

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 71

In the Matter of

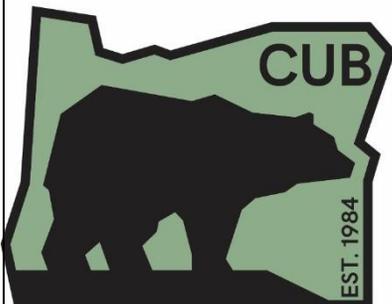
NORTHWEST NATURAL GAS
COMPANY dba NW NATURAL,

2018 Integrated Resource Plan

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COMMENTS OF THE
OREGON CITIZENS' UTILITY BOARD

October 15, 2018



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I. INTRODUCTION

There is much to like about NW Natural's (NWN or the Company) 2018 Integrated Resource Plan (IRP) and the way it is considering actions it can take to reduce its carbon output. Climate change and reducing carbon emissions has not been a major part of natural gas utilities' IRPs; CUB is encouraged by NWN's analysis. However, CUB is concerned that the Company did not adequately consider the impact that climate change may have on its future load.

II. NW NATURAL'S CLIMATE CHANGE ANALYSIS

It is important to recognize that NW Natural's discussion of climate, carbon emissions, carbon regulation, and carbon reductions are unusual for a gas utility and, given the current state of affairs, the discussion is timely. The fact that the Oregon Legislature has a Joint Interim Committee on Carbon Reduction that is co-chaired by the Speaker of the House and the President of the Senate suggests that carbon regulation is coming sooner rather than later in Oregon. NWN should be commended for the amount of effort it has put into carbon analysis.

- CUB is supportive of NWN’s carbon savings goal. There is no doubt that carbon regulation is coming. Identifying what policies will be added and the timing of those policies is difficult, but preparing for that future is necessary. NWN states that its goal is to “facilitate a 30% carbon savings” from 2015 emissions levels by 2035. CUB believes working to reduce the carbon emissions of natural gas is a prudent, reasonable expectation for a gas utility.
- CUB supports NWN’s proposal to evaluate renewable natural gas against conventional gas based on all-in costs which include costs of carbon regulation and avoided capacity costs.
- While NWN’s analysis shows that it will be a decade before on-system renewable natural gas (RNG) is cost effective¹, CUB believes there is currently an opportunity for a pilot program that looks to develop RNG. On-system RNG is locally produced and added to the distribution system. Because it is local and on-system, development may well require involvement from the local gas utility. Beginning to identify sources, technologies and best practice that might be required to bring this RNG onto NWN’s system seems to be a reasonable, low-risk activity. Because gas prices are at historic lows, developing an RNG pilot with limited costs/risks at this time is affordable. NWN’s goal to reduce the carbon emissions associated with its product by 2035 may be endangered if the Company waits too long to begin that effort.

¹ NWN IRP, Figure 1.16, page 1.14.

III. NWN'S CLIMATE ANALYSIS FAILS TO EXAMINE LOAD IMPLICATIONS

NWN's discussion of climate and carbon fails to adequately discuss and analyze the amount of fuel switching away from natural gas that is likely to take place in response to concerns that it is a fossil fuel and its use adds carbon emissions to the atmosphere. NWN clearly believes that direct use of natural gas – particularly if the gas has lower carbon emissions than conventional gas – is compatible with addressing the decarbonization needs presented by climate change.

CUB understands that NWN has commissioned a study that finds that a pathway to decarbonization that allows continued use of natural gas for heating building is lower cost than alternative decarbonization strategies. But part of the IRP is to examine the risks associated with various futures. While NWN did include a scenario where natural gas will not be added to new homes beginning in 2025, it did not analyze the likelihood that fuel switching in existing buildings could reduce the demand for direct use of natural gas. CUB is not trying to argue that fuel switching is appropriate or should be encouraged or discouraged by public policy – only that it is a future that needs to be analyzed.

On some level, it is an activity that has begun. CUB has had contact with NWN customers who desire to switch away from natural gas because of their concern with climate. In addition to carbon emissions, climate change is increasing the number of hot days in the summer and this can lead to fuel switching to add efficient heat pump air conditioning. Portland has had 4 years with more than 20 days with temperatures greater than 90 in recorded history – all 4 have happened in the last five years. This year, Portland had more than 30 days with temperatures above 90. This is important because the Portland Metropolitan Area is the core of NW Natural's service territory. While NWN may not agree that fuel switching is the best environmental

answer to reduce carbon emissions or cool a home, the IRP should be concerned with the number of customers who take these actions and address the issue appropriately.

Eugene is one of the largest cities in NWN’s service territory. Its 2010 Climate Plan calls for a 50% reduction in fossil fuel use by 2030.² To help it achieve these goals, its municipal electric utility, Eugene Water and Electric Board (EWEB) is offering incentives to fuel switch away from natural gas. EWEB offers incentives on efficient space and water heating, but “to help reduce greenhouse gas emissions” gives extra incentives for gas heat customers to convert. For a ducted heat pump, EWEB offers an incentive of \$1000, but increases this by 50% to \$1500 for natural gas heated homes who fuel switch to electricity. For a ductless heat pump, EWEB offers an incentive of \$650, but increases this by 130% to \$1500 for natural gas homes that fuel switch. For heat pump water heaters, EWEB offers an incentive of \$400, but increases this by 150% to \$1000 for homes that currently use natural gas for water heating.³ While EWEB is a municipal electric utility and might have ulterior motives (load building to boost retail sales), the IRP needs to consider whether these actions will affect its load forecasts.

A few years ago, electric utility IRPs did not concern themselves with rooftop solar because it was occurring at a low enough level that it had little impact and it was unrelated to utility actions. Today, electric utilities hire consultants to forecast rooftop solar additions. This is not because the IRPs see rooftop solar as a least cost/least risk resource – utility scale tracking solar is almost always lower cost – but because this is an activity that is happening and impacting resource needs. Future resource needs are not just affected by IRP least cost/least risk analysis, but by the decisions made by thousands of individual customers. NWN needs to include a forecast of fuel switching in future IRPs.

² A Community Climate and Energy Action Plan for Eugene, 2010, page 3,

³ www.eweb.org/residential-customers/rebates-loans-and-conservation/go-fossil-free

Many national decarbonization plans call for “beneficial electrification” of heating load. If beneficial electrification were to occur, it will impact future capacity needs and peak natural gas load, items that are addressed in IRP. In addition, if fuel switching led to a circumstance where the utility had declining load, it may be necessary to accelerate depreciation of NWN’s rate base to avoid intergenerational equity concerns.

IV. CUB RECOMMENDATIONS

A. Action Plan.

With respect to NWN’s Action Plan, CUB makes the following recommendations:

- The Commission should acknowledge the 2 supply resources investments:

Action Plan 1. Mist recall.

Action Plan 2. The evaluation of renewable natural gas as an alternative to conventional sources on an all-in cost basis.

- With regards to the distribution projects (action plan items 3, 4, 5, 7 and 8), CUB believes that the Company has shown evidence as to the need for these investments. However, CUB would like the Company to address the issue of whether fuel switching has begun in these areas and whether it has the potential to affect the need for the project.
- With regard to the North Eugene Reinforcement (action plan item 6), CUB urges against acknowledgement. CUB believes the Company needs to do additional analysis regarding the impact of the City’s climate plan and EWEB fuel switching incentives. This is a project that is driven by load growth⁴ but the city has a goal of reducing fossil fuel use by 50%, and is offering fuel switching incentives. The

⁴ NWN IRP, page 8.18

IRP does not contain analysis to determine whether the City's efforts to promote fuel switching could offset the load growth that is driving this project.

- CUB recommends acknowledgement of Action Plan item 9, relating to acquiring energy efficiency through the Energy Trust of Oregon.

B. Non-Action Plan

CUB has three recommendations that do not directly impact the action plan items:

- The Company should consider proposing a RNG pilot program that would identify sources, technologies and best practice that might be required to bring this RNG onto NWN's system.
- In future IRPs, NWN should develop a forecast of fuel switching from natural gas to electricity.
- NWN should adopt PGE's planning approach and begin looking at a trended weather forecast. There seems to be little doubt that the climate is changing, and that is affecting the weather. While it is unclear whether this will have any real impact on system peak, it likely will impact overall demand. Warmer springs and falls will reduce gas consumption, even if the probability of extreme weather events do not change or increases. A change in the trended weather assumption could impact the relative value of storage versus firm pipeline capacity.



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