

**Exh. JL-5Tr
Docket UG-181053
Witness: Jing Liu**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

V.

**NORTHWEST NATURAL GAS
COMPANY,**

Respondent.

DOCKET UG-181053

REBUTTAL TESTIMONY OF

Jing Liu

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

*Rebuttal of Public Counsel's Response Testimony in Opposition to the Decoupling
Agreement*

July 18, 2019

Revised July 23, 2019

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1 **I. INTRODUCTION**

2

3 **Q. Please state your name and employment status.**

4 A. My name is Jing Liu. I am employed by the Washington Utilities and Transportation
5 Commission (Commission) as a Regulatory Analyst in the Energy Regulation
6 section of Regulatory Services.

7

8 **Q. Are you the same Jing Liu who filed testimony in support of the Partial Multi-
9 Party Settlement Agreement on Decoupling (Decoupling Agreement) in this
10 proceeding?**

11 A. Yes.

12

13 **II. SUMMARY OF TESTIMONY**

14

15 **Q. Please explain the purpose of your testimony.**

16 A. The purpose of my testimony is to respond to the testimony that Public Counsel
17 witness Mr. Scott Rubin filed in this proceeding on July 3, 2019, in opposition to the
18 Decoupling Agreement. Commission Staff (Staff), the Alliance for Western Energy
19 Consumers (AWEC), the Energy Project, and Northwest Natural Gas Company d/b/a
20 NW Natural (“NW Natural” or the “Company”) are all signatories to the Decoupling
21 Agreement. Public Counsel is the only party opposed to the Decoupling Agreement.

22 In this testimony, I will document several material flaws in Mr. Rubin’s
23 analysis, and I will explain why the Commission should reject Public Counsel’s

1 arguments against the Decoupling Agreement. I will also re-iterate why Staff
2 continues to support the revenue-per-customer decoupling mechanism presented in
3 the Decoupling Agreement.

4
5 **Q. Please summarize Public Counsel’s argument in opposition to the Decoupling**
6 **Agreement.**

7 A. Public Counsel witness, Mr. Rubin, argues that given NW Natural’s significant
8 customer growth in Washington, revenue-per-customer decoupling will provide a
9 windfall of revenue to the Company. To support this position, Mr. Rubin provides
10 his own assessment of the incremental cost to serve new customers, which he
11 represents to be relatively low, suggesting the Company doesn’t really need
12 incremental revenues to offset the incremental costs of new customers.

13 Mr. Rubin further argues that new customers tend to use less gas (and
14 accordingly generate less revenues) than existing customers, suggesting a revenue-
15 per-customer approach would produce an allowed revenue that is too high for those
16 customers. New customers, Public Counsel argues, would tend to produce revenues
17 below their allowed revenue, and the corresponding revenue shortfall would be
18 spread unfairly to other ratepayers through the decoupling true-up.

19 Mr. Rubin goes on to propose an alternative decoupling design, fixing the
20 Company’s gas distribution revenue from volumetric charges at the level determined
21 in this General Rate Case (GRC). This fixed-revenue decoupling proposal would not
22 allow the Company’s volumetric revenues to grow with customer count or load; any

1 incremental volumetric revenues due to customer growth would be returned to
2 ratepayers.

3

4 **Q. Please summarize your response to Public Counsel’s position on the Decoupling
5 Agreement.**

6 A. In short, there is no merit to Public Counsel’s arguments; the Commission can
7 confidently approve the Decoupling Agreement as filed.

8 The central thrust of Public Counsel’s position – that revenue-per-customer
9 decoupling will provide a revenue windfall to the Company – is a demonstrably
10 incorrect conclusion. On the contrary, fixed-revenue decoupling is likely to provide
11 the Company with revenues insufficient to cover the incremental cost of serving new
12 customers.

13 To support its position, Public Counsel relies on an unrealistically low
14 incremental cost of serving new customers that is calculated using cherry-picked
15 data, and presents the contorted and fundamentally backward argument that a
16 declining use per customer argues for a lower allowed revenue for new customers.

17 As I will explain, a declining usage per customer actually further *justifies* a revenue-
18 per-customer decoupling mechanism.

19

20 **Q. Please summarize your response to Public Counsel’s alternative, fixed revenue
21 decoupling proposal.**

1 A. Given that Public Counsel’s argument against the Decoupling Agreement falls
2 substantially short of persuasive, the Commission should approve the Decoupling
3 Agreement as filed, rendering the alternative proposal moot.

4 However, in the event the Commission does entertain Public Counsel’s fixed
5 revenue decoupling proposal, Staff provides an assessment herein. In short, fixed
6 revenue decoupling is a regressive concept that would leave the Company worse off
7 than if it had no decoupling mechanism at all. Further, fixed-revenue decoupling
8 would generate the need for more frequent GRCs – it would require the Company to
9 absorb the incremental cost associated with new customers but deprive it of the
10 offsetting incremental revenues.

11

12 **Q. Have you prepared any exhibits in support of your testimony?**

13 A. Yes. I have prepared Exhibits JL-6 through JL-10_r.

14 Exh. JL-6 shows NW Natural’s revised estimate on the cost of service
15 associated with serving new customers.

16 Exh. JL-7 provides NW Natural’s explanation on line extension cost
17 categories.

18 Exh. JL-8 provides NW Natural’s explanation on how it develops
19 incremental O&M expense.

20 Exh. JL-9 shows the change in usage per customer among NW Natural’s
21 residential and commercial customers over time.

22 Exh. JL-10_r shows Staff’s estimate of total incremental cost and incremental
23 revenue associated with Schedule 2 residential customers.

1 A. Mr. Rubin presents his own assessment of the incremental cost of serving new
2 customers over a six-year time horizon, and compares those costs to the incremental
3 revenue provided under a revenue-per-customer decoupling mechanism. Public
4 Counsel’s position – that NW Natural would receive a windfall under revenue-per-
5 customer decoupling – rests on Mr. Rubin’s conclusion that incremental revenues far
6 exceed incremental costs.

7
8 **Q. What is Mr. Rubin’s assessment of the incremental revenues and costs
9 associated with serving new customers?**

10 A. Mr. Rubin argues that under the proposed revenue-per-customer decoupling
11 mechanism, over the next six years the Company would collect \$24.4 million in
12 additional revenues above the revenue requirement established through this
13 proceeding.¹ Mr. Rubin, through his own assessment of the Company’s line
14 extension cost data, represents that the incremental cost is only \$12.6 million.²

15
16 **Q. Is it fair for Public Counsel to suggest revenues should not exceed the revenue
17 requirement in this GRC, and that the \$24.4 million amounts to a windfall?**

18 A. No, it is not. First, Mr. Rubin appears to be arguing that the decoupling mechanism
19 itself generates \$24 million in additional revenue above the revenue requirement.
20 This is not true. It is important to recognize that the Commission uses revenue
21 requirement to set rates, and to the extent there is customer growth, those rates can
22 and do generate revenues above the revenue requirement, even in the absence of

¹ Rubin, Exh. SJR-1T, 18: 15-18.

² Rubin, Exh. SJR-1T, 23: 18-19.

1 decoupling. To suggest revenue-per-customer decoupling is the *source* of
2 incremental revenues is dishonest.

3 Second, whether \$24 million in incremental revenues from new customers
4 creates a revenue surplus depends on the cost of serving those customers. Mr. Rubin
5 presents these incremental revenues in isolation, giving the false impression that the
6 \$24 million in incremental revenues represents a pure windfall to the Company, and
7 are not offset by incremental costs associated with serving those same new
8 customers.

9
10 **Q. Do you agree with Mr. Rubin’s estimate for the cost of serving new customers?**

11 A. No, I do not. Mr. Rubin’s estimate of the cost of serving new customers is based on
12 selective use of the cost information provided by the Company, resulting in an
13 artificially low and unrealistic representation of those costs. Mr. Rubin’s analysis
14 also omits certain incremental expenses associated with serving new customers,
15 providing an incomplete and misleading picture of how the cost of serving new
16 customers compares to the cost of serving existing customers.

17
18 **Q. Does Mr. Rubin present cost information that differs from the cost information
19 provided by the Company?**

20 A. Yes. First, Mr. Rubin presents incremental capital costs that are substantially lower
21 than reported by the Company. While NW Natural calculates an average incremental

1 capital investment of \$3,507 to serve each new customer (using 2018 data),³ Mr.
2 Rubin argues that this investment is only about \$1,300.⁴ Second, Mr. Rubin's
3 analysis does not appear to recognize the incremental expenses associated with
4 serving new customers.

5 With an average incremental capital investment of \$3,507 and including
6 incremental expenses (e.g. depreciation, property tax, incremental O&M, etc.), the
7 cost of serving each new customer is approximately \$508 in the first year.⁵ Mr.
8 Rubin's analysis, using his \$1,300 capital cost and his omission of incremental
9 expenses, produces a cost of serving a new customer of about \$147 in the first year.⁶
10 Mr. Rubin manages to manufacture a 70 percent reduction to the estimated cost of
11 serving a new customer.

12
13 **Q. How did Mr. Rubin arrive at an average cost that was so low?**

14 A. He cherry picked the data. First, Mr. Rubin inappropriately excluded data
15 representing higher-cost line extensions and, as a result, his estimate for incremental
16 capital cost was unrealistically low. Second, Mr. Rubin inappropriately omits
17 incremental expenses associated with serving new customers. The combination of
18 these two violations yields an artificially low cost estimate.

³ Liu, Exh. JL-6. NW Natural initially estimated this cost to be \$3,585 (see Exh. JL-4). In NW Natural's initial response to Staff Data Request No. 202, the cost it provided included the total cost of the system expansion cost, not differentiating specific customer classes. NW Natural later revised its response to provide only the system expansion cost allocated to residential customers. The updated capital expenditures for serving each new customer has a slight reduction but do not materially differ from the initial numbers.

⁴ Rubin, Exh. SJR-1T, 22:7-9.

⁵ Liu, Exh. JL-6, page 4. The cost slowly declines over time as the asset depreciates.

⁶ Staff used NW Natural's method of calculating cost of service and Mr. Rubin's capital expenditure of \$1300 to come up with \$147 cost of serving new customers.

1 **Q. Please explain in more detail how Mr. Rubin cherry picks the data to generate a**
2 **lower estimate for the incremental capital cost for a new customer.**

3 A. NW Natural provided capital costs for new gas customers between 2013 and 2018
4 for three types of line extension orders: SM01, SM02 and SM03.⁷ SM01 orders refer
5 to installations of new gas mains whereas SM02 and SM03 refer to service line
6 extensions.⁸

7 Mr. Rubin excluded the SM01 cost category. He argues that costs under the
8 SM01 category are “costs associated with significant extension projects that either
9 had a combination of residential and non-residential customers or that appear to be
10 backbone projects where just a few customers had connected in the year of
11 completion (resulting in extremely high costs per customer).”⁹

12
13 **Q. Why was it inappropriate to exclude the costs associated with SM01**
14 **installations?**

15 A. The SM01 category represents real costs associated with line extensions serving new
16 customers. As background, a gas main extension is comprised of “piping and
17 associated facilities required to extend service from the Company’s existing Main
18 facilities into an area not previously supplied to serve an Applicant.”¹⁰ By the nature
19 of such a project, a main extension tends to be more expensive than a service line
20 extension. However, without mains, NW Natural would not be able to provide
21 service lines to new neighborhoods. NW Natural’s line extension tariff clearly states

⁷ Liu, Exh. JL-4, page 3.

⁸ See Exh. JL-7.

⁹ Rubin, Exh. SJR-1T, 22:2-6.

¹⁰ NW Natural Tariff WN U-6, Sheet 00.5.

1 that it is applicable to “the installation of distribution facilities to a bona fide
2 Applicant(s), including ... Main Extensions. ...”¹¹ Thus, the cost of a new gas main
3 is a legitimate cost associated with extending distribution facilities.

4 The fact that mains extensions tend to be significant projects with higher
5 costs is not a valid argument for pretending those costs do not exist.

6
7 **Q. Does the Company incur incremental expenses (beyond incremental capital
8 expenditures) associated with serving new customers?**

9 A. Yes, it does. The Company provided the explanation on how they developed
10 incremental expense estimate, which I have included as an exhibit.¹² Mr. Rubin’s
11 omission of these expenses is inappropriate and contributes to a misleading
12 presentation of the incremental cost of serving new customers. Even if Mr. Rubin
13 were to dispute the accuracy of NW Natural’s assessment of incremental expenses,
14 his assumption that those costs are zero is unrealistic. I find the Company’s estimate
15 of incremental expenses to be reasonable.

16
17 **B. Public Counsel incorrectly concludes that with a declining use per
18 customer, a revenue-per-customer approach allows too much revenue
19 for new customers and hurts existing customers.**

20
21 **Q. Please explain Public Counsel’s argument regarding the relevance of a declining
22 use per customer.**

¹¹ NW Natural Tariff, WN U-6, Schedule E.

¹² See Liu, Exh. JL-8.

1 A. Mr. Rubin testifies at length that newer customers use fewer therms of natural gas.
2 Since new customers will contribute less volumetric revenue, he argues, it would be
3 wrong to provide the Company with an authorized revenue per customer based on
4 average consumption. Mr. Rubin suggests new customers would tend to generate
5 revenue that is lower than the allowed revenue per customer, and that revenue
6 shortfall would be passed on to other customers through the decoupling true-up.

7 Mr. Rubin's remedy to this concern is to provide the Company with an
8 allowed revenue of zero for new customers – after all, if the allowed revenue for new
9 customers is zero, there can be no revenue shortfall.

10

11 **Q. Do you agree with Mr. Rubin that new customers will have reduced usage?**

12 A. I agree that the statement is true in general, though I do not necessarily believe the
13 usage datasets that Mr. Rubin relied on for his analysis are the ideal ones.¹³

14 Nevertheless, I agree that newer customers are more likely to occupy newly
15 constructed houses with better insulation and more efficient gas appliances, and
16 therefore consume less energy. For NW Natural's residential customer class
17 (Schedules 1 and 2), the weather-normalized usage per customer in the test year has

¹³ See Rubin, Exh. SJR-1, pages 13-17. The first two datasets Mr. Rubin relied on are not specific to NW Natural. The third dataset he used is the test year residential customer usage. He concludes that customers who took services between 2010 and 2017 will use substantially fewer therms (522 therms) than the total average (670 therms). The third dataset is not ideal, either because it is the actual test year usage, not the weather normalized usage at the customer level. Depending on the gas appliance used in a household, the weather normalized usage can be different from the actual usage. In addition, some circumstances could cause a new customer to use more natural gas, for example, new houses tend to be bigger and need more energy to heat up the bigger footprint; new houses with gas service tend to have gas furnace whereas existing customers in older houses may use gas only for water heating and gas stoves.

1 been dropping: from 758 therms in the 2003 GRC test year to 715 therms in the 2008
2 GRC test year, and to 673 therms in the current GRC's 2018 test year.¹⁴

3
4 **Q. If we accept the premise that newer customers use less natural gas, does that**
5 **validate Mr. Rubin's argument against revenue-per-customer decoupling?**

6 A. No, it does not. In my view, the declining usage of new customers, and of all
7 customers in general, is an important justification for a revenue-per-customer
8 decoupling mechanism from a fixed cost recovery standpoint. Given that the vast
9 majority of the costs of serving customers remain fixed and do not vary with
10 volumetric sales, a decline in volumetric charge revenue from new customers will
11 generate a net revenue shortfall over time. The necessary remedy would be a rate
12 design that moves towards a larger fixed charge, or a revenue-per-customer
13 decoupling mechanism. In my opinion, the latter is a superior solution, especially for
14 residential and small commercial customer classes, because it maintains the
15 volumetric rate design as a conservation signal.

16
17 **Q. Mr. Rubin states, "If per-customer decoupling is used, then existing customers**
18 **would be required to make up this so-called "shortfall" of 95 therms per year**
19 **for each new customer."¹⁵ Do you agree with his statement?**

20 A. No, I do not. Conservation-related revenue decline is the very problem that a
21 revenue-per-customer decoupling mechanism aims to address, not a problem that it

¹⁴ See Liu, Exh. JL-9.

¹⁵ Rubin, Exh. SJR-1T, 10:5-7.

1 creates. Again, Mr. Rubin does not consider the cost side of the equation, especially
2 the “fixed” nature of distribution costs.

3
4 **Q. Mr. Rubin referenced a report on decoupling from the Regulatory Assistance**
5 **Project which states, “The revenue-per-customer, or RPC method may not be**
6 **appropriate in areas with stagnant economies or volatile spurts of growth, or**
7 **where new customers are significantly different in usage patterns than existing**
8 **customers.” Do you agree with his assessment about the situation and the**
9 **applicability of revenue-per-customer decoupling in the current circumstances?**

10 A. No. The quote does not prove the inapplicability of the revenue-per-customer
11 approach in this proceeding. First of all, NW Natural’s customer growth is not
12 “volatile.” It has been constant during at least the past five years, which is reflected
13 in my Exhibit JL-3.¹⁶ In addition, NW Natural has predicted a similar, consistent 3 to
14 4 percent annual growth rate in the coming years. More importantly, Staff’s support
15 of a revenue-per-customer decoupling mechanism is based on the examination of the
16 trend of cost elements (rate base and O&M expense) and number of customers,
17 which clearly exhibit a positive correlation. In fact, the data show that as the number
18 of customers grow, the cost of serving customers is growing even faster. This trend
19 supports the application of revenue-per-customer in this case because the cost of
20 service without revenue-per-customer decoupling would outpace the Company’s
21 revenues, as I illustrated in my earlier testimony.¹⁷ In some cases, it could make

¹⁶ Mr. Rubin points out that there is some abnormality in administrative and general (A&G) expenses (Rubin, Exh. SJR-1T 29:3-18). Staff agrees with the observation. However, even though a particular sub-category of expense such as A&G may appear lumpy at times, the overall trend remains valid.

¹⁷ Liu, Exh. JL-1T, 8:7-19.

1 sense to set different revenue-per-customer baselines for new and existing customers,
2 if the incremental cost of serving each new customer is significantly lower than the
3 average cost for existing customers. But that is not the case here.

4 Mr. Rubin also takes the quote out of context. The article suggests that, in
5 circumstances of stagnant economies, volatile spurts of growth, or significantly
6 different usage patterns exhibited by new customers, the attrition method may work
7 well.¹⁸ Nowhere in the article, however, do the authors suggest that a rate-class-level
8 fixed revenue approach would be appropriate for such situations.

9
10 **C. Public Counsel’s Rate-Class-Level Fixed Revenue Decoupling Proposal**
11 **Should be Rejected**

12
13 **Q. Please describe “rate-class-level fixed revenue decoupling.”**

14 A. As an alternative to the mechanism proposed in the Decoupling Settlement, Mr.
15 Rubin proposes a decoupling design that would fix the Company’s volumetric
16 revenues for each rate class at the level determined in this GRC, and would hold
17 those allowed revenues constant until the conclusion of the Company’s next rate
18 case. For example, the group margin revenue settled in this GRC for Residential
19 Schedules 2 and Schedule 27 are \$23.6 million. Mr. Rubin proposed that the
20 Company’s authorized revenue from volumetric charges should remain at \$23.6

¹⁸ Lazar J., Weston, F. Shirley, W., Migden-Ostrander J., Lamont D. and Watson E., *Revenue Regulation and Decoupling: A Guide to Theory and Application*, Montpelier, VT: Regulatory Assistance Project, p. 16 (June 2011) (available at: <https://www.raonline.org/knowledge-center/revenue-regulation-and-decoupling-a-guide-to-theory-and-application-incl-case-studies/>).

1 million until it is revised in the next GRC.¹⁹ In other words, under Public Counsel’s
2 proposal, when the Company acquires new customers it would be asked to bear the
3 incremental cost of serving those customers, but the incremental volumetric revenues
4 would be refunded to customers rather than be used to offset the incremental costs.

5
6 **Q. What rationale does Public Counsel provide for using a rate-class-level fixed**
7 **revenue approach to decoupling?**

8 A. Public Counsel appears to believe that the Company should only be allowed to
9 recover the authorized revenue from this GRC. The Company should not keep any
10 volumetric revenue contributed by new customers.

11
12 **Q. Does Public Counsel’s decoupling proposal make sense?**

13 A. No. Public Counsel’s decoupling proposal is bad regulatory policy for a number of
14 reasons. The proposal does not match revenue with cost of service in the rate years,
15 and would make the Company worse off than if it had no decoupling mechanism at
16 all. Under this proposal, Public Counsel is arguing that the Company should absorb
17 the cost of new customers but should be deprived of the revenues to offset the costs
18 of serving those new customers. Public Counsel’s proposal does not balance new
19 revenues with new costs and, as a result, is patently unfair to the utility. Furthermore,
20 Public Counsel’s proposal would almost certainly lead to more frequent rate cases

¹⁹ The decoupling mechanism proposed in the Decoupling Agreement covers margin revenue for five decoupled groups, a total of \$32.8 million based on NW Natural’s amended response to Public Counsel Data Request No. 146.

1 than if NW Natural had no decoupling mechanism at all. It does not balance the
2 protection of the utility and the protection of rate payers.

3

4 **Q. Mr. Rubin asserts that “rate class decoupling would . . . provid[e] some return**
5 **on the incremental investment made to serve new customers.”²⁰ Do you agree**
6 **with his statement?**

7 A. No, his statement is inaccurate. Rate class decoupling does not provide any return at
8 all on the incremental investment made to serve new customers.

9 Even using Mr. Rubin’s own analysis (which is itself flawed, as I explained
10 earlier), incremental basic charge revenues are clearly insufficient to cover
11 incremental costs. While NW Natural would retain \$5.7 million in additional revenue
12 (basic charge revenue from new customers) over the next six years, by his own
13 calculation (which he admits is “not extremely precise”), Mr. Rubin estimated the
14 Company would need approximately \$12.6 million over the six years to cover its
15 costs and allow the Company an opportunity to earn its authorized rate of return.²¹
16 Mr. Rubin freely admits that “[a] return of almost \$6 million over six years would
17 not provide the Company with a full return on its investment.”²²

18

19 **Q. You note above that Mr. Rubin’s analysis is flawed. What did you mean?**

20 A. As explained above, Mr. Rubin estimates that the incremental cost to serve new
21 customers is approximately \$12.6 million. However, Mr. Rubin grossly

²⁰ Rubin, Exh. SJR-1T, 3:9-11.

²¹ Rubin, Exh. SJR-1T, 23:11-19.

²² Rubin, Exh. SJR-1T, 24:13-16.

1 underestimates incremental costs of service. As I show in Exhibit JL-10r, the
2 estimated incremental cost for NW Natural to serve new customers over the next six
3 years is over \$34 million, not \$12.6 million. My analysis also shows that over the
4 next six years, under the Decoupling Agreement the Company’s incremental revenue
5 from new customers will fall about ~~\$6.95.7~~ million short of the incremental cost to
6 serve those same customers.

7
8 **Q. Does the \$5.7 million basic charge revenue even partially cover the return on**
9 **investment for new customers?**

10 A. No. The basic charge is designed to cover the fixed customer-related costs such as
11 the cost of the meter, meter reading, billing, and customer service; and it is often
12 priced below cost. Even if we assume that the basic charge revenue fully recovers the
13 fixed recurring customer-related cost, Mr. Rubin leaves no room for NW Natural to
14 recover any return on the capital investment. The only solution he offers to get back
15 to the revenue-cost balance is for the utility to file rate cases year after year.²³

16
17 **Q. Mr. Rubin pointed out that your statement that the decoupling mechanism**
18 **“would compare the normalized, allowed revenue to the actual revenue” is**
19 **inaccurate. What do you think?**

20 A. He is right. I should have been more precise in my wording. The correct statement
21 should be that under the settling parties’ proposed decoupling mechanism, the
22 Company would compare the normalized, allowed revenue under decoupling

²³ Rubin, Exh. SJR-1T, 24:16-19.

1 (excluding basic charge revenue) to the actual revenue from the volumetric charges
2 on a monthly basis. In Washington state, all regulated utilities' decoupling
3 mechanisms exclude basic charge revenue from the decoupled revenue. Again, basic
4 charge revenue is intended to cover customer-related expenses, whereas decoupling
5 intends to smooth out the variation in revenue associated with volumetric sales.

6
7 **Q. In your testimony, you stated, “It costs \$476 to \$518 each year to serve a new**
8 **residential customer. In comparison, the average revenue generated with each**
9 **additional residential customer under the decoupling mechanism will be \$226**
10 **for Schedule 1 residential customers and \$416 for Schedule 2 residential**
11 **customers.” Do you have corrections to these numbers?**

12 **A.** Yes, I have minor corrections to these numbers. Since the supporting testimony was
13 filed, NW Natural fine-tuned its capital expenditure for SM01 system expansion to
14 exclude allocated cost to non-commercial customers to enable an apples-to-apples
15 comparison with residential revenues. It had a minor revision on incremental O&M.
16 In addition, the Company made a correction to volumetric rates. These corrections
17 create a very minor change to the estimated incremental cost and increment revenue.

18 Based on the revised information, the Company estimates that it costs over
19 \$421 to \$508 each year to serve a new residential customer in the first ten years.²⁴

20 However, the revenue from a new residential customer still is significantly lower
21 than the cost. A new residential customer taking service from Schedule 1 will

²⁴ The cost includes incremental O&M.

1 contribute \$224 in revenue annually, and a customer on Schedule 2 will contribute
2 \$410 annually ~~(including basic charge revenue)~~.²⁵

3 Notwithstanding the above correction, my point that the marginal cost
4 exceeds marginal revenue remains valid. Under a revenue-per-customer decoupling
5 mechanism, a utility will be compensated for the cost of serving additional
6 customers. The fixed revenue decoupling mechanism proposed by Public Counsel,
7 however, would throw revenues and costs into imbalance.

8
9 **Q. Could you explain why Public Counsel's proposal for fixed revenue decoupling**
10 **does not make sense?**

11 A. The fixed revenue mechanism would exacerbate regulatory lag and would cause the
12 Company to be much worse off financially than without any decoupling mechanism.
13 The following table compares the revenue NW Natural would obtain from Schedule
14 2 residential customers under three scenarios, using Mr. Rubin's numbers in his
15 Exhibit SJR-8.

16

²⁵ The revenue includes basic charge revenue.

1

Table 1. Schedule 2 Residential Customers' Revenue Under Three Scenarios

Year	No Decoupling	Revenue-per-customer Decoupling	Fixed Revenue Decoupling
Base	\$30,506,382	\$30,506,382	\$30,506,382
2019	\$30,951,018	\$31,113,289	\$30,648,942
2020	\$31,999,659	\$32,377,781	\$30,945,966
2021	\$33,142,305	\$33,755,480	\$31,269,582
2022	\$34,350,243	\$35,212,059	\$31,611,726
2023	\$35,589,240	\$36,706,235	\$31,962,702
2024	\$36,861,574	\$38,240,464	\$32,323,086
2019-2024	\$202,894,039	\$ 207,405,308	\$188,762,005
Total Difference in Revenue from Base Year (2019-2024)	\$19,855,746	\$24,367,015	\$5,723,712

2

3

Q In terms of authorized revenue under decoupling, how does Public Counsel’s proposal compare to the scenario in which the Company does not have any decoupling mechanism?

4

5

6

A. As illustrated by the table above, using Mr. Rubin’s example for residential customers, without a decoupling mechanism, NW Natural would be able to retain \$20 million over the next six years from both volumetric and basic charge rates.²⁶

7

8

9

10

11

12

13

That is \$14 million more than the revenue under Public Counsel’s decoupling proposal. In other words, under rate class fixed revenue decoupling, the utility gets a much worse deal than if there were no decoupling. Under Public Counsel’s decoupling proposal, the effective residential rate in 2024 would decrease by 16 percent from the rate agreed to in the settlement.²⁷ And this illustration is for the

²⁶ Staff does not agree with a number of assumptions in SJR-8, for example, the usage per customer and average rate base per customer for existing and new customers, respectively. However, Staff adopts the numbers in SJR-8 here for illustration purpose.

²⁷ Calculated based on Mr. Rubin’s Exhibit SJR-8.

1 residential class alone. The revenue gap would be even larger if we added the
2 commercial class. Mr. Rubin's decoupling design does not pass the smell test for
3 revenue sufficiency in rate years: it focuses on gross revenue but ignores costs; it
4 does not address utilities' disincentives for conservation that the Commission
5 expects decoupling mechanisms to address; and it does not provide the utility with a
6 better opportunity to earn its authorized return. It definitely represents a step
7 backward in rate regulation.

8
9 **Q. In terms of authorized revenue, how does the per-customer decoupling**
10 **mechanism compare to the scenario without decoupling?**

11 A. Again, using Mr. Rubin's illustration, the Company will retain \$24 million more
12 revenue in the next six years, or \$4.5 million more than the scenario without
13 decoupling over six years (\$752,000 more revenue per year on average). It translates
14 to an increase of approximately 2 percent in decoupled margin revenue for the first
15 year and 4% each year afterwards, matching up with the forecasted customer growth
16 rate for the residential class. The majority of this additional revenue is the revenue
17 the Company would be allowed to keep in between the traditional GRC cycles
18 without decoupling;²⁸ and the rest represents the approximate revenue level that the
19 Commission might authorize for the Company in iterative rate cases. Staff believes it
20 is a positive step forward in addressing regulatory lag and rate case fatigue.

21

²⁸ Using Mr. Rubin's example on residential class, the Company will retain \$20 million additional revenue from new customers in the next six years if without decoupling, that is, 81% of the \$24 million under the revenue-per-customer decoupling.

1 **Q. Is it possible that the authorized revenue in the decoupling mechanism could**
2 **lead to an over-earning situation?**

3 A. Yes, it is possible. A utility’s actual earning depends on a number of variables
4 including the actual expense and the actual capital investment as well as the actual
5 capital structure and cost of debt. Those are influenced by management decisions,
6 broad economic conditions, consumer behaviors and other regulatory policies. For
7 example, if a utility is able to run the business more cost effectively, it will be able to
8 achieve more net income and a higher rate of return. Of course, the opposite could be
9 true. A utility might incur major capital expenses that need additional revenue
10 support. In that case, it might file a GRC in spite of the decoupling mechanism.

11 As I discussed in my testimony in Exhibit JL-1T, the earnings sharing
12 mechanism and periodic review and renew process protect the rate payers in the
13 excessive earnings scenario.²⁹ In between rate cases, the utility still has the incentive
14 to improve efficiency to reap higher earnings. The customers will share half of the
15 excess earnings above the authorized level. In addition, in the next GRC, the test
16 year result will capture the lower expense level (or “the benefit of economies of
17 scale” per Mr. Rubin³⁰), which will translate to lower rates to customers.

18
19 **Q. Mr. Rubin states, “At its core, then, revenue decoupling is focused on the utility**
20 **(ensuring a particular level of revenue for the utility) rather than on the**

²⁹ Liu, Exh. JL-1T, 7: 3-11.

³⁰ Rubin, Exh. SJR-1T, 26:1-3.

1 **customer (setting the price the customer pays).”³¹ Do you agree with his**
2 **statement?**

3 A. Not quite. It is true that decoupling smooths out the utility’s revenue volatility
4 caused by weather and conservation, but I dispute Mr. Rubin’s insinuation that
5 decoupling somehow robs rate payers to ensure the utility shareholders’ profits. It is
6 not the case here. RCW 80.28.020 specifically provides that the Commission shall
7 determine the just, reasonable, non-discriminatory and compensatory rates and
8 charges.³² The rates the Commission determines shall be fair, just, and reasonable
9 (rate payer interest), on the one hand, and yield reasonably sufficient compensation
10 for the service rendered (utilities’ interest) on the other hand. Under a decoupling
11 mechanism, the rates are not merely volumetric charges but should also include
12 decoupling adjustment surcharges or credits. The revenue-per-customer decoupling
13 mechanism accomplishes the balance of interests. By allowing revenue increases to
14 match the cost of service in the future, it follows that rates in future rate years will be
15 *sufficient*. It is symmetrical in dealing with weather effect: if the winter is cold, the
16 Company’s revenue will go up, but the customers will get a credit through the
17 decoupling rate true up; whereas in the traditional GRC cycles, the Company will
18 keep the cold-induced revenue. In that sense, decoupling yields *fair* rates. It has the

³¹ Rubin, Exh. SJR-1T, 6:12-14.

³² RCW 80.28.020 provides that “Whenever the commission shall find, after a hearing had upon its own motion, or upon complaint, that the *rates or charges* demanded, exacted, charged or collected by any gas company, electrical company, wastewater company, or water company, for gas, electricity, wastewater company services, or water, or in connection therewith, or that *the rules, regulations, practices or contracts affecting such rates or charges* are unjust, unreasonable, unjustly discriminatory or unduly preferential, or in any wise in violation of the provisions of the law, or that *such rates or charges* are insufficient to yield a reasonable compensation for the service rendered, the commission shall determine the just, reasonable, or sufficient *rates, charges, regulations, practices or contracts* to be thereafter observed and in force, and shall fix the same by order.” (italics added)

1 protection of a soft cap to limit the rate increase to a *reasonable* level in any single
2 year. In Staff's best knowledge, the vast majority of the decoupling mechanisms
3 implemented by different states for gas distribution revenues adopts a revenue-per-
4 customer design.

5 In comparison, Public Counsel's proposed revenue cap decoupling
6 mechanism does not balance the interest of rate payers and the interest of the
7 utilities. Capping a utility's revenue at a static level going forward would be counter-
8 productive. It would condemn the Company to even more severe regulatory lag than
9 prior to the implementation of decoupling, hindering the recovery of fixed costs. It
10 would lead to more frequent cycles of draining rate cases.

11 12 IV. CONCLUSION

13
14 **Q. In conclusion, what is your recommendation?**

15 A. I recommend the Commission reject Public Counsel's arguments against revenue-
16 per-customer decoupling, and approve the Decoupling Agreement as filed.

17
18 **Q. Does this conclude your testimony?**

19 A. Yes.