

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

**DOCKET UM 1750
INVESTIGATION OF NORTHWEST NATURAL'S WARM PROGRAM**

**NW NATURAL'S OPENING REPORT
November 10, 2015**

I. INTRODUCTION

NW Natural files this report in accordance with the schedule established in this proceeding, in order to provide an overview of the Company's "WARM" program and to set forth for the Commission the Company's assessment of the operation of WARM during this last winter.

During the "WARM Period" (December 1 through May 15), NW Natural's ("NW Natural" or the "Company") Schedule 195 Weather Adjusted Rate Mechanism ("WARM Program" or "WARM") adjusts the rate per therm paid by residential and commercial customers higher or lower depending on the winter weather. This mechanism helps ensure recovery of the utility's fixed costs, despite weather variations that can affect customers' usage, and therefore would affect the total amount a customer is billed for service in the winter period. Currently, NW Natural has approximately 550,000 customers enrolled in the WARM Program.

For much of NW Natural's service territory, the 2014-2015 heating season was the warmest ever recorded in Oregon history.¹ As would be expected in such a warm winter - where customer use is well below normal - NW Natural's WARM mechanism operated to ensure recovery of the utility's fixed costs in a way that significantly affected customer bills. For many customers, their decreased usage caused the WARM calculation to reach the maximum adjustment that can be applied to a monthly winter bill. When a WARM adjustment reaches this maximum monthly "bill cap," the portion of the WARM adjustment that exceeds the bill cap is deferred until the first bill issued following the end of the WARM Period ("WARM True-up Bill") and a "true-up" adjustment is placed on that bill. The bill cap is designed to protect

¹ See Figure 1, at page 14, below.

customers from spikes in their winter bills as a result of the WARM adjustment in a single month. However, if a the bill cap is reached in multiple months during the WARM Period, the true-up adjustment for each of those months is deferred and placed on the WARM True-up Bill. Because of the 2014-2015 record warm winter an unusually high number of customer bills reached the bill cap in multiple months and these customers received significant true-up adjustments on the WARM True-up Bill.

At the conclusion of the 2014-2015 WARM Period, the Public Utility Commission of Oregon's ("OPUC" or "Commission") Consumer Service Staff ("CSS") reported higher volumes of customer complaints related to the WARM Program's true-up adjustment as compared to previous years' customer complaints. Specifically, the OPUC CSS staff received 14 residential complaints and 18 commercial complaints related to the true-up adjustment.² The Company's call center also experienced an increase in customer inquiries related to the true-up adjustment for the 2014-2015 WARM Period.

At the recommendation of OPUC Staff, on September 8, 2015, the Commission opened an investigation into the Company's WARM Program, with a focus on issues arising from the 2014-2015 winter season.³ Following a prehearing conference held on October 1, 2015, Administrative Law Judge Power directed NW Natural to file this report ("Report") to assist the Commission with its investigation into the WARM Program, as agreed between the Company and the parties to this docket.

² Staff Request to Open Investigation, August 31, 2015.

³ OPUC Order 15-264.

In this Report, the Company addresses the following: (1) an overview of the WARM Program; (2) how the WARM Program operates; (3) the Company's customer outreach related to the WARM Program; (4) the impacts that WARM had on customer bills in the 2014-2015 WARM period, and the Company's conclusions regarding the issues that led to increased complaints during the 2014-2015 WARM Period; (5) proactive measures the Company has taken to improve customer communication related to the WARM Program as a result of the 2014-2015 winter; and (6) the Company's recommendations for possible modifications to the WARM Program to mitigate these issues moving forward.

II. OVERVIEW OF THE WARM PROGRAM

The WARM Program was proposed by the Company in its 2002 general rate case, and the original Schedule 195 carried an effective date of September 1, 2003.⁴ The WARM Program concept was developed to mitigate the effects that variations in winter weather has on the Company's revenues and on customers' bills. Because a large portion of the Company's fixed costs are recovered through volumetric charges, prior to the establishment of the WARM Program, the revenues to recover those fixed costs would vary significantly with the weather. In colder than normal winters the Company would over-recover its fixed costs at the expense of customers and in warmer than normal winters the Company would under-recover its fixed costs. This exposed both customers and the Company to weather-related risk, over which neither had control. The WARM Program modified the rate structure "to recognize the need to

⁴ The first WARM Program period began November 1, 2003. See Docket UG 152, OPUC Order 03-507.

separately identify and collect the revenues to cover the fixed costs from the revenues which cover truly usage-related costs, and to do so in a way that immediately benefits both customers and the Company.”⁵

The WARM Program operates as a real-time bill adjustment during the winter months to level out the variability in customer bills (and Company revenues) due to changes in weather. The WARM Program applies only to customers served under Rate Schedule 2 (residential customers) and Rate Schedule 3 (commercial customers), as these customer classes largely represent primary space heating load that is typically more sensitive to the effects of weather during the winter months. Weather effects are determined on a weather zone-specific basis and are measured by comparing normal average heating degree days (HDDs)⁶ to the actual HDDs experienced in a billing month. The weather zones used for WARM represent each of the Company’s district areas within its Oregon service territory, and are the same weather zones used in the determination of thermal billing units.⁷

Because the objective of the WARM Program is to capture the effects of weather variability on all of the Company’s Schedule 2 and Schedule 3 heat load customers, the degree to which the WARM Program is successful is dependent on customer participation in the program. For that reason, the parties agreed to make the WARM Program an “opt-out” program, meaning customers in the applicable rate schedules are automatically enrolled unless and until they affirmatively opt out of the Program. The opt-out design addressed three key

⁵ OPUC Order 03-507 at p. 7.

⁶ Normal average weather is based on the same weather period used in the load forecast that established the permanent rate component (margin rate) of customer bills in the most recent general rate case proceeding. The weather period currently used for the WARM Program is the 25-year period 1986-2010 as published by the National Oceanic and Atmospheric Administration (NOAA).

⁷ The weather zones are identified in General Rule 24 of the Company’s approved Tariff, P.U.C. Or. 25.

issues: (1) a program that was structured as “opt-in” would be unlikely to reach enough customers to achieve the primary objective of the mechanism; (2) the Company’s customer information system (“CIS”) data cannot accurately identify customers with, or without, space heating equipment (thus the Company relies on customers elections); and (3) the program provides customers a choice about whether to participate in WARM.

In the very first WARM Program period (2003-2004) the WARM amount was calculated on a customer class basis and applied to customer bills on a per-therm-of-usage basis without a cap or floor on the monthly WARM adjustment. In addition to being the first year of the WARM program, it was a warmer than normal winter period. The combination of a new program that caused an increase in customer bills gave rise to an increase in consumer complaints. In 2004-2005, changes were made in response to the Commission’s directive to determine if customer complaints could be reduced through changes in the WARM calculation. Effective with the 2004-2005 WARM period the link between the WARM amount and customer usage was eliminated, a cap and floor on the monthly WARM amount was created, and the post-WARM period true-up went into effect to allow for the collection of amounts that were not applied to bills as a result of the cap and floor. See OPUC Order No. 04-463 dated August 16, 2004.

The Company’s WARM Program is unique, and the Company is not aware of any other utility in the region with a mechanism that performs exactly as the WARM Program. The WARM Program has and continues to meet the original objectives established for the program with regard to weather risk mitigation. Since its inception, the WARM Program has resulted in both credits and surcharges in various years. On a total net basis to date, it has credited to participating customers \$9.9 million of net savings, over and above the surcharges.

III. THE WARM PROGRAM MECHANICS

The WARM Program period begins with bills generated on meters read on or after December 1 and ends with bills generated based on meters read on or before May 15.⁸ A bill issued based on a meter read after May 15 will not have a WARM adjustment applied for that billing cycle, even if the cycle included usage that occurred prior to May 15. However, that bill may include a WARM adjustment related to the true-up, if there is a true-up associated with previous WARM adjusted billing cycles. A detailed discussion of the true-up is provided later in this section of the Report.

The WARM calculation uses four global data points and one customer-specific data point. The four global data points are: (1) normal HDDs by weather zone; (2) actual HDDs by weather zone; (3) a statistical coefficient (one for each customer class); and (4) the margin rate (one for each customer class). The customer-specific data point is the customer's monthly usage.

The Company uses the same normal HDDs by weather zone as those used by the Company to establish rates in its last general rate case.⁹ The actual HDDs are obtained from third-party reporting agents and entered into the Company's CIS.¹⁰ For purposes of calculating

⁸ The initial WARM Program period was set as November 1 through May 31th, but was changed to November 15 through May 15. See Docket UG 152, OPUC Order 03-655. Following the first WARM period, changes were made to the WARM calculation in response to Commission concerns triggered by customer inquiries. See Docket UG 152, OPUC Order 04-463. Commencing with the 2006-2007 WARM period, the WARM period was changed to December 1 through May 15.

⁹ Normal HDDs used in the calculation for the 2003-2004 through 2011-2012 WARM Program period were based on rates established in UG 152, and normal HDDs used in the calculation for the 2012-2013 through 2014-2015 WARM periods were based on rates established in UG 221.

¹⁰ There are two weather zones for which actual HDDs are obtained from alternate weather stations due to issues associated with timely receipt of actual data. The HDDs are adjusted as needed to match the normal HDDs, in accordance with General Rule 24 of the Company's approved Tariff.

HDDs used in the WARM calculation, WARM uses a set point temperature of 59 degrees Fahrenheit for Rate Schedule 2 and 58 degrees Fahrenheit for Rate Schedule 3, which differs from the set point temperature used by the National Oceanic and Atmospheric Association (NOAA). Testimony and support for the use of different set point temperatures for WARM can be found in the UG 152 docket record.

The statistical coefficients used in the calculation are also established through the general rate case process using the same weather data used in the load forecast to establish revenue requirements. As such, normal HDDs and the statistical coefficients do not change between rate cases. The statistical coefficient represents the effect that each degree day has on customer use (in therms). The same statistical coefficients are used in the Company's Schedule 190 Partial Decoupling Mechanism calculation.

The margin rate is established in the Company's last general rate case for the respective rate schedules, but is updated annually coincident with the Company's purchased gas adjustment filings for any potential base rate adjustments that may occur at that time.¹¹

To determine the bill effect under the WARM Program, the difference in HDDs (normal HDDs compared to actual HDDs) for a given billing cycle and weather zone is multiplied by the statistical coefficient to determine the equivalent therms to relate to the change in HDDs. This result is then multiplied by the margin rate to determine the WARM amount for that billing

¹¹ Annual adjustments include but may not be limited to environmental cost recovery, bare steel program cost recovery, and Mist storage recall.

cycle. Using a residential example, for an HDD variance of 180¹² at current margin rates, the calculation would be:

$$((180 \times 0.16471 = 29.6478 \text{ therms}) \times \$0.44470) = \$13.1844$$

The resulting \$13.1844 WARM amount is the same for every customer in that class within the same weather zone and with the same beginning and ending bill cycle, regardless of customer usage. However, the manner in which the WARM adjustment is applied to a customer bill will vary depending on the customer's actual gas usage for that bill cycle. First, there is a ceiling (cap) and a floor that are applied in each month of the WARM Period. The ceiling for residential customers is the lesser of \$12 or 25% of the energy portion of the bill; the ceiling for commercial customers is the lesser of \$35 or 25% of the energy portion of the bill. The floor for all customers is the currently effective Weighted Average Cost of Gas (WACOG). The ceiling could be triggered in months where actual HDDs are lower (warmer) than normal. The floor could be triggered in months where actual HDDs are higher (colder) than normal.

In general, the WARM amount will be applied as an adjustment to the rate per therm billed for usage. However, the rate per therm is different for each customer because the total WARM amount is divided into the customers' usage in order to apply the appropriate per therm rate to their bill. If the total WARM amount would trigger the ceiling, then the rate per therm will be adjusted up to the ceiling, and the remainder of the WARM amount would be set aside (deferred) and applied to the WARM True-up Bill.

¹² 180 HDDs is the highest HDD variance experienced in the 2014-2015 WARM period by customers that registered complaints with the OPUC CSS.

The rate per therm adjustment for a residential customer with an HDD variance of 180 therms and a customer usage of 53 therms is as follows:

$$\begin{aligned} \text{WARM Adjustment Per Therm:} & \quad \$13.1844 \div 53 = \$0.24876 \\ \text{Billing Rate Per Therm:} & \quad \$0.93513 + \$0.24876 = \$1.18389^{13} \end{aligned}$$

However, because the WARM adjustment of \$13.1844 in the example is more than \$12.00, and is also more than 25% of the energy portion of the bill - $(\$0.93513 \times 53 = \$49.56) \times 0.25 = \$12.39$ – only a portion of the WARM adjustment (\$12.00) is applied to the rate per therm, and \$1.18 is deferred. So, the WARM adjustment applied to the winter bill is as follows:

$$\begin{aligned} \text{WARM Adjustment Per Therm:} & \quad \$12.00 \div 53 = \$0.22642 \\ \text{Billing Rate Per Therm:} & \quad \$0.93513 + \$0.22642 = \$1.16155 \end{aligned}$$

If the customer had zero usage, the entire \$13.18 WARM amount would be deferred because zero cannot be used in the per therm calculation shown above. As discussed below, there were a number of zero use customers in the 2014-2015 winter season that received large adjustments on their WARM True-up Bill which contributed to the increase in customer complaints/inquiries related to the true-up adjustment.

The following tables show how the WARM calculations from the examples above would be reflected on residential and commercial customer bills at different usage levels if the HDD variation from normal is 180 HDDs:

¹³ In this example, the starting rate per therm is the November 1, 2015 effective rate. The HDDs are shown as lower than normal (warmer); the adjustment for 180 HDDs colder than normal would be a reduction of the same amount to the rate per therm.

<i>Net HDDs = 180 below normal</i>			
RESIDENTIAL			
Usage Levels	WARM Adj.	Per Therm Rate	Deferred Amt.
High Use (150 therms)	\$13.18	\$1.01513	\$1.18
Average Use (53 therms)	\$13.18	\$1.16154	\$1.18
Low Use (10 therms)	\$13.18	\$1.16891	\$10.85
No Use (0 therms)	\$13.18	\$0.93513	\$13.18

<i>Net HDDs = 180 below normal</i>			
COMMERCIAL			
Usage Levels	WARM Adj.	Per Therm Rate	Deferred Amt.
High Use (400 therms)	\$54.51	\$0.90993	\$42.51
Average Use (233 therms)	\$54.51	\$0.93143	\$42.51
Low Use (85 therms)	\$54.51	\$1.02110	\$42.51
No Use	\$54.51	\$0.87993	\$54.51

Verification of WARM calculations

During every WARM Period, the Company's billing department verifies that the WARM calculation is billing correctly by taking a modified random sample¹⁴ of 21 bills and recreating the bill calculation using an Excel worksheet. The same verification is performed on WARM True-up Bills through the end of the true-up period.

The Company found no errors in the WARM calculation during the 2014-2015 WARM billing period.

¹⁴ The sample of accounts comes from a weekly auto generated list from CIS. The query is designed to get multiple bill scenarios for each customer class to include closing bills, opening bills, etc. Without the query modification, 80% of the sample would be residential regular bills.

IV. NW Natural's WARM Program Customer Communications.

The UG 152 WARM Stipulation established standards for the communication to customers about the WARM Program, and these standards continue today and are included here.

Customer Information. Each customer bill includes a bill message that indicates whether or not the customer is enrolled in the WARM program. Upon request, the Company will provide a customer a calculation showing what their billed amounts would have been without a WARM adjustment or with a WARM adjustment, as applicable.

Opt-out Notice. The Company communicates the opt-out options to customers annually through a second bill message that appears on customers' bills during the July through August billing cycles. In addition, a copy of the most recent WARM brochure is included as a bill insert in the July bill.¹⁵

New Customers. New customer packets contain a copy of the WARM Brochure which includes information on how to opt-out of the WARM Program.

The Company annually reviews all of the WARM bill messages, bill inserts, and the annual WARM brochure. Since the inception of the program, the Company has revised the bill messages and the WARM brochure several times, with the most recent updates completed after the 2014-2015 WARM Period. The Company coordinates any material changes to the bill messages or the brochure with the Manager of the OPUC CSS. The 2014-2015 WARM messages and brochure changes were made to address customer feedback received by the Company

¹⁵ The initial WARM communications timeframe differed due to the timing of the rate case proceedings. See OPUC Order 03-507, Appendix C, page 2.

from customer calls and inquiries made through the OPUC CSS. A copy of the two most recent versions of the WARM brochure are provided as Attachments A and B to this report.

The following messages comprise the Company's currently effective WARM Program bill messages to customers:

- Monthly bill message for WARM participants

"You are participating in the WARM program, which adjusts bills if weather between December and mid-May is colder or warmer than normal."

- Monthly bill message for non-WARM participants

"You have opted out of the WARM program, which adjusts bills if weather between December and mid-May is colder or warmer than normal."

- August and September bill message for WARM participants¹⁶

"You're currently enrolled in WARM, the optional billing program designed for space-heat customers, which helps smooth out the impacts of warmer or colder-than-average weather during the Dec.-May heating season. If you wish to opt out of WARM, visit nwnatural.com or call 800-422-4012 by Sept. 30."

- August and September bill message for non-WARM participants¹⁶

"You're not enrolled in WARM, the optional billing program designed for space-heat customers which helps smooth out the impacts of warmer or colder-than-average weather during the Dec.-May heating season. If you wish to opt in to WARM visit nwnatural.com or call 800-422-4012 by Sept. 30."

¹⁶ This is in addition to the standard monthly bill message.

The WARM brochure is included in the July bill as a bill insert. Beginning in July 2015, and moving forward, the July bill will include a unique bill message that reads¹⁶:

“Please see our yearly WARM billing program brochure. This optional billing program is designed for space heat customers and helps smooth out the impacts of warmer or colder than average weather. See program details inside.”

Since 2010, the Company has also posted a Frequently Asked Questions (FAQ) document about WARM on its website. This FAQ is posted year-round.

When a customer requests information about how the WARM program impacted their bill, the Company will mail a letter to the customer containing a table showing the customer's WARM period bills with and without the WARM adjustment. See Attachment C to this Report for a sample letter. The CIS calculates and retains this information for every WARM eligible residential and commercial customer account. A customer may also view this information from the Company's website provided they have established an on-line sign-on to their account.

In addition to the standard WARM communications, there were several instances since the implementation of the WARM Program where the Company initiated a communication as a letter insert in customer bills to those customers that received a WARM true-up line item adjustment of \$10 or more for residential customers and \$40 or more for commercial customers, and/or who had low or zero usage during the prior WARM Program period. About 33,000 customers received the insert in 2005, 196 received the insert in 2006, and about 12,000 customers received in the insert in 2010.

In August 2005, the Company sent a separate direct mail to 2,241 customers that had zero usage in the 2004-2005 WARM Period. This communication resulted in 599 of the 2,241 customers changing their WARM status to opt-out. See Attachment D to this report. As

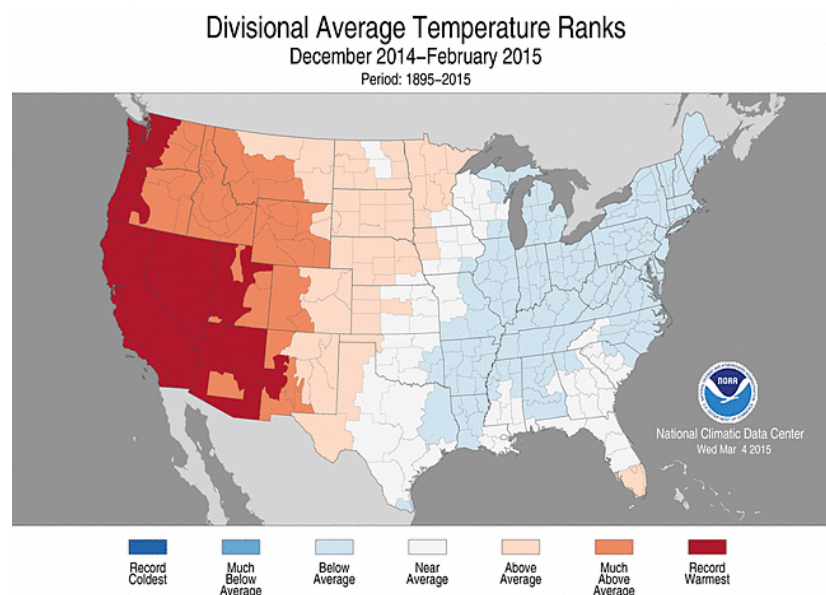
discussed in Section V of this Report, the Company plans to do a similar direct mail notice to customers for whom the Company's billing records showed zero use between December 2014 and February 2015.

V. THE 2014-2015 WARM PERIOD

a. The Warmest Year on Record.

As reported in the Staff's recommendation to the Commission, the 2014-2015 winter months were unusually warm. In fact, NOAA confirms that for significant regions of NW Natural's service territory, 2014-2015 was the warmest winter ever on record.¹⁷

Figure 1



b. Operation of the Mechanism

NW Natural believes that the WARM Program functioned as intended and designed in the 2014-2015 WARM period. There were no calculation errors relating to WARM, and it was

¹⁷<http://www.ncdc.noaa.gov/sotc/service/national/divisionaltavgrank/201412-201502.gif>

effective in implementing the adjustments intended by the mechanism, which result in additional charges for fixed costs in warmer-than-normal winters, and credits in colder-than-normal winters.

c. Customer Complaints

NW Natural understands customers' concerns when they are faced with a significant adjustment of their bill of any kind. And, in light of the record warm winter experienced, it is not surprising that customer complaints and inquiries increased with respect to WARM.

Although the Company regrets any complaints of its customers, it is worth noting that the 56 customer cases opened with the OPUC CSS¹⁸ represent a very small fraction of the customers enrolled in WARM, which total nearly 550,000. Of the 30 residential cases opened related to WARM, OPUC CSS reported 14 specific complaints about the true-up adjustment.¹⁹ Generally, of those residential customers that raised complaints about the true-up adjustment, the customers stated that they did not feel that it was fair to pay a true-up adjustment when they used less gas than usual. Of the 26 commercial cases opened related to WARM, OPUC CSS reported 18 complaints regarding the true-up amount.²⁰ Generally, the commercial customers did not feel that the true-up adjustment was fair if they used little to no gas during the winter. Some zero-use commercial customers stated that the true-up adjustment is inconsistent with the bill messages and tariff, which state that the WARM Program adjusts on a rate per therm basis.

¹⁸ Staff Request to Open Investigation, August 31, 2015. The OPUC CSS later issued an updated report that shows 58 customer cases.

¹⁹ *Id.*

²⁰ *Id.*

The increased complaints related to the true-up adjustment are very likely caused by the anomalous 2014-2015 winter weather. With respect to complaints about the true-up, the OPUC CSS likely received more complaints because more of our customers received true-up adjustments this year because space heating was used less. The lower than normal gas usage caused the monthly WARM adjustments to reach the 25% ceiling of their bill and deferred the true-up adjustment to the customers' WARM True-Up Bill. The true-up adjustment came as a surprise to some customers, and most of the customers that complained about the true-up chose to opt-out of WARM. Of the complaints and inquiries that NW Natural and the OPUC CSS received about the WARM Program, NW Natural is not aware of any customer bills that the Company failed to correctly apply the monthly WARM adjustment or true-up adjustment in accordance with the Company's tariff.

While the Company does not believe that the increase in complaints in and of itself is an indication that changes to the mechanism are warranted, it is appropriate to consider whether there are modifications to the WARM mechanism that would help address any shortcomings that have been brought to light. As described above, the Company has taken actions to ensure that its customers understand the WARM mechanism, and that customers are aware of their options under the Company's tariffs. Additionally, the Company addresses certain other modification options in Section VI below.

d. Improvements to Customer Communication Following the 2014-2015 WARM Period.

The Company is implementing a new process intended to improve communications to new residential and commercial customers that may not have gas space heating equipment in use at the premise during the winter period. The Company shared a draft letter with the OPUC

CSS Manager, Phil Boyle, in August 2015. The final letter is provided as Attachment E. The Company's plan is to generate this letter at the time of every new customer account activation or account turnover when the information provided by the new customer, or from previous equipment and usage history at the account premise, indicates that there may not be natural gas space heating equipment installed and/or in regular use at the premise.

The Company identified several key learnings related to customer communications about the WARM Program from the 2014-2015 WARM program experience. First, our communication materials could have been clearer with respect to specific details about how the WARM program functions during warmer than normal winters, such as the way that WARM handles zero use bills, and the fact that if there is low- or zero use most or all of the WARM amount is deferred to the WARM True-up Bill. We have since corrected these shortfalls and believe that the current WARM brochure and customer bill messages bring more transparency to these communication materials and should go a long way to minimizing the type of complaints that were registered about the 2014-2015 WARM period.

Second, it came to our attention that Schedule 195 as it is currently written does not clearly state how the WARM adjustment is applied to customer bills where the usage is zero. This came to the forefront with the 2014-2015 experience where many of the commercial customers that registered complaints with the Commission were zero use customers. Schedule 195 was written premised on the assumption that WARM participants are space heating customers with gas usage during the winter months, and as such, focuses on the application of the WARM adjustment as an adjustment to the rate per therm. The OPUC investigation that resulted in the current WARM calculation methodology clarified that the WARM adjustment is

intended to apply to all customers regardless of usage.²¹ However, the current tariff language does not explicitly state how the WARM adjustment would be applied to the bill if there was zero usage in a WARM billing month. While the current tariff can benefit from this clarification, the Company believes that the appropriate interpretation of the current tariff is that zero usage customers are still subject to the WARM adjustment. Indeed, it would seem to be an unfair interpretation of the tariff to find that customers that have any amount of usage (no matter how low) would pay the full WARM adjustment amount, but that customers with zero usage avoid it altogether.

The Company expects to file tariff revisions to clarify the application of WARM in the case of a zero use customer. However, we would recommend that any revisions to Schedule 195 be made at the conclusion of this proceeding should other changes result from this investigation.

Finally, the Company intends to send a direct mailing this year to our zero use customers to notify them that they should likely opt-out of WARM if they anticipate zero use in the future. We will allow these zero-use customers to opt-out for the current winter even though the official deadline to opt-out was on September 30, 2015.

VI. POTENTIAL MODIFICATIONS TO THE WARM PROGRAM

At the outset, NW Natural notes that there are at least two general methods through which the WARM mechanism could be implemented. The first would be through applying a common cent-per-therm adjustment to the bills of customers within the same class. In other

²¹ OPUC Order No. 04-463, p. 2.

words, this methodology would apply a total WARM adjustment amount to bills that would vary depending on the customers' usage during the month. This approach would mean that customers with zero use would have no WARM adjustment, and customers with low use would have a low WARM adjustment. Of course, high use customers experience larger WARM adjustments. This is the methodology through which NW Natural initially implemented WARM. After its first year of operation, however, customer complaints caused the Company and OPUC staff to review the mechanism, and OPUC Staff urged a change, to the current methodology. This current methodology represents the second approach through which WARM can be implemented.

Under the second method, which is currently used, the same WARM adjustment (in dollar terms) is applied to customers in the same class. Under this approach, a customer's usage does not determine the WARM adjustment to their bill (except to the extent the cost caps factor in to defer the effect for later). This method does a good job of recovering fixed costs from all customers, but can lead to the current situation, where low or no use customers may feel they are "overpaying" and high use customers may be viewed as paying too little of an adjustment.

Generally, either of the two methods can be used, and each method has its pros and cons. Each method is also likely to lead to some amount of customer complaints under different circumstances. The Company believes the current method has merit in that it recovers fixed costs from all customers, regardless of their usage. This tracks, to some extent, cost causation principles, because many of NW Natural's fixed costs do not vary with customer usage but are instead incurred in order to allow customers to be connected with the system.

However, the Company notes that the current method can have a somewhat strange impact in situations where WARM results in credits to low- or zero-use customers, because those customers may already be paying significantly less than the cost of service on the assets required to maintain their customer status.

The Company is open to discussing the other (previous) methodology with parties and Staff in this proceeding, and believes that many of this year's complaints would have been avoided under the prior methodology.

The Company is, in either case, interested in modifying the caps in the current program. These caps came about only after the 2004-2005 winter, as a solution proposed by OPUC Staff to customer complaints at that time. We are concerned that the credits or surcharges caused by the cap unduly surprise or confuse customers because they occur after the regular monthly WARM adjustment during the winter heating season. NW Natural believes that WARM should be allowed to operate on a real-time basis—that is, the effects of the adjustment should be experienced in the months in which the weather variation is experienced. This best matches the intent of WARM, which is to adjust winter bills to be normalized for weather.

If the Commission is concerned about removal of the cap entirely, the Company will work with the parties to this docket to explore how the caps can be modified to limit the undesirable effects that can be caused in situations like this past winter. NW Natural believes that if the cap is viewed as having value because it prevents too great of a fluctuation in the per-therm rate shown on customers' bills, that the same goal can be achieved by causing credits or surcharges to appear as a line item on the bill after a certain level of adjustment to the per-therm rate. For instance, a cap could be applied on the rate-per-therm adjustment at a

level that would prevent the rate presented on the bill from being extremely high (e.g. more than \$2 per therm). Similarly, the Company believes that a floor on the rate per therm set at the Annual WACOG is also appropriate to ensure that the rate per therm presented does not go too low or below zero in colder winter months. This may be important to avoid an unintended price signal to customers that their volumetric rate is so low that they should not concern themselves with monitoring their usage levels. In this real-time program structure, any excess WARM adjustment would be applied as a line item adjustment on the same bill. This approach would provide a balance between large deviations to the volumetric rate but would also minimize the size of a line item adjustment. And most importantly, it would eliminate any post WARM period bill adjustments, which appears to have been the cause of almost all of the customer complaints this past winter.

VII. CONCLUSION

NW Natural believes that the WARM mechanism is operating as intended. However, it understands that under the circumstances of a record warm winter, it can lead to situations that increase customers' concern about the adjustments that occur under the WARM mechanism. NW Natural believes that it has taken reasonable steps to address these concerns, but also believes that certain modifications, as discussed above, could improve the operation of WARM, and decrease customer concern.

NW Natural looks forward to discussing this report with the OPUC Staff and parties in this proceeding.

BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON

UM 1750 – WARM Investigation

REPORT ATTACHMENTS

NOVEMBER 10, 2015

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FAQS *(continued)*

If I am on the Equal Pay Plan, how will WARM affect me?

The Equal Pay Plan operates the same way whether or not you are in WARM. As usual, your Equal Pay Plan amount may be adjusted during your plan year, if necessary, to bring your account into better balance by the adjustment month.

Why is WARM the default billing method during the December-May heating season?

WARM is the default billing method because it benefits both space-heating customers and the company. Without WARM in the heating season, space-heating customers would experience even higher bills when weather is colder than average, and the company would experience unexpected revenue losses when the weather is warmer than average. WARM is optional so that customers who do not use natural gas for space heating and customers who prefer that their bill fully reflect the effects of colder or warmer than average weather would have a choice. In many states, a weather adjustment mechanism like WARM is mandatory and is simply part of the utility's normal rate structure.

Is participating in WARM the right choice for me?

If you are NOT using a natural gas furnace, fireplace or free-standing stove to heat your home, you should opt-out of WARM.

This is best because you will not experience spikes on your bill due to extreme variances in weather.



REDUCING PEAKS AND VALLEYS

NW Natural has set a maximum (cap) and minimum (floor) amount for the WARM adjustment that will appear on any one bill. Any difference between the month's calculated WARM adjustment, and the amount that is actually billed using the cap and floor, will be collected from you or credited back to you at the end of the WARM period.

Under this provision, the WARM adjustment will never increase a residential customer's bill more than \$12 or 25 percent a month (whichever is lower). Similarly, WARM will never increase a commercial customer's bill more than \$35 or 25 percent a month (whichever is lower).

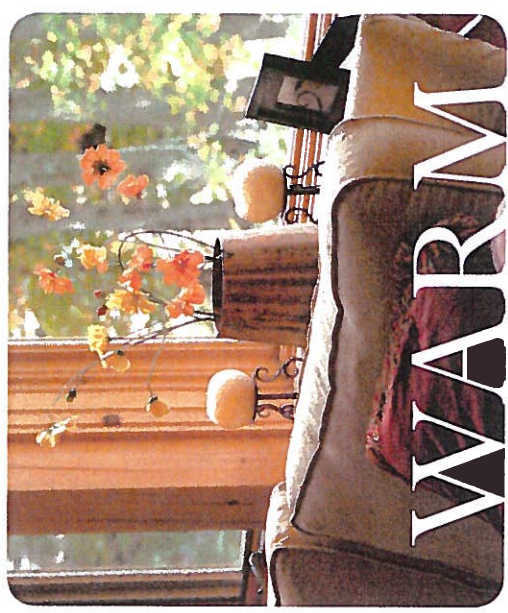
The floor rate during the WARM period will be the currently effective commodity rate which can be found on our website under Schedule P of the Oregon tariff book.

At the end of the WARM period, all monthly WARM adjustment amounts above the cap that were not billed, and all monthly amounts below the floor that were not credited, will be tallied and trued up for each customer. The true-up will appear in the next bill.

If you close your account before WARM ends, any amount set aside due to the WARM caps and floor will be applied to your closing bill.



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WARM is NW Natural's default billing method that adjusts customers' bills during the December 1 through May 15 heating season. However, WARM is optional and customers can elect not to have WARM applied to their bills.

The information provided in this brochure explains how WARM works and your WARM options.



How WARM Works

For bills issued in any month from December through May, when the weather is colder than average, WARM adjusts that month's billing rate down. When the weather is warmer than average, WARM adjusts that month's billing rate up. This means that customers' bills won't be as high for a colder-than-average month, but also won't be as low for a warmer-than-average month. For more information, please see the "Frequently Asked Questions" in this brochure.

TIMING

Between May 16 and September 30
(outside of the heating season)

Between October 1 and May 15
(during the heating season)

* A "new customer" is a customer that has not had an active account with NWN Natural at all during the prior 12 months. If you were a NWN Natural customer before you moved to your current address, your WARM status will continue at your new address. To learn if you are currently in WARM, look for a message about WARM on your NWN Natural bill, or call us at 800.422.4012 and dial 0 to speak with a customer service representative.



Changing your WARM status.

Your account will be billed under the WARM billing method, unless you choose to change your status. Your status will stay the same (even if you move) unless you contact NWN Natural again to request a change. See the following table to determine when you may change your status and when the change will become effective. To change your WARM status please visit nwnatural.com or call 800.422.4012.

CURRENT CUSTOMER

- Opt-out of WARM for upcoming heating season
- Opt-out allowed to begin with next heating season
- No-opt out allowed for current heating season

NEW CUSTOMER*

- Opt-out of WARM for upcoming heating season
- Opt-out allowed within 30 days from receipt of NWN Natural's Welcome Packet
- After 30 days, opt-out allowed to begin with next heating season

FAQS *(continued)*

You can also calculate the difference yourself. For residential customers, the WARM rate effect will be the difference between the rate per therm shown on your bill and the rate schedule 2 billing rate. For commercial customers it is the difference between the rate schedule 3 billing rate. You can view these rate schedules at nwnatural.com.

If the rate per therm is higher, it means the weather in that billing month was warmer than average. If the rate per therm is lower, then the weather in that billing month was colder than average. You can multiply the rate difference by the number of therms you used that month to find out how much WARM affected your total bill.

What is average weather?

Average weather is calculated for each day of the WARM period, based on the 25-year average temperature for that day. The 25-year average used for the WARM calculation comes from the National Oceanic and Atmospheric Administration (NOAA) and is for the years 1986-2010.

How will WARM affect my summer bills?

WARM will not affect your summer bills.

When will WARM be used for billing?

WARM will be used every year during the heating season, from December 1 through May 15.

If I decide not to participate.

can I change my mind and return to WARM?

Yes, you can return to WARM for the next heating season. To return to WARM for the coming heating season you must contact us before September 30 of this year. If you make your selection after the September 30 deadline, your status in WARM will become effective the following heating season. →

FREQUENTLY ASKED QUESTIONS

How do I know if I am in WARM?

Look on your bill. Customers in WARM will see a message stating, "You are participating in WARM." Customers who have chosen not to participate in WARM will see a message stating, "You have chosen not to participate in WARM."

How will WARM affect my winter bills?

A bill for a colder-than-average month during the December-May heating season will be lower than it would have been without WARM, but a bill for a warmer-than-average month during

the December-May heating season will be higher than it would have been. You can request billing information for past December-May billing periods to see how weather affected your bill under both the WARM opt-in and opt-out options.



To see how WARM affects your current monthly bill, visit the Billing Options section of nwnatural.com. The site will show you what your most recent bill would be with and without WARM.

ATTACHMENT B

WARM, the company could over-collect revenues in a colder-than-average winter because gas use typically increases. And it could under-collect revenues in a warmer-than-average winter when gas use typically decreases. WARM allows NW Natural to collect the revenues that the OPUC has ruled are necessary to serve customers.

Why is WARM optional?

WARM is optional so that customers who do not use natural gas full time for space heating, or customers who simply prefer to pay the standard billing rate throughout the year, have a choice. In many states, a weather adjustment mechanism like WARM is mandatory and is simply part of the utility's normal rate structure.

Is WARM the right choice for me?

If you don't use gas for space heating at all or use very little during the winter months, you should consider opting out of WARM because your gas use likely will not vary much due to changes in weather.

Can I see how WARM affects my current monthly bill?

Yes. Please visit the Billing Options section of nwnatural.com. This will show you what your most recent bill would be with and without WARM. You can also request billing information for past December-May billing periods to see how weather affected your bill under both the WARM opt-in and opt-out options.

How can I opt out of WARM?

See the table in this pamphlet to determine when you may change



your status and when the change will become effective. Then visit nwnatural.com or call 800.422.4012 to opt out.

If I opt out, can I opt in later?

Yes, you can return to WARM for the next heating season. To return to WARM for the coming heating season you must contact us before Sept. 30. If you make your selection after that, your status in WARM will become effective the following heating season.

What is average weather?

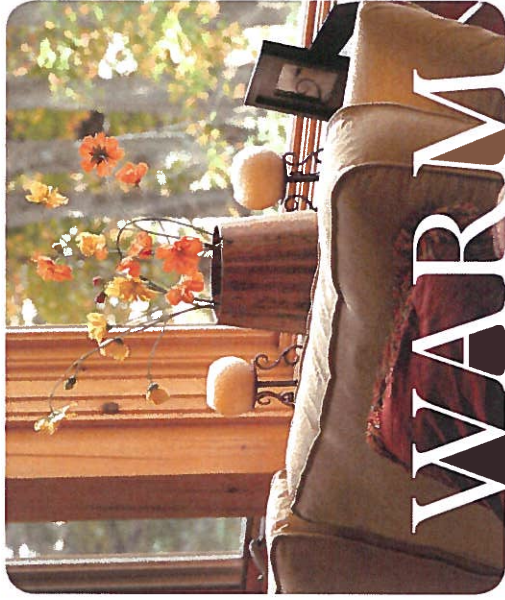
Average weather is calculated for each day of the WARM period, based on the 25-year average temperature for that day. The 25-year average used for the WARM calculation comes from the National Oceanic and Atmospheric Administration and is for the years 1986-2010.

If I am on Equal Pay, how will WARM affect me?

The Equal Pay Plan operates the same way, whether or not you are in WARM. Your Equal Pay Plan amount may be adjusted during your plan year, if necessary, to bring your account into better balance by the adjustment month.

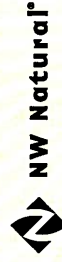


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BILLING PROGRAM

The Weather Adjusted Rate Mechanism (WARM) is NW Natural's default billing method that adjusts customers' bills for the December 1-May 15 heating season. WARM was approved by the Public Utility Commission of Oregon (OPUC) in 2003. Customers can opt out of WARM. See "Changing Your WARM Status" inside.



ATTACHMENT B

How WARM Works

WARM is intended to smooth out fluctuations in winter bills caused by weather variances. WARM calculates a bill adjustment to remove the effect of changes in gas use due to colder- or warmer-than-average winter temperatures. If weather is colder than average, for most customers WARM will lower the billing rate, or if weather is warmer than average, it will increase the billing rate. If there is little or no gas use in a month, some or all of the adjustment will be set aside to bill after May 15.

Since its inception, WARM has resulted in a net benefit to customers, providing bill savings of approximately \$9.9 million as of 2015. The benefit for NW Natural is that WARM evens out revenues during the heating season, which helps ensure the company does not under-collect or over-collect ongoing operating costs.

For more information, please see the "Frequently Asked Questions" in this brochure.



Changing your WARM status.
 Your account will be billed under WARM unless you opt out. Your status will stay the same



even if you move unless you contact NW Natural again to request a change. If you move to a location without gas space heat, you should consider opting out. See the table below to determine when you may opt out and when it will become effective. To change your WARM status, please visit nwnatural.com or call us at 800.422.4012.

Frequently asked questions

How do I know if I am in WARM?

Look for a WARM message on your bill. You can also visit nwnatural.com or call us at 800.422.4012 and ask to speak with a customer service representative.

How will WARM affect my winter bills?

For the typical customer using gas for space heating full time during the WARM period from **December 1 - May 15**, the billing rate for a colder-than-average billing month will be lower than it would have been without WARM. The billing rate for a warmer-than-average billing month will be higher than it would have been.

If you have low or zero gas use during any given winter month, the WARM adjustment may not

appear on that bill. Instead, WARM will calculate the weather impact, and some or the entire amount may be set aside and billed to your account with the first monthly bill after May 15.



The impact of WARM on your bill will vary from month to month, and from one winter to the next, depending on weather conditions.

Is there a limit on how much WARM will affect my bill?

There is a cap on the amount that can be billed during the WARM period. In a warmer-than-average month, WARM cannot cause a residential customer bill to increase more than \$12 or 25 percent, whichever is less. The monthly cap is \$35 or 25 percent for commercial customers.

If this cap is triggered, the excess amount is set aside until the end of the WARM period. With the first bill after May 15, any amounts set aside will be applied to that month's bill as a separate WARM Rate Adjustment. There is no cap on the amount of the WARM Rate Adjustment that can be billed. If you close your account during the WARM period, any amounts set aside will be applied to your closing bill.

How will WARM affect my summer bills?

WARM will not affect your summer bills because the mechanism does not apply from May 16 until the WARM period begins December 1.

Why is WARM the default billing method?

NW Natural covers most of its operating costs through revenues from gas use charges. Without

TIMING **CURRENT CUSTOMER** **NEW CUSTOMER***

- Between May 16 and September 30 (outside of the heating season)
- Between October 1 and May 15 (during the heating season)
- Certain exceptions may apply. Please call us at 800.422.4012 to learn more.
- Opt out of WARM for upcoming heating season
- No opt out allowed for current heating season
- Opt out allowed to begin with next heating season
- Certain exceptions may apply. Please call us at 800.422.4012 to learn more.
- Opt out of WARM for upcoming heating season
- Opt out allowed within 30 days of receipt of NW Natural's Welcome Packet
- After 30 days, opt out allowed to begin with next heating season

*A "new customer" is a customer that has not had an active account with NW Natural at all during the prior 12 months. If you were a NW Natural customer before you moved to your current address, your WARM status will continue at your new address unless you request a change of WARM status.

ATTACHMENT C

November 6, 2015

Customer Name

Service Address:

Address
 Address

Address
 Account Number: XXXXXXXX-X
 WARM Participant: Yes

Thank you for your recent inquiry for information regarding our WARM program. The following table gives you a comparison of your Billed Gas Usage with and without the WARM adjustment for the [2014-15] heating season. The table also lists the weather information for that period. We hope you find the information useful in making an informed decision regarding this program.

WARM Adjustment Detail

Bill Date	Billed Gas Usage	With WARM	Without WARM	Temp.	WARM Adj.	Deferral Amount	Settle Up
5/22/2015	\$29.49	\$29.49	\$29.49	Adjust	\$0.00	\$0.00	\$0.00
4/23/2015	\$62.80	\$62.80	\$59.38	Warmer	\$3.42	\$0.00	\$0.00
3/25/2015	\$51.69	\$51.69	\$43.88	Warmer	\$7.81	\$0.00	\$0.00
2/24/2015	\$78.73	\$78.73	\$67.69	Warmer	\$11.04	\$0.00	\$0.00
1/26/2015	\$160.60	\$160.60	\$156.55	Warmer	\$4.05	\$0.00	\$0.00
12/23/2014	\$146.66	\$146.66	\$136.80	Warmer	\$9.86	\$0.00	\$0.00
Totals	\$529.97	\$529.97	\$493.79		\$36.18	\$0.00	\$0.00

*The weather variance is a comparison between the actual weather experienced and the 25-year average for the same period.

Under the WARM program, your bill for any month from December to May with colder-than-average weather will be lower than it would have been without the WARM program. If any of these heating months are warmer than average, your bill will be higher than it would have been without the WARM program.

If you would like further information or have questions about the information provided, please call our office at 1-800-422-4012.

Respectfully,

Enclosure

ATTACHMENT D

August 31, 2005

Dear Customer:

As we prepare for the heating season, we are reviewing the billing records of NW Natural customers currently in the WARM (Weather Adjusted Rate Mechanism) program.

WARM is a billing method that adjusts bills issued between Nov. 15 through May 15 to reduce peaks and valleys during what are normally the coldest months of the year. WARM was designed with space heating customers in mind. With WARM, space heating customers' bills aren't as high for a colder-than-normal month, but also aren't as low for a warmer-than-normal month.

Our records indicate that you didn't use any natural gas last heating season. If that is the case – and you don't expect your usage to change – we suggest you complete the form below and mail this letter back to us in the pre-paid envelope provided, so we can remove you from WARM for the coming heating season. **The deadline to be removed from the program is September 30.**

While WARM is a simple concept, the details can be quite complex. With this letter we have included a WARM brochure that explains the program. If you have questions, please visit our Web site, nwnatural.com, or call a Customer Account Service representative at 1.800.422.4012.

Thank you for being a NW Natural customer.

Sincerely,

Your NW Natural Customer Service Team

Enc.

WARM PROGRAM OPT-OUT FORM

____ Yes, I'd like to be removed from the WARM program.

Customer Signature: _____

Upon receipt of the completed form, NW Natural will remove your account from the WARM program. If you prefer to use our online opt-out form, please visit nwnatural.com.

ATTACHMENT E

Dear Customer:

Thank you for your recent application for gas service with NW Natural.

Your account is enrolled in the Weather Adjusted Rate Mechanism (WARM) program, which is NW Natural's default billing method applied to residential and commercial customer bills from December 1 – May 15. WARM is designed to help smooth out the bill impacts of winter weather for customers that live in their home or operate their business year-round and use gas full-time for space heating during the winter months.

In general, if you typically do not use gas in the winter, or if you do not use gas for space heating in every month of the winter period, then WARM may not be right for you. You may want to consider opting out of WARM if the following circumstances apply to you:

- If there is no gas space heating equipment installed
- If gas is used only for freeze protection for a commercial warehouse or vacant home
- If this account is for a vacation home
- If for any reason there is a high possibility that gas space heating equipment will not be used full-time during every month of the winter period

If you *do* expect to use gas full-time for space heating during the winter months, then WARM may be the best option for you. WARM has resulted in a net savings to NW Natural customers of \$9.9 million since the program began in 2003. However, the actual bill impact related to WARM will vary from month to month and from one winter to the next depending on weather conditions.

To decide if WARM is right for you, we encourage you to carefully read the enclosed brochure which contains specific information about how the WARM program works, as well as some frequently-asked questions. NW Natural wants to ensure that you have the information necessary to make the right decision for your service needs.

As a new or moving customer, you will receive a Welcome Packet shortly. You can opt out of the WARM program now or up to 30 days from the date you receive the Welcome Packet if you receive it after December 1 and want your change of WARM status to be effective immediately. Also, customers can opt out of WARM each year between May 16 and September 30 in order for the change of WARM status to be effective for the next winter. To opt out or ask further questions, please visit www.nwnatural.com or call us at 800-422-4012.

Thank you,

NW Natural

Customer Contact Center