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Oregon Public Utility Commission 201 High St. SE, Suite 100 Salem, OR 97301-3398

Re: Comments on Community Lens Questionnaire OPUC Docket UM 2225

The NW Energy Coalition, Climate Solutions, Spark Northwest, Oregon Solar + Storage Industries Association (OSSIA), Multnomah County Office of Sustainability, and Rogue Climate (Energy Advocates) appreciate the opportunity to provide the below comments on the Community Lens Questionnaire as part of Staff's Work Plan under docket UM 2225, investigating Clean Energy Plans ("CEP") to implement HB 2021 (2021). Below Energy Advocates address some of the questions posed by Staff in the questionnaire for Staff's consideration. We address the questions posed by Staff in the order in which they were presented in the questionnaire.

1. How do you envision the Risk-based resiliency analysis, based on Commission adopted standards?

Defining Resiliency

Like Renewable Northwest, we believe that the definition of resilience should be flexible but measurable. With regard to measurability, resilience should be defined along the lines of the ability to withstand, adapt to changing conditions, and recover quickly and positively to shocks and stresses of the energy system. This notion should apply to the entirety of the energy system's value chain, from where electricity is generated to where it is delivered and all elements that may affect generation, transmission, and distribution.¹ The definition and application guidelines for resilience should also include the three resilience valuation criteria stated below.

Valuing Resilience

When valuing resilience, the utilities and Commission should focus on three primary areas: prevention, recovery, and survivability.

1. Prevention means that utilities use best practices and innovative technologies to inform the design, construction, maintenance, and inspection of their equipment and programs to mitigate against possible instances of technology or equipment

¹ Resilience Shift Primer: Electric Utilities. An Industry Guide to Enhancing Resilience. Peter Hall, et al., (July 11, 2019) https://www.resilienceshift.org/publication/primer-electric-utilities/.

failure. In the case where there is a failure, these preventative measures should ensure that it is not prolonged.

- 2. Recovery means that utilities have robust recovery plans and sufficient training to allow for rapid damage assessment and prompt responses to failures or disruptions on their technology and equipment.
- 3. Survivability means that customers should be equipped with the technology, and therefore, the ability to maintain some basic level of electrical functionality to survive a disruptive event. The risk of serious illness or even death should be mitigated to the greatest extent possible. Integration of demand-side resources should also be part of utilities' recovery plans, and utilities should, to the greatest extent possible, equip and train customers with the necessary technology and knowledge to recover from disruptive events.

Risks to Consider

The risks that should be considered in resiliency planning include but are not limited to:

- All climate change impacts, including but not limited to those mentioned below;
- Wildfire impacts;
- Severe weather impacts as has been discussed in several dockets. We specifically recommend adopting severe weather thresholds that have been identified in joint advocates' comments in AR 653;²
- Increases in demand as a result of changing climate conditions and severe weather;
- Future weather-related impacts such as flooding, winter storms, wind-related impacts, lightning strikes;
- Earthquakes and other seismic activities and their impacts;
- Civil unrest, terrorism, and cyber security.

Utility-Resilience Best Practices

There are resiliency best practice examples that other utilities in the country are engaged in including:

- Pre-positioning resources in key locations or locations that may best serve vulnerable populations that allow for quick utility recovery in the case of a failure.
- Leveraging technologies such as microgrids, renewables, and battery energy storage, smarter switchgear, advanced distribution management systems,

² See Multnomah County Office of Sustainability, Supplemental Comments Regarding Cold Weather and Severe Weather Moratoria (April 18, 2022) (stating that: "In a systematic review prepared as a threshold recommendation, researchers established a threshold of 18°C/64°F for indoor temperatures. [citation omitted] Below that temperature, adverse health impacts are observed. The National Health Service used this review to develop a cold weather plan, and in supporting documents they identify a range of 4-8° C (39-46°F) as the outdoor temperature at which significant health effects are observed in the general population [citation omitted]) https://edocs.puc.state.or.us/efdocs/HAC/ar653hac9530.pdf.

autonomous drone usage, real-time analytics augmented by machine learning and artificial intelligence.

- System hardening such as installing concrete steel poles, undergrounding wires, installing fire-resistant lines, and improving stormwater management near substations and other critical facilities.
- Installing weather stations and high-definition pan-tilt cameras to track conditions and impacts.
- Using sensors and other monitoring technologies to assess damages to grid assets, routes, and supplies.

Resilience Resource Acquisition

In considering the resources necessary to strengthen utilities' resiliency measures, and to comply with the requirements of HB 2021, utilities should first prioritize the use of non-wires solutions such as increasing energy efficiency measures and net metering programs and ramping up demand response programs. Where non-wire solutions have been exhausted and resource acquisition is needed, utilities should prioritize the integration of non-emitting resources into their systems. Utilities must act rapidly to replace their carbon-emitting resources while increasing system-wide resilience.

CEP Acknowledgement & Policy Considerations

Where appropriate, information collected through this process should be considered in utility procurement-related actions for acknowledgment. Increasing utility and utility customers' resilience is increasingly important as we have witnessed the negative impacts that non-resilient infrastructure and poor planning have on human lives. Increasing resilience is especially ripe as utilities are currently engaged in several planning processes, including Distribution System Planning (DSP), Integrated Resource Planning (IRP), Wildfire Protection Planning (WPP) as well as beginning the process to formulate their Clean Energy Plans (CEP). Resiliency measures should be thoroughly investigated, accounted for, and included and specifically referenced in these several planning processes. In doing so, utility resilience plans should be informed by and formulate through close collaboration with their customers—especially those most vulnerable to disruptions—and other interested stakeholders.

As alluded to by staff, information collected through this process may also be used to inform policies regarding resiliency resource valuation.

Costs

CEP should analyze long-term and short-term power generation costs of fossil fuels compared to an array of options for community-based renewable energy, including

renewable energy generation, energy storage, and energy efficiency. It should consider community-based renewable benefits identified through distribution resource planning. A CEP should also take into account the realistic viability of different technologies in the varying communities it serves. Tribes, community members, and advocacy groups should be meaningfully engaged in the utility's analysis and involved in the energy technology proposed for the community.

Additionally, CEPs should analyze costs beyond monetary expenses of providing energy to a community. It should analyze the externalized costs from burning fossil fuels, damages from extreme weather events and other impacts of climate change; indoor and outdoor air pollution; short- and long-term economic impacts; community health impacts and other societal impacts.

CEPs should use the new methodology for cost-effectiveness that is being considered in the Distribution System Plans and in UM 2005. Cost-effectiveness should include the externalized costs and co-benefits mentioned in the above paragraph to ensure that the full benefits of resilience are realized for communities.

Analyzing Resilience in Utility Plans

Resiliency measures should be mentioned explicitly across all utility planning documents and processes (CEP, IRP, DSP, and WPP) in a consistent but separate manner and be analyzed through the three resilience valuation criteria from the definition section. The essence of utility resilience plans should be identical and therefore consistently represented as such in these several documents, but each respective plan serves a different purpose and should reflect that. For example, utility CEPs and WPPs can, *inter alia*, layout the pathway to achieve system-wide resilience, while IRPs address how and where to procure resources to satisfy resiliency measures, and DSPs inform the viability and feasibility of integrating emission reduction resources while also identifying roadblocks and solutions to integrating such resources.

2. How do you envision offsetting fossil fuel generation with community-based renewable energy (CBRE) generation analysis?

CBRE Opportunities and Carbon Offsetting

Opportunities offered by a Clean Energy Plan that would offset fossil fuel generation with CBRE include benefits to communities where CBRE generation is sited in the form of reduced pollution from fossil fuel generation and energy cost savings via net metering and interconnection with the grid. Utilities seeking to offset fossil fuel generation must demonstrate in their analysis that CBRE generation will actually and permanently displace existing fossil fuel generation, and should not be allowed to use CBRE offsets as justification to build new fossil fuel infrastructure. The greatest benefit will be realized when CBRE generation is implemented with net metering, and specifically with virtual net metering in cases where multiple households complicate the use of traditional net metering.

Furthermore, in examining the opportunities of CBRE-based offsets, a Clean Energy Plan needs to incorporate the added value of CBRE generation projects in communities where energy burden is the highest. Energy burden is a significant financial hindrance for many Oregonians, and alleviating energy burden is one of the greatest opportunities associated with CBRE offsets. Since a high energy burden is typically indicative of a broader shortage of capacity and resources, a Clean Energy Plan with CBRE offsets needs to include a plan to work closely with communities and organizations that support CBRE development in energy-burdened communities to develop straightforward plans that include full funding to ensure that the project is completed and will meet the generation capacity needed to offset the fossil emissions that are being offset.

CBRE-based offsets should also reflect the benefits of renewable microgrids and the value they bring during outages. CBRE generation and microgrids pose opportunities when there is an outage, especially when the alternative would be utilizing high polluting diesel generators.

Finally, a Clean Energy Plan that considers offsetting fossil fuel generation with CBRE generation needs to thoroughly consult with communities where CBRE projects are to be planned or implemented such that communities do not end up bearing undue costs. For example, if the CBRE project is to include rooftop solar or land acquisition, utilities need to cover the costs of roof repair or land management.

3. How do you envision incorporating community benefits into planning?

Community Benefit Indicators

We have some ideas for community benefit indicators which we include below. However, we believe that the work of defining and planning for community benefits in a Clean Energy Plan needs to happen through meaningful consultation and one-to-one individual outreach between utilities and representatives of communities where the energy system currently causes significant hardship and where its lack after an incident would also cause hardship. These hardships may include but are not limited to: health, safety, resilience, as well as financial hardships. Utilities need to include provisions in their community benefit consultation strategies such that low-income individuals, individuals living with disabilities, and individuals who do not speak English as a first language can access resources necessary to their participation, such as translated materials, background education, access to transportation or internet services for virtual meetings, and/or childcare stipends as necessary. The process to obtain accommodations to participate should be simple and should not require income or health status verification.

That said, some community benefit indicators include, but are not limited to:

Energy Benefits

- 1. Improve efficiency of housing stock in utility service territory, including low-income housing:
 - a. Increased funding of efficiency programs targeted to low income, both owner and renter.
 - b. Increased participation in programs.
 - c. Reduction in bills due to actions taken to improve efficiency.
 - d. Increase number and percentage of appliances converted to efficient models.
 - e. Improvement and expansion of EE in rental housing stock.
- 2. Low income and vulnerable communities have access to an increasing number of renewable or non-emitting distributed generation resources:
 - a. Increase in number of distributed and community renewable projects, including those with storage.
 - b. Increase in number of community groups or public agencies that serve low-income and vulnerable communities and households that own renewable energy projects, especially ones paired with storage.
 - c. Increased percentage of electricity generated by distributed renewable energy projects, including storage for when renewable production is low.

Non-Energy Benefits

- 3. Community Employment opportunities:
 - Increased number of local low-income and vulnerable population representation in clean energy apprenticeships and training programs in the state.
 - b. Increase in number of living wage/union jobs sustained.
 - c. Increased representation of low-income and vulnerable communities for contractors selected in local program delivery.
- 4. Community Economic Development:

- a. Indirect economic benefits during project construction, especially for larger-scale community projects.
- b. Property tax benefits, especially for rural counties, for larger-scale community solar and community-based renewables.
- 5. Health and Community well-being:
 - a. Reduced number of school and work absences due to illness triggered by poor air quality in highly impacted communities.
 - b. Improved housing conditions: health and safety outcomes related to weatherization measure installation.
 - c. Improved comfort in home (for example, customers' ability to heat/cool as needed, with efficient heat pump technology) due to more affordable bills.
 - d. Increase in number of customers with access to electricity as a transportation fuel in highly impacted communities.
 - e. Increased incorporation of non-energy benefits in utility cost-effectiveness analyses, particularly for low-income weatherization measures and renewable programs.

Reduction of Burdens

- 6. Reduction in number of customers suffering from high energy burden by:
 - a. customers in highly impacted communities;
 - b. customers in vulnerable populations;
 - c. participants in bill assistance programs;
 - d. known low-income customers; and
 - e. other residential customers with high energy burden.
- 7. Reduced barriers for program participation:
 - Increased participation in bill assistance, weatherization, and energy efficiency programs, renewable and smart grid pilots and grant opportunities.
 - b. Expanded translation services.
 - c. Reduction in cost disparities between customers who have access to EV charging at home on a residential rate and customers who do not have access to EV charging at home.

Public Health

- 8. Improved Health outcomes:
 - a. Reduction of hospital admissions for asthma and harmful emissions-related illnesses.
 - b. Decreased wood use for home heating.

- c. Improvements in indoor and outdoor air quality in communities that experience poor air quality due to pollution.
- d. Reduction in health care cost burden and reduced health care bills.

Environment

- 9. Reduction of GHG emissions:
 - a. Continuous reduction in overall greenhouse gas emissions in the utility service area.
 - b. Increased electrification.
 - c. Increased electrification of transit services.
- 10. Reduced Pollution Burden and Pollution Exposure:
 - a. Decrease in share of population and pollution burden, by race/ethnicity, geography and all customer groups (e.g., income level, frontline community, senior citizens, medically vulnerable, rural/ urban, renter/homeowner, race, gender, ability/disability, language spoken, etc.).
 - b. Decrease in air pollution exposure index, by race/ethnicity and all other customer groups.
 - c. Reduction of particulates from fossil fuel burners in targeted neighborhoods.
 - d. Improved air quality due to reduction in diesel particulate emissions.
- 11. Increase Neighborhood Safety:
 - a. Reduction in frequency and length of outages due to major disasters, wildfires, and extreme weather events through cost-effective investments to reduce risk.
 - b. Increased capacity of local community to respond to local disasters or weather events.
 - c. Increase the number of critical facilities with solar paired with storage, so that local fire, policy, medical facilities, and other critical facilities can retain power during outages.

Energy Security

- 12. Reduced Residential Disconnections:
 - a. Reduction in number and percentage of residential customer disconnections.
 - Reduction in number and percentage of residential customer disconnections by location (and demographic info) of residential customer disconnections (zip code/census tract; renter; known low-income; highly impacted communities; and BIPOC customers).
- 13. Improved access to reliable clean energy:

- a. Increase distributed generation in low-income neighborhoods, focusing on ownership by low-income and highly impacted communities.
- b. Optimize grid investments on the distribution system through increased community-centered distribution system planning.

Resilience

- 14. Reduction in frequency and duration of blackouts or brownouts in target communities:
 - a. Improve SAIDI and SAIFI, particularly in communities that have experienced long loss of service in the past.
- 15. Reduction in energy and capacity need:
 - a. Increased participation in targeted demand response, load management, distributed generation and behavioral programs that result in a measurable reduction to peak demand.
 - b. Increased acquisition of energy efficiency savings.
 - c. Increased water savings due to water efficiency measures.
- 16. Reduction in recovery time and increase in survivability from outages:
 - a. Increase number of neighborhoods with storage/backup/locally powered centers for emergencies.
 - b. Increase access to renewable generation and storage in order to provide a safety net to households that rely on power to keep necessary medical equipment on and medications refrigerated.

We make these recommendations while reiterating the importance of utilities speaking directly with their communities to identify and define what community benefits mean to them. Holistically, these community benefit indicators are useful in identifying a better energy future for communities; however, not all communities experience negative energy impacts the same and have different needs. One-to-one consultation between utilities and their communities will allow for tailored and effective solutions for their customers.

Lastly, we emphasize that, currently, not all community benefits can be accurately monetized by utilities and integrated into rates. Certain community benefits, including those that accrue to low income households, such as better air quality and public health, and the general benefits of decarbonization, are not necessarily quantifiable or fungible. GHG emissions create pervasive risks to the environment, economy, and human health in ways that climate science hasn't fully documented yet. We urge the Commission to recognize the broader benefits of decarbonization, increased system resilience, and other community benefits, and to consider those along with the monetary benefits within the IRP/CEP planning process.

Public Interest

In addition to what's stated in HB 2021, the information that is collected through utility-to-community consultation can be used to determine what is in the public's interest. Utility customers' agreement to utility clean energy plans, after thorough consultation, would be a strong indicator of public interest. It is important, however, to ensure that costs are attributed to the utilities themselves before reaching their customers. These measures should, to the greatest extent possible, not result in increased burden for low-income and other otherwise marginalized customer groups. If utilities choose to identify community benefits through consultation with their Community Benefits and Impacts Advisory Groups (CBIAGs), the commission should ensure that appointment of CBIAG members happens with input from utility community members and other trusted stakeholders.

Thank you for your consideration of these comments. We look forward to continued engagement in this process.

Respectfully submitted this 4th day of May 2022,

/s/

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