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April 26, 2022

Via Electronic Filing

Public Utility Commission of Oregon
Attention: Filing Center
P.O. Box 1088
Salem, OR 97308-1088

Re: UM 2225 Investigation into Clean Energy Plans; Community Lens Questionnaire response from Portland General Electric Company

Dear Filing Center:

Enclosed for filing in the above captioned docket is Portland General Electric Company's (PGE or Company) response to Public Utility Commission of Oregon (OPUC) Staff's Community Lens Questionnaire for the Clean Energy Plan (CEP), which Staff provided as Appendix B of the Work Plan Announcement posted on April 4, 2022.

In our comments, we have highlighted the breadth of ongoing activity related to the topics of resiliency, community-based renewable energy, and community benefits and outlined how we seek to bring this work into the CEP.

Please direct questions or comments regarding this filing to Sam Newman at (503) 464-7805.

We look forward to further engagement with Staff and stakeholders on these topics.

Sincerely,

/s/ Nidhi Thakar

Nidhi Thakar
Senior Director, Resource and Regulatory Strategy

Community Lens Questionnaire Comments

Introduction

On April 4, 2022, OPUC Staff posted to Docket UM 2225, Investigation into Clean Energy Plans, a Work Plan Announcement proposing workstreams, a schedule of activities, a straw proposal for a CEP planning framework, and a questionnaire to capture initial perspectives on the implementation of new community-based planning elements (“Community Lens” topics) introduced by House Bill (HB) 2021. Staff requested questionnaire responses by April 26, 2022.

These Community Lens topics have implications across PGE’s business. They are connected to PGE work in progress to develop and update processes across numerous areas, including through activity in multiple OPUC dockets. In these comments, we offer context on PGE’s approach to Community Lens topics and make recommendations for their inclusion in our first CEP. We encourage Staff to:

1. Continue to seek community input through utility and OPUC processes to involve community members and technical experts in developing approaches
2. Establish clear and manageable near-term expectations, recognizing that Community Lens topics, particularly the relationship between equity and resilience, will be iterative in future planning cycles
3. Coordinate guidance for CEP analysis and acknowledgment with other planning efforts and approval processes including cost-effectiveness alignment work
4. Develop guidance compatible with the “Option 1” CEP planning approach. PGE prefers to file an Integrated Resources Plan (IRP) simultaneously with our CEP, with an HB 2021 compliant IRP preferred resource portfolio, including any adjustments to IRP and CEP outputs and action plans to incorporate Community Lens topics

Topic 1: Risk-Based Resiliency Examination

HB 2021 §4(4)(c) requires Clean Energy Plans to “Include a risk-based examination of resiliency opportunities that includes costs, consequences, outcomes and benefits based on reasonable and prudent industry resiliency standards and guidelines established by the Public Utility Commission[.]”

To advance a human-centered approach to resiliency in the spirit of the HB 2021 legislation, we should start with an understanding of what resiliency means to our customers and communities. As a foundation, we understand that for many community advocates and customers, resiliency refers broadly to the capacity of individuals, households, or communities to withstand and manage a variety of shocks and stresses; we recommend that a risk-based resiliency examination conducted for CEP (or other planning purposes) be considered through an equity lens that accounts for both community resiliency and energy system resiliency.¹

As utilities apply a community lens to consider “benefits and impacts” vis-à-vis Risk-Based Examination, PGE recommends a deliberate approach to a new analysis that recognizes and

¹ See PGE’s Draft CEP Engagement Strategy, filed on April 21, 2022, for additional context on our human-centered engagement approach and use of an equity lens: <https://edocs.puc.state.or.us/efdocs/HAH/um2225hah175022.pdf>

complements work already in progress across OPUC dockets and other local, state, and federal agency activity. Through its Distribution Resource Plan (DSP), PGE has developed a resiliency framework as shown in Figure 1.² The energy system resiliency layer is overlaid on societal resiliency, of which community resiliency is a key part.

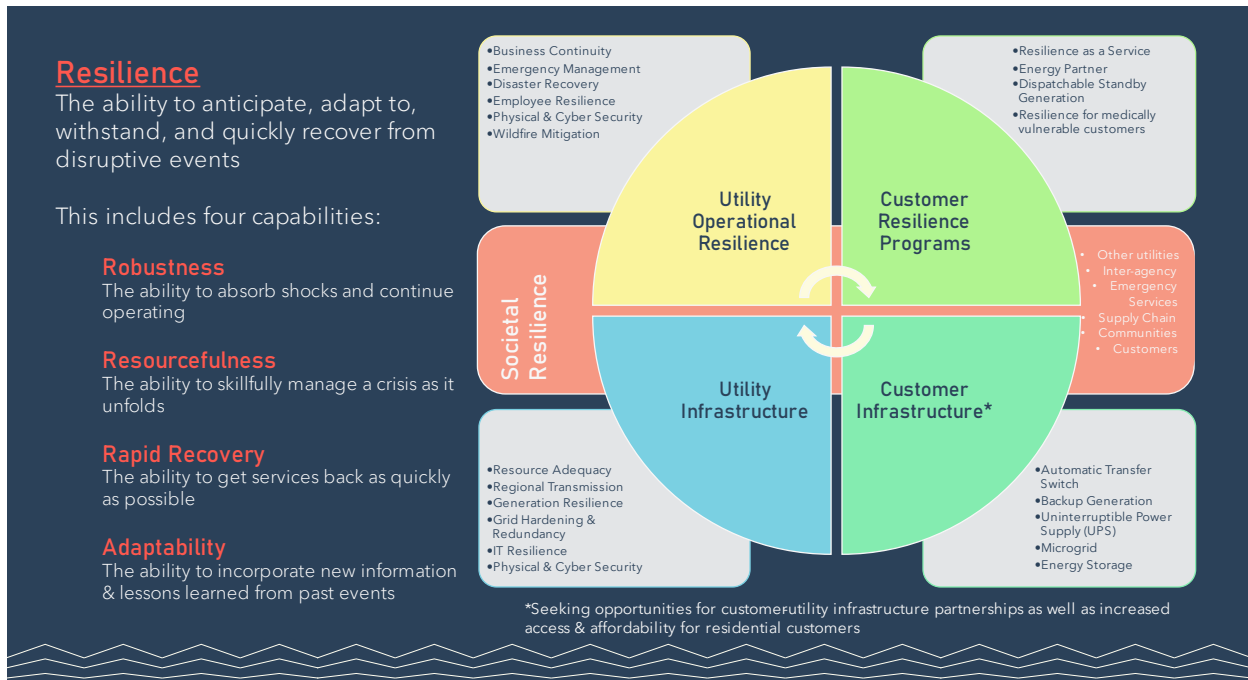


Figure 1. PGE Resiliency Framework

In keeping with HB 2021, PGE’s CEP will consider both of these layers, describing how PGE can advance a community-based resiliency framework, informed by our community partners, alongside our energy system resiliency framework. This approach will allow PGE to deploy a community lens to understand the complex social context in which people live, work, and play, how community-based and energy system resiliency intersect, and how to operationalize resiliency actions and outcomes at the local and societal levels.

Advancing Community-Based Resiliency

PGE’s efforts to advance community-based resiliency encompass a broad suite of equity-focused activities and initiatives such as income-differentiated rates, career-training partnerships with educational institutions and sourcing opportunities for small businesses. From a process perspective, these initiatives build on engagement work done in DSP and other community partnerships.

PGE understands that using a community lens and embedding human-centered thinking in our decision-making processes is a process and an outcome. PGE will leverage the community-based resiliency knowledge and tools that organizations such as Mercy Corps have developed and used to design and implement a wide range of community-based resilience programs across the globe.

² PGE’s Resiliency Initiative can be found in Chapter 5 of the DSP Part 1. This work is being expanded and updated in DSP Part 2, expected to be published in August 2022: https://assets.ctfassets.net/416ywc1laqmd/4nOQVHQIgbCRAAZWNpuEd/946827f45bb6859133a151a052578778/DSP_2021_Report_Chapter5.pdf

This work has encompassed initiatives aimed at increasing access of farming communities to financial resources when climate-and market-related shocks impact their livelihoods, such as crop insurance. These tools will help us take a systems approach that embeds human-centered thinking and applies an equity lens to consider benefits and impacts of our decisions on community or societal resiliency. Using such approaches, we can work together with our partners and environmental justice communities to:

1. Identify, understand, and prioritize disruptive events and stresses that could undermine the provision of direct benefits to environmental justice communities
2. Understand the energy needs that could provide people, households, communities, and systems the ability to adapt, withstand and recover from shocks and stresses
3. Articulate how our programs and initiatives contribute to a single set of resilience goals that will provide benefits to the community³

This work is broader than the CEP. However, PGE believes that application of a community lens to the CEP resiliency examination will be a critical tool for aligning these and other initiatives with opportunities and challenges identified in the CEP.

Advancing Energy System Resiliency

PGE's CEP resiliency examination also focuses on energy system resiliency. As described in the DSP, PGE has established the Resilience Accelerated Response Coordination (Resilience ARC) initiative, which brings together leaders and teams from across the company to improve PGE's ability to meet customer and community expectations for resilient power delivery. This initiative has four areas of focus, as depicted in Figure 1:

- Customer infrastructure resiliency: deployment of equipment including transfer switches, backup generators, microgrids and batteries that enable customers to mitigate the effects of outage events and, during normal conditions, provide services to the grid
- PGE infrastructure resiliency: investment in infrastructure, such as grid hardening, integrated grid technologies, and energy supply hardening, that mitigate the occurrence of outages during disruptive events such as wildfires and wind or ice storms
- Operational resiliency: improvements in PGE's ability to meet customers' needs during disruptive events and accelerate the restoration of service through emergency preparedness, outage response and customer support
- Customer resiliency programs: programs to increase PGE customer resiliency, such as Dispatchable Standby Generation, Energy Partner, and resiliency-as-a-service

Within the DSP, PGE will be evaluating and presenting resource and infrastructure actions that can enhance the resiliency of the distribution grid. Updated valuation and cost-effectiveness methodologies for distributed energy resources (DERs) are recognized as important outputs of the DSP process; these approaches will value DERs' contributions to resiliency and ability to provide other distribution grid services in combination with the benefits or avoided costs associated with the bulk power system. An emerging topic is how to determine the extent to

³ Levin, E., Vaughan, E., & Nicholson, D. (2017). Strategic Resiliency Assessment Guidelines. Portland, OR. Mercy Corps. <https://www.mercycorps.org/research-resources/strategic-resiliency-assessment>

which use of these resources for customer or community resiliency alters their provision of grid services, ultimately impacting the value proposition for these approaches.

PGE investments to advance these areas of resiliency will be further articulated in Part 2 of the DSP, to be filed in August 2022. However, activities cross over into other planning venues and regulatory dockets, including (but not limited to) Wildfire Mitigation Plan, Smart Grid Test Bed, and Flex Load Plan activities. For the HB 2021 resiliency examination, we anticipate that the CEP will leverage analysis being advanced through PGE's Resilience ARC work in the DSP, which will be incorporated as an input to IRP system analysis.

PGE Assesses Regional Grid Reliability in the IRP and Transmission Planning

From a FERC perspective, the resilience of the regional generation portfolio to extreme weather events or other forms of disruption, such as what was observed in Texas in 2021, is addressed within the topic area of system reliability. This type of reliability analysis is conducted within the IRP and local and regional Transmission Planning processes, with outputs that will flow into PGE's CEP.

Reliability is a core goal of the CEP resource roadmap and is addressed by the requirement that a CEP must "Result in an affordable, reliable and clean electric system." (§4(4)(f)) and the acknowledgment condition that CEP actions "are consistent with providing affordable, reliable, and clean electricity service" (§5(3)(c)(A)).

Consistent and Quantitative Examination of Resiliency will be an Iterative Process

As discussed above, resilience-related opportunities considered in the CEP Action Plan will include a broad range of community-based and energy system resiliency recommendations. An iterative process will allow us to make progress toward consistently applied resiliency definitions, energy-related value sources, non-energy benefits, incremental costs, and implementation frameworks. As these methodologies are developed and refined, they could be incorporated as appropriate into portfolio optimization analysis, program cost-effectiveness analysis, and RFP bid evaluation.

In addition to direct community input provided via DSP, UM 2225 and other OPUC and utility processes, PGE looks forward to OPUC Staff's effort to develop broadly applicable standards and guidelines through its technical assistance grant from the US Department of Energy. Additionally, tools such as LBNL's ICE Calculator⁴ could be useful inputs to this valuation discussion, a topic raised during PGE's DSP partner workshops. Any Staff guidance relating to the CEP resiliency examination should account for the iteration of the analytical framework over time, as best practices evolve and additional data becomes available.

⁴ <https://www.icecalculator.com/home>

Topic 2: Community-Based Renewable Energy (CBRE) Analysis

HB 2021 §4(4)(d) requires the Clean Energy Plan to “Examine the costs and opportunities of offsetting energy generated from fossil fuels with community-based renewable energy[.]”

Community-Based Renewables are Important to Emissions Targets

We know that gigawatts of renewable resources need to be developed to meet HB 2021 decarbonization goals. And we anticipate that we’ll face headwinds from supply chain constraints, limited pace of transmission build-out, interconnection capacity, siting considerations, and competition for resources from other load-serving entities. In that context, PGE’s vision will continue to emphasize the need to accelerate growth of all carbon-free resource types.

Numerous existing and new programs are creating pathways for community-based renewable development, including:

- Community Solar Program: PGE customers will support 93 MW of local projects through CSP, which includes a 25% carve-out for projects owned by public-sector or non-profit entities and pricing targeting low-income residential customers.
- Municipal Green Tariff: Section 20 of HB 2021 provides for the development of a Community Supported Renewables program. PGE is actively working to develop this new program and anticipates launching with its first municipal partners in 2023.
- Non-Wires Solutions. PGE will propose at least two non-wires solution projects in the DSP Part 2. We anticipate that these solutions may include CBRE as part of the resource mix. Projects are currently in the scoping face and will be provided in the DSP Part 2.
- Customer-Sited Resources: Through programs, pilots and partnerships, PGE supports customer-sited development of rooftop solar, flex load programs, energy efficiency and a range of battery and microgrid projects. While demand side solutions aren’t specifically included in the CBRE definition, we believe they align with the CEP CBRE assessment.

IRP Analysis Evaluates Cost and Carbon from Fossil Fuels

HB 2021’s examination of CBRE opportunities in comparison to fossil fuels needs to be tied to IRP system modeling. Within the IRP process, PGE identifies resource needs to meet HB 2021 emissions reduction targets and will recommend a diverse portfolio of resources. Based on IRP analysis, PGE can develop an assessment of the costs – and carbon intensity – of either proxy or on-system fossil resources as a comparator per HB 2021 §4(4)(d). The CEP can then leverage these analyses to assess benefits of clean energy resources, specifically including community-based renewables.

Analysis of CBRE Costs and Opportunities is Centered in DSP

The DSP conducts a forecast of resources connected at the distribution level. Our forecasting framework integrates true bottom-up modeling of the building and vehicle stock with market-level adoption forecasts to create an integrated view of how different DER and electrification

technologies complement and compete under different conditions.⁵ Phase I of our DER forecast study included distributed rooftop solar, as well as single-customer and campus microgrids. We also recently updated our model for the DSP Part 2 filing and have added a community microgrid resource that incorporate solar, battery storage, and diesel backup generators⁶ sized such that they can offload entire feeder loads for eligible feeders. We ran these resources through NREL's ReOpt tool⁷ to develop estimates of resource size and dispatch patterns to mitigate long-duration outages. There were 129 eligible feeders based on initial screening criteria and the technical potential of this resource totaled 146 MW of new distribution-sited PV, 17 MW / 92 MWh of battery storage, and 1.2 MW of diesel backup generators. These community microgrid resources were included in our DER forecast to facilitate future analytical work to screen resource options that provide enhanced resiliency but may not be cost-effective under the current cost-benefit framework. The DSP DER resource forecast then informs the IRP as an input assumption, allowing IRP and CEP action plans to be informed by DSP modeling.

Future iterations of this analysis should reflect continued engagement and iteration with community partners to better reflect local conditions and community needs related to land use considerations, priority geographies or populations, and preference toward ownership and payment models. As they are refined, PGE can incorporate changes to definitions and community benefits through development of new tools using its open codebase.

As with resiliency costs and benefits, we encourage alignment of CBRE cost and benefit valuation with broader OPUC efforts to establish consistent approaches to cost-effectiveness evaluation across resource types and regulatory dockets.

Topic 3: Community Benefits

HB 2021 §5(2)(a) requires the Commission to consider in acknowledgement, “(a) Any reduction of greenhouse gas emissions that is expected through the plan, and any related environmental or health benefits...(e) Costs and risks to the customers; and (f) Any other relevant factors as determined by the commission.”

Realization of community benefits is a core objective of HB 2021, and per Section 5, a key factor in the Commission's review of the extent to which a utility plan is in the public interest.

Community Benefits should be Informed by Communities

Through our community engagement, we routinely hear that communities' concerns related to the clean energy transition span a wide range of topics, encompassing for example improved community and energy resiliency, access to renewable energy, and job and business opportunities. Accordingly, PGE hopes to consider all these factors into its CEP development and presentation, as discussed throughout these comments.

⁵ Details on our DER forecasting model, AdopDER, and initial forecasting results are available under Appendix G “DER and Flex Load Potential – Phase I” filed along with the DSP Part 1. The study is accessible at <https://portlandgeneral.com/about/who-we-are/resource-planning/distribution-system-planning>

⁶ While the focus of this resource is clean and resilient generation and backup power sources, some customers and critical facilities may still rely on fossil-based emergency backup generation due to different needs and preferences

⁷ <https://reopt.nrel.gov/>

While we envision this work occurring through a community process, the following benefits are key areas that we encourage Staff to consider:

- Community benefits of resiliency: we discussed this topic thoroughly in the Resilience section of these comments and expect that resiliency benefits are relevant to the Section 5 acknowledgement considerations.
- Emissions reductions from transportation and building electrification: the CEP framework does not inherently value beneficial electrification activities, since the emissions targets are absolute based on historic emissions (rather than scaling with load growth), while costs of renewables to serve new load types are considered CEP costs. Without valuation of emissions reductions (and other benefits) achieved from heating and transportation systems, a CEP would overstate the costs and understate the relevant benefits of the transition from a statewide perspective.
 - A social cost of carbon framework is one administratively simple approach to account for these benefits from within and beyond the electric sector. These costs have been estimated for incorporation into societal cost tests for customer program and/or non-wires solution projects in jurisdictions such as California, Washington and New York. This carbon valuation approach also connects to work OPUC Staff has indicated will be in scope in UM 1893 for energy efficiency in 2022.

The Commission's consideration of these, and potentially other, benefits will be critical context for its CEP review, particularly in considerations of the application of the six percent cost cap defined in HB 2021 Section 10.

CEP Benefit Quantification should Align with Cost-Effectiveness Policy

The OPUC has indicated its intent to address cost effectiveness across dockets, and the CEP use case should align with this broader work. As we stated above, efforts to quantify benefits to inform analytical investment decisions needs to be deployed in an iterative way. PGE looks forward to working with Staff and stakeholders to develop these new methodologies.

Next Steps

PGE thanks Staff for the opportunity to provide comments on the Community Lens topics. Maximizing community benefits is a critical theme of HB 2021 and critical to our successful decarbonization journey. We are eager to use our CEP as a tool to focus attention and advance these efforts.