BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION Complainant, v. NORTHWEST NATURAL GAS COMPANY, Respondent.	DOCKET UG-18___

NORTHWEST NATURAL GAS COMPANY

Direct Testimony of Kyle T. Walker

RATE MECHANISMS – DECOUPLING

Exh. KTW-1T

December 31, 2018

DIRECT TESTIMONY OF KYLE T. WALKER

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I. INTRODUCTION AND SUMMARY

Q. Please state your name and position with Northwest Natural Gas Company ("NW Natural" or "the Company").

A. My name is Kyle Walker. I am a Senior Rates/Regulatory Analyst in the Rates and Regulatory Affairs Department of NW Natural. I have worked at NW Natural since February 2015. My responsibilities include rate setting, regulatory accounting liaison, development of regulatory reports and rate filings, research relevant to gas rates and regulatory mechanisms, and analysis of gas costs, regulatory deferrals, adjustment mechanisms, and rate base issues.

Q. Please describe your education and employment background.

A. I hold a Bachelor of Science in Business Administration, emphasis in Finance, from Oregon State University and a Masters of Business Administration from Willamette University. I have also obtained an accounting certificate from the University of Washington and am currently licensed as a certified public accountant in the state of Oregon.

Prior to working with NW Natural, I worked for five years in various capacities at the Bonneville Power Administration, including Finance Analyst, Derivative Accountant, Internal Auditor and Risk Management Analyst. I also have experience working as a Financial Analyst at Wells Fargo and Tax Preparer at a small CPA firm.

Q. Please summarize your testimony.

A. My testimony explains NW Natural's proposed decoupling mechanism. My testimony will:

- Describe the history of, and principles underlying, the proposed decoupling mechanism;
- Describe how the proposed decoupling mechanism meets the criteria for approval set forth in the Washington Utilities & Transportation Commission's ("WUTC" or "Commission") *Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, To Encourage Utilities To Meet or Exceed Their Conservation Targets* ("Policy Statement")[1] and;
- Compare NW Natural's proposed decoupling mechanism to the mechanisms currently in effect for Avista Corp., Puget Sound Energy and Cascade Natural Gas Company.

NW Natural's proposed decoupling mechanism is summarized below:

- NW Natural proposes a full decoupling mechanism that captures all causes of usage variation, including weather, using a revenue-per-customer methodology;
- The proposed decoupling mechanism would apply to all residential and commercial firm and interruptible sales customers, which are the same customer classes and rate schedules eligible to participate in NW Natural's existing energy efficiency programs;
- Each residential and commercial customer class would be divided into two groups – (for a total of four separate customer groups) based on usage characteristics;

[1] *In the Matter of the Washington Utilities and Transportation Commission's Investigation into Energy Conservation* I*ncentives*, Docket U-100522 (Nov. 4, 2010).

- The use-per-customer used to derive the Company's revenue requirement is used to derive the revenue-per-customer factor in the proposed decoupling mechanism; and
- NW Natural's proposal is nearly identical to the decoupling mechanisms currently in place for other Washington natural gas utilities;

II. DESCRIPTION OF DECOUPLING HISTORY AND PAST USAGE VOLATILITY

Q. Does NW Natural currently have a decoupling mechanism in place?

A. NW Natural does not have a decoupling mechanism in place in Washington. NW Natural has had a decoupling mechanism in place in Oregon since 2002.

Q. Please describe the history of decoupling in both Oregon and Washington.

A. In Oregon, NW Natural currently has two types of decoupling mechanisms that are designed to decouple the utility from the effects of conservation and weather. These mechanisms were adopted in 2002 and 2003, respectively.[2] The first mechanism adjusts for the reduction in residential and commercial gas usage caused by energy conservation. This mechanism was approved in conjunction with the transfer by NW Natural of all energy efficiency programs to the Energy Trust and the implementation of two new low-income programs; a low-income energy efficiency program and a low-income bill payment assistance program. The second mechanism normalizes weather

[2] *Application for Public Purpose Funding and Distribution Margin Normalization*, Docket UG 143, Order No. 02-634, at 2 and *NW Natural request for rate revision*, Docket UG 152, Order No. 03-507, at 7 and 10

by adjusting customer rates for weather that deviates from normal.[3] Combined, the two mechanisms function much the same as a full decoupling mechanism.

In Washington, NW Natural included in its 2008 general rate case filing,[4] a request for approval of two decoupling mechanisms that were identical to the then effective Oregon mechanisms. During settlement of the 2008 case, NW Natural agreed to withdraw its request. The Company has not requested approval for a decoupling mechanism since settlement of the 2008 rate case.

Q. What customer usage patterns has the Company observed in the last few years?

A. The usage patterns of the Company's Washington residential and commercial sales service customers has varied significantly over the last five years as represented by the two tables below:

Residential Customer Class

Year	Total Usage	Avg. Customer Count	Use Per Customer
2013	46,899,222	66,547	705
2014	45,004,305	68,294	659
2015	40,115,054	70,035	573
2016	43,033,213	72,158	596
2017	54,823,312	74,468	736

Commercial Customer Class

Year	Total Usage	Avg. Customer Count	Use Per Customer
2013	21,701,354	5,589	3,883
2014	21,190,845	5,704	3,715
2015	18,715,431	5,766	3,246
2016	19,216,112	5,853	3,283
2017	23,611,429	6,018	3,923

[3] Weather Adjustment Rate Mechanism (WARM)
[4] NW Natural General Rate Case, Exh. CAM-1, UG – 080546, at 8.

Q. How do customer usage patterns affect NW Natural?

A. NW Natural recovers roughly 66 percent[5] of its fixed costs on a volumetric (per-therm) basis. The volumetric rates for all residential and commercial customers are set in general rate case proceedings based on normalized usage; meaning that we establish rates using forecasted therm usage with an assumption of average, or "normal," weather. This means that NW Natural could either under- or over-recover its fixed costs based on the extent to which actual usage falls below or above the normalized level.

Q. How do usage patterns affect customers?

A. As mentioned above, volumetric charges make up the vast majority of a customer's bill, particularly during the heating season. Customers bear the risk that they could be overpaying their share of costs in years where their usage is greater than the normal usage assumptions used to establish billing rates.

Q. What can cause variations in customer usage?

A. Usage variations are caused by two main factors that drive natural gas consumption: Weather and conservation efforts. Many other factors, such as local and national economic performance as well as business cycles, can to a lesser extent play a role in usage variations over time

Q. Please explain how weather causes variations in usage.

A. Weather creates the most variation in usage from month to month, and is generally represented by seasonality in gas use in a given year. Generally, we tend to see either

[5] Based on average residential schedule 2 base rate usage. This does not include temporary rates, WACOG, demand or the monthly charge portion of customer bills.

colder or warmer winters than normal. In colder than normal winters, usage can be significantly higher while warmer than normal winters can cause usage to drop way below the norm. The chart below (Figure 1) depicts the historical annual residential and commercial gas usage in Washington over the last five years. Figure 1 demonstrates that usage can vary significantly from year to year.

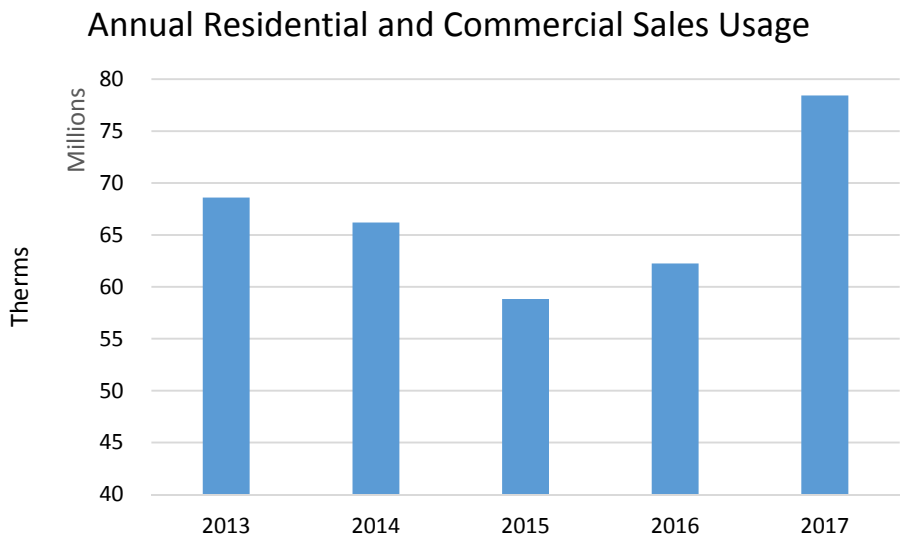

Figure 1

Q. Please describe how energy conservation impacts usage.

A. Conservation measures implemented by consumers through participation in programs such as the Company's Schedule G Energy Efficiency Services Program, has driven down usage across the residential and commercial customer classes. The Company's Energy Efficiency Services Program is administered by the Energy Trust of Oregon ("Energy Trust") in accordance with an approved Energy Efficiency Plan (EE Plan) filed each year with the WUTC.[6]

[6] The most recent EE Plan was filed November 30, 2018 in Docket UG-180989.

Q. Please provide more detail on the Company's Energy Efficiency Program.

A. NW Natural's Schedule G Energy Efficiency Program has been in effect since October 1, 2009. The Schedule G Program is available to all residential customers served under Schedules 1 and 2 and all commercial firm and interruptible sales customers served under Schedules 1, 3, 27, 41, and 42. Customers that participate in the program can receive cash incentives to offset the cost of installing high-efficiency equipment and/or to install other energy conservation measures, such as window replacements and home and building insulation.

An Energy Efficiency Advisory Group (EEAG), which is a group comprised of interested parties to the Company's 2008 general rate case, provides oversight for the Schedule G Program. EEAG oversight is required per the stipulated agreement attached to Commission Order No. 04 to the Company's rate case (Docket UG-080546). Energy Trust provides the EEAG with Quarterly and Annual Reports demonstrating total program costs, therms saved, and levelized costs of measures offered. These reports are filed with the WUTC in accordance with the EE Plan. The table below (Figure 2) displays the reported therms saved since the inception of the program:

2009-10	2011	2012	2013	2014	2015	2016	2017	Total
120,897	240,372	213,486	221,172	253,988	201,446	263,184	391,606	1,906,151

Figure 2

Q. Does NW Natural offer a low income energy efficiency program?

A. Yes. The Company offers a low-income energy efficiency program to qualifying low-income residential customers under Schedule I. The EEAG, as discussed earlier in my

testimony, also oversees the Company's Schedule I low-income program. Household participation and therm savings goals for low-income households is also captured in the Annual EE Plan filed with the WUTC. The 2019 EE Plan recently filed with the WUTC includes the implementation of two pilot programs designed to improve access to Schedule I services and to increase the number of households served under the program.

Q. Does the Company currently experience lost margin as a result of its conservation efforts?

A. Yes. As described in the Policy Statement, "lost margin" means "a reduction in revenue during a rate-effective period due to a reduction in usage, from the level of usage determined using a modified historic test year in a general rate case."[7] A large majority of the Company's fixed costs are recovered on a volumetric basis. Therefore, any reduction in customer usage from the normalized consumption established in the rate case proceeding creates a situation where the Company under recovers its costs i.e. experiences lost margin. A decoupling mechanism will protect the Company from a loss of earnings that are a direct result of the NW Natural's conservation programs.

III. DECOUPLING PROPOSAL

Q. What is NW Natural's decoupling proposal?

A. NW Natural is proposing a full decoupling mechanism that will allow the Company to either recover revenue declines related to reduced sales volumes or, in the case of sales volume increases, refund such revenues to its customers. As proposed, all usage

[7] *Policy Statement, In the Matter of the Washington Utilities and Transportation Commission's Investigation into Energy Conservation* I*ncentives*, at 6, Docket U-100522 (Nov. 4, 2010).

variations due to any cause, including weather, would be captured by the decoupling mechanism. In addition, the proposal includes a revenue-per-customer methodology, a deferral mechanism, earnings test, and a soft cap. The details of each component of the proposed decoupling mechanism are described in more detail later in my testimony.

Q. How does a decoupling mechanism impact customers and the Company?

A. A decoupling mechanism eliminates the throughput incentive and aligns the Company with conservation efforts. The throughput incentive is a Company's incentive to increase revenue by increasing gas sales. Conservation efforts reduce customer consumption and their bills alike. In addition, the decoupling mechanism would reduce bill volatility caused by variations in consumption from year to year. It does this by deferring revenue based on variations in customers' usage, to then be included in rates the following year. In a year where consumption is above the normalized baseline, the next year's rates would decrease, with everything else held constant. The converse is also true. In a year where consumption is below the normalized baseline, the next year's rates would increase, with everything else held constant.

From the Company's perspective, a decoupling mechanism helps mitigate the variations in revenues that otherwise occur because of variations in usage. As a business that delivers natural gas to customers primarily for space heating use, sales are greatly affected by a warmer- or colder-than-normal winter. This variation in revenues brings a risk of over- or under-collections of the costs that NW Natural's volumetric rates are designed to recover during a normal weather year. In addition, it helps eliminate the under recovery of costs due to declining usage over time caused by conservation.

Q. How would the proposed decoupling mechanism work?

A. The proposal is a revenue-per-customer mechanism that would, on a monthly basis, decouple only the base revenue, or margin revenue, derived from the volumetric base rate portion of each applicable rate schedule (see Exh. KTW-2). The mechanism would not factor in the monthly Customer Charge, temporary rate adjustments, any amortizations built into the permanent (base) rate, or cost of gas[8] revenue. Where applicable, a simple weighted average, based on actual usage, will be used to derive base, or margin revenue, as shown in Exh. KTW-3.

Q. Please describe the Commission's Policy Statement requirements[9] for a full decoupling program.

A. Under the Policy Statement, a utility's request for a full decoupling mechanism must be made in its direct testimony of its rate case filing, and include, at a minimum, the following elements:

- *True-up Mechanism* – A deferral mechanism seeking an annual true-up of revenue attributed to each affected class, or group, of customers;
- *Impact on Rate of Return* – An evaluation of the impact of NW Natural's proposal on risk to investors and ratepayers and its effect on ROE;
- *Earnings Test* – An application of an earnings test including the Decoupling revenue recognized in the time period being tested;

[8] Cost of gas includes both pipeline capacity and commodity charges.
[9] *Policy Statement, In the Matter of the Washington Utilities and Transportation Commission's Investigation into Energy Conservation* I*ncentives*, at 17, Docket U-100522 (Nov. 4, 2010).

- *Accounting for Off-System Sales and Avoided Costs* – Describe the method NW Natural intends to use to determine the financial benefits associated with off-system sales or avoided costs attributable to the utility's conservation efforts and then to net these benefits against the true-up provided in this mechanism;
- In addition to the requirements listed above, the Commission's Policy Statement stated that a full decoupling mechanism should address the following criteria:
    1. *Application to Customer Classes;*
    2. *Weather Adjustment Mechanism;*
    3. *Incremental Conservation;*
    4. *Low-Income;*
    5. *Duration of Program;*
    6. *Reporting; and*
    7. *Other Factors Impacting the Public Interest.*

Q. Has the Company considered each of these elements in its proposal?

A. Yes. Each element is described below.

Q. Please describe how the true-up mechanism would work.

A. The revenue-per-customer true-up calculation would be conducted during each month's accounting close. Any revenue above or below the normalized revenue-per-customer outlined in Exh. KTW-2 would be deferred on the Company's balance sheet until reviewed for prudence and amortized over the following year's annual Purchased

Gas Adjustment ("PGA") tracker period.[10] The deferral account would accrue interest determined by the Federal Energy Regulatory Commission, consistent with current interest accruing deferral accounts. Amortization would be subject to the soft cap discussed later in my testimony.

Q. How would the proposed decoupling mechanism impact the Company's rate of return?

A. NW Natural's ROE witness Dr. Bente Villadsen addresses decoupling mechanisms and the cost of capital in testimony Exh. BV-1T. All utilities in Dr. Villadsen's sample have some form of revenue decoupling. Dr. Villadsen and the company she works for, The Brattle Group, conducted an extensive study that found a lack of statistical support that decoupling results in a decrease in the cost of capital:

> "… decoupling primarily affects diversifiable risk, which is the kind of risk that does not affect the cost of capital because investors can eliminate diversifiable risk through formation of a portfolio. The second possible explanation is that decoupling merely offsets the increased risk from economic circumstances that favor energy conservation. If the second explanation is the correct one, then companies that face declining energy consumption without the benefit of a decoupling mechanism would indeed face higher systematic risk than their peers that can rely on such a mechanism."[11]

Q. Does the proposal include the application of an earnings test?

A. Yes. An earnings test would be included in the Company's annual Commission Basis Report filing. The earnings test would include decoupling revenues which would take the place of the weather normalizing adjustment included today. In this way, the earnings test will not require any weather normalizing adjustment.

[10] The Company would file a separate advice for the amortization coincident with the routine PGA advice filings in September each year.
[11] See Dr. Villadsen's testimony (Exh. BV-1T), at pages 56-57.

Q. Does the Company propose a sharing mechanism related to the earnings test described above?

A. Yes. The Company proposes a 50% sharing of before tax operating revenues in excess of the Company's authorized rate of return.

Q. In a scenario where NW Natural has a decoupling credit balance and has earned more than its authorized rate of return, what does the Company propose to share?

A. The Company would share 50% of any before tax operating revenues that exceed the rate of return in the decoupling amortization. The revenues would be shared on an equal cent per therm basis with decoupled customers.

Q. In a scenario where NW Natural has a decoupling surcharge balance and has earned more than its authorized rate of return, what does the Company propose to share?

A. The Company would share 50% of any before tax operating revenues that exceed the rate of return in the decoupling amortization, effectively reducing the surcharge balance. Any remaining decoupling surcharge would be shared on an equal cent per therm basis with decoupled customers.

Q. How would the Company account for off-system sales and avoided costs?

A. All gas costs are passed through to customers on an annual basis through the annual PGA process, so an accounting for off-system sales and avoided costs is unnecessary.

Q. What rate schedules would be subject to the decoupling mechanism?

A. As mentioned earlier in my testimony, the decoupling mechanism would apply to the residential and commercial rate schedules that are currently eligible to participate in the Company's energy efficiency programs, and would be divided into two groups each

based on usage characteristics, for a total of four groups. The residential groups consist of one group for low use residential customers and one group for all other residential customers, including our dry-out schedule[12]. The commercial groups consist of one group for lower use commercial customers and one group for higher use commercial customers. We have not included industrial customer classes in our proposal for decoupling because these customer classes are not included in our conservation programs, and because these classes have limited customers and any change to the composition of a class could have a disproportionate impact on the rest of the class. The four groups are detailed below:

- Group 1 – All residential sales service customers served under Rate Schedule 1.
- Group 2 – All residential sales service customers served under Rate Schedule 2 and dry-out sales service customers under Rate Schedule 27[13].
- Group 3 – All commercial sales service customers served under Rate Schedules 1 and 3.
- Group 4 – All commercial firm and interruptible sales services customers served under Rate Schedules 41 and 42.

Q. How does the proposed decoupling mechanism adjust for usage variance, including weather?

[12] This schedule is available to residential home builders, developers, and contractors during the period that a residential dwelling is under construction.
[13] Although Schedule 27 is a commercial class schedule, the usage is most similar to a Schedule 2 customer.

A. The proposed revenue-per-customer methodology multiplies normalized use per customer by the base volumetric rate.[14] Normalized use is derived from 20 years of local daily weather data. So, the revenue-per-customer is a function of the average weather observed over the last 20 years and the revenue requirement amount as established in this rate proceeding.[15]

Q. Would NW Natural pursue incremental conservation if the decoupling mechanism is approved?

A. Yes. NW Natural is committed to increasing conservation throughout our service territory. As shown in Figure 2, the Company has steadily increased annual therms conserved since the Company's energy efficiency program inception. Accordingly, the Company would continue to pursue cost effective energy efficiency through our existing programs.

Q. How long would the proposed decoupling mechanism remain in effect?

A. NW Natural proposes that the decoupling mechanism would be permanent.

Q. How would NW Natural report the results of the decoupling mechanism to the WUTC?

A. NW Natural currently files a monthly gas cost deferred balance accumulations/amortizations report with the WUTC. The Company proposes to expand this report to include the monthly deferral and amortization balances related to the proposed decoupling mechanism. In addition, the annual results of the mechanism would be reflected in the Commission Basis Report and the proposed earnings test.

[14] See Exh. KTW-2 for an example of the revenue-per-customer methodology
[15] See McVay testimony Exh. KSM-1T, at 12.

Q. Are there other factors to consider with a decoupling mechanism that could impact customer interests?

A. Yes. There may be years where the results of the decoupling mechanism could produce customer rate increases, particularly if extreme warm weather is experienced, or if customers' conservation efforts drastically reduce customer use. To mitigate against large rate increases to customer bills, rate ceilings or "caps" are commonly used.

Q. Does NW Natural propose a "cap" for rate increases caused by the proposed decoupling mechanism?

A. Yes. NW Natural proposes to apply a cap of 5%. A "cap" has been used by other Washington utilities to mitigate against customer rate increases associated with a decoupling mechanism. The use of 5% is a reasonable proposal that would limit a rate increase, but would also allow the company to recognize the associated revenue in a timely manner.

Q. How would customers be impacted by the proposed "cap"?

A. Any decoupling surcharges that would result in a rate increase of 5% or more would remain on the Company's balance sheet (i.e. deferral account) and not be included in rates in that year, effectively capping rate increases caused by decoupling at 5% in any given year. Amounts remaining on the balance sheet would be included in rates the following year, subject to the cap. All decoupling credits would go back to customers in rates, even if it results in a decrease greater than 5%.

Q. **Has the Company considered how a decoupling mechanism would impact low-income customers?**

A, Yes. NW Natural currently offers energy efficiency incentives for low income residential customers under general schedule I. Schedule I makes funds available for qualifying energy efficiency measures as long as three conditions are met: 1) a gas service line is installed at the premise; 2) the primary space heating equipment is fueled by natural gas; and 3) the occupant has an active account with the Company.

NW Natural also currently offers a low-income bill assistance program. The Gas Residential Energy Assistance Tariff (GREAT) was implemented at the conclusion of the Company's last general rate case proceeding and has been in effect since 2009. In general, the decoupling mechanism would be expected to impact low-income customers in much the same way as it would impact any other residential customer, as the two programs discussed above are readily available.

IV. DECOUPLING COMPARISON TO OTHER NATURAL GAS UTILITIES IN WASHINGTON

Q. Is NW Natural's proposed decoupling mechanism similar to the decoupling mechanisms in place for other Washington natural gas utilities?

A. Yes. The Company's proposal was designed to operate in the same manner as other mechanisms in the state. We have reviewed mechanisms from Avista, Puget Sound and Cascade and have proposed a mechanism similar to those already approved by the Commission.

Q. Please compare the different aspects of the other gas utilities' decoupling mechanisms to NW Natural's proposed mechanism.

A. A comparison is provided in the table below:

Company	Full/Partial	Methodology	Conservation [1]	Earnings Test	Soft Cap
NW Natural's Proposal	Full	Revenue Per Customer	Fully Covered	Yes – 50% Sharing if Over Earning	Yes – 5%
Cascade	Full	Revenue Per Customer	Fully Covered	Yes – 50% Sharing if Over Earning	Yes – 3%
Avista	Full	Revenue Per Customer	Fully Covered	Yes – 50% Sharing if Over Earning	Yes – 3%
Puget	Full	Revenue Per Customer	Less than Fully Covered	Yes – 50% Sharing if Over Earning	Yes – 5%

[1] Compares the rate schedules in conservation programs to that of the Decoupling mechanism

Q. Does this conclude your testimony on NW Natural's proposed decoupling mechanism?

A. Yes.

V. LIST OF EXHIBITS

Exh. KTW-2	Margin Revenue Calculation for Decoupling Mechanism
Exh. KTW-3	Margin Rate Weighting