



Oregon Citizens' Utility Board

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December 9th, 2020

Oregon Public Utility Commission
Attn: Filing Center
201 High Street SE, Suite 100
Salem, Oregon 97308

**Re: Portland General Electric – Advice No. 20-14
PGE Schedule 300 Line Extension Allowance**

Dear Chair Decker, Commissioner Tawney, and Commissioner Thompson:

CUB is supportive of Portland General Electric's proposal to update PGE's Residential Line Extension Allowance (RLEA). CUB has reviewed the data supporting the updated RLEA and appreciates the participation of OPUC Staff and PGE in internal workshops.

In this advice filing, Portland General Electric is seeking to create two categories for the RLEA. The first proposed category is residential all electric service, which consists of homes where heating is provided by active electric HVAC systems. The second category is residential service primary other where the primary heating source is provided by an alternative HVAC-system that uses heating fuels such as natural gas, propane, oil, biodiesel or wood.

Historically, Portland General Electric's RLEA is flat; it does not take into consideration different fuel types. Electric heat customers use a higher portion of PGE's distribution system compared to non-electric residential customers. Since electric distribution rates are primarily volumetric, electric heating residential customers pay a higher portion of the distribution system costs in their monthly utility bill. Based on this fact, CUB finds it entirely reasonable to provide a higher RLEA for new dwelling that are all electric. After reviewing the line extension policy, CUB recommends that the Commission exclude new dwellings that are primarily heated with electric resistance heat from the higher RLEA group:

1. Resistance Heat and Builder Incentives

Electric resistance heating is expensive to operate compared to other types of heating. However, Electric resistance heating devices have a lower capital costs for home builders compared to electric heat pumps or natural gas furnace. Home builders compete on price when building new construction. CUB is concerned that including resistance heat in a higher line extension allowance, may unintentionally provide an incentive for new homes to be built with resistance heat, due to the low construction cost of electric resistance heat, and that home builders do not have to pay for the higher operating costs of electric resistance heating.

2. Resistance Heat and Winter Peak

Resistance heating is inefficient compared to modern electric heat technologies such as air heat pumps or geothermal heat pumps. CUB is concerned that incentivizing resistance heat could increase PGE's winter peak and make electrification more expensive compared to new construction with heat pumps. Most homeowners only replace a HVAC system when it fails and resistance heating systems can last decades. Most new homes are financed with a 30-year mortgage. Initial construction costs such as the cost of the HVAC system are baked into the homeowner's mortgage payments. It is more prudent to provide an incentive for efficient electric heating prior to adding the home to the utility system than its to build new homes with resistance heat and ask the homeowner to finance a retrofit in the future.

3. Smart Thermostats and Resistance Heat

In PGE 2019 IRP, the Company has stated its goal to seeking all cost-effective and reasonable distributed flexibility resources. By 2025, the Company is expecting to achieve 141 MW of winter demand response. In response to its resource plan, PGE is rolling out a Smart Thermostat Program. The Smart Thermostat program, enables residential customers to enroll their smart thermostat into PGE's system. During peak events in the winter time, eligible enrolled smart thermostat can automatically pre-heat a home and shift energy usage away from peak times. Unfortunately, the thermostats used in these programs are low-voltage and are incompatible with high-voltage resistance heat. Additionally, some resistance heating systems have to be manually set on the device and are incompatible with external thermostats. Resistance heat customers are unable to fully participate in demand response programs around heating.

CUB is supportive of PGE's proposal to update the RLEA into two groups. However, CUB recommends that new dwellings, which are heated using resistance electric heat be excluded from the all-electric RLEA.

Respectfully submitted,



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