

CASE: UE 335
WITNESS: LANCE KAUFMAN

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 1100

Rebuttal Testimony

August 15, 2018

1 **Q. Please state your name, occupation, and business address.**

2 A. My name is Lance Kaufman. I am a Senior Economist employed in the Energy
3 Rates, Finance and Audit Division of the Public Utility Commission of Oregon
4 (OPUC). My business address is 201 High Street SE., Suite 100, Salem,
5 Oregon 97301.

6 **Q. Have you previously provided testimony in this case?**

7 A. Yes, I provided Staff/300 and Staff/800.

8 **Q. What is the purpose of your testimony?**

9 A. The purpose of my testimony is to reply to parties' testimony on PGE's
10 proposed decoupling changes.

11 **Q. Did you prepare an exhibit for this round of testimony in this docket?**

12 A. The only exhibit I prepared is Staff/1100.

13 **Q. How is your testimony organized?**

14 A. My testimony is organized as follows:

15 Issue 1. Decoupling 2

ISSUE 1. DECOUPLING

Q. Please summarize the decoupling issues in this docket.

A. As explained in my opening testimony, decoupling mechanisms remove or reduce the relationship between sales volume and revenue. When sales decline, utilities are able to collect more per unit sold to make up for the lost revenue. Utilities generally support decoupling because it reduces the volatility of a utility's earnings.¹

A full decoupling mechanism adjusts revenues for all deviations from forecasted revenue. A partial decoupling mechanism limits adjustments for usage or revenue variation to specified causes of variation such as energy efficiency (EE).²

Currently, PGE has two decoupling adjustments in place, the Sales Normalization Adjustment (SNA) and the Lost Revenue Recovery Adjustment (LRRRA). The SNA applies to residential (Schedule 7) and small commercial customers (Schedule 32) and compares weather-adjusted distribution, transmission, and fixed generation revenues that are collected on a volumetric basis with those that would be collected with a fixed per-customer charge. The difference is accumulated in a balancing account and refunded or collected over a future period. The LRRRA is a limited revenue recovery mechanism tied to the reduced kWh sales resulting from incremental EE savings generated through ETO programs directed to nonresidential customers other than those on

¹ Staff/800, Kaufman/13.

² Staff/800, Kaufman/13.

1 Schedule 32 whose load does not exceed one average megawatt.³ Any rate
2 increase resulting from either the SNA or LRRRA is limited to two percent
3 annually.

4 In this docket, PGE proposes to:

- 5 1. Discontinue the LRRRA and in its place apply the SNA to Schedules 38/538
6 (Large Nonresidential Optional Time-of-Day Standard Service/Large
7 Nonresidential Optional Time-of-Day Direct Access Service), 47 (Small
8 Nonresidential Irrigation and Drainage Pumping Standard Service), and
9 49/549 (Large Nonresidential Irrigation and Drainage Pumping Standard
10 Service/Large Nonresidential Irrigation and Drainage Pumping Direct
11 Access Service), and to the fixed generation portion of the volumetric
12 generation charges in Schedules 83 (Large Nonresidential Standard
13 Service 31-200 kW) and 85 (Large Nonresidential Standard Service (201-
14 4000 kW));⁴
- 15 2. Remove the weather adjustment from the SNA to allow the full difference in
16 use per customer to be refunded to customers or charged to customers;
17 and
- 18 3. Retain the two percent annual rate increase limitation, but allow PGE to
19 carry forward any amounts over two percent and collect from ratepayers in
20 subsequent years.⁵

³ See PGE/1300, Macfarlane-Goodspeed/29.

⁴ PGE presents this item as two separate changes, but clarifies in its reply testimony that this is in fact a single proposal. (PGE/2400, Macfarlane-Goodspeed/4, lines 3 to 6.)

⁵ PGE/1300, Macfarlane-Goodspeed/29-30.

Staff opposed all three changes in opening testimony.⁶ CUB opposed item two related to the weather adjustment and was silent on the remaining issues.

Walmart opposes applying the SNA to Schedules 83 and 85, but recommends that if the Commission does apply the SNA to schedules 83 and 85, the adjustment should be on a per kW basis rather than a kWh basis.⁷ Walmart did not address the remaining PGE decoupling proposals.

Q. What are Staff's concerns with PGE's proposal?

A. Full decoupling does not further Commission goals and shifts risk from the company to customers without any offsetting benefit to customers. Also, PGE's proposal eliminates large customers' ability to mitigate economic risk by reducing electric usage.

Q. How does PGE respond to Staff's concern with PGE's proposal to discontinue the LRRRA and replace it with the SNA?

A. PGE responds by noting that:

1. The customers who receive service under the affected schedules also implement energy efficiency measures;⁸ and
2. The changes reduce business risk for customers.⁹

Q. Please respond to PGE's statement that the changes affect customers that implement energy efficiency measures.

A. Staff's does not oppose maintaining the LRRRA, which is a mechanism that recovers lost revenue associated with energy efficiency. If the LRRRA is

⁶ Staff/800, Kaufman/11-16.

⁷ Walmart/100, Chriss/20.

⁸ PGE/2400, Macfarlane-Goodspeed/4.

⁹ PGE/2400, Macfarlane-Goodspeed/5.

1 maintained, PGE should be indifferent to energy efficiency, and there is no
2 need for additional changes. PGE's testimony does not conflict with Staff's
3 recommendation to maintain the LRRRA, which addresses lost revenue from
4 energy efficiency.

5 **Q. Please respond to PGE's statement that its proposed change to the**
6 **LRRRA and SNA would reduce business risk for customers.**

7 A. According to economic theory, risk is fundamentally an issue of variation in
8 profit. Risk mitigation tools, such as insurance, and commodity price swaps are
9 designed to reduce volatility of profit. Under PGE's proposal, however, the
10 volatility of PGE's business customers' profit increases, resulting in greater risk
11 to these customers.

12 During periods of high economic activity, businesses generally have high
13 demand, which results in high electric use and high costs, but also high
14 revenue. Under PGE's proposal, during periods of high economic activity
15 when profits are normally high, customers would have lower power prices and
16 therefore even higher profit. Similarly, during periods of low economic activity,
17 customers would experience additional energy charges, thus lowering profit. In
18 other words, PGE's proposal increases profit volatility.

19 **Q. How does Walmart's response to PGE's decoupling proposal relate to**
20 **Staff's position that no change to the LRRRA is appropriate?**

21 A. Walmart's position underscores that the Commission should adopt Staff's
22 recommendation to maintain the LRRRA. Walmart opposes PGE's proposal to
23 substitute the SNA for the LRRRA. Customer preference should be given

1 substantial weight when it comes to decoupling mechanisms. Walmart
2 provides the only customer opinion on PGE switching from the LRRRA to the
3 SNA in this docket.

4 **Q. Given Staff's response to PGE's two points above and the support of**
5 **Walmart, does Staff continue to recommend no change to the LRRRA?**

6 A. Yes, PGE has failed to rebut Staff's concerns or demonstrate that the proposal
7 provides any ratepayer benefit.

8 **Q. How does PGE respond to Staff's and CUB's objections to eliminating**
9 **weather normalization from the SNA?**

10 A. PGE's opening testimony relies on an assertion that eliminating weather
11 normalization will reduce customer weather risk.¹⁰ To support this assertion
12 PGE references a 2013 report on PGE's decoupling that stated that full
13 decoupling would reduce customer bill volatility.¹¹ In Staff/804, Staff provides
14 analysis of the 2013 report, and demonstrates that in fact there would be
15 almost no reduction in bill volatility, and that the very small reduction in volatility
16 is not statistically significant. This means that PGE's "evidence" could just as
17 well be normal random variation.

18 PGE notes that Staff's analysis does not include 2017 weather affects,
19 which will not be incorporated into rates until 2019. PGE points out that
20 weather normalization would reverse the sign of the adjustment, but this is not
21 evidence that it reduces bill volatility.¹² PGE's analysis is fundamentally flawed

¹⁰ PGE/1300, Macfarlane-Goodspeed/31.

¹¹ PGE/1300, Macfarlane-Goodspeed/31, n. 4; PGE/1306, Macfarlane-Goodspeed/26-33.

¹² PGE/2400, Macfarlane-Goodspeed/6.

1 because it is not evaluating the net impact of the amortization of 2017 amounts
2 in 2019 considering actual 2019 weather. In order to analyze the impact of the
3 mechanism on customer risk BOTH the mechanism and actual weather must
4 be considered. Staff's analysis uses a time period that allows consideration of
5 the combined impact, and shows that there is virtually no impact on bill
6 volatility.

7 **Q. PGE states "It is a common misconception that full weather decoupling**
8 **increases risk or shifts risk to customers."**¹³ **What evidence or**
9 **argument does PGE provide to demonstrate that this is a**
10 **misconception?**

11 A. PGE provides no evidence or argument to support this statement.

12 **Q. PGE states that decoupling removes PGE's incentive to increase**
13 **sales.**¹⁴ **Is this relevant to the question of weather normalization?**

14 A. No, this is not relevant to weather normalization. PGE's existing SNA
15 mechanism is sufficient to remove the incentive to increase sales. Unless PGE
16 can influence the weather, removing weather normalization will not provide
17 further benefit with respect to removing the incentive to increase sales.¹⁵

18 **Q. Please respond to CUB's arguments against eliminating weather**
19 **normalization.**

¹³ PGE/2400, Macfarlane-Goodspeed/6.

¹⁴ PGE/2400, Macfarlane-Goodspeed/7.

¹⁵ Staff acknowledges that PGE may have some marginal ability to influence global weather through carbon emissions, but is skeptical that PGE would intentionally manipulate global climate in order to achieve greater sales.

- 1 A. Staff generally agrees with CUB's arguments, summarized below that
2 eliminating weather normalization:
- 3 1. Represents a significant shift of risk from shareholders to customers;
 - 4 2. Will lead to additional volatility in customer bills;
 - 5 3. Is a significant change in Commission policy;
 - 6 4. Represents inappropriate (and maybe illegal) retroactive ratemaking, and
 - 7 5. Is unnecessary.

8 These points generally mirror Staff's points, although Staff has yet to take a
9 position on CUB's arguments related to retroactive ratemaking.¹⁶

10 **Q. How does PGE respond to Staff's objection to modifying the two**
11 **percent of rates limiter?**

- 12 A. PGE proposes to modify the two percent limiter so that annual amounts in
13 excess of the two percent can carry forward to future years. Staff argues that
14 this will harm customers with no associated benefit. PGE argues that Staff
15 provides no rational for this observation.¹⁷ However, PGE does not deny that
16 Staff's statement is true, and indeed it is true, and the underlying rational is
17 quite simple. If amounts over the two percent limit carry forward, they will be
18 collected from customers in a future time period. This is an increase in rates
19 relative to the status quo in which the amounts do not carry forward.

20 PGE compares the SNA with the provision of a service, asserting that
21 carrying the excess balances forward to future periods is "simply charging

¹⁶ Staff notes that further analysis on the issue of volatility is needed. The initial analysis shows no increase in volatility. Additional data are needed to establish that volatility actually increases under PGE's proposal. However, Staff agrees that in theory volatility should increase.

¹⁷ PGE/2400, Macfarlane-Goodspeed/7.

1 customers for services provided.”¹⁸ However, SNA is not a service to
2 customers; it is a service to the utility.

3 The Commission has already considered whether the amounts in excess
4 of the two percent should be carried forward in Docket No. UE 197. The
5 Commission explicitly ordered that these amounts should not be carried
6 forward: “We also eliminate the recovery of adjustments in excess of 2 percent
7 of the approved revenue requirement via deferral accounts.”¹⁹

8 PGE provides no new arguments for the Commission to consider in this
9 case. Staff has simply noted that PGE offers no benefits to counteract the
10 burden placed on ratepayers by PGE’s proposal. Given that the Commission
11 has already ruled that it is appropriate that the amounts do not carry forward,
12 PGE should provide a more substantial basis for this change.

13 **Q. Does this conclude your testimony?**

14 **A. Yes.**

¹⁸ PGE/2400, Macfarlane-Goodspeed/7.

¹⁹ Order No. 09-176, page 1.

CASE: UE 335
WITNESS: SCOTT GIBBENS

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 1200

Rebuttal Testimony

August 15, 2018

1 **Q. Please state your name, occupation, and business address.**

2 A. My name is Scott Gibbens. I am a Senior Economist employed in the Energy
3 Rates, Finance and Audit Division of the Public Utility Commission of Oregon
4 (OPUC). My business address is 201 High Street SE., Suite 100, Salem,
5 Oregon 97301.

6 **Q. Have you previously provided testimony in this case?**

7 A. Yes, I previously sponsored Exhibit Staff/100 and Exhibit Staff/1000. Staff/100
8 concerned the Company's net variable power costs, while Staff/1000 discussed
9 the Company's load forecast among other general rate case topics.

10 **Q. What is the purpose of your testimony?**

11 A. I will discuss the Company's response to Staff's proposed adjustments to load
12 forecast. Specifically, I will address the normal weather assumption utilized by
13 the Company.

14 **Q. Did you prepare an exhibit for this docket?**

15 A. I did not prepare any exhibits in conjunction with Staff/1200.

16 **Q. How is your testimony organized?**

17 A. My testimony is organized as follows:

18 Issue 1. Normal Weather Assumption..... 2

ISSUE 1. NORMAL WEATHER ASSUMPTION**Q. What is a normal weather assumption?**

A. The Company's load forecast model utilizes weather as an informing factor in the expected load forecast. Standard ratemaking principals lead to the recovery of the Company's prudently incurred costs during a "normal" year. Following this idea, the weather input into the forecasting model is representative of a normal year, not the expected weather for the test year that might include things like El Niño status.

Q. Please provide a background for this issue.

A. PGE has typically used a 15-year moving average methodology to create a normalized weather input for its load forecast model. In PGE's last rate case,¹ PGE proposed to utilize a trended weather approach for the normal weather assumption in its load forecast. Staff argued that the use of a trended or "hinge fit" model was a non-standard and unnecessary practice.

The hinge fit method is not necessary because it produces results similar to the rolling-average method when determining the short-term forecast, i.e., the test year load. Also, the fifteen years of weather is a relatively small sample for determining a normalized weather forecast. Because PGE's methodology uses a relatively short period for the historical average, it should be adept at forecasting any upward trend in the weather.²

¹ PGE's last general rate case was Docket No. UE 319.

² Staff/1000, Gibbens/6-8.

1 Staff is aware of no other public utility that uses a trended weather
2 approach in its load forecasting. All of the Oregon utilities use a rolling
3 average. Given there is little need to change the forecast method, especially in
4 PGE's case, Staff concludes that the uncertainty associated with using a non-
5 standard methodology such as the hinge fit method outweighs any potential
6 benefit.³

7 **Q. What was PGE's response to Staff's reply testimony?**

8 A. PGE listed several reasons they disagree with Staff. PGE pointed to evidence
9 of acceptance of the methodology by nationally respected agencies and the
10 fact that PGE utilized the approach in the previous IRP.⁴ PGE also noted the
11 relatively minute impact of the change to the overall result and also included a
12 rebuke to Staff regarding Staff's concerns of the level of uncertainty and risk.⁵

13 **Q. Does Staff agree that the trended weather approach is well developed**
14 **and recognized?**

15 A. No. Although it has been studied and otherwise is available as a means of
16 making sample forecasts to further knowledge by different government
17 agencies, it is simply not a methodology utilized by other utilities. Neither Staff
18 nor PGE were able to identify a utility anywhere in the U.S. that currently
19 utilizes this approach for ratemaking.⁶

20 **Q. Does Staff agree that all weather assumptions are subject to uncertainty?**

³ Staff/1000, Gibbens/6-8.

⁴ PGE/2300, Riter-Lucas/7.

⁵ PGE2300, Riter-Lucas/7-8.

⁶ PGE/1100, Riter-Lucas/10.

1 A. Yes, it is true that no matter what the assumption, the forecast will face the
2 same uncertainty. However, PGE is proposing to change their methodology to
3 an approach no other utility in the state uses. They are adding complexity to
4 the model to try to account for a very minor problem. It's akin to using stitches
5 to heal a paper cut. To give a sense of the magnitude of the issue, Staff
6 compared the last 20 years of historic actuals to a 15-year moving average for
7 both heating degree days (HDD) and cooling degree days (CDD) with a 65
8 degree basis. Staff found that PGE's previous methodology was off by 1165
9 cumulative days for both HDD and CDD over the last twenty years. To put that
10 into perspective, PGE's previous forecast methodology produced an error of
11 about one tenth of a degree per day.

12 **Q. Does the fact that PGE utilizes this methodology in its IRP influence**
13 **Staff's recommendation?**

14 A. No. Staff understands it can be efficient to utilize a single forecast methodology
15 for both IRP and general rate case purposes. However, the two forecasts have
16 differing goals and the forecast methodologies should cater to those goals. A
17 warming trend may be a concern for long-term planning, which is what IRP
18 forecasts are used for, but it has little impact on year-ahead forecasts used
19 in general rate cases.

20 The paper relied on by PGE from Robert Livezey et al., "Estimation and
21 Extrapolation of Climate Normals and Climatic Trends,"⁷ notes that moving
22 average approaches only begin to fail in longer forecasts and under "very

⁷ PGE/1111, Riter-Lucas/2.

1 strong underlying trends".⁸ This paper is of limited relevance to the shorter-
2 term forecast used for general rate cases.

3 **Q. PGE notes that the impact of substituting the hinge fit method for the 15-**
4 **year rolling average is relatively minor, does Staff believe this should**
5 **influence the decision?**

6 A. No. Staff notes that this is a change to methodology and will most likely have
7 impacts beyond this single filing. Being that Staff's main concern for the load
8 forecast is how it pertains to rates in this filing, Staff believes that the model
9 should be optimized to industry standards.

10 **Q. Does this conclude your testimony?**

11 A. Yes.

⁸ See Livezey, Robert E. et al. "Estimation and Extrapolation of Climate Normals and Climatic Trends." Journal of Applied Meteorology and Climatology, vol. 46, 2007, pp. 1759-1776, <http://journals.ametsoc.org/doi/pdf/10.1175/2007JAMC1666.1>. Accessed August 2018.