than also building capacity, and also without clear transparency on how feedback is being valued and incorporated. In some cases, it is not clear how stakeholder feedback has been integrated at all in the current iterations of both PGE and Pacific Power's distribution system plans. Guidance from the OPUC for Stage 1 of the DSP process required that "utilities create a collaborative environment among all interested partners and stakeholders", and "document community feedback and utility's responses." Education and engagement are

<sup>10</sup> Order No. 20-485: DISPOSITION: STAFF'S RECOMMENDATION ADOPTED WITH MODIFICATION, 12/23/2020.

valuable, but ultimately useless if the responses and perspective of those engaged are not fully and clearly integrated into the process.

The second opportunity for continued growth and exploration in future DSPs is to ensure that customer-side solutions are well-positioned to address technical grid constraints. Utilities should work with stakeholders and communities to develop guidance that helps address both grid- and human-centered problems. In a closed loop DSP system, when the grid runs into a particular problem, a particular set of customer-side/human-centered solutions are viable alternatives, and vice versa, when a community is faced with a particular challenge, a particular set of grid-integrated, non-wires alternatives are viable solutions to address this challenge. Such strategic mapping would help carry out a truly human-centered approach to DSPs, one that utilizes effective and community-centered engagement with non-technical stakeholders/community that makes a deeply technical space accessible and relevant to ratepayers.

# Specific Comments on PGE Phase 1 Distribution System Plan

# Human-Centered Planning

As noted in our general comments about the PGE and Pacific Power DSPs, we have two primary concerns with the initial approach to human-centered planning. It first did not build sufficient capacity for communities and new community-based organizations to engage in the process and did active harm to those who did, despite good intentions and efforts. Second, feedback was received by PGE, but it is not clear how it was incorporated and what changed in PGE's thinking due to the stakeholder input it received. Section 3.5<sup>12</sup> of the DSP filing, "Community Engagement Learnings to Date," includes discussion of PGE's learnings on how to improve their engagement efforts, but it failed to share the specificities of the priorities expressed by community through the Phase 1 engagement. It also did not extrapolate on how PGE incorporated this feedback into their broader plan. It is also not certain that a co-creative and mutually beneficial approach to engagement will occur in future plan phases based on how PGE has laid out its engagement strategy, which is cited below.<sup>15</sup>

# • Stage 2:

 Reflecting UM 2005 outreach requirements, utility holds ongoing community stakeholder meetings during grid needs assessment, solution identification and action planning.

<sup>&</sup>lt;sup>12</sup> "2021 Distribution System Plan" (78)

<sup>&</sup>lt;sup>13</sup> "2021 Distribution System Plan" (61)

- Utilities and OPUC agree on community goals, project tracking and coordination activities. Utilities conduct baseline study to increase detailed knowledge of service territory communities.
- Utilities engage CBO experts to inform co-created community pilot(s). Utilities consult
  with communities to understand identified needs and opportunities, then seek to
  co-develop solution options, documenting longer-term needs.

# Stage 3:

 Utilities collaborate with CBOs and environmental justice communities so that community needs inform DSP project identification and implementation. "Community needs" could address energy burden, customer choice and resiliency.

PGE would first do well to outline how feedback will be accepted and incorporated for each action item, ideally helping stakeholders to understand their intervention points and the level of influence that they can realistically have. For example, while it is admirable that PGE has committed to -- and followed through on -- monthly technical subgroup meetings, it is uncertain how those spaces will change the outcomes and allow for course corrections from the Stage 1 filing. It would be helpful to understand how stakeholders can influence the structure and outcomes of the grid needs assessment, and in particular how community-based organizations and customers can more directly inform solutions. The pilots in Stage 2, Bullet 3 are not likely to be successful if the communities they are intended to serve have not had the ability to influence and engage meaningfully in earlier stages of the process.

To this end, a glaring omission in Stage 2, Bullet 2 is the inclusion of community in the agreement on community goals, project tracking, and coordination activities. Moreover, community-based organizations are well positioned to help inform PGE on the service territory communities they are a part of in a way that can impactfully supplement the integration of equity metrics into the HCA. The consultation with communities "to understand identified needs and opportunities" should be aligned with the Stage 2, Bullet 1 and inform Bullets 2 and 3. There is also a missing action item with regard to values identification in addition to needs and opportunities. Values can serve as a lens for all other community engagement actions and DSP investments, and a crucial backstop to ensure that no strategy is undertaken that does not align with these mutually agreed-upon north stars.

It is also worth noting that, while it is laudable that PGE is focused on procedural, distributive, and restorative justice, the SmartGrid TestBed (SGTB) is not an ideal example of distributive justice, due to

its location in the more White and affluent areas of North Portland. Had the project been located in Portsmouth or St. Johns (which have a larger share of lower income Indigenous, Black, and Brown communities) as opposed to Arbor Lodge, Overlook, and Kenton (which are wealthier and Whiter), it would have had a more equitable impact on creating access to the environmental wealth of distribution system investments. While the project itself is an important step in the right direction that has involved tremendous and thoughtful engagement work, nonetheless it is a lesson for PGE to inform future grid investments. It highlights the importance of building out rich and nuanced HCA maps that include a wealth of equity indicators, and also of engaging with low-income, and Indigenous, Black, and Brown communities to understand needs, values, and opportunities, before any actions or work are undertaken to ensure that those needs, values, and opportunities are maximally centered in any effort.

In light of these reactions to the PGE Stage 1 DSP, we have the following requests:

- Request: PGE should provide a multi-faceted avenue for translation of technical information into curriculum for community capacity building, community input with transparent and tangible ways it will be incorporated, and technical translation of community member input into process and system changes and investments.
- **Request:** PGE should utilize equity mapping tools and community input in order to identify and site pilot projects to ensure maximum equitable benefit.
- **Request:** PGE should incorporate values, activities and frameworks into early engagement work to ensure that there are clear lenses for all work and easy ways to identify when something will not serve shared goals of community needs.
- Request: PGE should put these requests into practice in the Phase 2 distribution system plan proceeding and future filings, while also utilizing a truly community-led process for writing the plan. To avoid the problems that have emerged with community-based organizations already in this proceeding, funds should be directed to the PUC to distribute to community-serving organizations. It will be essential to institute a mediating entity between utilities and community after the loss of trust during this docket.

Incorporate Equity Indicators within the Hosting Capacity Analysis and Mapping
While Chapter 6 of PGE's DSP is thorough and thoughtful in its technical analysis, it does not acknowledge the human element of HCA mapping. In general, we are concerned that the PGE DSP siloes the human-centered elements to Chapter 3, as opposed to taking a more holistic approach.

This is a common pitfall in treating equity as one element of a project rather than an overarching value that should be imbued in all aspects of a project, program, or plan. PGE should use HCA as an opportunity to understand the communities and buildings that the people they serve live in, and layer this information with the HCA to create a more complete and nuanced understanding of how the quality of grid segments interact with the various communities that depend on them, and within that, how benefits and burdens are distributed, and how distributed energy resources (DERs) can be used to balance those benefits and burdens and account for historical harms...

PGE should acknowledge that the state of the grid is a result of both the demand (human) and supply sides, and that it cannot divorce one from the other. The demand side (i.e., customers/community members) is characterized by a diverse set of socioeconomic and historical factors, underinvestment and direct harms in some communities and overinvestment in others. The magnitude and patterns of energy consumption (and on-site production) of ratepayers is a direct outcome of historical patterns of economic oppression or accumulation and the intersection with land use, planning, and segregation, such as redlining. Traditionally redlined or literally marginalized neighborhoods are more likely to have inefficient buildings and less access to smart technologies, and therefore may have more capacity-constrained feeders or relatively less ability to defer distribution investments. Two present examples of this are the Pacific Power choice to repower the Kennedy Substation in the Cully neighborhood, an environmental justice community with historic disinvestment, and PGE's choice of a SGTB in North Portland, favoring more rapidly gentrifying areas over Portsmouth which has substantial racial, ethnic, and economic diversity, in part due to the significant amount of regulated affordable housing that has historically, and still presently, covered most of the neighborhood. An HCA with good equity indicators that is utilized as a decision-making tool for both PGE and developers is a good way to avoid creating burdens like the Kennedy Substation and benefits that do not flow to Indigenous, Black, and Brown communities sufficiently, like the North Portland SGTB.

One approach to this is to utilize a strong mapping tool that can be layered with HCA. CCC, Verde, and IMT recommend the Greenlink Equity Mapping (GEM)<sup>14</sup> tool as a pre-existing visualization of equity indicators that could be integrated with HCA shape files. In addition, we would like to draw attention to a newly published dataset that could be further layered, the below cited Climate Justice metrics which map socioeconomic, physical, risk, and housing data. This data set was recently utilized in Miami.<sup>15</sup> The added layers of data can become a tool for developers who want to benefit

<sup>14</sup> https://www.equitumap.org/

<sup>15</sup>https://www.liebertpub.com/doi/full/10.1089/env.2021.0059?utm\_source=Adestra&utm\_medium=email&utm\_term=&utm\_co ntent=Article3-OA&utm\_campaign=ENV+OA+Sept+8+2021

communities through their projects to understand where the need is highest, but also where a project might cause potential displacement by raising property values or creating other unintended consequences. A good mapping tool can help lead to intentional partnership with local communities to ensure that any project benefits flow directly and intentionally.

Even better, a good mapping tool is one that can be integrated intentionally with other GIS projects to create a centralized source of data and information. Examples of this include the CalEnviroScreen, <sup>16</sup> and the Washington Environmental Health Disparities Map. <sup>17</sup> On November 19, Verde convened a meeting with PGE, Energy Trust of Oregon (ETO), Greenlink, and a number of state agencies undertaking data collection and visualization work, including the PUC and the Department of Energy (ODOE). The purpose of this convening was to identify opportunities to combine or align efforts - such as the ODOE Oregon Renewable Siting Assessment (ORESA) and utility HCA maps with data from agencies like the Oregon Health Authority, the Department of Land Conservation, and Development Healthy Climate initiative. The ultimate goal is to ensure synergy between energy data and health- or socioeconomic-focused data, and to provide the kinds of data sets that can inform good equity indicators for future HCA iterations. We hope to continue to connect both PGE and Pacific Power to these kinds of spaces and to advocate for siting maps that provide a holistic view of a community and the social, economic, and health factors that intersect with project development.

We are heartened by PGE's participation in the Oregon equity mapping conversation, and by their general enthusiasm to deepen the approach to equity-focused data in future HCA maps, and with that in mind, we have the following recommendations:

- **Request:** PGE should continue to engage in statewide equity mapping conversations and work to both make relevant data available, and to incorporate relevant data sets into its own mapping tools, such as HCA.
- Request: PGE should also develop clear narratives with community to help give context to why different data is important and the story it tells. It should acknowledge and map the impact that historical underinvestment in certain communities has on the grid to help identify opportunities for reparative justice This will be key in helping developers to understand why new projects are important in particular locations with regard to rebalancing benefits and burdens. It should also drive resource deployment and infrastructure investment for PGE's future distribution system plans.

<sup>16</sup> https://oehha.ca.gov/calenviroscreen

<sup>&</sup>lt;sup>12</sup>https://www.doh.wa.gov/DataandStatisticalReports/WashinatonTrackinaNetworkWTN/InformationbuLocation/WashinatonE nvironmentalHealthDisparitiesMap

Request: CCC, Verde, and IMT continue to recommend partnership with the Greenlink Equity
 Mapping tool as a strong visualization of the data discussed in this section.

## Develop and Utilize a Community Benefits Test

Cost-effectiveness screening determines the types and magnitudes of demand-side solutions and DERs considered to be good investments of ratepayer dollars. They inform the components of NWS ultimately available for PGE to deploy. Therefore, examining the methods used and the priorities optimized for within each test is of the utmost importance. Unfortunately, PGE's filing does not address the role cost-effectiveness screening will have in determining viable NWS, nor does it take a human-centered approach to outlining the community benefits of DERs.

In the initial Verde and IMT comments, we proposed the development of a "Community Benefits Test" as the - or a - key resource test to evaluate the components of NWS. This approach strives to maximize the benefits accrued to communities through a human-centered analysis and could build on the equity indicators described in the previous section. A Community Benefits Test derived from equity indicators will also be critical to assessing community benefit. We cannot accurately measure community benefits - which PGE names as being a priority - without specific metrics to track this.

PGE states they are updating their cost-effectiveness screening approach in response to PUC comments on PGE's Flexible Load Plan, and are including non-energy benefits and low-income benefits (Section 4.7.2.4). We applaud this initiative to re-evaluate cost-effectiveness screening. PGE states they are spending an estimated \$100k in 2021 and \$100k - \$250k in 2022 to develop a new cost-effectiveness tool. PGE states they will "refine and develop cost-effectiveness methodology... including...: non-energy benefits and low-income benefits development with future iterations improving on these values." However, PGE has not engaged the very communities whose benefits they intend to represent in the development of this tool and methods. Human-centered design means that those affected by a process should be leaders in any proceeding that impacts them, and they are likely to have the best ideas and solutions as to how to provide maximum benefit to their communities. PGE cannot know how communities balance the options before them without engaging the people in those communities.

In line with our first general recommendation, PGE should provide an avenue for community input to be translated into technical and methodological recommendations on the development of the new

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<sup>&</sup>lt;sup>18</sup> "Distribution System Plan" (103)

Community Benefit Test that ratepayers are funding, and more importantly, create transparency around how community input will be valued and incorporated. PGE recommends using the LBNL report "Benefit-Cost Analysis for Utility-Facing Grid Modernization Investments: Trends, Challenges and Considerations" as the starting point for a revised cost effectiveness screening test. The report builds on the National Screening Practice Manual (NSPM), which recommends that states develop their own "regulatory test" based on the state's regulatory goals. For instance, New Hampshire used the NSPM to develop the "Granite State Test<sup>20</sup>" based on current guiding state laws and statutes, Commission orders, and other relevant policies. We support PGE's recommendation to follow the guidance of the LBNL report<sup>10</sup> and develop an Oregon-specific cost effectiveness test to achieve the regulatory goals outlined in HB 2021, HB 2475 HB 3141, SB 978, and PUC Order No. 20-485. However, we do not support PGE's use of the Resource Value of Solar (RVOS) as a basis for its cost-effectiveness modeling, and we agree with the PUC that there should be more stakeholder input before RVOS is used in applications other than those mandated in statute.

To summarize our feedback, CCC, Verde, and IMT make the following recommendations with regard to modernizing and deepening equity around how NWS investments are assessed and valued:

- Request: The PUC should develop a "Community Benefits Test" in partnership with utilities,
  community-based organizations, and other stakeholders to identify, track, and achieve
  metrics regarding energy burden and other community benefits, as required by HB 3141 for
  public-purpose-charged-funded incentives, HB 2021 for clean energy investments and the
  charges of the Utility Equity Advisory bodies, and HB 2475 with regard to energy affordability.
- Request: PGE should solicit community input into the development of new cost-effectiveness screening approaches and provide/facilitate opportunities to translate that input into technical and methodological recommendations.

Maximize Community Benefits from Non-Wires Solutions and Interconnection Policies

All of the elements discussed in the plan and in these comments feed into the decision-making process for how distribution investments will be made. The average of \$300 million per year that PGE spends on the distribution system represents a substantial opportunity to advance reparative justice while meeting state-mandated climate goals. Considering that PGE is guaranteed to recover this spending from its ratepayers, with the additional regulated rate of return as guaranteed profit, it is

<sup>20</sup>https://www.nationalenergyscreeningproject.org/wp-content/uploads/2019/12/NewHampshire\_NSPM-CaseStudy\_1.20update.pdf

<sup>19</sup> https://emp.lbl.gov/publications/benefit-cost-anglusis-utilitu-facing

the duty of both the PUC and PGE to ensure that this spending is both prudent and achieves the equity and climate goals of the ratepayers.

The SB 978 process was developed for the purpose of exploring these new policy and social drivers that impact the utility system. While the PUC has not changed its ultimate role as an economic regulator, nor its statutory mission, it nonetheless has been given clear direction from the Oregon legislature through HB 2021 and HB 2475 to begin considering the climate, social, and environmental justice impacts of the entities it regulates. And as such, those entities - the utilities - must also adjust their business models to account for new goals and values. The DSP proceeding can be considered successful if, and only if, it results in actual changes to the way the distribution system is operated and invested in, with human and community benefit as the priority.

These changes must forward the resilience of the distribution system in the face of climate catastrophe, balance environmental justice benefits and burdens, and deepen opportunities for health, safety, and wealth-building for Indigenous, Black and Brown, and rural communities who have faced historic disinvestment. Non-wires solutions can be a restorative justice practice when the solutions implemented achieve these aims. Underinvestment in certain communities contributes to inefficient patterns of energy use that cause grid constraints and also contribute to high utility bills that reinforces poverty in already impacted communities. A more values- and justice-based approach to distribution system investments would be in contrast to the traditional techno-centric planning environment in which grid constraints are understood separately from their human causes and the proposed solutions do not take into account how solutions can be designed to improve the lives of the very people the grid is intended to serve. NWS as reparative justice is needed in both PGE and Pacific Power service territory, because the lack of investment contributes to economic inequities through energy burden and when investments are made equitably, they can further build wealth for communities who do not typically benefit from energy infrastructure or renewable energy projects.

Of the \$300 million spent annually on distribution system upgrades, PGE spends approximately \$50 million on capacity upgrades alone and an average of \$75 million and \$85 million are spent on reliability & power quality and new customer projects, respectively. The DERs that comprise NWS can be used to mitigate capacity constraints. Increasingly, they are also being used to address reliability and other technical concerns.<sup>21, 22</sup> We acknowledge that some spending on exclusively grid-focused

https://www.hawaiianelectric.com/documents/clean\_energy\_hawaii/integrated\_grid\_planning/stakeholder\_engagement/working\_groups/distribution\_planning/20200602\_dpwg\_non\_wires\_opportunity\_evaluation\_methodologu.pdf

<sup>&</sup>lt;sup>21</sup> https://emp.lbl.gov/publications/locational-value-distributed-energy

investments within each of these categories is necessary and that the timeline for implementing an NWS vs. a traditional solution is a concern. However, we believe that a significant subset of these investments can be replaced with weatherization, energy efficiency, demand flexibility, and/or storage upgrades to manage load on a feeder or substation and improve building and housing quality, and resiliency upgrades such as storage and grid integration to balance generation.

PGE's Phase 1 filing does not contain sufficient information or guidance around their approach to NWS. We acknowledge that many of these details may be included in the Stage 2 filing, and we implore PGE to think creatively about how NWS in their service territory can be used in a streamlined fashion to achieve both community and grid benefits. It is important that the NWS development process is designed in such a way that it integrates the full value spectrum of DERs to PGE, its customers - including underserved communities - and the environment. Current non-wires solutions processes across the country have largely failed to deliver NWS projects, partially due to the selected cost-benefit analysis approach - which could be improved through our recommended Community Benefits Test - and relatively complicated bureaucratic processes associated with NWS compared to traditional T&D investments.<sup>23</sup> This is not necessarily a reflection of the potential of NWS, but a reflection of the administrative processes behind NWS. PGE states that "Non-wires solutions cannot be evaluated the same way as traditional T&D solutions" (Section 7.4.5).<sup>24</sup> While this may have an element of truth, this statement risks predisposing NWS to overly complicated processes that limit their use. PGE and the PUC should integrate the full value of NWS and consider how to streamline the NWS selection process, in particular in ways that involve and value community to achieve a human-centered and participatory approach to selecting investments. .

High interconnection fees and system upgrade charges are one barrier to community-based and community-benefiting projects, but interconnection policies also hold opportunities for restorative justice. High interconnection fees and long wait times can negatively affect the economic viability of customer-driven distributed generation projects. Yet the constraints on the grid that lead to the deterring interconnection fees can be a direct result of underinvestment in efficient and smart buildings in underserved communities. Section 7.4.3<sup>25</sup> does not acknowledge the human source of interconnection constraints. Where technically feasible, interconnection provides an opportunity to solve grid constraints with targeted investment in underinvested communities.

<sup>&</sup>lt;sup>25</sup> https://www.greentechmedia.com/articles/read/where-are-all-the-non-wires-alternatives

<sup>&</sup>lt;sup>24</sup> "Distribution System Plan" (162)

<sup>&</sup>lt;sup>25</sup> Ibid. (161)

PGE recommends that interconnection practices to encourage DERs and cost allocation should be discussed in PUC Docket UM 2111. We believe these topics are central to Distribution System Planning and should be discussed in UM 2005.

As stated in the initial Verde and IMT comments, we reviewed twenty recent Small Generator Interconnection Study Reports available on Oasis OATI (summarized in Table 1) and found that the average interconnect requires \$254,000 in distribution modifications. These findings are in line with a study by NREL that found average interconnection costs to mitigate thermal overloads for systems between 0.1 and 5 MW can range from \$75,000 to \$200,000. A subset of these investments may be abated with feeder-specific investment in underinvested buildings.

Table 1: Trends in PGE Interconnection Fees

Avg.	Avg.	Avg.	Avg. Protection	Avg.	Avg. Total
system size	Distribution	Distribution	Modification Cost	Communication	Cost to
(MWAC)	Modification	Cost per MW		Equipment Cost	Interconnect
	Cost				
2.26	\$254,017	\$ 112,280	\$167,837	\$170,521	\$598,691

However, as discussed in the general comments section, it is difficult for stakeholders without deep distribution engineering expertise to understand the technical overlap between the various DERs and the customer solutions available and when they can be applied to the various grid constraints identified by PGE. This asymmetry of information makes it challenging for stakeholders to effectively engage in discussions on the feasibility of NWS, leading to a suboptimal outcome for all parties involved. Moreover, an HCA map that incorporates strong equity indicators is an important tool to help developers understand how best to site projects with restorative justice in mind. To achieve this, we suggest the following actions:

• **Request**: PGE should produce a guide, through a collaborative, strategic mapping effort, that describes how available NWS components can address grid needs and how they benefit the

<sup>&</sup>lt;sup>26</sup> https://www.oasis.oati.com/pae/

<sup>&</sup>lt;sup>27</sup> Our analysis is available for review at: <a href="https://ifmt.box.com/s/ryo9a381eaikl9zoutkujo22vy06rret">https://ifmt.box.com/s/ryo9a381eaikl9zoutkujo22vy06rret</a>

<sup>28</sup> https://www.nrel.gov/docs/fu18osti/71232.pdf

- communities PGE serves with an eye toward both addressing historical harms and generational justice.
- **Request:** PGE should develop a program to deploy DERs/customer-sited solutions in underserved buildings at the feeder level to mitigate interconnection constraints.
- Request: The PUC should require utilities to include interconnection practices to encourage
  DERs and cost allocation in the DSP Phase 2 filing. PGE should detail how they plan to absorb
  potential DER costs through other NWS and value the distribution system on multiple levels.

#### Specific Comments on Pacific Power Phase 1 Distribution System Plan

The recommendations from the initial Verde and IMT pre-filing comments were intended to support the PUC's encouragement for all the investor-owned utilities to take a "human-centered approach to DSP", as laid out in the staff's recommended guidelines. In addition to the general comments above, we have included some recommendations here for how Pacific Power might incorporate these requests in future phases and stages of the DSP process. We strongly recommend that Pacific Power closely examine our comments to PGE and recommendations, as we consider these to be best practices for Pacific Power to strive toward.

#### General Recommendations

We thank Pacific Power for the effort they have put into their first filing and acknowledge that this is a new process for them. We would like to point to several components of the PGE filing that we would like to hold as a standard for Pacific Power's phase two filing.

- Centering environmental justice. PGE stated that environmental justice is a key goal of their DSP filing. Their section 3.3 included a discussion of human-centered planning and descriptions of environmental, energy, procedural, distributive and reparative justice. While PGE has a long way to go to truly integrate these principles into their operations, this is a good model for Pacific Power to look to.
- Robust community engagement plan. PGE included a framework for energy justice and a racial equity tool (GARE) that helped inform their community engagement plan, as well as recommendations for best practices received from Community Energy Project, CCC, and Unite Oregon. These best practices for community engagement center around accessibility, approachability, popular education, and meeting logistics.

• **Readability**. PGE provided a "Reader's Guide" at the start of each section that outlined the relevance of each section to the distribution system, what they intend to accomplish with the section, DSP guidelines they are addressing, and which appendices are relevant.

# Human-Centered Planning

As previously stated, neither Pacific Power nor PGE's community engagement plans presents an avenue for community input to be translated into technical recommendations. While Pacific Power acknowledges the need for a "feedback loop" through a mechanism to respond to community input, this must be expanded to translation of this input into key technical recommendations. Pacific Power does not include any documentation of community input and feedback that have been received thus far, and most of the plans included for outreach are yet to occur. The plan notes that "the feedback loop must be established, transparent, equitable, and well understood by all participants", but it is unclear what steps Pacific Power will take or has taken to ensure this is the case.

Pacific Power should look to the "best practices" for community engagement included in PGE's plan. These recommendations were provided by CCC, Unite Oregon, and Community Energy Project through the workshops they organized as well as demonstrated experience in community engagement and advocacy. Pacific Power may consider using these recommendations as a foundation to guide its engagement with impacted communities moving forward in this process. Additionally, as PGE discusses in its plan, the Movement Strategy Center's Spectrum of Community Engagement to Ownership provides a valuable framework for meaningful public participation that is truly human-centered.

Pacific Power's plan also does not incorporate the same level of thinking around environmental, procedural, distributive, and reparative justice as does PGE's plan. While PGE's utilization of such a framework can and should be built upon to lead to equitable and just outcomes, Pacific Power may consider incorporating a similar framework into its plan to better acknowledge the human connection to distribution systems planning and the opportunities it presents to benefit communities. Overall, there is strikingly little mention in Pacific Power's plan of environmental justice or of centering human and community needs and benefits.

• **Request:** Pacific Power should acknowledge and center environmental justice and human and community-centered planning in their Phase 2 filing.

Including Equity Indicators in Hosting Capacity Analysis

Pacific Power mentions their initial efforts to evaluate methods to assess energy equity in their Community Outreach and Engagement Plan, including assessing the U.S. Department of Energy's Low-Income Energy Affordability Data (LEAD) Tool and Greenlink Analytics Equity Map (GEM). We support the utility's plans to evaluate and implement GEM in the coming year, and encourage the integration of community equity data into the HCA to provide a more human-centered locational analysis of the system and inform decisions about feeder-level investments, as discussed in the pre-filing recommendations for a just and equitable approach to DSP.

Pacific Power also references plans to incorporate quality data on demographics, community goals, customer usage and resource patterns, and generation capability in order to equitably evaluate non-wires solutions options in under-invested communities. This would be an opportunity for the utility to consult with community experts to inform what data sets would be most appropriate and to progress toward the Stage 2 and 3 goals for deeper consultation and collaboration with community groups to inform DSP project and community pilots.

- **Request:** Pacific Power should engage in the statewide equity mapping conversations convened by Verde and work to both make relevant data available, and incorporate relevant data sets into its own mapping tools, such as the HCA.
- Request: Pacific Power should consult with community groups to develop clear narratives on why different data sets are important and the stories they tell. It should acknowledge and map the impact that historical underinvestment in certain communities has on the grid to help identify opportunities for reparative justice This will be key in helping developers to understand why new projects are important in particular locations with regard to rebalancing benefits and burdens. It should also drive resource deployment and infrastructure investment for Pacific Power's future distribution system plans.
- Request: CCC, Verde, and IMT support Pacific Power's stated intent to evaluate and implement the Greenlink Equity Mapping tool or an equivalent as a strong visualization of the data discussed in this section.

#### Utilize a Community Benefits Test

Cost-effectiveness screening determines the types and magnitudes of demand-side solutions and DERs considered to be good investments of ratepayer dollars. They inform the components of NWS ultimately available for Pacific Power to deploy. Therefore, examining the methods used and the priorities optimized for within each test is of the utmost importance. Unfortunately, Pacific Power

does not discuss cost-effectiveness screening at all. There is no discussion about how the practice determines the types and magnitude of DERs available for NWS projects, nor how cost-screening falls short of including key community benefits. Cost-effectiveness screening (and related terms) do not appear in the Pacific Power filing at all, while PGE references cost-effectiveness around 50 times and includes several subsections dedicated to the topic in sections 4.6 and 4.7.29

In the initial Verde and IMT comments, we proposed the development of a "Community Benefits Test" as the - or a - key resource test to evaluate the components of NWS. This approach strives to maximize the benefits accrued to communities through a human-centered analysis and could build on the equity indicators described in the previous section. A Community Benefits Test derived from equity indicators metrics will also be critical to assessing community benefit. We cannot accurately measure community benefits without specific metrics to track this. Please see the "Develop and Utilize a Community Benefits Test" under our comments to PGE for a more in depth discussion on the relevance of developing a Community Benefits Test to the DSP.

Pacific Power notes that they used a demand response (DR) potential study to compare demand response with supply side alternatives in their planning process. With the information available in the filing, it is unlikely that any community benefits were included in the cost-benefit analysis of the DR options. This is a prime example of how a community benefits test could affect resource decisions - if a community benefits test were employed, the DR programs evaluated would likely show more value and therefore be selected in greater numbers and more locations than through current modeling.

**Request:** Pacific Power should support the development of a Community Benefits Test.

Maximize Community Benefits in Distribution Spending and Non-Wires Solutions The average of \$170 million per year that Pacific Power spends on the distribution system represents a substantial opportunity to advance reparative justice while meeting state mandated climate goals. Considering that Pacific Power is guaranteed to recover this spending from its ratepayers, with the additional regulated rate of return as guaranteed profit, it is the duty of both the PUC and Pacific Power to ensure that this spending is both prudent and achieves the equity and climate goals of the ratepayers. Please see the "Maximize Community Benefits from Non-Wires Solutions and Interconnection Policies" under our comments to PGE for a more in depth discussion of the opportunities for reparative justice within NWS and interconnection.

<sup>&</sup>lt;sup>29</sup> "Distribution System Plan" (92 & 97)

Of the average total of \$170 million in annual distribution spending, approximately \$43 million per year is spent on new customer projects, and \$15 million and \$4.5 million is spent on system expansion or upgrades for capacity and reliability & power quality respectively. As with the PGE plan, we recommend that Pacific Power thoroughly investigate the potential for non-wires solutions - including weatherization, energy efficiency, demand flexibility, and energy storage - to meet the capacity constraints, reliability and power quality, and other grid needs identified in Part 2 of its DSP. In evaluating these alternatives to traditional distribution system investments, Pacific Power should also consider the community benefits of targeted investments in under-invested buildings as the default method of solving grid constraints, where possible.

Taking a holistic approach to hosting capacity and energy equity mapping as described in the previous recommendation is a crucial way to determine where grid and community benefits intersect. It provides the opportunity to target investments not only where it provides maximum grid benefit, but also in ways that benefit the communities that pay for these upgrades and that have been historically underserved by both public and private institutions.

Pacific Power's filing failed to address NWS and interconnection entirely. While the PUC guideline 5.3 (Solution Identification<sup>30</sup>) to evaluate NWS is not required until the second filing, Pacific Power's decision to not address these central issues at all in the first filing is disheartening and provides no basis for stakeholders to understand Pacific Power's current state of thinking which limits our ability to engage. As stated in the OPUC order "the need to co-develop distribution system solutions with communities and CBOs remains a priority throughout the DSP evolution"<sup>51</sup>, and providing some initial grounding on the utility's approach to NWS, as well as initial engagement with community groups to explore opportunities is critical to that. Pacific Power uses the term "non-wires alternative" only three times in the entire filing, while the term (and its variations) appears around 100 times in PGE's filing.

- Request: Pacific Power should include in their DSP Part 2 filing thorough discussion of how they are evaluating the potential of NWS to meet grid needs and provide community benefits, acknowledging the historical harms and potential for reparative justice
- Request: Pacific Power should develop a program to deploy DERs/customer-sited solutions in underserved buildings at the feeder level to mitigate interconnection constraints.
- Request: Pacific Power should detail how they plan to absorb potential DER costs through other NWS and value the distribution system on multiple levels.

 $<sup>^{30}</sup>$  Order No. 20-485: DISPOSITION: STAFF'S RECOMMENDATION ADOPTED WITH MODIFICATION, 12/23/2020.

<sup>31</sup> Ibid, page 19

# **Conclusion and Proposed Next Steps**

Verde, the Coalition of Communities of Color, and the Institute for Market Transformation are grateful for the extensive work PGE, Pacific Power, and the PUC have put into developing a transparent and human-centered distribution system planning process. The Phase 1 filings are a marked improvement upon previous practices and set the stage for industry leading practices to transform the distribution system into a human-centered source for energy justice and climate solutions. We summarize our key recommendations below:

#### Human-Centered Planning

- Request: PGE and Pacific Power should provide a multi-faceted avenue for translation of technical information into curriculum for community capacity building, community input with transparent and tangible ways it will be incorporated, and technical translation of community member input into process and system changes and investments.
- **Request:** PGE and Pacific Power should utilize equity mapping tools and community input in order to identify and site pilot projects to ensure maximum equitable benefit.
- Request: PGE and Pacific Power should incorporate values, activities and frameworks into
  early engagement work to ensure that there are clear lenses for all work and easy ways to
  identify when something will not serve shared goals of community needs.
- Request: PGE and Pacific Power should put these requests into practice in the Phase 2 distribution system plan proceeding and future filings, while also utilizing a truly community-led process for writing the plan. To avoid the problems that have emerged with community-based organizations already in this proceeding, funds should be directed to the PUC to distribute to community-serving organizations. It will be essential to institute a mediating entity between utilities and community after the loss of trust during this docket.

#### Incorporate Equity Indicators within the Hosting Capacity Analysis and Mapping

- Request: PGE and Pacific Power should continue to engage in statewide equity mapping
  conversations and work to both make relevant data available, and to incorporate relevant
  data sets into its own mapping tools, such as HCA.
- Request: PGE and Pacific Power should also develop clear narratives with community to help give context to why different data is important and the story it tells. It should acknowledge and map the impact that historical underinvestment in certain communities has on the grid to help identify opportunities for reparative justice This will be key in helping developers to

understand why new projects are important in particular locations with regard to rebalancing benefits and burdens. It should also drive resource deployment and infrastructure investment for PGE's future distribution system plans.

• **Request:** CCC, Verde, and IMT continue to recommend partnership with the Greenlink Equity Mapping tool as a strong visualization of the data discussed in this section.

Develop and Utilize a Community Benefits Test

- Request: The PUC should develop a "Community Benefits Test" in partnership with utilities, community-based organizations, and other stakeholders to identify, track, and achieve metrics regarding energy burden and other community benefits, as required by HB 3141 for public-purpose-charged-funded incentives, HB 2021 for clean energy investments and the charges of the Utility Equity Advisory bodies, and HB 2475 with regard to energy affordability.
- Request: PGE and Pacific Power should solicit community input into the development of new cost-effectiveness screening approaches and provide/facilitate opportunities to translate that input into technical and methodological recommendations.

Maximize Community Benefits from Non-Wires Solutions and Interconnection Policies

- Request: PGE and Pacific Power should produce a guide through a collaborative, strategic
  mapping effort that describes how available NWS components can address grid needs and
  how they benefit the communities PGE serves with an eye toward both addressing historical
  harms and generational justice.
- **Request:** PGE and Pacific Power should develop a program to deploy DERs/customer-sited solutions in underserved buildings at the feeder level to mitigate interconnection constraints.
- Request: The PUC should require utilities to include interconnection practices to encourage
  DERs and cost allocation in their DSP Phase 2 filings. PGE and Pacific Power should detail how
  they plan to absorb potential DER project costs through other NWS and value the distribution
  system on multiple levels.

Thank you for your consideration and collaboration. We look forward to meeting with you to discuss these comments further.

Respectfully,

Oriana Magnera, Verde

Jake Duncan and Julia Eagles
Institute for Market Transformation

Nikita Daryanani, Coalition of Communities of Color