



# Oregon Citizens' Utility Board

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## *Via Electronic Filing*

Public Utility Commission of Oregon  
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## **Re: Docket No. UG 490 –Errata Oregon Citizens' Utility Board Opening Testimony of Jahn Garrett**

The Oregon Citizens' Utility Board (CUB) files these errata to the Opening Testimony of CUB Witness John Garrett.

- The erratum to CUB/200/Garrett/10 and the erratum to Exhibit CUB/203/Garrett/2 corrects incorrect values in the tables (these values are accurate in the workpapers).
- The Exhibit CUB/203 erratum also corrects pages that were attached out of order.
- The erratum to exhibit CUB/208/Garrett/2 includes stricken language that was meant to be omitted in the final draft, and footnotes inadvertently omitted from the spreadsheet.

Enclosed are redline pages with these corrections identified. Please contact me if you have any questions with this filing.

Sincerely,

*/s/Jennifer Hill-Hart*

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1 additional equity and discrimination concerns. Table 3 shows that 11% of the  
 2 Company’s existing customer base is made up of multifamily customers.  
 3 Comparatively, 33% of “new premise” customers will be multifamily customers. This  
 4 is concerning, since multifamily customers tend to be renters and/or lower-income.  
 5 Targeting them with a higher rate runs counter to the attempts by this Commission to  
 6 address energy burden.

7 **Table 3: New Premise Customers Breakdown<sup>26</sup>**  
 8

“New Premise” Customers			Existing Customers		
	Customers	Percentage		Customers	Percentage
New MF	1525	33%	Existing MF	<del>73,221</del> 71,695	11%
New SF	3081	67%	Existing SF	566,945	<del>88%</del> 89%
Total “New Premise”	4606		All Res Cust Count	<del>643,247</del> 638,640	

9  
 10 While the Company proposes a customer charge that is \$2 lower for multifamily  
 11 customers across existing and “new premise” customers,<sup>27</sup> which CUB supports, this  
 12 does little to offset the \$18.25 increase to the customer charge for “new premise”  
 13 multifamily customers from UG 435 to UG 490.

14  
 15 **IV. The Line Extension Allowance (LEA) for Residential Customers**

16 **Q. Please provide an overview of your LEA testimony.**

17 **A.** First, I assess the Company’s novel LEA design, which maximally incents “lower-  
 18 use” customers to connect to NW Natural’s system.<sup>28</sup> This design starkly contrasts  
 19 the standard of providing higher allowances for customers that use more of a utility’s  
 20 product and subsequently generate higher revenues. The Company’s LEA design

<sup>26</sup> See CUB/Garrett/203/New Premise Customer Rates.

<sup>27</sup> See NW Natural/1717/Walker/ Page 4.

<sup>28</sup> See NW Natural/1900/Therrien/ Page 25-26.



**Rates & Regulatory Affairs**  
UG 490  
Request for a General Rate Revision  
**Data Request Response**

**Request No.:** UG 490 CUB DR 9

For residential customers in each month of the Test Year, what are the projected use-per-therm rates (inclusive of the customer charge) for:

- a. all residential customers?
- b. existing residential customers?
- c. new premise residential customers?

**Response:**

(a., b., c.) See supporting workbook UG 490 CUB DR 9 Attachment 1.

Projected use per therm rates were calculated by dividing each month's projected usage per customer (UPC) into the monthly fixed charge, and then adding the UG 490 projected base rate.

**Note:** The response to "a. all residential customers" uses a weighted average of the UPC and customer fixed charge of all Residential categories: existing single family, existing multi-family, new premise single family, and new premise multi-family.



Oregon Residential (02R) Accounts with Full Year Billing				
	Total Accounts	Accounts with 449 Therms/ Yr or Fewer	Percentage That Used 449 Therms or Less	Average Annual Usage (Therms)
2021	603,141	193,417	32.07%	614.5
2022	611,191	157,881	25.83%	677.5
2023	617,097	179,075	29.02%	640.1
Average	610476	176791	28.97%	644.0

Source: UG 490 CUB DR 10

Source: UG 490 CUB DR 9

New Premise Customers			Existing Customers		
	Customers	Percentage		Customers	Percentage
New MF	1525	33%	Existing MF	73221-71695	11%
New SF	3081	67%	Existing SF	566945	88.89%
Total New Premise	4606		Total Customer Count	643247-638640	

MF - multi-family

SF - single-family

	Existing Cust	New Premise Cust	Difference		
Proposed UG 490 Total Base Rate (\$/therm)	0.90649	0.90649			
Annual UPC (set equal for analysis)	449	449			
Annual Variable Charge	\$407.01	\$407.01	\$0		
Customer Charge	\$10	\$26.25	\$16.25		
Mo/Yr	12	12			
Annual Fixed Charge	\$120	\$315	\$195		
Annual Rate (\$)	\$527.01	\$722.01	\$195.00	Avg Winter Bil	Multiple of Differenc
Annual Rate/ Therm (\$/therm)	1.173750579	1.773929133	51.1%	\$67.42	2.9

Source: UG 490 CUB DR 9 Attachment 1

Inputs: Existing customer rates with 449 therms annual usage profile														
Proposed UG 490 Total Base Rate (\$/therm	0.90649													
Customer Charge (existing cust)	\$10.00													
	<b>24-Nov</b>	<b>24-Dec</b>	<b>25-Jan</b>	<b>25-Feb</b>	<b>25-Mar</b>	<b>25-Apr</b>	<b>25-May</b>	<b>25-Jun</b>	<b>25-Jul</b>	<b>25-Aug</b>	<b>25-Sep</b>	<b>25-Oct</b>		
<b>UPC</b>	51.16	73.09	75	63.93	53.54	39.89	22.82	13.93	9.46	8.16	11.05	27.36	<b>Annual Thems</b>	\$449.39
<b>Monthly Rate</b>	\$56.38	\$76.26	\$77.99	\$67.95	\$58.53	\$46.16	\$30.69	\$22.63	\$18.58	\$17.40	\$20.02	\$34.80	<b>Annual Rate:</b>	\$527.37
<b>Winter Months Avg</b>	\$67.42													

Source UG 490 CUB DR 9 Attachment 1

**Table 4: Residential Gas v. Electric Heating Systems**

	NWN Gas Service w/ Gas Furnace	NWN Gas Service w/ Hybrid Heating	Cold- Climate Air Source Heat Pump	Air Source Heat Pump	Electric Service w/ Air Source Heat Pump and Backup Generator
<b>NWN New Premise Customer Charge (15 Years-Worth)</b>	\$4,725	\$4,725	N/a	N/a	N/a
<b>Gas Furnace [2]</b>	\$5,500	N/a	N/a	N/a	N/a
<b>Heat Pump (without IRA rebate) [1]</b>	N/a	N/a	\$11,000	\$7,000	\$7,000
<b>Hybrid Gas Furnace/ Electric Heat Pump [1]</b>	N/a	\$8,350	N/a	N/a	N/a
<b>Generator Cost [4]</b>	N/a	N/a	N/a	N/a	~\$2,500
<b>Total Cost Less Usage Charge</b>	<b>\$10,225</b>	<b>\$13,075</b>	<b>\$11,000</b>	<b>\$7,000</b>	<b>\$9,500</b>
<b>Air conditioning? [1]</b>	No	Yes	Yes	Yes	Yes
<b>Flexibility during electric outage?</b>	Could power gas appliances.	Could power gas appliances.	Nothing would be powered.	Nothing would be powered.	Could flexibly power electric appliances and outage contingency devices, providing for heating, AC, refrigerators, lights, phones, and medical devices.
<b>Efficiency? [1]</b>	Significantly less efficient than heat pumps, except possibly in frigid temperatures.	Good for “frigid” climates with temperatures that frequently drop below freezing, offering heat pump efficiency in cold conditions and a gas furnace during prolonged frigid temperatures.	Cold climate air source heat pumps are more expensive, but uphold higher performance at colder temperatures.	Air source heat pumps are highly efficient (up to 3x more efficient than furnaces),[3] but lose their efficiency edge over the higher-efficiency furnaces at frigid temperatures. "It's also important to note that the pump won't be useless during extreme weather events: The efficiency will just be lowered." [1]	
<b>Variable Rate: Gas versus Electric</b>	This is the most complex comparison and cannot realistically be made to be consumer-friendly. It would be very challenging for anyone to do, particularly on a 15-year forward-looking basis. That said, assuming the customer is a Portland-area resident with access to NW Natural and PGE bills <del>NW Natural's proposed usage rate in UG 490- is about half PGE's proposed usage rate in UE 435- [3]</del> comparing usage rates for PGE and NW Natural reveals <del>that the usage rate for PGE is about three times higher.</del> [5] However, an electric heat pump “can deliver up to three times more heat energy to a home than the electrical energy it consumes,” [4] meaning the heat pump could <del>easily</del> offset the difference in gas and electric usage rates through higher efficiency. This is particularly true in a climate that does not consistently drop below freezing, meaning heat pumps operate closer to optimal efficiency. It would not be unreasonable for a customer to <del>conservatively</del> assume that presently this factor is roughly a wash, and their per-therm variable rate could be exchanged for a comparable per-kWh variable rate. If a customer was to research the forward outlooks of the gas versus electric systems in a decarbonizing Oregon, <del>responses to gas-company IRPs...</del> they could review the Commission's responses to 2022-2023 Oregon gas company IRPs.				

1. See Lawrence Bonk, “How Much Does Heat Pump Installation Cost?”, Forbes Home (Feb. 29, 2024), <https://www.forbes.com/home-improvement/hvac/heat-pump-installation-cost/> (last visited April 17, 2024).

2. See Cellucci, N. and Pelchen, L. How Much Does A Gas Furnace Cost In 2024? Forbes Home (Feb. 22, 2024) <https://www.forbes.com/home-improvement/hvac/how-much-does-a-gas-furnace-cost/> (last visited April 17, 2024).

3. See Heat Pump Systems, Dep't of Energy, <https://www.energy.gov/energysaver/heat-pump-systems> (last visited April 17, 2024).

4. See Portable Generators, The Home Depot, <https://www.homedepot.com/b/Outdoors-Outdoor-PowerEquipment-Generators-Portable-Generators/Dual-Fuel/N-5yc1vZbx9nZ1z1cr39> (last visited April 17, 2024).

5. NW Natural's 2023 variable rate (Per Therm Usage Charge; \$1.35/Therm) was drawn from [https://www.nwnatural.com/-/media/nwnatural/pdfs/rates-external/or\\_rs-2-billing-rate-hist\\_2023a.pdf?rev=e88fa9d88b604572a7366e2c14943ee9&hash=BC0C051CF3B42C367CC3095E7F3D8190](https://www.nwnatural.com/-/media/nwnatural/pdfs/rates-external/or_rs-2-billing-rate-hist_2023a.pdf?rev=e88fa9d88b604572a7366e2c14943ee9&hash=BC0C051CF3B42C367CC3095E7F3D8190). PGE's variable rate (14.51 cents/KWH) was drawn from an October 2023 PGE bill and included all per KWH charges except the “Green Futures Choice” charge.