BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1744

In the Matter of

NORTHWEST NATURAL GAS
COMPANY, dba NW NATURAL

Application for Approval of an Emission
Reduction Program

PREHEARING BRIEF OF THE CITIZENS' UTILITY BOARD OF OREGON

November 2, 2015

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1744

In the Matter of NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL Application for Approval of an Emission Reduction Program	)	PREHEARING BRIEF OF THE CITIZENS' UTILITY BOARD OF OREGON

Pursuant to Administrative Law Judge ("ALJ") Rowe's Ruling issued October 20, 2015, the Citizens' Utility Board of Oregon ("CUB") submits its Prehearing Brief in docket UM 1744.

I. Background

CUB is a supporter of Senate Bill 844, which requires the Commission to establish a voluntary emissions reduction program for natural gas utilities that provides an incentive to the utility while providing benefits to customers.[1] The legislation fits into Oregon's overarching policy to reduce greenhouse gas emissions.[2] However, the voluntary emissions reduction program should not be considered viable at any cost. ORS

[1] Senate Bill 844, 77th Leg., Reg. Sess. (Or. 2013), later codified as ORS 757.539.

[2] *In re Rulemaking to Implement SB 844 (2013)*, OPUC Docket No. AR 580, Order No. 14-417 at fn. 1 (Dec. 3, 2014) ("This law is related to two other statutes. In 2007, House Bill 3543 established greenhouse gas emission reduction goals for the state, with the goal of reducing greenhouse gas levels to at least 10 percent below 1990 levels by the year 2020. In 2009, Senate Bill 101 required the Commission to report biennially to the Legislature on the estimated rate impacts for Oregon's regulated electric and natural gas utilities of meeting the greenhouse gas emission goals.").

757.539 and the Commission's rules implementing the statute contain several requirements for projects. In order for a project to be eligible for cost recovery, it must have a measurable reduction in emissions, produce quantifiable benefits for customers, be outside of the utility's ordinary course of business, and be vetted through a stakeholder engagement process.[3] Additionally, the rate impact of all projects may not exceed 4 percent of the utility's last approved retail revenue requirement.[4]

The purpose of the legislation is to evaluate the potential of voluntary emissions reductions programs. Even if it is determined that there are no viable projects, we have still learned something—that voluntary emissions reductions programs do not work and that another approach is needed in order to meet Oregon's greenhouse gas emissions reductions goals.

II. Argument

NW Natural is seeking Commission authorization to implement its Combined Heat and Power ("CHP") Solicitation Program ("CHP Program") pursuant to SB 844. Although CUB remains open to other voluntary emissions reductions projects that may be proposed, CUB recommends rejection of NW Natural's CHP Program, without prejudice, because the Company does not provide analysis of customer benefits, including an allocation by rate class which is necessary for allocation of costs. CUB also urges the Commission to demand a more transparent, robust and symmetric analysis in future SB 844 proposals, and to caution the Company to emphasize customer benefits before utility incentives.

[3] ORS 757.539(3); OAR 860-085-0550.
[4] OAR 860-085-0700.

A. NW Natural's CHP Program proposal does not appropriately analyze customer benefits.

ORS 757.539(3)(c) requires that an emissions reduction program project must benefit customers of the public utility as identified by the Commission by rule or by order. The Commission must make a finding that a type of ratepayer receives a benefit from the project before costs and investments can be recovered from the ratepayer.[5] OAR 860-085-0600(2)(b) defines "Project benefits" as "those benefits that accrue to ratepayers of the utility when such benefits can reasonably be attributed to the Project" and explicitly requires that the project application include a showing of the Project benefits received and the allocation of benefits for each type of ratepayer.[6]

Additionally, before costs and investments incurred by NW Natural can be recovered from a particular type of ratepayer, the Commission must make a finding that the ratepayer receives a benefit from the project.[7] Recovery from multiple types of ratepayers must be in an amount proportionate to the benefit received by that type of ratepayer.[8] Notably, the statute *requires* a customer benefit, while it *allows* for a utility incentive. Because the design of NW Natural's CHP Program is flawed and the Company has failed to quantify ratepayer benefits by class, the Commission should reject NW Natural's proposal.

[5] ORS 757.539(8)(a).
[6] OAR 860-085-0600(2)(b).
[7] ORS 757.539(8)(a).
[8] ORS 757.539(8)(a).

1. NW Natural's proposed CHP Program design does not ensure that it will benefit customers

As discussed above, it is explicit that ratepayers receive a benefit by the design of the CHP program.[9] Therefore, if the overall program is designed in a way that an individual CHP project could mean that customers do not receive a benefit, NW Natural's CHP Program must be rejected. CUB has consistently been concerned that the Company has not appropriately identified and quantified benefits, as described in the next section of this brief. But because the Commission is approving the CHP Program design, rather than approving individual CHP projects, the program design must also systematically ensure that customers receive a benefit—there cannot be room for an individual CHP project to move forward that might not result in customer benefits.[10]

NW Natural's current proposal is to separately track and defer incremental margin related to increased throughput from CHP, excluding any capital investment, and then to share the benefit 50/50 with customers until its next general rate case.[11] This design, however, does not ensure that every CHP project would result in benefits to customers. NW Natural's proposal could mean that customers receive no benefit for some projects that require a line extension.[12]

NW Natural's line extension policy, contained in Schedule X, provides customers with a "Construction Allowance" to fund, at least partially, construction and/or main extension connected to the provision of service.[13] If a customer utilizes the Construction Allowance under Schedule X, NW Natural is responsible for a capital outlay that, at a minimum, is equal to "5.0 times the annual margin revenue estimated to be generated

[9] ORS 757.539(3)(c); OAR 860-085-0600(2)(b).
[10] This is especially true in light of the fact that NW Natural would have the ability to move forward with one large CHP project, rather than several smaller CHP projects.
[11] NWN/300/Summers/16-17.
[12] CUB/200/McGovern/6-8.
[13] CUB/200/McGovern/7.

from the operation of natural gas-fired equipment to be installed at the service address."[14] The "annual margin revenue" is the same thing as the "throughput" benefit.[15] Therefore, the line extension policy can absorb five years of "throughput" benefit for each project. NW Natural has also proposed a 10-year evaluation life for regulatory purposes.[16] With any industrial project, there is a risk that a customer could exit its business at some time in the future, so CUB has not argued that using a useful life that is less than the expected life of each individual unit is inappropriate. Using a 10-year evaluation life, however, also means that if the line extension policy is utilized, other customers do not see throughput benefits until after year five. This would cut the customer benefit in half and if the CHP customer stopped taking service during those first five years, there would be no benefit to non-participating customers from the throughput.

Without a mechanism to share the throughput benefits with all customers on day one, there will be no customer benefits if the participating customer stops taking service before the next general rate case. This is inappropriate given ORS 757.539(3)(c)'s requirement that customers receive a benefit from SB 844 programs. Compounding this issue is the fact that NW Natural is in control of and incented on several variables, including the timing of general rate cases. NW Natural has failed to provide any analysis to show what the customer benefit is after throughput is used for line extensions and after the company retains 50 percent of this benefit before general rate cases.

2. *NW Natural has not provided a basis for allocating costs and benefits among ratepayer classes*

In addition to the design flaw discussed above, NW Natural has not provided the Commission with a record upon which it can conclude that recovery from each type of

---

[14] NW Natural Schedule X at X-6.
[15] CUB/200/McGovern /7-8.
[16] NW Natural's Application for Authorization of an Emission Reduction Project at 7.

ratepayer is proportionate to the benefit received from that ratepayer. In addition to allowing proportional allocation, quantification of benefits also ensures that the benefits are material and not merely theoretical.

In its Opening Testimony, NW Natural claims that the increased load from CHP will benefit NW Natural's ratepayers by lowering average system costs and increasing reliability, and that these benefits accrue to all customers.[17] Therefore, NW Natural proposes that recovery be accomplished by allocating the costs to "residential, commercial, and industrial customer classes on an equal percent margin basis."[18] Initially, however, the Company did not put forth a proposal to pass through any lower average system costs that could be created by the increased throughput to customers ("throughput benefits").[19] In other words, NW Natural failed to account for the fact that some of this throughput benefit was being retained by the Company.

CUB's Response Testimony questioned the materiality of customer benefits, especially in light of embedded costs, and the Company's optimistic assumptions about penetration rates.[20] CUB also criticized the Company for not putting forth a proposal to pass through throughput benefits to customers before the Company's next general rate case despite the fact that costs would be recovered through the PGA in year one.[21]

In response to CUB's concerns about the uncertainty of customer benefits, the Company's Reply Testimony proposes to cap emissions reductions at 240,000 MTCO2(e) per year which they estimate will provide approximately $700,000 in system

---

[17] NW Natural's Application for Authorization of an Emission Reduction Project at 5-6; NWN/200/Speer/2-3.
[18] NW Natural's Application for Authorization of an Emission Reduction Project at 6.
[19] CUB/100/McGovern-Jenks/7.
[20] CUB/100/McGovern-Jenks/8-9.
[21] CUB/100/McGovern-Jenks/7.

benefits,[22] but concedes that customer benefits are uncertain until projects are installed and operational.[23] To address CUB's concern that customers will not receive throughput benefits until the Company's next general rate case, the Company proposes to track and defer these throughput benefits, *excluding any capital investment*, and then share them on a 50/50 basis with customers after capital costs have been repaid until the next general rate case.[24] NW Natural attempts to justify its sharing proposal by arguing that it should not have to absorb any amount of cost for capital investments that it would normally recover through incremental margin between rate cases and raises concerns about the ability of a third party to accurately track the increased margin associated with CHP.[25] The Company does not provide analysis that a 50/50 split is the right number to achieve this objective. Furthermore, many of these projects could require a capital investment in the form of a line extension. Because the line extension can absorb five years of margin, for many of these projects, there could be no margin to share until the project has been operational for five years. NW Natural's projection of $700,000 of throughput benefit does not take into account the 50/50 sharing before the general rate case, nor does it take into account any capital investments, such as line extensions.[26] If the $700,000 is NW Natural's forecast of the throughput benefits of this project, but some of those throughput benefits are flowing to participants in the form of line extensions, then the required proportional allocation of this throughput benefit cannot be merely on a basis of equal percent margin.

[22] NWN/300/Summers/15.
[23] NWN/300/Summers/15.
[24] NWN/300/Summers/16-17.
[25] NWN/300/Summers/17.
[26] NWN/404/Speer/1.

Finally, NW Natural argues that customer benefits of SB 844 projects do not need to exceed costs, rather there simply needs to be a showing that customers obtain some benefits from the SB 844 program.[27] While CUB could agree that the benefits do not have to exceed the costs, CUB does believe that the benefits have to be demonstrated, quantified, and allocated to customer classes per the requirements of ORS 757.539(8)(a).[28] Simply asserting that there are benefits without proposing how to pass them through to customers, as the Company did in its Application, does not demonstrate that there is actually a real benefit. Providing a loose quantification and proposing to share the benefits between shareholders and customers without showing how this sharing affects the level of benefits, as the Company did in its Response Testimony, does not provide an adequate quantification of the benefits. Asserting that the benefits flow to all customers is not the same as demonstrating that the benefits are flowing in proportion equally to all customers. Finally, asserting that the customer benefit is the increase throughput does not demonstrate that there are not other customer benefits that "can reasonably be attributed to the Project." For example, NW Natural has failed to explain why the participant incentive or the funding of a line extension are not benefits that can be reasonably attributed to the project.

---

[27] NWN/300/Summers/12-13.

[28] ORS 757.539(8)(a) states: (8) If a final order issued under subsection (6)(c) or (7)(b) of this section authorizes a project, the order shall specify:

(a) The type of ratepayer from whom the public utility that submitted the project proposal may recover costs incurred and investments made. A public utility may recover costs incurred and investments made from a type of ratepayer under this paragraph only if the commission makes a finding that the type of ratepayer receives a benefit from the project. If the commission makes a finding that more than one type of ratepayer receives a benefit from the project, the commission shall allow recovery from each type of ratepayer in an amount that is proportionate to the proportion of the benefit received, as determined by the commission, by the type of ratepayer.

In sum, the Company's proposal for customer benefits completely misses the mark. It does not meet the statutory and rule requirements that a utility must demonstrate the Project benefits received and the allocation of benefits for each type of ratepayer before costs of the project can be recovered. There is no quantifiable customer benefit on the record upon which the Commission could make a finding that there are customer benefits consistent with ORS 757.539(3)(c) or that those benefits, if they do exist, could be allocated in proportion to cost as required by ORS 757.539(8)(a). Accordingly, the Commission should reject NW Natural's Application.

B. NW Natural's CHP Proposal, if adopted, should be modified.

As discussed above, CUB continues to urge the Commission to reject NW Natural's CHP Program proposal. However, should the Commission determine that moving forward with the CHP Program is warranted, the design should be modified to include an earnings test, to include Staff's methodology for calculating emissions reductions, to limit the size of the CHP Program and to reduce NW Natural's incentive.

1. Earnings Test

There are two earnings tests at issue in this case. The first is the PGA earnings test, which looks at whether NW Natural is significantly overearning and if so, shares a portion of that overearning with customers.[29] The second is earnings test associated with the deferral of identified utility expenses or revenues.[30] ORS 757.259(5) requires the Commission to apply an earnings test to deferred amounts unless deferred amounts are subject to an automatic adjustment clause. The purpose of the earnings test in this context is to see if rates need to be adjusted in order for a utility to absorb the particular

[29] CUB/100/McGovern-Jenks/20.
[30] CUB/100/McGovern-Jenks/20.

cost.[31] In the rulemaking process associated with SB 844, the Commission explicitly reserved the rate to make determinations about whether NW Natural's incentive should be included in one or both earnings tests.[32] Notably, the Commission determined that a case-by-case approach was appropriate in light of the fact that "individual emission reduction projects may vary significantly in their costs, emissions reduced, and implementation timelines."[33]

In its Response Testimony, CUB argued that both earnings tests should apply to non-incentive costs. With regard to the incentive, CUB argued that the PGA earnings test should include all costs plus the NW Natural incentive.[34] For the deferral earnings test, CUB argued that it should apply to the NW Natural incentive as well, but rather than capping the earnings test at NW Natural's authorized ROE, the cap should be at ROE plus the incentive level.[35]

The Company responded that no earnings test should apply to the CHP Program, but does not address CUB's proposal to cap the deferral earnings test at ROE plus the NW Natural incentive.[36] Rather, the Company merely argues that subjecting NW Natural's incentive to the earnings test makes the incentive "uncertain, and possibly non-existent, which undermines the policy behind promoting voluntary projects under SB 844."[37] It is important to note that NW Natural is not guaranteed to earn an explicit incentive for its participation in SB 844 programs—whether a NW Natural incentive is

---

[31] CUB/100/McGovern-Jenks/20; *See In re NW Natural Gas Co.*, OPUC Docket No. UM 1635, OPUC Order No. 15-049 at 12 (Feb. 20, 2015) ("The [earnings] test must appropriately balance the circumstances of the deferral, the utility's earnings, and the benefits and costs to customers.").
[32] CUB/100/McGovern-Jenks/20-21 (citing *In re Rulemaking to Implement SB 844 (2013)*, OPUC Docket No. AR 580, Order No. 14-417 at 6).
[33] OPUC Order 14-417 at 6.
[34] CUB/100/McGovern-Jenks/21.
[35] CUB/100/McGovern-Jenks/22.
[36] NWN/300/Summers/38-39.
[37] NWN/300/Summers/39.

appropriate will depend on the particular circumstances of the case.[38] Additionally, the Company has an implicit incentive to participate in the CHP program through additional load growth.

CUB continues to advocate for the application of an earnings test to all costs of this program, including NW Natural's incentive, as described in its Response Testimony. The application of an earnings test in both contexts ensures that there is an appropriate balance between shareholders and ratepayers.

2. Calculation of Emissions Reductions

ORS 757.539(3)(b) provides that in order for a project to be eligible, it must directly or indirectly reduce emissions. OAR 860-085-0600(1)(e) requires NW Natural to discuss its emission reduction strategy, and why the approach is appropriate, timely, and merits approval.

NW Natural has chosen to calculate the emission reduction from CHP based on a baseline from EPA's most recent eGRID non-baseload carbon emissions value for the Northwest Power Pool ("NWPP") sub-region.[39] Although CUB has agreed with the Company that the appropriate methodology for approximating the carbon reduction for the CHP project is the emissions of the marginal resource, CUB has raised several objections to the use of eGRID data. First, the data is out of date, which is problematic given that emissions in the region are constantly changing due to new EPA regulations.[40] Second, CUB is concerned that by using eGRID data, NW Natural will be taking credit for the progress made in emissions reductions via the Clean Power Plan.[41]

[38] OPUC Order No. 14-417 at 6.
[39] NWN/500/Summers/2-7.
[40] CUB/200/McGovern/11.
[41] CUB/200/McGovern/11.

In its October 16, 2015 testimony, NW Natural updated its eGRID methodology with updated carbon emissions projections based on a new version of eGRID that the EPA released 8 days before its testimony.[42] This update increased the carbon reduction value for non-baseload resources from 1,340 CO_2 lbs./MWh to 1,579 CO_2 lbs./MWh.[43] Because this updated information came in NW Natural's final testimony, no party has had the opportunity to provide analysis of it on the record. Generally, it is troubling that several parties, including CUB, criticized the 1340 CO_2 as inflated yet the Company now proposes an even larger number. Because the Company is proposing a shareholder incentive based on the amount of carbon reduced, NW Natural has the incentive to inflate these carbon reduction numbers. Regardless of the impact on the project, measuring the carbon reduction is critical because the purpose of SB 844 is to see whether, and to what extent, carbon emission reductions could grow out of a voluntary program. CUB urges the Commission to reject NW Natural's updated carbon emission reduction values and to adopt Staff's methodology should it move forward with the CHP program.

3. Size of the CHP Program

CUB has been concerned with the size of NW Natural's proposed CHP Program.[44] It will increase rates by more than 1.5%, which is greater than the Company's last general rate case,[45] and the CHP Program could use up more than one-third of the four percent of revenue requirement cap associated with all SB 844 programs.

This is a large, expensive program. If the Commission does approve the CHP Program, CUB urges the Commission to consider a limit on the size of the program.

---

[42] NWN/500/Summers/2.
[43] NWN/500/Summers/2.
[44] CUB/100/McGovern-Jenks/19.
[45] CUB/100/McGovern-Jenks/17-12.

4. NW Natural's Incentive

ORS 757.539(9) permits the Commission to consider the amount of reduced emissions created by a project or the value of reduced emissions created by a project in determining the incentive level to the utility. However, NW Natural is not *guaranteed* the right to receive an incentive.[46]

For this project, NW Natural has proposed a $10 per metric tonne incentive.[47] In addition, NW Natural has proposed allowing shareholders to retain 50 percent of the throughput benefits until the next general rate case, after capital costs are recovered.[48] The Company believes this incentive level to be reasonable because the CHP program represents a "high potential and effective carbon reduction program, delivered at some of the lowest costs that may be available under SB 844."[49] Notably, this incentive level is near the limit on the incentives proposed under the Commission's rules.[50]

CUB proposed an incentive level of $5 as a way to keep the overall cost of carbon reduction below $40/tonne, which it still believes is expensive relative to other emissions reductions programs.[51]

C. NW Natural has not provided reliable information in this proceeding.

The transparency and completeness of information contained in NW Natural's Application, testimony and data responses has been problematic in this case. First, the Company has provided incomplete and/or misleading information.[52] Second, the Company changed the program assumptions depending on whether it was modeling

46 *See* OAR 860-085-0750.
47 NWN/300/Summers/38.
48 NWN/300/Summers/16.
49 NWN/300/Summers/37.
50 NWN/300/Summers/37.
51 CUB/100/McGovern-Jenks/18.
52 CUB/200/McGovern/9-10.

customer benefits or participant incentive payments.[53] Finally, the Company has made proposals that would provide it with a clear benefit at the expense of the ratepayers who are responsible for funding the projects.[54] In short, it is CUB's impression that the Company is more concerned with its level of incentive than designing a program that provides a benefit to customers while reducing greenhouse gas emissions.

D. Electric Utilities' Concerns

PacifiCorp and PGE argue that NW Natural's proposed CHP Program would incentivize fuel switching, which they argue is inappropriate for several reasons in the context of this CHP Project.

First, PacifiCorp argues that because NW Natural already has an incentive—increased load—to invest in CHP, the statutory requirement that the project must be outside of the ordinary course of business is not met.[55] PacifiCorp also argues that NW Natural's emphasis that customers may not invest in CHP absent the SB 844 incentive is immaterial—the question is whether NW Natural has demonstrated that an additional incentive, beyond increased load, is necessary for NW Natural to invest in CHP projects.[56] PGE supports the arguments made by PacifiCorp and further argues that as a matter of policy, it is inappropriate to use ratepayer funds to promote fuel switching.[57]

ORS 757.539(3)(d) requires the Commission to make a finding that absent the voluntary emissions reduction program, the utility would not invest in this project in the

[53] CUB/200/McGovern /7-8.
[54] *See e.g.* UM 1744 – NWN/300/Summers/16 (with regard to the customer benefits of increased margin, CUB pointed out that customers would not receive a benefit until NW Natural's next general rate case. NW Natural's proposal to address this concern is to share, on a 50/50 basis, the benefit between customers and shareholders); NWN/300/Summers/38-40 (NWN advocating that no earnings test be applied to NW Natural's incentive).
[55] ORS 757.549(3)(d) sets forth the requirement that "the public utility, without the emission reduction program, would not invest in the project in the ordinary course of business."
[56] PAC/100/Weincke/3.
[57] PGE/100/Barra/2.

ordinary course of business. The question is not, as PacifiCorp and PGE argue, whether there is some level of inherent incentive to undertake the program already present in the ordinary course of business.[58] CHP has is not a new concept in Oregon—the ETO has offered incentives for CHP as an energy efficiency program for several years.[59] Given the level of adoption of CHP in NW Natural's service territory, increased load has obviously not been enough of an incentive to foster the development of CHP. If it was, the Company would be providing incentives for CHP participants on its own already.

Second, PacifiCorp and PGE argue that, as a matter of policy, money collected from electric ratepayers for energy efficiency should not be used to promote fuel switching for natural gas conservation.[60] Fundamentally, they argue, the individual choice of a customer to install energy related technologies should not stem from ratepayer-funded incentive programs that require fuel switching.[61] PacifiCorp further argues that money collected from ratepayers on the electric side should not be used to fund an incentive for NW Natural.[62]

Again, CHP is not a new concept. As acknowledged by PGE, the DOJ has found that the law does not preclude the use of funds collected for electric efficiency to be used for CHP programs.[63] CUB does not agree that, as a matter of policy, the Commission should preclude the use of funds collected from electric customers for CHP programs. To apply this rigid logic to customer incentives would mean that other CHP projects,

[58] PAC/200/Weincke/1.
[59] CUB/200/McGovern/3.
[60] PAC/100/Weincke/4; PGE/100/Barra/2-3.
[61] PAC/100/Weincke/4.
[62] PAC/100/Weincke/4.
[63] PGE/101/Barra/1-4.

such as those that use biomass rather than natural gas, would be precluded due to inappropriate fuel switching.[64]

III. Conclusion

CUB recommends that the Commission reject NW Natural's CHP Proposal without prejudice, demand a more transparent, robust and symmetric analysis, and caution the Company to emphasize customer benefits over utility incentives. At the same time, CUB recommends that the Commission find that a CHP Program is an electric energy efficiency program and that its application as an SB 844 project does not constitute inappropriate fuel-switching.

Respectfully submitted,

Sommer Moser

Sommer Templet Moser, OSB #105260
Staff Attorney
Citizens' Utility Board of Oregon
610 SW Broadway, Ste. 400
Portland, OR 97205
(503) 227-1984 phone
(503) 224-2596 fax
sommer@oregoncub.org

[64] CUB/200/McGovern/3.