



Oregon Citizens'
Utility Board

Clean Energy Plan updates City of Milwaukie 6/20/23

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Overview

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HB 2021 – 100% Clean Electricity law

- Oregon's electric utility clean energy law, did two big things.
 - It set the most aggressive clean energy standard in the country. Requiring utilities to reduce emissions by 80% by 2030 and 100% by 2040.
 - It reimagined the utility planning process to bring in community voices concerns and priorities, with a particular emphasis on environmental justice communities, which include communities of color and communities with low incomes.
- Applies to Oregon's two investor-owned electric utilities, Portland General Electric and PacifiCorp.
- The Oregon Public Utility Commission (PUC) will acknowledge a clean energy plan if it finds that it is consistent with the emissions' reduction requirements and in the public interest.



HB 2021 – Emissions Reduction Requirements

- Emissions reduction requirements: The law uses an accounting framework that already exists at the Oregon Department of Environmental Quality (“DEQ”) and, under current DEQ rules. If the “underlying generating resource” is renewable, it will have zero carbon emissions in its DEQ accounting.
- These utilities can meet these emissions goals by using renewable energy or through energy conservation, utility-wide scale, or community level.



HB 2021 - “Public Interest” requirement

- Public interest is defined as:
 - (a) Any reduction of greenhouse gas emissions that is expected through the plan, and any related environmental or health benefits;
 - (b) The economic and technical feasibility of the plan;
 - (c) The effect of the plan on the reliability and resiliency of the electric system;
 - (d) Availability of federal incentives;
 - (e) Costs and risks to the customers; and
 - (f) Any other relevant factors as determined by the commission.



HB 2021 – Community Engagement

- HB 2021 implementation must “be done in a manner that minimizes burdens for environmental justice communities.”
 - “Environmental justice communities”: communities of color, communities experiencing lower incomes, tribal communities, rural communities, coastal communities, communities with limited infrastructure and other communities traditionally underrepresented in public processes and adversely harmed by environmental and health hazards, including seniors, youth and persons with disabilities.
- Community Benefits Impact Advisory Groups representative of environmental justice and low-income communities.
 - Biennial report assessing community benefits and impacts, including actions taken to increase energy resilience (ex, renewable energy, grid investments, storage, social and economic benefits).
 - Advise on equitable implementation of distribution plan and best practices for decreasing energy burden and disconnections.



Oregon Public Utility Commission's HB 2021 Investigations

- UM 2225 (CEP filings) - Utility Clean Energy Plans are expected to be filed with the utility's planning document, the Integrated Resource Plan (IRP)
- UM 2273 (contested case) - Public investigation docket to determine what PUC expects in a utility CEP and how commission should consider whether to acknowledge plan, including:
 - How should "public interest" policy statement be considered?
 - What should the process for utility demonstrations of "continual progress" on CEPs look like?
- PGE's CEP/IRP (LC 80) provides public opportunities to comment on plans (next is July 20, 2023).
- New emphasis on accessibility of PUC dockets -- are community members not regularly involved in utility regulation world able to understand the planning process and meaningfully participate.



Emissions Reduction Status

- HB 2021 consistent with the coal to clean law - Oregon utilities stop serving customers with coal by 2030.
- PGE closed the Boardman coal plant, its largest generating plant, and PacifiCorp has stopped burning coal at Naughton 3. PGE's reported emissions as of January this year were 26% below the baseline and PacifiCorp's was 9% below the baseline.
- Boardman was the easiest coal plant to deal with because it primarily served Oregon customers. Getting out of other coal plants is harder because we must work with other states and utilities.
- Closing coal plants has added costs to rates. Accelerating depreciation and update decommissioning add costs to rates. These are necessary steps in transitioning to a clean future. These are not large increases, but they are increases.



Keeping rates affordable

- Need to manage rates to make transition affordable.
- Both PGE and PAC have raised rates by more than 20% over the last 2 years and both are set for additional double-digit rate increases this year.
- Increases are from increased power costs, Ukraine war impact on gas prices, general inflation, and supply chain difficulties. Also include costs to meet HB 2021, repairing damage from wildfires and wildfire mitigation. And all the other demands on their systems: EVs, storage, resiliency, new renewables, new QFs, new low-income programs, microgrids and everything else.
- Energy efficiency should be prioritized - lowers bills and reduces emissions. Right now, the federal government is offering tax credits and rebates on insulation, doors, windows, heat pumps, heat pump water heaters and dryers, and even convection stoves.



PGE's IRP & CEP – Plan for compliance

- PGE's plan focuses on acquiring wind, solar, battery storage facilities, while placing limits on natural gas generation for load, and closing PGE's only coal plant, Colstrip before 2030.
- 1634 MW of new wind built by 2030, current wind capacity is 1116 MW capacity – 146 % increase in wind farm capacity by 2030
- 1166 MW of new solar built by 2030, current solar capacity is 832 MW capacity – 140 % increase in wind farm capacity by 2030
- 632 MW of Battery built by 2030, current battery capacity is ~40 MW capacity. – 1580% increase in battery capacity
- Community Based Renewable Energy - 155 MW capacity in 2026 – Most of this is expected to be solar, and these capacity numbers are not included in the solar numbers above.



PGE's IRP & CEP – Community Based Renewable Energy

- Community Based Renewable Energy resources (CBREs) are a new for everyone – HB 2021 states CBREs can include one or more renewable energy system that can be combined with other resiliency measures including microgrids and storage systems, but investments must provide a direct benefit to the community.
- PGE is planning on procuring the equivalent of 7 small scale solar power plants of community-based renewables.
- PGE is proposing to move past least cost least risk in utility planning and including community benefits as a non-price score for evaluating community renewable projects. This resource will evolve overtime as communities give input on this.
- Community advocates would like broader engagement with environmental justice communities from the initial stages of a utility development of its CEP. And that those community-based renewable resources come from an understanding of what the individual communities' need most.



PGE's IRP & CEP – CUB initial thoughts

- Risks of transmission delays
- Closing Colstrip - Carbon reductions can be immediately done by not using Colstrip. Colstrip is co-owned with other utilities in the NW, which make PGE's path from moving away from the facility not straight forward.
- Investing in customer-sided opportunities, like energy efficiency and demand response may need greater emphasis and can provide value to Milwaukee residents. We would like to see this option revisited more closely.
- Federal funding incentives and Justice40 initiative – requires 40% of benefits passed on to disadvantaged communities. Need more discussion. This is another reason we believe community engagement and buy-in is critical at all stages of CEP development and implementation.



Opportunities for Engagement

- Ways to engage at the PUC:
<https://www.oregon.gov/puc/news-events/Pages/Get-Involved.aspx>
- LC 80, PGE's IRP & CEP:
<https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=23636>
- UM 2273, PUC investigation into HB 2021 implementation issues:
<https://apps.puc.state.or.us/edockets/DocketNoLayout.asp?DocketID=23609>



The role of electrification

- Gas utilities must reduce emissions by 50% by 2035 and 90% by 2050 – about 3% per year and eliminate 100% from new customers. There are two ways to do this with current technology:
 - Renewable natural gas (RNG), and
 - Reducing demand for fossil natural gas.
- Decarbonizing with RNG will be difficult and if even possible, will be expensive
 - Landfills, wastewater treatment plants and factory farms (cheaper)
 - Gasification of biomass (more expensive)
 - There is not enough RNG on the market – you cannot go out and buy large quantities of RNG. RNG will require large amounts of investment.



The role of electrification

- Alternative is to reduce demand for gas -- expanding the gas network is not in the interest of existing gas customers, for two main reasons:
 - New customers mean more emissions that must be eliminated under the Climate Protection Program and that the cost of that is really expensive; and
 - Adding gas service to new buildings increases the cost of service to existing customers and adds additional risk to customers in the future. Every new building is connected to the gas system with a pipe that has a 58-year useful life. It is 2023, 58 years from now is 2081. It is not clear what role the gas system will play in 2051, let alone 2081.
 - Customers who are unable to switch away from gas service in the future, including low-income households and renters could be particularly hard hit by future costs of the gas system. CUB supports Milwaukee's efforts to stop expanding gas system and appreciates their leadership.



The role of electrification

- Electrification is the best way to reduce natural gas emissions.
 - The first place we should electrify is new buildings. Electrifying new buildings doesn't just reduce demand for gas, but it avoids capital investment in expanding the gas system.
 - Electrification in existing buildings - Heat pumps are incredibly efficient. My gas furnace is 96% efficient, meaning that 96% of the energy content of the gas is being converted to heat. But a heat pump is 250 to 300% efficient.
 - Federal tax credits: up to \$2000 available today. Later this year there will be rebates available for low- and moderate-income households. These rebates can be up to \$8000 and can be used with the tax credits.



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