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State Of WASH.
UTIL. AND TRANSP.
COMMISSION

October 25, 2021

Ms. Amanda Maxwell
Executive Director and Secretary
Washington Utilities & Transportation Commission
621 Woodland Square Loop SE
Lacey, WA 98503

RE: Docket No. UG-210729 – Comments of Avista Regarding Natural Gas Line
Extension Allowances – Perpetual Net Present Value

Dear Ms. Maxwell:

There are three key issues the Commission should address in this rulemaking.

1) The 2018 Energy Code reduces the energy use of new homes dramatically. This took effect in January of this year. The attached study for the Washington State Building Code Council shows that the typical usage of a newly constructed gas-heated home will be dramatically lower than before, therefore dictating a smaller line extension allowance even under the current policy. The summary modeling results are below. For example, a medium-size single-family home built to the 2006 energy code, the top half of the table, would be expected to use 698 therms of gas per year, while the same house built to the 2018 code, at the bottom of the table, would be expected to use only 365 therms/year.

Each utility should resubmit their line extension allowances immediately based on the current energy code. This should reduce line extension allowances by about half, and thereby avoid the current problem, with existing customers facing rate increases to subsidize the line extension allowances for new customers that have been calculated based on lower efficiency in the previous energy codes.

These efficiency changes will affect the cost-effectiveness of consumers choosing gas quite dramatically. For example, in the Olympia area, where PSE electricity competes with PSE natural gas, the consumer is better off with an all-electric new home, except in the largest household size. The reason for this is that the monthly fixed charge for gas is amortized over fewer therms, and it has the effect of making gas more expensive than electricity for small and medium homes.

If utilities do NOT immediately submit new calculations based on the current code, they should not be allowed to include in rate base any line extension investments in excess of those justified by application of the current formula to the expected energy use under the new code.

2) The "perpetual net present value" approach is inappropriate for gas utilities. Gas utilities are required to reduce their emissions to net-zero by 2045. It is unlikely that they can do this as long as fossil gas is their primary fuel. There simply is not enough biogas available, it is not possible to substitute hydrogen to any major extent in the current gas distribution system, and pragmatically, the declining carbon allowances that the state will auction will go to much higher priority uses, such as transportation. Unless and until the gas utilities have approved decarbonization plans that achieve this transition to net-zero, **the Commission is obligated to assume that their service will end in 2045, and that should be the outer limit (23 years) for which a line extension should be calculated.** And the societal cost of carbon associated with emissions until that date should be subtracted from the line extension allowance. In addition, the Commission should direct the use of depreciation schedules for gas utilities that result in no stranded assets assuming a discontinuation of service in 2045.

3) The Commission must incorporate the social cost of carbon in both line extension allowances and natural gas prices. The first should be done by deducting the life-cycle carbon emission costs from any allowed line extension computed on the basis of usage and natural gas rates. The second should be done by reducing fixed charges and increasing per-therm charges to fully reflect the social cost of carbon. The first of this can be dealt with in this docket.

Summary table from State Building Code Council study.

APPENDIX B – DETAILED RESIDENTIAL MODELING RESULTS

Run Label	Dwelling Size (Section R406)	Heating Fuel	Heat, kWh	Heat, Therm	Cool, kWh	Fan, kWh	Lights, kWh	DHW, kWh (Therm)	Appliances and Plugs, kWh	Total kWh	Total Therms	Total kWh/Unit Equiv
WA06_0	Single Family Small	gas	167	259	140	255	1397	(140)	5533	7491	399	19175
WA06_0	Single Family Small	elec	3339		336	255	1397	2499	5533	13359		13359
WA06_0	Single Family Medium	gas	357	512	202	342	2358	(187)	5533	8792	698	29255
WA06_0	Single Family Medium	elec	6280		470	342	2358	3337	5533	18320		18320
WA06_0	Single Family Large	gas	578	724	278	424	5197	(246)	5533	12010	970	40421
WA06_0	Single Family Large	elec	9151		626	424	5197	4400	5533	25330		25330
WA06_0	Multifamily (R-2)	elec	2272			210	1015	1703	4121	9320		9320
WA18_1	Single Family Small	gas	132	176	94	138	277	(119)	5533	6174	295	14812
WA18_1	Single Family Small	elec	1976		231	247	277	2272	5533	10535		10535
WA18_1	Single Family Medium	gas	199	244	125	201	468	(121)	4693	5686	365	16382
WA18_1	Single Family Medium	elec	3633		319	251	468	1153	4693	10517		10517
WA18_1	Single Family Large	gas	276	297	182	563	1030	(160)	4693	6745	457	20137
WA18_1	Single Family Large	elec	5398		442	276	1030	1520	4893	13558		13558
WA18_1	Multifamily (R-2)	elec	1191			272	205	588	4121	6377		6377

Summary

I am the author of several authoritative handbooks on electric utility regulation, including *Electricity Regulation in the US: A Guide*, and *Smart Rate Design for a Smart Future*. I also served as Public Counsel's expert in line extension changes adopted in the 1980's and 1990's. I am submitting these comments as a private citizen. No client has engaged me in this docket.

Avista's comments in this docket state:

"Avista has always provided an allowance for new natural gas customer line extensions, albeit utilizing different methodologies. The purpose of a line extension allowance is not to serve as an incentive to connect to natural gas service, but rather is a recognition in traditional ratemaking that new customers pay for the costs associated with their line extension in the rates they pay once they take service." [Erbar, October 25, 2021]

This is reasonable, but two major things have changed. First, new customers will use half as much gas per year. And second, they are likely to take service for only twenty-three years. Taken together, this means that the gas line extension policy, even if calculated using traditional methods, would allow only about one-third of the current allowances.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim Lazar".

Jim Lazar
1907 Lakehurst Dr. SE
Olympia, WA 98501