

BEFORE THE PUBLIC UTILITY COMMISSION

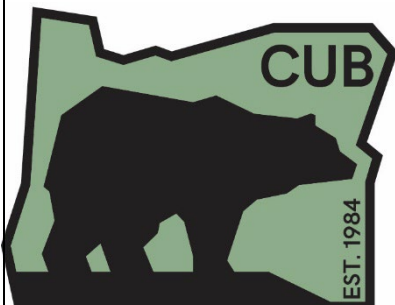
OF OREGON

UM 2178

In the Matter of)
)
OREGON PUBLIC UTILITY)
COMMISSION STAFF,)
)
Natural Gas Fact Finding per Executive)
Order 20-04 PUC Year One Work Plan.)
_____)

COMMENTS OF THE
OREGON CITIZENS' UTILITY BOARD ON THE NATURAL GAS FACT-FINDING
DRAFT REPORT

June 3, 2022



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I. INTRODUCTION

The Oregon Citizens' Utility Board (CUB) is grateful to the Oregon Public Utility Commission (PUC) for opening this timely investigation into the future of natural gas service as part of its efforts to implement Executive Order 20-04's (EO 20-04) directives for rapid reduction of greenhouse gas (GHG) emissions in Oregon. This investigation is especially timely for the PUC and stakeholders to consider adequate customer protections in the face of an uncertain future for the natural gas sector. The PUC received a lot of information from a variety of stakeholders in this docket throughout its robust engagement process. However, the Natural Gas Fact Finding Draft Report (Draft Report) appears to rely heavily on utility proposals that focus, in part on nascent and unproven technology, in order to meet GHG emission reductions goals. This is part of the reason why CUB is disappointed with the Draft Report at this stage.

In October 2020, in response to the PUC's investigation into implementation of Governor Brown's EO 20-04, CUB called for the PUC to investigate the future of natural gas service in Oregon given the significant risk GHG reduction requirements may place on natural gas customers.¹ The PUC opened a Natural Gas Fact Finding investigation in docket UM 2178 to consider these risks. The PUC stated its investigation would analyze the natural gas utility bill impacts that may result from limiting GHG emissions under the Oregon Department of

¹ Comments of the Oregon Citizens' Utility Board on Oregon Public Utility Commission Executive Order 20-04 Work Plans (Oct. 28, 2020) *available at* <https://www.oregon.gov/puc/utilities/Documents/EO20-04-Comments-CUB.pdf>.

Environmental Quality’s (DEQ) Climate Protection Program (CPP). The natural gas fact finding report was supposed to identify appropriate regulatory tools to mitigate potential customer impacts of any future natural gas energy consumption and inform future policy decisions and other key analyses in 2022.²

Rather than conducting analyses and drawing conclusions about the future of natural gas, the Draft Report appears to primarily summarize utilities’ proposed compliance scenarios. It does not summarize, discuss, or analyze stakeholder comments, nor does it include any comments or information provided from the PUC’s consultant, the Regulatory Assistance Project (RAP). Instead, the report summarizes stakeholder comments as: skeptical of utility modeling. It states PUC Staff (Staff) engaged RAP “to assist staff and explore regulatory tools.”³ However, despite being couched as a fact finding, the Draft Report finds no facts about bill impacts from CPP compliance scenarios, nor does it identify any regulatory tools that could reduce costs to customers. The report suggests limited strategies for future action, asserting that more data is needed, and that utilities should include this information in the IRP dockets. Staff also recommends the PUC hire another consultant to continue the investigation.

CUB is sympathetic to the capacity needs of Staff—it has been a busy couple of years to say the least. However, there is sufficient information in this docket to make conclusions about the future of natural gas. Staff created a robust plan for this investigation, offered a thorough engagement process, and hired a regulatory expert to assist the process. CUB believes the content of the Draft Report should not be limited to utility modeling projections. Many stakeholders participated throughout the engagement and comment process. Their input is important to this docket and should be discussed and considered in the final report’s analyses and conclusions.

Staff has the information it needs to conduct a fact finding analysis of the potential rate impacts of gas utility proposals for EO 20-04 compliance. Staff has the necessary information in this docket to direct utilities in cost-effective resource and program planning. The report should detail compliance scenarios that are informed in part by utility projections, but also market and industry data, science-based information, stakeholder input, and PUC expertise. Without fact finding conclusions from an analysis of the best projections for utility compliance with EO 20-04 goals, it is difficult to identify the best and most cost-effective regulatory tools to mitigate customer costs from utility compliance with the CPP.

This is a very serious issue. Climate change is happening. We are all aware that Oregon communities have been destroyed by wildfires. We are all aware that marginalized and vulnerable Oregonians have died from extreme heat and extreme snow and ice storms have left Oregonians without power and heat for days. Oregonians need clean air, stable weather, healthy homes, and affordable utility rates. The average Oregon resident has no idea what the energy future will bring, whereas the PUC, utilities, and Wall Street have a pretty good idea of what it

² Oregon Public Utility Commission, *Natural Gas Fact Finding Overview*, p 2 (May 27, 2021), <https://www.oregon.gov/puc/utilities/Documents/EO20-04-NGFF-Overview.pdf> (emphasis added).

³ UM 2178 – Natural Gas Fact Finding Draft Report at 4, available at <https://edocs.puc.state.or.us/efdocs/HAH/um2178hah155046.pdf>.

looks like. Natural gas utility companies are legally bound to maximize profits to shareholders. And when on one hand they claim to offer viable and affordable GHG reduction strategies, and on the other hand challenge the State’s authority to mandate those strategies, there is reason to be skeptical of the gas utilities’ forthrightness in this docket. It is not up to the PUC to protect the market share of the natural gas industry. Even if there is general movement away from gas service, gas furnaces have 20-year useful lives and customers will need the PUC to be looking out for our interests for years to come. The PUC ensures Oregon utility customers have access to safe, reliable, and high-quality utility services at just and reasonable rates. This investigation is meant to ensure just that.

It has been two years since Governor Brown issued EO 20-04 ordering the PUC to prioritize proceedings and activities that advance decarbonization and determine whether utility portfolios reduce risks by making rapid progress towards reducing GHG emissions. The Draft Report was released over seven months after it was originally anticipated to be issued. Five months ago, Oregon’s natural gas utilities filed a lawsuit challenging DEQ’s authority to enforce the CPP. Currently, in this proceeding, the PUC is considering future gas utility resource procurement that relies heavily on the use of nascent, uncommercialized, and unproven replacement energy for methane gas and thus, potentially exposes customers to great risks. These risks must be thoroughly analyzed in this proceeding, and the final report must not rely so heavily on utility assumptions. This Draft Report must and can be revised in an expedited manner.

CUB recommends that Staff:

1. Reorient its report based upon the purpose and scope of the investigation;
2. More fully incorporate stakeholder comments and data, Regulatory Assistance Project guidance, as well as natural gas utility feedback into the report discussion and analysis;
3. Remove the two cases where the report makes conclusions regarding issues that were in dispute or, at least, explain the basis for the conclusions and
4. Expedite the final workshop with facilitated discussion of the Draft Report by the end of June or early July, prior to the July 12, 2022, Special Public Meeting on the Draft Report.

II. DISCUSSION

A. CUB urges Staff to reorient the final report based upon the purpose and scope of the investigation and issue a fact finding report.

The PUC identified that EO 20-04 directed the PUC to take action in six areas, including determining “whether utility portfolios and customer programs reduce risks and costs by making rapid progress towards reducing GHG emissions” and prioritizing “proceedings and activities that advance decarbonization in the utility sector to reduce GHG

emissions, mitigate energy burden experienced by utility customers, and ensure system reliability and resource adequacy.”⁴ The PUC stated it “considers the public interest and state energy policy when administering our enabling statutes, and will consider how EO 20-04’s directives and articulations of the public interest and state policy affect our work with thoughtful consideration and input from our stakeholders,” and it would begin that process by engaging stakeholders and providing opportunities to comment on its proposal for implementing EO 20-04.⁵

In October 2020, CUB recommended that the PUC “[o]pen an investigation to consider the risks to customers associated with the natural gas GHG emissions reductions requirements,” including costs to ratepayers.⁶ Specifically, when CUB recommended the fact finding investigation, we identified the need to provide guidance to IRPs about how to consider options for emissions reductions and the need to investigate how to minimize customer risk, including with stranded costs associated with impacts of policies that require GHG emissions reductions.⁷ Per this recommendation, CUB asked the PUC to investigate: no pipes solutions; line extension reform; useful lives and depreciation curves; discouraging incentives to switch from electricity to gas; reallocating investment risk; and fuel switching.⁸ The PUC opened a natural gas fact finding docket in order to: gain a better understanding of the natural gas customer dimensions and the impacts of different decarbonization scenarios to help inform future decision making.⁹

However, rather than investigating the risk to customers from clean energy policies, the Draft Report focuses almost entirely on the gas utilities’ potential to comply with the CPP. While CUB agrees that the CPP is a useful tool to examine decarbonization efforts, the EO 20-04 and CUB’s request to open this investigation both occurred before the CPP rules were finalized. In its report to the Governor’s office on the state of its efforts to meet the Governor’s GHG reduction goals, the PUC identified five pathways to meet the state’s GHG goals. Collaboration with DEQ in its cap-and-reduce program work was only one of those pathways. The PUC’s directives under EO 20-04 are distinct from DEQ’s CPP and this investigation should at a minimum include analyses of the future of natural gas within the PUC’s proposed pathways to compliance with the EO’s directives, which include “Utility Planning Framework” (related to impacts to IRPs).¹⁰

The gas companies are suing the state to challenge the CPP. Accordingly, CUB is concerned as to how serious the gas utilities are taking this docket—how realistic are their proposals and level of engagement. Regardless of their legal challenge, decarbonizing the economy will remain a priority for Oregon’s energy sector. Policies that promote

⁴ *Oregon Public Utility Commission Report on Executive Order 20-04*, p 3 (May 15, 2020), accessible at: <https://olis.oregonlegislature.gov/liz/201911/Downloads/CommitteeMeetingDocument/222332>.

⁵ *Oregon Public Utility Commission Report on Executive Order 20-04*, p 12 (May 15, 2020), accessible at: <https://olis.oregonlegislature.gov/liz/201911/Downloads/CommitteeMeetingDocument/222332>.

⁶ Oregon Citizens’ Utility Board, Comments of the Oregon Citizens’ Utility Board on Oregon Public Utility Commission Executive Order 20-04 Work Plans, p 5 (Oct. 28, 2020), accessible at: <https://www.oregon.gov/puc/utilities/Documents/EO20-04-Comments-CUB.pdf>.

⁷ *Id.*

⁸ *Id.* at 5-6.

⁹ *In the Matter of OREGON PUBLIC UTILITY COMMISSION STAFF Natural Gas Fact Finding per Executive Order 20-04 PUC Year One Work Plan*. See attached materials from the May 27, 2021 Workshop (June 8, 2021), accessible at: <https://edocs.puc.state.or.us/efdocs/HAA/um2178haa11959.pdf>.

¹⁰ *Oregon Public Utility Commission Report on Executive Order 20-04*.

decarbonization will continue to be proposed at the state, local and, maybe, the national level. Increasing summer temperatures will continue to drive customers to consider heat pumps as an efficient cooling investment. A simple change in residential building codes in Washington has led to a dramatic change in the primary heating source: going from about 80% using natural gas as primary heating fuel to more than 90% using electricity as primary heating fuel.¹¹ Similar changes may occur in Oregon. The economic risks to natural gas customers from a failure to properly manage the transition to clean fuels will remain and the tools to manage those risks will be required as directed by EO 20-04 and regardless of the legal challenges to the CPP.

In its final work plan on EO 20-04 implementation, issued in December 2020, Staff stated that “regardless of the strategies used by natural gas utilities to reduce GHG emissions, it anticipates the need to understand potential economic impacts on natural gas bills and to explore regulatory options to mitigate ratepayer impacts.”¹² Staff recommended opening a fact finding investigation docket “to better understand the customer dimensions and impacts of decarbonization scenarios on natural gas companies and to help inform future decision making.” Specifically, the investigation would “analyze the potential natural gas utility *bill impacts* that may result from limiting GHG emissions of regulated natural gas utilities under the DEQ’s Climate Protection Program and to suggest appropriate regulatory tools to *mitigate potential ratepayer impacts*.”¹³ Accordingly, Staff identified the purpose of the Natural Gas Fact Finding docket to:

1. Analyze the potential natural gas utility bill impacts that may result from limiting GHG emissions of regulated natural gas utilities under the DEQ’s Climate Protection Program;
2. To suggest appropriate regulatory tools to mitigate potential ratepayer impacts; and
3. The goal of the Fact Finding will be to inform future policy decisions and other key analyses to be considered in 2022, once the CPP is in place.¹⁴

One of the key findings identified in Staff’s Draft Report was that “CPP compliance costs and risks to gas customers from gas utilities’ compliance actions range from manageable to rather substantial by 2029, depending on the customer and their existing level of energy burden.”¹⁵ Regarding those costs and risks, Staff found two general points of agreement (presumably among the utilities, stakeholders, and Staff):

1. Gas utilities will need to take significant near-term action to decarbonize: “Business As Usual” growth and operations of the system result in emissions exceeding the 2035 compliance targets.
2. Any compliance pathway will very likely increase the costs of energy service for all categories of customers over the next decade.¹⁶

¹¹ Northwest Energy Efficiency Alliance, *Washington Residential Post-Code Market Research Report, May 26, 2022*

¹² Staff Natural Gas Fact Finding Overview at 1.

¹³ Staff Natural Gas Fact Finding Overview at 1-2.

¹⁴ Staff Natural Gas Fact Finding Overview at 2.

¹⁵ Draft Report at 6.

¹⁶ Draft Report at 8.

In the Draft Report’s “Summary of Costs and Risks from Scenarios,” Staff stated that “the compliance modeling often provided a wide range of results from which trends were difficult to detect” but also had a “general trend of increased customer bills attributable to CPP compliance.” The Draft Report concluded that the modeling exercise “helped all parties understand what information should be modeled more rigorously in IRPs and what new information should be brought into IRPs to help assess least-cost/least-risk compliance strategies.” This “new information” includes the “general trend of increased customer bills” and “cost, feasibility, and ratepayer impacts of CPP specific compliance strategies.”¹⁷

Staff’s report lacks an analysis of potential bill impacts from various GHG emissions reduction scenarios. This investigation is meant to analyze impacts from natural gas GHG emissions reductions compliance scenarios to provide the PUC with much-needed information to protect ratepayers Oregon shifts away from fossil fuel energy. This investigation was meant to inform other utility dockets, not kick the investigation over to individual IRPs. Relying solely on the information provided in utility modeling, Staff offers a blanket and unremarkable conclusion that compliance with the CPP will increase costs to all customers in the near-term, with differing impacts as suggested by the utility models. The report concludes that “in the absence of some form of intervention, the greatest burden from any increased bills will likely fall to those already experiencing high energy burdens,” specifically if customers migrate away from the natural gas system.¹⁸ This is not new information gleaned from this investigation. CUB flagged this concern as a reason for the PUC to conduct a natural gas fact finding investigation in October 2020 before the CPP existed.¹⁹

CUB believes that purpose of this investigation is to scrutinize utility compliance proposals, consider input and feedback from stakeholders and RAP, as well as industry data. And Staff could analyze Oregon-specific projections of future bill impacts of future natural gas delivery projections and provide guidance on tools to mitigate those impacts. The focus of this investigation should not be on maintaining the natural gas business model, but on conducting a robust analysis of potential impacts of future natural gas service on customers. Stakeholders put in a great deal of effort analyzing the gas utilities compliance modeling and raised major concerns about whether the gas utilities’ proposals could reasonably comply with the regulatory requirement. The Draft Report ignores most of the analysis from stakeholders and does not weigh in on whether the utilities have reasonable compliance plan. The natural gas utilities have every reason to delay implementation of the CPP. Given they are challenging the DEQ’s authority to enforce the CPP, CUB believes the PUC should closely scrutinize the utilities’ engagement level in this docket and question the fidelity of their compliance proposals.

¹⁷ Draft report at 10.

¹⁸ Draft report at 20.

¹⁹ *Comments of the Oregon Citizens’ Utility Board on Oregon Public Utility Commission Executive Order 20-04 Work Plans*, p 1.

Further, the Draft Report offers no guidance on the role of electrification in the future as a tool of decreasing emissions and CPP compliance. There is no discussion about the role of electric heat pumps in customer futures. The directive to Energy Trust of Oregon (ETO) to expand training on gas heat pumps and marketing this technology is confusing (see more on heat pumps below). As stated in our comments in this docket, natural gas heat pumps (GHP) are not commercially available. First the technology must be finalized, then undergo field tests, and then if it goes to market, wait to see if it appeals to consumers.

As CUB stated in its comments on the EO 20-04 process, based on DEQ reporting, GHG emissions by Oregon gas utilities have increased emissions by 18% over the last 5 years, or more than 3% per year. Loads have increased even more, by 26% over last 5 years. Unfortunately, the Draft Report seems to accept that increasing natural gas customer counts is necessary. Natural gas utilities have yet to show how they can reduce their GHG emissions with current customer base, we should rightfully be skeptical of any assertions they can figure this out in the next 5-10 years while growing their customer bases. The utility argument expanding the gas system is necessary to protect communities should not be accepted as fact. Without consideration of the feedback from stakeholders, industry data and market trends, and an analysis of this available information, this investigation risks accepting the natural gas company modeling without scrutiny.

B. Staff must incorporate stakeholder comments and data, Regulatory Assistance Project guidance, as well as natural gas utility feedback into the report discussion and analysis.

One of Staff's two outcomes for this docket was to: work with all stakeholders to analyze customer impacts from proposed approaches to the gas utilities' compliance with DEQ's CPP.²⁰ One of the conclusions of the Draft Report discusses the need for stakeholders to be able to meaningfully engage in dockets at the PUC.²¹ However, Staff's report is void of discussion of stakeholder comments, let alone consideration of the report's analyses. Stakeholders put a lot of time and resources to exercise their right to voice their communities' concerns and provide informative and meaningful feedback. At a minimum, stakeholders deserve to know if and how their input was considered in Staff's analyses and development of the Draft Report. As the PUC has already identified, stakeholders are an important part of this process. Their comments and factual resources shared are valuable. Meaningful consideration and inclusion of stakeholder feedback is beneficial to the analyses in this docket. It is also an equity matter.

Staff stated that the foundation for the analyses in the report was based off utility models of how they would comply with DEQ's CPP, specifically: base case, high innovation, and accelerated electrification. The modeling was meant to help understand the cost and timing of the utilities' CPP compliance strategies, and then help the Commission, staff, and stakeholders better understand where, when, and which regulatory tools might be used to mitigate costs and risks.²²

²⁰ Staff Natural Gas Fact Finding Overview, p 2.

²¹ Draft report, p 15.

²² Draft report at 8.

Staff summarized its base case scenario analyses, renewable natural gas analyses, and declining customer count analyses without any discussion of input from stakeholders or RAP in the Draft Report. These analyses appear to be solely informed by information provided by the natural gas utilities. Yet, Staff noted that the utilities varied in their analyses, resulting in: a “range of outcomes” for future annual bills; “different assumptions about how much RNG they would be able to secure”; and modeling scenarios with declining customer counts providing “limited insights” likely due to “inconsistencies in how each company modeled assumptions.”²³ Nowhere in these summaries was any discussion of CUB’s fourteen pages of comments on modeling and alternative scenarios, nor other stakeholder input into these modeling assumptions, market and technology trends, or otherwise relevant and data-driven information. Stakeholder comments, not just utility information, should have been included in Staff’s analyses, and then use this information to develop and better-informed, fact-based conclusions as to costs and risks of future natural gas consumption.

If Staff does not have the resources to conduct this investigation, CUB would likely support PUC staff retaining another consultant, but the consultant must be allowed to weigh in on the issues such as the cost and availability of renewable natural gas and hydrogen, the potential of energy efficiency to reduce loads, and the role of electrification in building decarbonization. This investigation has already been delayed seven months from the original Draft Report release date. Given the directive for urgent and rapid action in implementing EO 20-04, CUB would prefer to avoid any further delay in this docket.

C. Remove the two cases where the report makes conclusions regarding issues that were in dispute or explain the basis for the conclusions.

While this docket has been labeled a fact finding, it does very little to find fact – it does not attempt to weigh in on the issues that were found to be in dispute, with two noticeable exceptions:

1. Staff declares that customer count growth must be allowed to continue.
2. Staff finds that natural gas fueled heat pumps are at such a stage of development that the PUC should require the Energy Trust of Oregon to run pilot programs and trainings on gas heat pumps.²⁴

²³ Draft report at 12-13.

²⁴ Draft Report at 21.

1. *Customer Count Growth*

The Draft Report calls for reducing natural gas usage but allowing growth in the number of customers in order to avoid “upward rate pressure.” There is little evidence of how reducing gas demand while expanding the system will accomplish this, beyond Staff’s experience with “institutional bias” with the telecom industry.²⁵

CUB recommends that this conclusion should be stricken from the final report or, at a minimum, Staff explain more fully the basis for it. Communities, such as Eugene, are considering the role an expanded natural gas system has on their local climate action planning and whether there should be restrictions on expanding customer counts within their communities. The conclusion from the PUC—the state’s protector of utility customers—in a “fact finding investigation” that restricting new customer growth will raise rates will be cited by opponents of local restrictions on gas developments.

If Staff intends to maintain this conclusion, it needs to offer a better reason. Institutional bias from the telecom industry makes little sense as an explanation. Staff is concerned about this “example of regulatory problems when a subset of customers cannot transition away from a monopoly experiencing negative growth.”²⁶ If the Staff is suggesting that there would have been benefits to telephone customers if regulators had only attempted to prevent this negative growth and had tried to maintain growth in the copper wire phone system, this is an astounding conclusion. Yes, telephone companies have seen negative growth in traditional landline service, but the legacy customers who still subscribe to traditional landline service have not been unduly harmed. The price of basic landline telephone service for these customers has not dramatically risen. Some telecommunications investors, particularly ones who bet on maintaining a copper network, rather than transitioning to fiber, were harmed. If this really is the reason Staff supports continued growth in customer counts, the Staff needs to discuss what customer harms it is referring to, how it believes that this harm could have been prevented, and how this lesson is being applied in this circumstance. .

In addition, the Draft Report is clear that Avista’s modeling show that declining customer counts reduced customer costs “significantly,” and that Cascade’s modeling showed little bill impact from declining customer counts.

Finally, CUB notes that it is difficult to understand the Staff’s conclusion based on simple math. Staff believes that customer counts should increase to reduce “upward rate pressure,” but that there is a need to reduce overall usage. Let’s compare what happens when we reduce overall usage on the gas system by 600 therms. We have two options: 1) we reduce usage from existing customers (60 homes reducing 10 therms/year or 100 homes reducing usage by 1 therm/year); or 2) we reduce load growth by avoiding one additional customer whose annual

²⁵ Draft Report at 20.

²⁶ Draft Report at 20.

usage would be 600 therms. In both cases the utility would save on having to purchase an additional 600 therms of gas and would save the cost of decarbonizing 600 therms of gas. In both cases the utility would lose the revenue associated with selling 600 therms at the retail rate. Avoiding a new customer has two additional effects on the gas system. It avoids a capital investment through the utility's line extension allowance. This amount varies by utility but is in the range of \$2400 to \$2875. There is additional revenue lost beyond the commodity cost. When you avoid a new customer, you lose an additional monthly customer charge. This also varies by utility but is in the range of \$70 to \$120 per year. To the degree that Staff is concerned that limiting growth in customer counts reduces revenue by about \$70 to \$100/year for each new customer, this effect is real. However, it is more than offset because it also reduces capital investment by about \$2400 to \$2875. It will take more than 20 years for the additional customer charge to pay for the cost of the capital investment, creating a stranded cost risk if the customer later converts to an electric heat pump.

2. Natural gas heat pumps are not ready for pilot programs and vendor training.

The Draft Report proposes to direct the Energy Trust of Oregon to “expand training and vendor on electric and gas heat pump technology through education and pilots and increase marketing of heat pump technology on its website.”²⁷ . There are a variety of heat pumps: electric, electric split level, dual-fuel, and gas heat pumps also can be used for both space and water heating. Currently electric, electric split level, and dual fuel heat pumps are all commercialized technology that customers can install in their homes. Gas heat pumps, on the other hand, are not commercially available for residential homes, but the Draft Report is explicitly calling for the ETO to do vendor training, marketing, and run a pilot program on gas heat pumps.

In our comments on the utility modeling, CUB raised concerns that gas heat pump technology is not commercialized and NW Natural's compliance modeling assumed it could achieve gas heat pumps achieving a market share of 25% by 2025.²⁸ Based on how market transformation occurs, achieving 25% market share by 2025 is impossible. Staff which oversees the ETO and should understand market transformation does not weigh in on whether this is possible, but instead proposes directing the ETO to try to help by promoting gas heat pumps. CUB has several concerns with this:

- The ETO is funded by customers to acquire cost-effective energy efficiency. The ETO often uses pilot programs as a way to test potential technologies or marketing strategies which might not yet be cost effective. When doing so, the ETO looks at the potential for the pilot to be successful. With new technology, the ETO has to consider whether it is likely to be successful and become commercially available at a reasonable price. New technology programs are normally conducted by the Northwest Energy

²⁷ Draft Report at 27.

²⁸ UM 2178, CUB Comments at 8.

Efficiency Alliance (NEEA) because a wider regional market has a greater chance of transforming markets. By requiring pilots for **all** types of heat pumps, the Staff is interfering with the ETO's analysis and directing it to run a pilot regardless of the potential for success. The ETO was formed in order to professionalize energy efficiency investments. CUB believes that the ETO and NEEA should conduct pilots on heat pump technologies where the ETO and NEEA find that such pilots are appropriate using the criteria they normally apply to emerging or potential technologies.

- NEEA continues to examine the gas heat pump market but at this point is not running any pilots for residential space heating²⁹. Attachment A is a slide from the April 26, 2022 meeting of NEEA's Natural Gas Advisory Committee.³⁰ It shows that there are currently no commercially available natural gas heat pumps for the residential market in North America. There is one product available in Europe. There is lab testing on four models and field trials on two models. But lab testing and field trials do not mean that this technology is ready for pilot programs. These tests and trials must first be successful, showing that the technology works and that a product can be manufactured at a price point that supports the investment. The manufacturer must consider the state of the marketplace, and the potential for success or failure (are they likely to produce a VCR or a Betamax?). Ultimately manufacturing a new consumer end use product has a significant financial risk. Until a manufacturer decides to take that risk, we should be careful about the assumptions we make about that technology. Regardless of whether the Commission directs the ETO to run a pilot program on gas heat pumps and begin vendor training, gas heat pumps will not meet the market share on the time table that is assumed in NW Natural's compliance modeling. When discussing gas heat pumps CUB does not understand why Staff is unable to confirm this obvious conclusion.

- The ETO's energy efficiency expertise can be extremely valuable to us right now. NW Natural's compliance modeling proposes to increase its energy efficiency spending by 5-fold by 2025 and 10-fold by 2030. Directing the ETO to conduct a conservation potential study that focuses on how the CPP emission requirements and the cost of RNG affect cost effective energy efficiency. Such a study would include the potential of natural gas heat pumps and help inform whether and when pilot programs are appropriate.

D. Expedite the final workshop with facilitated discussion of the Draft Report by the end of June or early July, prior to the July 12, 2022, Special Public Meeting on the Draft Report.

Although the timeline for reviewing and providing feedback on the Draft Report was pushed back a few times, the process remained the same: Staff would issue its Draft Report and about a month later it would hold a fifth and final workshop and facilitate a conversation with stakeholders to provide feedback on the Draft Report. About a month after that, Staff would hold a Special Public Meeting to present its final report with recommendations for 2022 activities,

²⁹ NEEA did conduct a pilot (technology test) on a single large commercial natural gas heat pump a few years ago.

³⁰ This entire presentation is over 90 pages long and we could not find it online. CUB is happy to share it with parties upon request.

including “an identification and discussion of the tradeoffs associated with of various regulatory “tools” available to the Commission and the impacts those would have on current and future customers.”³¹ The Draft Report was posted to the UM 2178 docket on April 15, 2022 and stated stakeholders could provide written comments by June 3, 2022 and that it would hold a Special Public Meeting for public comment on July 12, 2022. On May 31, 2022, Staff issued an Announcement that a Special Public Meeting would be held the afternoon of the Public Comment Hearing for UM 2178. The original final workshop timeline that would have provided an opportunity for stakeholder feedback and discussion on the Draft Report, and would have allowed stakeholder to ask questions about Staff analysis, provide feedback and allow Staff to consider stakeholder feedback prior to the Public Comment Hearing. While stakeholders are provided the opportunity to submit comments, the removal of the workshop removed the opportunity to ask questions.

It is clear that there is a disconnect between what stakeholders, including CUB, expected from the Draft Report and what is actually contained in the Draft Report. Eliminating the final workshop eliminates the opportunity for dialog between Staff and stakeholders about stakeholder concerns. CUB believes Staff should expedite scheduling this final workshop to provide the stakeholders the opportunity to discuss their feedback. CUB appreciates that Staff provided stakeholders the opportunity to synthesize feedback in written comments – and recognizes that this allows stakeholders who feel their previous comments was not valued the opportunity to provide additional comments. However, CUB believes a facilitated dialogue about stakeholder feedback remains an important part of this investigatory process and we are unsure why this important opportunity for discussion was removed. CUB understands that developing the Draft Report took a lot longer than Staff had anticipated, but CUB does not believe this justifies removing an opportunity for discussion of the Draft Report, especially given the investment by stakeholders in this process and the report’s exclusion of discussion of stakeholder interests in its analyses in the Draft Report.

Originally, the Draft Report discussion workshop was scheduled about one month after the Draft Report was issued. CUB requests PUC Staff reconsider its decision to hold the workshop the day of the Public Comment Hearing. In the interest in avoiding further delays in a process that is already seven months behind its original schedule, CUB requests that Staff expedites this workshop and schedule it as soon as possible, preferably in late June or early July, prior to the Public Comment hearing so Staff can consider the feedback in its report to the PUC. Given the repeated recognized need for rapid action in EO 20-04 and in this docket, avoiding additional delay should be a top priority in this docket.

³¹ *Staff Natural Gas Fact Finding Overview* at 3.

III. CONCLUSION

It is an indisputable fact that the combustion of fossil fuels is causing climate change which is causing extreme weather events, like wildfires and heat waves, which are increasing in Oregon. The need to transform our energy system to non-emitting, clean sources is clear, including the energy used for space and water heating. Because for-profit utilities are managed for the benefit of shareholders, utility customers fundamentally need the active engagement of the Oregon Public Utility Commission and its Staff to ensure that the interests of customers are central to this transition and that policies are put in place to ensure that customers are protected.

The natural gas fact finding should identify how to keep customer costs low as Oregon transitions away from fossil fuel energy. It also should guide customer investment decisions, not Wall Street investment decisions. Wall Street investors know the market trends and predictions for the future of natural gas. If utility proposals rely on information that is lacking, inconsistent or unlikely to succeed, it hardly seems prudent, just or reasonable to ask customers to bear the costs of these risky investments. Customers have to decide how to plan for their energy use for the next 20 years and they do not have information about the future of natural gas. If the PUC, with its professional staff and expertise, after months of investigation, cannot draw any meaningful conclusions, what chance do customers have when making decisions and investment in their energy systems. The PUC should be able to find, review, and analyze the facts around the future of natural gas as an energy source in a society moving away from fossil fuels. We are in a major regulatory paradigm shift and if natural gas companies are not coming up with realistic plans to adapt, and regulators will not weigh in, how can customers know how to plan?

Dated this 3rd day of June, 2022.

Respectfully submitted,










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Technology Readiness

Green: Commercially available in North America

Source: Enbridge, NEEA, GTI

Manufacturer	Type	Primary Applications	Primary Sectors	Technology Readiness for North America
	Absorption	Space and DWH heating Cooling (possible)	<ul style="list-style-type: none"> Commercial Residential 	<ul style="list-style-type: none"> Commercial size unit commercially available Residential unit available in Europe. Efforts underway to bring it to NA
	Engine driven	Space heating and cooling	<ul style="list-style-type: none"> Commercial 	<ul style="list-style-type: none"> Commercially available
	Absorption	Space and DHW heating	<ul style="list-style-type: none"> Residential Small commercial 	<ul style="list-style-type: none"> Field trials of pre-production unit underway
	Absorption	Space and DHW heating	<ul style="list-style-type: none"> Residential Commercial 	<ul style="list-style-type: none"> Commercially available in China Lab testing and field trials of production unit underway in NA
	Thermal compression	Space heating, cooling and DHW heating	<ul style="list-style-type: none"> Residential Small commercial 	<ul style="list-style-type: none"> Lab testing and field trials of pre-production unit underway
	Adsorption	Space and DHW heating	<ul style="list-style-type: none"> Residential Small commercial 	<ul style="list-style-type: none"> Lab testing in Europe
	Absorption	DHW heating	<ul style="list-style-type: none"> Residential 	<ul style="list-style-type: none"> Lab testing and field trials planned