BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UG 344

In the Matter of	)
	)
NORTHWEST NATURAL GAS COMPANY, dba NW NATURAL,	)
	)
Request for General Rate Revision.	)
	)

OPENING TESTIMONY

OF THE

OREGON CITIZENS' UTILITY BOARD

April 20th, 2018

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I. INTRODUCTION

Q. Please state your names, occupations, and business addresses.

A. My Name is Bob Jenks. I am the Executive Director of the Oregon Citizens' Utility Board (CUB). My name is William Gehrke. I am an Economist employed by Oregon Citizens' Utility Board (CUB). Our business address is 610 SW Broadway, Ste. 400 Portland, Oregon 97205.

Q. Please describe your educational background and work experience.

A. Our witness qualification statements are found in CUB Exhibit 101.

Q. What is the purpose of your testimony?

A. CUB's testimony is organized as in the following manner:

<u>Revenue Requirement</u>

II. At Risk Pay

III. Officer Compensation

IV. Long Term Incentive Plans

II. AT RISK PAY

Q. Please summarize your concerns with NW Natural's ("NWN" or "the Company") proposal for at risk pay.

A. The Company is asking the Commission to change its precedent regarding at-risk pay. In past rate cases, the Commission has disallowed 100 percent of officers' pay-at-risk compensation, and 50 percent of non-officer's pay-at-risk compensation. In this rate case, the Company is seeking full recovery of pay-at-risk compensation expense.

Q. What is pay-at-risk compensation?

A. As the Company states, pay-at-risk is compensation made to employees, only in the event certain performance goals are met within a defined timeframe. It is not guaranteed for employees, and is intended to foster higher performance.[1]

Q. What is the Company proposing to change with regards to pay-at-risk compensation?

A. The Company is seeking to change the Commission's policy regarding pay-at-risk compensation.[2] The Commission has historically disallowed 100 percent of

[1] UG 344 – NW Natural/700/Doolittle/7.
[2] *See generally* UG 344 – NW Natural/700/Doolittle.

officers' at-risk pay, and 50 percent of non-officers' at-risk pay.[3] NW Natural is seeking to change this Commission standard, and seeks full recovery of officer and non-officer compensation.[4]

Q. Why does the Company offer pay-at-risk compensation?

A. NWN offers several rationales in its testimony. First, the Company stated pay-at risk compensation incentivizes beneficial employee behavior for the utility's operations.[5] Second, pay-at-risk is widely used in the labor market, and it is expected from the workforce.[6] Third, pay-at-risk is part of the total cash compensation for employees.[7]

Q. Does at-risk compensation incentivize beneficial behaviors to utility operations?

A. Maybe. CUB does agree with the Company regarding employee incentives. At-risk compensation incentivizes employee behavior, which may be beneficial to utility operations. One of the core principles of economics is about people's response to incentives. In recognition of this principle, the Company is able to recover 50 percent of non-officer at-risk pay under current Commission practice. Officer at-risk pay is not included, because officers have a fiduciary duty to shareholders. Therefore, there need not be an extra incentive, when a legal obligation already exists. Officers in this context are individuals who have the

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[3] UG 344 - NW Natural/700/Doolittle/12, lines 17-19.
[4] UG 344 - NW Natural/700/Doolittle/16, lines 3-5.
[5] UG 344 – NW Natural/700/Doolittle/9, lines 5-6.
[6] UG 344 – NW Natural/700/Doolittle/9, lines 6-7.
[7] UG 344 – NW Natural/700/Doolittle/9, lines 9-10.

authority to act on behalf of the company, and they are in charge of a principal business unit, division, or function. [8]

Q. What is the function of a labor market in attracting and hiring employees for a company?

A. Each employer has a different labor market from which it draws it employees. For example, the casual dining restaurant labor market is the local labor market. A large specialized technology company draws it employees from a national job market, due to the specialized expertise required for that type of work.

Q. What are some characteristics of NW Natural's labor market?

A. In order to gain insight into NW Natural's labor market, CUB conducted a survey of NW Natural's employees. To conduct this survey, CUB drew a random 200 employee sample of NW Natural employees on LinkedIn.[9] LinkedIn is a professional networking social media service. Each LinkedIn profile homepage is presented as a digital resume; the profile provides an overview of the employee's career history. The survey indicated 69% of employees at NW Natural did not have prior experience in the energy field. Instead of looking at the gas industry job market, as it does in its testimony,[10] the Company should look at the job market in the Portland Metropolitan Area for best compensation practices, since it is hiring a majority of new candidates without prior energy experience.

Q. Is pay-at-risk widely used in the gas industry job market?

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[8] *See* CUB Exhibit 102 (UG 344 CUB DR 37 NWN Response.pdf)
[9] *See* Confidential CUB Exhibit 103.
[10] UG 344 – NW Natural/700/Doolittle/9.

A. According to a 2017 survey conducted by the American Gas Association Compensation Survey, 83.0% of gas industry executives and 80.8% of exempt, Non-Management programs have variable pay programs.[11]

Q. Is pay-at-risk an essential element of total compensation in the Gas Industry?

A. No. CUB has surveyed North American natural gas companies' employment websites. 18.18% of the sampled natural gas companies had job postings mentioning at-risk compensation.[12] In recognition of differing job posting practices, CUB also examined the benefits pages of each natural gas corporation. These pages are meant to advertise the benefits provided at a company. Only 24.40% of the natural gas companies had listed at-risk compensation on its benefits page.[13] Based on these results, natural gas LDC's do not advertise these benefits to attract qualified employees.

Q. Is NW Natural experiencing high employee turnover?

A. No. In its 2017 annual report, the Company states a majority of its current employees were hired prior to 2009.[14] Therefore, the average tenure of NW Natural employee is at least nine years. Compensation at the Company has been more than adequate to maintain highly qualified workers.

Q. Does the Commission need to depart from its standard on utility at-risk compensation?

A. No. A fifty percent disallowance of non-executive at-risk compensation acknowledges the operational advantages of at-risk compensation. The

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[11] UG 344 - NW Natural/703/Doolittle.
[12] *See* CUB Exhibit 104.
[13] *See* CUB Exhibit 104.
[14] *See* CUB Exhibit 105.

Commission should continue to disallow at-risk pay for Officers, due to their existing fiduciary duty to shareholders.

Q. Does this conclude this portion of your testimony?

A. Yes.

III. OFFICER COMPENSATION

Q. How is Officer Compensation determined?

A. [redacted]

Q. What criticisms do you have of Pay Governance's approach to comparing NWN's compensation to the market?

A. [redacted]

15 [redacted]

[redacted]	
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

Q. What is the issue the issue with targeting median compensation for NW Natural?

A. [redacted]

Q. What does CUB recommend with regards to executive compensation?

[16] *See* CUB Exhibit 106.
[17] UG 344 – NW Natural/400/Villadsen/12, lines 16-17.
[18] *See* CUB Exhibit 107.

A. [redacted]

IV. LONG-TERM INCENTIVE PLANS

Q. Please summarize your concerns with the Company's proposal for long-term incentive plans.

A. The Company is seeking full cost recovery on long-term incentive plans. CUB opposes this change in cost recovery because these programs benefit shareholders, and provide no tangible benefit to customers.

Q. What are Restricted Stock Units?

A. Restricted Stock Units (RSU) are a promise from the company to the employee to grant future restricted stock in the future.[19] The Company provides RSUs as a long-term incentive for select high-performing managers, officers, and key employees.[20] These restricted stocks options vest as the employees maintains employment with the Company. The Company is seeking to recover $1.713 million in expense associated with Restricted Stock Units.[21]

Q. What are performance shares?

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[19] *See* CUB Exhibit 108.
[20] UG 344 – NW Natural/700/Doolittle/18, lines 16-17.
[21] UG 344 – NW Natural/700/Doolittle/18, lines 2-3.

A. Performance shares are stocks and/or dividends given to executives based on company-wide performance metrics. NW Natural uses a variety of performance metrics, used to determine performance share compensation such as stock earnings or stock peer performance metrics.[22] The Company is seeking to recover performance shares for cost recovery. The Company is seeking to recover $1.286 million in expense associated with performance shares.[23]

Q. Should these long term expenses be recovered from customers?

A. No. Shareholders are the primary beneficiaries of these long term incentives. The Company stated "pay-at-risk is earned if the executive can deliver results that benefit all stakeholders in the company."[24] However, in an employee handbook about Restricted Stock Units, the Company stated "awards of restricted stocks units to key NW Natural Employees are specifically intended to reward high performers and encourage continued performance and alignment with **shareholders'** interests."[25] There is clearly a difference between providing a benefit to shareholders, and providing a benefit to *stakeholders*—which may include customers. CUB fails to see the connection between long-term incentives for Company employees and a benefit to customers. Allowing long-term incentive plans to be recovered in rates constitutes an improper movement of risk from customers (cost of long-term incentives) to shareholders (who benefit from stock appreciation).

Q. What rate recovery issues does stock-based incentive compensation present?

[22] *See* CUB Exhibit 109.
[23] UG 344 NWN 700/ Page 18 Lines 2.
[24] UG 344 - NW Natural/700/Doolittle/17, lines 5-7 (emphasis added).
[25] *See* CUB Exhibit 110.

A. It is difficult to determine if an RSU will vest or not. Restricted Stock Units are awarded to NW Natural employees based on the value at the date of vesting. The expense for RSUs are not predictable; the expense is determined by the market value of the vested RSU stock, and whether the RSU is successfully vested. Once the test year expense is established, there is uncertainty around the exact amount of RSU expense.

CUB presents an illustrative example to provide insight. A NW Natural executive receives 100 RSUs annually under a RSU award on March 1, 2017. There are four vesting dates for the 2017 RSU award: March 1st, 2018, March 1st, 2019, March 1st, 2020 and March 1st, 2021. The employee only receives the share if the financial targets are met.

Vested Stocks [A]	Vesting Date [B]	Target Achieved [C]	Share Value [D]	Value [E] = [A] * [D]
25 Units	03/01/2018	Yes	55	$1,375
25 Units	03/01/2019	Yes	87	$2,175
0	03/01/2020	No	30	0
0	03/01/2021	No	25	0

The grey row indicates the test year expense for vested stock units. In this rate case, the Company is presenting a test year ending on October 31st, 2019.[26] Once rates are established, $2,175 in expense is collected from customers to pay for the employees RSU expense. In this illustrative example, the hypothetical 2020 ROE is not greater than the 5-year average cost of long-term debt. Therefore, the employee is not able receive the vested RSU (25 Units) due to not meeting the financial criteria. However, the Company is still able to recover expense associated with the RSU. Additionally, if an employee leaves or is fired for cause, that Company will still be able to recover from customers the RSU expense for the employee, without having to pay the departing employee. RSU's align employees with Shareholders by driving them to increase the value of NW Natural Stock. If long-term incentive compensation is recoverable in rates, customers would be paying for a program that solely benefits shareholders.

Q. What does CUB recommend in regard to the Company's proposal for long-term incentive plans?

A. CUB recommends disallowance of cost recovery for long-term incentive plans due to the lack of evidence demonstrating a benefit to customers.

V. CATEGORY A COMMUNICATIONS EXPENSE

Q. What Oregon rule applies to NW Natural's Category A communications expense?

A. The reasonableness of advertising expenses in utility rate cases is established by Oregon Administrative Rule (OAR) 860-026-0022. This administrative rule defines Category A advertising expenses as "[e]nergy efficiency or conservation advertising expenses that do not relate to a Commission-approved program, utility service advertising expenses, and utility information advertising expenses."[27] In

[27] OAR 860-026-0022(2)(a).

rate proceedings, Category A expenses below 0.125% of gross retail operating revenues are presumed to be just and reasonable by the Commission.[28] The utility bears the burden of proof to demonstrate Category A expenses above 0.125% of gross retail operating revenues are just and reasonable.[29]

Q. What is 0.125% of the Company's gross retail operating revenues in the proposed Test Year?

A. The company is able to recover up to $853,000 for Category A communications expense under the presumption of just and reasonable Category A advertising expenses below 0.125%.[30] Based on the Company's initial filing, this expense pencils out to $1.27 per customer.[31]

Q. What Category A communications expense is the Company seeking to recover?

A. The Company is seeking to recover $1,696,500 in Category A expenditures.[32] Under that scenario, the per customer expense would be $2.52.[33] Therefore, the Company is seeking an additional $843,500 in Category A expenditures, beyond what is presumed to be just and reasonable.[34]

Q. What must the company demonstrate in order to recover expenditures in excess of 0.125 percent of gross retail operating revenues?

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[28] OAR 860-026-0022(3)(a).
[29] UG 344 – NW Natural/1000/Heiting/5, lines 8-10.
[30] UG 344 – NW Natural/1000/Heiting/4, line 7.
[31] (Calculation = $853,169 /669,961 Customers = 1.27 $/Customer)
[32] UG 344 – NW Natural Response to OPUC DR 104, Page 2 [CUB Exhibit 111] .
[33] UG 344 – NW Natural/1000/Heiting/5, lines 17-18.
[34] (Calculation = 1,696,500-853,000).

A. Under OAR 860-026-0022, the Company must demonstrate with sufficient evidence the expenditures are just and reasonable in order to collect more than 0.125% of gross retail operating revenues. The Company has provided three reasons as evidence for the additional expenditure: the diversity of NW Natural's service territory, the fragmentation of the media, and an increase in customer concern about greenhouse gas emissions.[35]

Q. Is NW Natural's service territory geographically broad with respect to media markets?

A. No. NW Natural's service territory is not geographically broad with respect to media markets. Distinct media markets, also known as media market areas, are areas covered by a group of television stations. The Company is able to reach its entire service territory with only two distinct media markets (Portland and Eugene).[36] 91% of NW Natural customers are located in the Portland media market.[37] NW Natural's customers are concentrated in a single media market: Portland. It is difficult to see how the Company envisions this as "geographically broad." Additionally, advertisements are significantly cheaper in Eugene compared to Portland.[38] The Company's advertising market is not significantly different from, for example, Portland General Electric Company's service territory with respect to media markets. The fact that NW Natural communicates across 126 cities and towns within its Oregon service territory does not render it

[35] UG 344 – NW Natural /1000/Heiting/5, lines 19-22, page 6, lines 1-5.
[36] UG 344 – NW Natural/1000/Heiting/5, line 20.
[37] *See* CUB Exhibit 112.
[38] *See* CUB Exhibit 113 "Eugene Market".

geographically diverse, since it is able to reach the vast majority of its customers in two distinct media markets.[39]

Q. Has media generally become more fragmented since NW Natural's 2011 rate case?

A. Yes. As stated by the Company, television no longer commands consumers' full attention.[40] Digital and social media are a major source of viewing media. American consumers increasingly view content on digital screens versus on televisions. The increasingly fragmented nature of consumer media intake makes it more difficult to justify increased expenses for television advertisement.

Q. Does NW Natural already purchase a wide variety of media content for Category A Advertising?

A. Yes. The pie chart below indicates that the company uses a variety of advertising media for its Category A advertising.[41]

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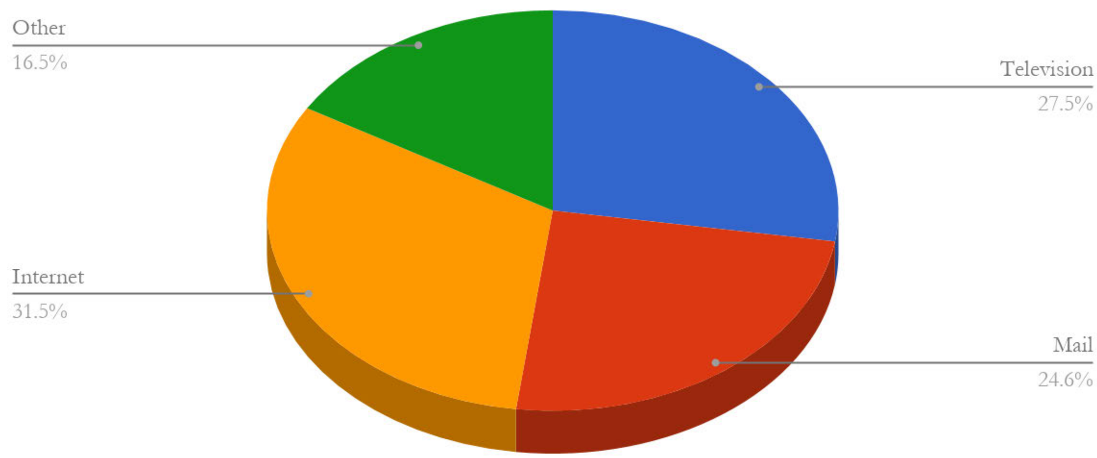
[39] *See* UG 344 – NW Natural/1000/Heiting/6, lines 9-12.
[40] UG 344 – NW Natural/1000/Heiting/ 6, lines 17-18.
[41] The source of this chart is from UG 344 NW Natural Response to OPUC DR 153 Attachment 1 [*See* CUB Exhibit 114].

NW Natural uses a variety of advertising media



Q. What programs has NW Natural conducted to reach customers with Category A advertising?

A. The Company uses a variety of advertising media to reach customers. The Company has used television, internet and mail advertising.

Q. Are television advertisements effective advertisements?

A. No. Television advertisements have limited effectiveness. 53% of American households use digital video recorders.[42] A digital video recorder is an electronic device that enables the recording of television programs for later playback. Users often use these devices to fast forward through advertisements. Additionally, households are increasingly using digital media in place of viewing media through cable television.

[42] http://www.leichtmanresearch.com/press/030617release.html

Q. What television advertisement has NW Natural broadcast in 2017?

A. *See* CUB Exhibit 115. The television commercial refers viewers to a website called LessWeCan.com. The advertisement does not offer specific advice on energy efficiency or conservation. The television advertisement promotes the LessWeCan website. Therefore, one can look at web traffic to indicate the successfulness of the advertisement.

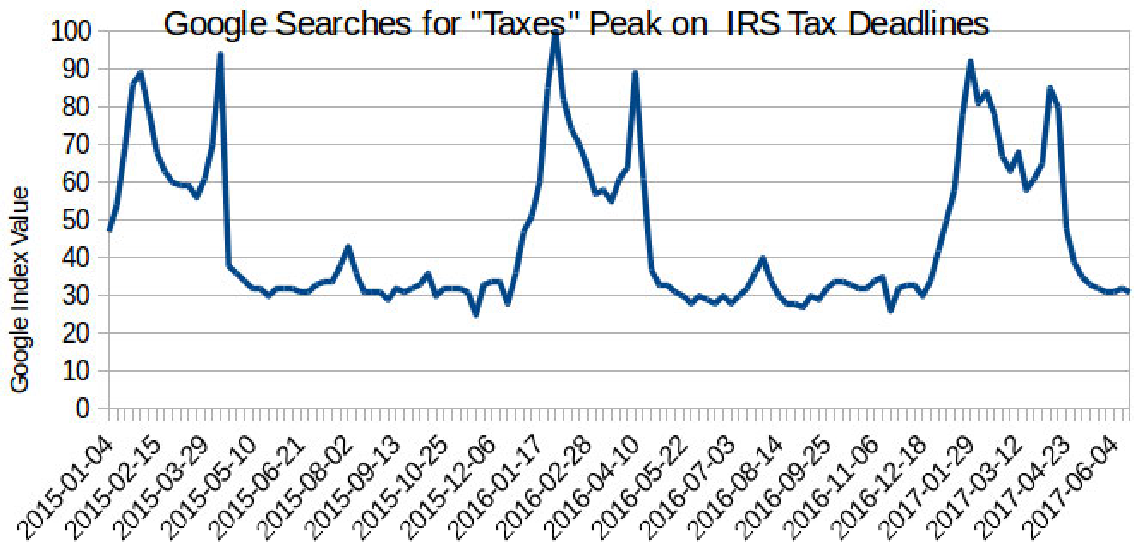
Q. What website has NW Natural created for customers?

A. NW Natural started an advertising campaign titled "Less We Can". The company has produced a website LessWeCan.com, along with several educational videos. This website provides education content about environmental considerations and reducing carbon emissions.

Q. What is a Google Trends Index?

A. The Google Trends Index tracks the frequency of a search item on Google over a period of time. The higher the value of the index, the more internet interest is observed for a web search. When searches reach a peak, the value of the index is 100. One can use Google searches as a proxy for web engagement over time, since Google is the predominant search engine.[43] Individuals use search engines to browse the web, instead of going to a single webpage. The chart below provides an example of Google Trends index data. During two tax deadlines (the first day to file tax returns and the tax filing deadlines for the IRS), Google searches for the term "taxes" peak. By observing search engine searches, one is able to determine when Americans are thinking about filing taxes.

[43] https://www.smartinsights.com/search-engine-marketing/search-engine-statistics/



Q. What does Google Trends Index indicate about the Company's advertising effort?

A. To assess the success of the advertising campaign, CUB looked at the Google Trends Index data for the search term "Less We Can." [44] The shaded area in the chart below indicates the period of time of NW Natural's advertising campaign. There is no discernible difference in search traffic for the term "Less We Can" after the website was established. The Google Trends data suggests that the advertising campaign has little effectiveness. As you can see, Google Trends data demonstrates increases and decreases in internet user searches for the given phrase have fluctuated naturally over time. There is little difference in search traffic for the term "Less We Can" before or after the marketing campaign.

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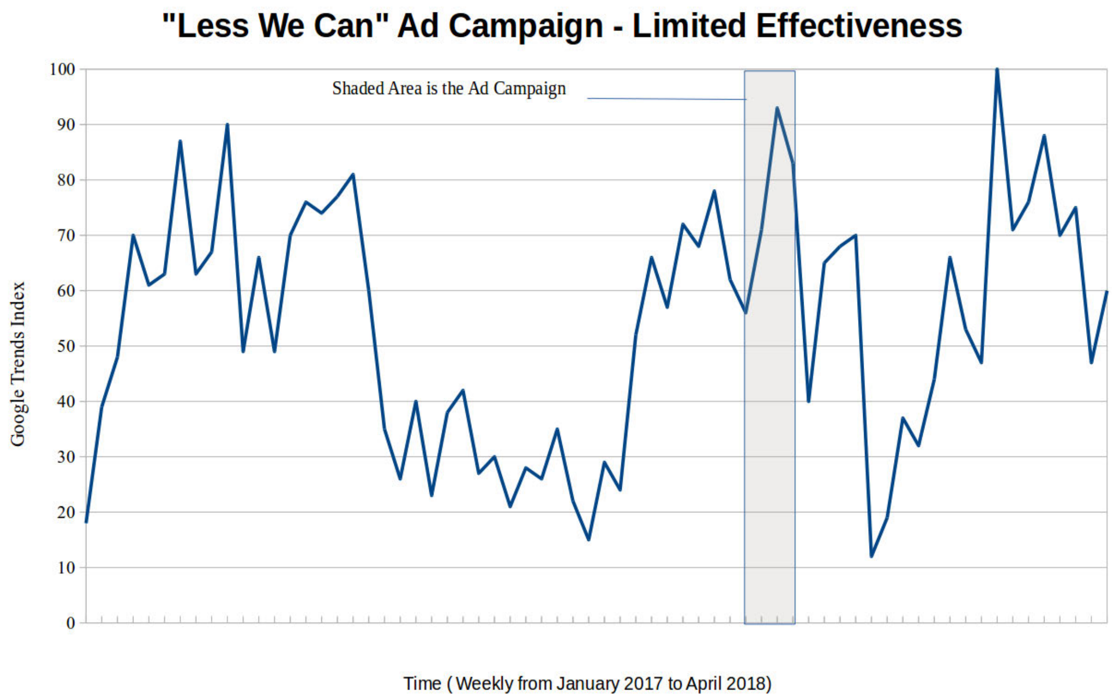
[44] *See* CUB Exhibit 116.



Additionally, CUB has reviewed the video view count statistics for the web videos produced by the advertising campaign. The online marketing campaign has not been effective at driving views towards the educational content produced by the Company. The table below indicates the cost per web video view.

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Videos	Total Views[45]	Cost Per View[46]
Offset	445	$62
Upgrade	249	$110
Conserve	269	$102
Equipment Innovation	215	$128
Power to Gas	272	$101
RNG	250	$110
Transportation	414	$66

CUB would like to note these numbers for videos are after a targeted web campaign conducted by NW Natural. The Company paid a third party consultant to drive web traffic to the Website. These videos do not reasonably provide a value to customers.

Q. What Communications A expense should the Company be allowed to recover?

A. The Company should be allowed to recover up to 0.125% of Gross Operating Revenue in Communication A expense. The Company has failed to demonstrate how the additional 843,500 in expenditure is just and reasonable.

VI. CRITICISM OF THE COMPANY'S RETURN ON EQUITY

Q. Please summarize your concerns with the Company's return on equity ("ROE") proposal.

45 UG 344 – NWN Response to CUB DR 46. Views accurate as of 04/12/2017 [CUB Exhibit 117].
46 Cost of the video for each video was $27,435.

A. The Company has made a subjective adjustment to the multi-stage discounted cash flow model. This adjustment has not been adequately supported by the company neither in company testimony nor in discovery.

Q. What is the Commission's preferred method return on equity method?

A. In NWN's last general rate case, the Commission stated a preference for multi-stage discounted cash flow ("DCF") modeling.[47]

Q. What are the results of the Company's multi-stage DCF modeling?

A. The results of the Company's multi-stage DCF estimate for ROE is 9.1%-10.0%.[48] The midpoint for this estimate is 9.55%.

Q. What adjustment has the Company made to the Multi-Stage DCF?

A. The Company truncated the lower range of the multi-stage DCF estimate.[49] The Company provides as evidence pages from The 2017 SBBI Yearbook: Stocks, Bonds, Bills, and Inflation: U.S. Capital Markets Performance by Asset Class 1926-2016 by Roger Ibbotson. The Company states: [redacted] The Company has failed to demonstrate how this size premium is applicable to the natural gas market and to NW Natural. CUB requests of the

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[47] *In re Northwest Natural Gas Company's Request for a General Rate Revision*, OPUC Docket No. UG 221, Order 12-437 at 6 (Nov. 16, 2012) ("[W]e give no weight to the results of NW Natural's single-stage DCF analysis. Staff relied only on multi-stage DCF modeling, for which we have expressed a preference in the past. . . . . We find no reason in the record of this case to reject this assumption, and therefore find it appropriate to rely on the parties' multi-stage DCF modeling in making our determination.").

[48] UG 344 -NW Natural/400/Villadsen/1, Table 1.

[49] UG 344 - NW Natural/400/Villadsen/2.

[50] *See* Confidential CUB Exhibit 119 for the source of Decile Comparison.

Company to provide more evidence concerning NW Natural's size premium in the next round of testimony.

Q. What regulatory mechanisms does NW Natural have to reduce business risk?

A. The Company's business risk is mitigated by a variety of risk-reduction measures, such as the Purchased Gas Adjustment mechanism, the WARM program, decoupling, environmental cost deferral, and pension cost deferral. CUB Exhibit 118 is an excerpt of the Company's annual report. The annual report provides a comprehensive explanation of these regulatory mechanisms. In the ROE section, the Company has made no mention of these risk reducing mechanisms when determining an appropriate ROE. Commission-authorized ROE compensates a utility for the business risk it assumes. Historically, natural gas utilities have a lower ROE than electric utilities, due to bearing less business risk.

Q. What ROE is appropriate for NW Natural?

A. CUB believes NW Natural has failed to make an adequate argument for 10% ROE. CUB expects this issue to be resolved in settlement, and we look forward to seeing the Company's response in upcoming testimony.

VII. WARM AND DECOUPLING

Q. Please summarize your concerns with NW Natural's proposals surrounding its Decoupling mechanism and the Weather Adjustment Rate Mechanism ("WARM").

A. In its Request for a General Rate Revision NW Natural is proposing a change to its decoupling methodology. It describes this change as a "decoupling weather adjustment methodology change to WARM therms."[51] NWN's concern is the lost revenue associated with weather variation, which is not recovered in WARM, because 10% of NWN customers opt out of WARM. The Company is proposing a weather adjustment be added to its decoupling mechanism, to compensate the Company for lost revenue due to customers opting out of WARM. WARM is the mechanism that currently compensates the Company for lost revenue due to weather variation. CUB opposes this change. CUB believes NWN is trying to conflate the WARM and decoupling mechanisms into a single mechanism—a proposition to which CUB takes issue. These are separate mechanisms developed separately in different dockets and which have separate purposes. In addition, CUB is concerned NWN's proposal represents impermissible retroactive ratemaking that is poor policy and not statutorily authorized. Finally, CUB believes the Company's proposed outcome is unfair to the vast majority of customers participating in the WARM program.

Q. Please explain decoupling.

A. A brief history of the decoupling mechanism in Oregon is necessary to understand its original design and implementation in this instance. Decoupling grew out of an informal investigation the Oregon Public Utility Commission ("the Commission") began in 1989. The Commission's investigation examined incentives for regulated electric utilities acquiring demand-side resource (energy efficiency or "EE").[52] Following a Commission Staff report entitled "Investigation into Electric Utility Incentives for Acquisition of Conservation Resources," the Commission opened a

[51] UG 344 - NW Natural/900/Walker/2.
[52] *See in re the Investigation into Electric Utility Incentives for Acquisition of Conservation Resources*, OPUC Docket No. UM 409, Order No. 92-1673 (Nov. 23, 1992).

docket to develop “a set of policies that will encourage utilities to acquire all cost-effective demand-side resources.”[53] That new docket looked at both developing incentives for utilities to acquire energy efficiency and reducing disincentives that dissuaded utilities from acquiring EE. The primary disincentive discussed was the reduction of net revenues caused by conservation and energy efficiency programs:

> Moreover, the implementation of conservation may reduce sales of energy and thus reduce company revenues. […] By lost revenue we refer to lost *net* revenues: the difference between the revenues the utility would have collected and the short-term avoided cost, accounting for resales, the utility would have incurred if energy had been sold instead of conserved.[54]

The solution identified by the balance of participants to the proceeding was “some method of permitting the utility to recover revenues lost through implementation of conservation.”[55] Decoupling was identified as a means to allow the utility to recover its lost revenues, by defining a “target for revenues and placing over-and under-collection relative to that target in a deferred account for recovery in a subsequent period.”[56] The Commission ordered Portland General Electric and PacifiCorp to undertake collaborative processes to develop decoupling proposals.[57]

The PGE collaborative was successful, and PGE developed a decoupling mechanism in its next rate case, UE 88. Because the concern providing the impetus for decoupling was the disincentive to invest in energy efficiency, the agreed decoupling mechanism was weather normalized, meaning the mechanism did not

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[53] OPUC Order No. 92-1673 at 1.
[54] OPUC Order No 92-1673 at 4 (emphasis in original).
[55] OPUC Order No 92-1673 at 4.
[56] OPUC Order No. 92-1673 at 11.
[57] OPUC Order No. 92-1673 at 3.

adjust for variations in revenue that were caused by weather. The Commission later approved a weather normalized[58] decoupling mechanism for PacifiCorp. At its inception, the Commission intended the decoupling mechanism in Oregon be weather normalized.

Q. What is NWN's WARM?

A. WARM is a mechanism of adjusting bills to account for the variation of weather occurring during the same billing period. NWN's distribution system consists largely of pipes in the ground. The cost of this distribution network is largely fixed and does not vary with usage. This means that during a cold winter month customers use more gas and, without WARM, NWN would over-collect its fixed costs. During a warm winter month, the Company would under-collect its fixed costs. By adjusting the bill to account for the actual weather during the billing period, NWN avoids this problem. WARM was set up as an opt-out (i.e., customers are automatically enrolled until they choose to opt-out) program with 91.4% of residential customers and 88.0 % of small commercial customers participating.[59]

Q. NWN testified WARM and decoupling were "approved at the same time." You are saying they were developed in separate dockets. What is the history of the two mechanisms?

A. These are two separate mechanisms developed in two different cases. NWN's testimony misstates the history of decoupling and WARM by stating that they "were approved by the Commission at the same time" in NW Natural's 2002 rate

[58] OPUC Order No. 92-1673 at 8.
[59] UG 344 - NWN/900/Walker/7.

case (UG 152).[60] However, decoupling was approved in UG 143. [61] This was not a general rate case but rather a proceeding in which NWN sought a decoupling mechanism, along with a proposal to fund energy efficiency, low income weatherization and low income bill paying assistance. In that docket, the Commission approved a stipulation allowing the Company to recover 90% of the usage differential associated with decoupling on a weather normalized basis. The next year, in a general rate case, the Company proposed WARM as a way to recover the usage variation related to weather.[62] The Company's WARM proposal came after the Commission approved NWN's decoupling mechanism.

Q. **Was NWN's decoupling mechanism also weather normalized?**

A. Yes. In UG 143, NWN asked for a non-weather normalized decoupling mechanism (i.e., included year-to-year differences in retail sales due to weather fluctuations), but the adopted stipulation did not include a weather adjustment. While the Commission did not rule on a weather adjustment, it noted NWN's original proposal in that docket was "unlike prior decoupling mechanisms," in that it would allow the Company to recover revenue losses related to variations in weather. It was "unclear" whether the Commission would have approved such a mechanism.[63]

Q. Why does it matter whether decoupling is weather normalized?

A. Decoupling is designed to break the link between utility profits and retail sales volume. The goal is to put the utility in a position where it is less likely to oppose

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[60] UG 344 - NW Natural/900/Walker/5.
[61] *In re Northwest Natural Gas Company's Application for Public Purposes Funding and Distribution Margin Normalization,* OPUC Docket No. UG 143, Order No. 02-634 (Sep. 12, 2002).
[62] *In re Northwest Natural Gas Company's Application for a General Rate Revision Advice No. 02-19,* OPUC Docket No. UG 152, Order No. 03-507 (Aug. 22, 2003).
[63] OPUC Order No 02-634 at 8.

energy efficiency efforts, which reduce sales volume, and to not promote activities designed to increase usage. Decoupling is designed to reduce disincentives and therefore change the behavior of the utility. Weather variation happens independently of the utilities actions. A utility cannot take actions to make the winter colder in order to drive additional sales and profits. Providing the utility a weather adjustment simply shifts the risk of weather-related sales variations from shareholders to customers. A weather adjustment does not change the utility's behavior.

In addition, there are concerns relating to retroactive ratemaking, including whether the Commission possesses the requisite legal authority to adopt weather normalized decoupling.

Q. Explain the issue concerning retroactive ratemaking?

A. There is a general prohibition on retroactive ratemaking, which can loosely be defined as charging ratepayers today for costs incurred in the past, unrelated to current service.[64] In the case of weather, there is little doubt a warm winter will reduce natural gas sales revenues and reduce Company earnings. However, taking those lost earnings and applying them to the following year's bills constitutes retroactive ratemaking. Essentially, it is allowing the utility to over-recover its profits in one year, explicitly making- up for under-recovery in a prior year.

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[64] *See, .e.g.,* CUB Exhibit 120 (1986 AG's Opinion).

From a customer experience, this is unfair. Let's assume the year after the warm winter, there is a harsh winter. In a harsh winter, usage—and therefore bills—also increase. Some customers will struggle with the ability to afford heating bills in a harsh winter. It is entirely unfair to add a surcharge to those high bills in order to recover lost profits from the previous year. This is particularly true in light of the fact the harsh winter will likely lead to the utility having sales above its forecast. Therefore, its revenues and profits will be higher than normal – even without the decoupling surcharge.

Weather variation happens. Earnings go up and down due to weather. Eventually, earnings balance out. If a mild winter in followed by a harsh winter, a gas utility will have lower earning the first year and higher earnings the following years.

Q. What is the issue related to legal authority?

A. CUB will appropriately evaluate the legality of NWN's proposal in briefing later in this proceeding. However, there is a general legal prohibition on retroactive ratemaking. In 1986, the Attorney General issued an opinion, stating retroactive ratemaking was generally prohibited. The Attorney General's decision led to a new statue (the ORS 757.259 deferral statute), allowing for retroactive ratemaking in limited circumstances. The Attorney General was especially critical of lost revenue mechanisms and revenue adjustment clauses (i.e., decoupling), stating:

> [A] 'revenue adjustment clause' would violate the rule against retroactive ratemaking. Revenue adjustments are the precise evil against which the rule against retroactive ratemaking protects. Under that rule, if actual revenues fall short of predictions, the utility must

> bear that loss. If actual revenues exceed predictions, the utility is permitted to retain that excess profit. Thus, the utility is encouraged to operate efficiently.[65]

This led to legislation to allow for deferred accounting, which defined a limited set of circumstances in which a utility is allowed to make retroactive rate adjustments. That statue clearly allows for retroactive ratemaking, when decoupling creates lost revenues or profits related to *energy conservation* programs.[66] But the statue does not directly authorize lost revenue mechanisms associated with weather variation. CUB believes expanding lost revenue mechanisms to incorporate fluctuations in weather variation is not only inequitable as a matter of policy, but it may not be legal.

Q. How does WARM solve the problem of weather variations and retroactive ratemaking?

A. WARM is a program which allows NWN to adjust bills for weather, to reflect the weather in the current billing cycle, thus eliminating a retroactive component. For customers, this can be helpful. It means the highest bills will include a surcredit and be reduced. Correspondingly, the lowest winter bills will include a surcharge. Generally, the program narrows the difference between bills. This can be contrasted to recovering lost revenues the following year, when the Company could add a surcharge to an already high bill. CUB supported adoption of the WARM mechanism, even though it reduced the Company's traditional weather risk. The WARM mechanism did not create harm to customers or violate the principle against retroactive ratemaking.

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[65] CUB Exhibit 120, 1986 AG's opinion.
[66] ORS 757.259(2)(d).

Q. If the Company has WARM, why does it need to add weather to its decoupling mechanism?

A. It does not. Customers can opt out of WARM, but less than 10% of residential customers do so. While weather risk has traditionally been born by utilities, WARM allows NWN to transfer 90% of this risk to customers.[67] The decoupling mechanism and the WARM mechanism are both working as designed; there is no need to make a change.

Q. Why does NWN claim it needs this change?

A. NWN is improperly attempting to interconnect WARM and decoupling, when they are in reality distinct mechanisms. According to the Company:

> NW Natural is proposing a change because the current Decoupling mechanism presumes that all of our residential and small commercial customers in decoupled rate classes participate in the WARM program, which means that Decoupling is using weather-adjusted therms for all customers in decoupled rate classes, even if they have opted out of WARM.[68]

CUB disagrees. When NWN's decoupling mechanism was implemented, there were no customers enrolled in WARM, so the presumption was none of the eligible customers were in WARM. These are two separate mechanisms. Decoupling came first. It is concerned with energy efficiency and is weather normalized. WARM came later. It is concerned with weather variation and is not weather normalized. These programs are not in conflict; they are different. The Company is simply trying to shift all of the weather-related revenue risk onto customers, even though over 90% of WARM eligible customers are bearing this risk.

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[67] 91.4% for residential customers and 88.0% for small commercial customers, UG 344 – NW Natural/900/Walker/7.
[68] UG 344 – NW Natural/900/Walker/11.

Q. When NWN's decoupling mechanism was approved, all prior decoupling mechanisms were weather normalized. Is that still the case?

A. No. PGE's decoupling mechanism is weather normalized, while PacifiCorp no longer has a decoupling mechanism. Since the NWN order establishing its decoupling mechanism, Cascade Natural Gas and Avista Utilities had decoupling mechanisms approved and which include weather adjustments. In both cases, it was because the utility could not do a weather adjustment in real time, as NWN does. However, both utilities were willing to consider a WARM-like mechanism. When Avista's decoupling was approved, it was done so with the condition of the Company examining whether it could provide a WARM-like mechanism with "real time" rebates/surcharges within the next twelve months.[69] When Cascade's decoupling mechanism was approved, it was done so with the condition of Cascade separately accounting for weather and non-weather changes in load. With Cascade, it would be possible to implement a WARM-like mechanism in the future, dependent upon the Company creating a billing system to accommodate such a program.

It should be noted CUB supported the stipulations, including the decoupling agreements in both cases. CUB did so, because there were commitments to allow transitioning the weather adjustment to a WARM-like program. It is also important to note those dockets did not consider whether these mechanisms were allowed under the 1986 AG opinion and the deferral statue.

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[69] *In re Avista Corporation Request for a General Rate Revision,* OPUC Docket No. UG 288, Order No. 16-076 APPENDIX A Page 9 of 18 (Feb. 29, 2016).

Q. Do you have any other issues with their decoupling proposal?

A. There is an additional concern relating to the fairness of the proposal. A NWN customer, who has not opted out of WARM, is responsible for his/her own weather variation. Under NWN's proposal, the weather adjustment for the customers who opt out would be placed on the bills of all customers. This means in addition to covering the customer's personal weather variation, a WARM customer will pick up a piece of the weather variation for the customers who opt out of WARM and who decline to take responsibility for their own weather variation.

Q. What do you recommend on this issue?

A. CUB recommends the Commission reject NWN's request to include a weather adjustment for WARM opt-out customers in the decoupling mechanism.

VIII. PENSION BALANCING ACCOUNT

Q. What is NWN's Pension balancing account?

A. NWN has a balancing account for its FAS 87 pension expense. Currently, the Company's revenue requirement includes $3.8 million for FAS 87 Pension Expense.[70] A FAS 87 expense greater than $3.8 million annually is placed in the balancing account, where it earns interest at the Company's authorized rate of return. NWN expects the pension expense to decrease and eventually turn negative.

[70] UG 344 – NW Natural200/McVay/20.

According to the Company, while the balancing account continues to grow each year, at some point it will begin to shrink. NWN is not proposing any changes to its pension balancing account. CUB is concerned: this balancing account is not working the way it was intended, it is creating a significant future liability for customers, and it is creating a large intergenerational equity concern.

Q. What is the FAS 87 Pension Expense?

A. It is the actuarial defined annual pension expense companies are required (with some exceptions) to identify in their accounting statements. FAS 87 is an annual pension expense and can be positive or negative. FAS 87 rules dictate the reporting of pension expense for a company in a given year, taking into account factors such as the present value of the benefits earned by an employee during the current period, life expectancy, expected rates of return, discount rates, and interest rates, among others. When the pension plan trust is flush (overfunded and/or producing significant investment gains), the FAS 87 expense can be negative, signaling the trust is in good health. FAS 87 is based on accrual accounting, meaning it represents the pension cost over the period benefits are earned. It represents the net pension cost for the year.

FAS 87 is different from pension contributions. Pension contributions are the contributions made by companies to fund their future pension liabilities. Pension contributions are made in some years, but not in other years. When a pension is fully funded, returns on the investments may alleviate the pension sponsor from making cash contributions. However, over the life of the pension plan, total cash contributions should equal the sum of annual FAS 87 expense, plus the FAS 88 expense related to pension plan termination.[71]

The Financial Accounting Standards Board issued its standards for FAS 87 pension accrual accounting in December 1985. Before FAS 87 standards were created, the Commission used pension cash contributions as the basis for pension ratemaking. Since the creation of FAS 87, Oregon has used FAS 87 as the basis of pension ratemaking. This was reaffirmed recently in docket UM 1633.[72]

Q. When was the pension balancing account established and what was its purpose?

A. It was approved by the Commission in 2011. At that time, due to an agreement in its previous rate case, NWN was prohibited from filing a new general rate case. NW Natural was concerned its FAS 87 expense was greater than the $3.8 million it was collecting in rates. NWN was also concerned this would continue for three more years, followed by a period of four years in which expenses and revenues would balance out,[73] and a period where FAS 87 expense would be less than $3.8 million. CUB, Commission Staff, NWIGU, and NWN agreed to establish this balancing account, with the expectation the balancing account would net to zero in approximately 12 to 13 years.

Q. **What has happened since 2011?**

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[71] *In re Public Utility Commission of Oregon's Investigation into Treatment of Pension Costs in Utility Rates,* OPUC Docket No. UM 1633, Order No. 15-226 at 2 (Aug. 3, 2015)
[72] OPUC Order No 15-226.
[73] *In re Northwest Natural Gas Company's Application to Defer Pension Costs,* OPUC Docket No. UM 1475, Order No. 11-051 at 3 (Feb. 10, 2011)

A. NW Natural's FAS 87 expense has remained above the amount in rates every year, since the establishment of the balancing account. Rather than leveling off after three years, the balancing account has continued to grow. When NWN requested the balancing account, it was facing a pension expense $3-4 million dollars greater than what was in rates.[74] Today, the annual interest added to the account alone is $4.5 million, and the Company projects pension expense will be $7 million greater than what is in rates[75] in 2017. The Company projects pension expense to be more than $11 million in 2018. This presents a problem and is illustrated in the following table.[76]

Historic and Projected Additions to Balancing Account

Year	Deferred Amount Added to Balancing Acount	Interest	Balance
2011	5,773,531	234,378	6,007,909
2012	7,875,620	1,138,376	15,021,905
2013	9,114,555	1,576,811	25,713,271
2014	4,577,728	2,249,908	32,540,907
2015	8,241,004	2,965,951	43,747,862
2016	6,251,726	3,780,615	53,780,203
2017*	7,106,881	4,459,411	65,346,494
2018*	11,292,582		

* forecasted [77]

While NWN originally expected to add to this balancing account for three years, the reality is it has been adding to for eight years. While the Company had expected this to net to zero in twelve or thirteen years, recent trends demonstrate

[74] UM 1475 - NW Natural/200/Feltz/15.
[75] CUB Exhibit 121.
[76] 2011-2017 is from CUB Exhibit 121; 2018 is from CUB Exhibit 122.
[77] 2011-2017 is from CUB Exhibit121; 2018 is from CUB Exhibit 122.

this is highly unlikely. Currently, the interest is approaching $5 million per year. This means even if FAS 87 Pension Expense reduces to zero, the balancing account will continue to grow, because the interest will be greater than the $3.8 million collected in rates. While FAS 87 can be negative, the largest negative amount NWN has had in its 31 year history of using FAS 87 is -$5 million.[78]

Because the balancing account only includes the O&M portion of pension expense (not the capitalized portion), approximately 65% of negative FAS 87 would be available to reduce the balancing account. This means if NWN achieved the lowest pension expense result in its history, the balancing account would only decline by approximately $7 million before interest, or approximately $2 million after interest.[79]

This is the problem. Even if NWN achieved the lowest pension expense in its history every year for the foreseeable future, it would take more than 30 years for this balancing account to net to zero.

Q. Is NWN aware of this problem?

A. Yes. Last November, NWN had a workshop with parties to discuss this issue and update parties on the condition of the balancing account. The Company is now estimating it will take 36 years for the balancing account to net to zero.[80] Based on the information from NW Natural, Staff developed the following chart for a workshop this year.[81]

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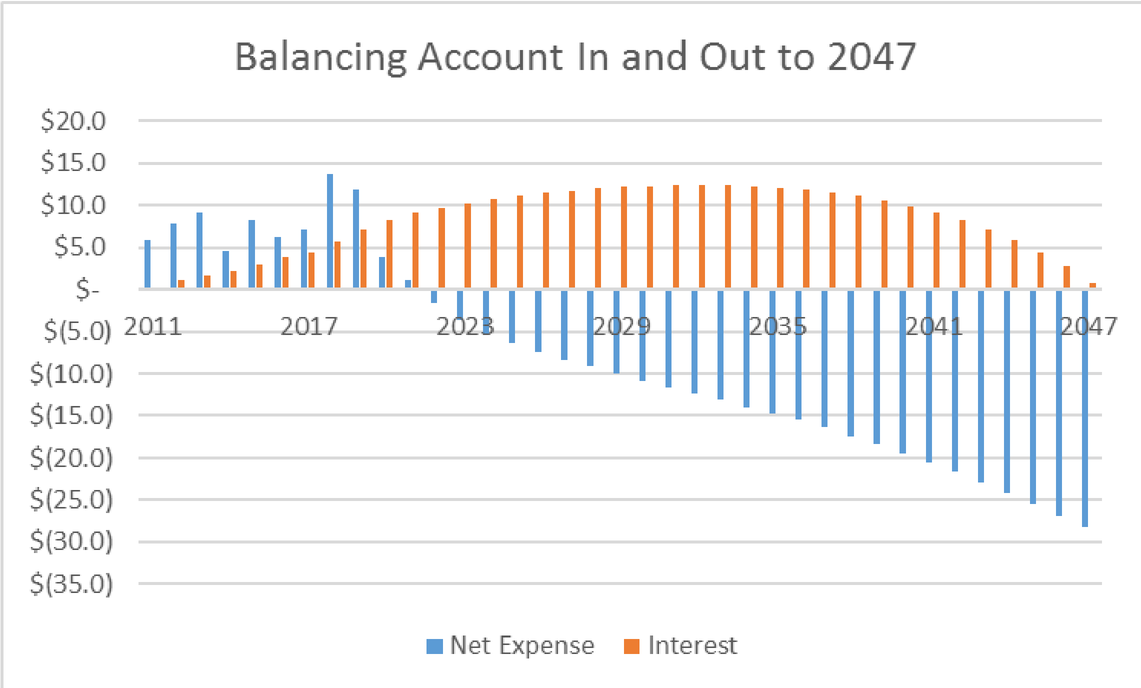
[78] UM 1633, CUB Exhibit 105.
[79] 65% of -5 million plus 3,796,055
[80] *See* CUB Exhibit 121.



The chart indicates pension expense will continue to be greater than the $3.8 million in rates through 2022. But due to interest charges, the balancing account will continue to grow until about 2030 and then begin to decline. This forecast assumes negative FAS 87 will grow to amounts several times the best result the Company has had in its history.

It also raises an issue of intergenerational equity. Customers between 2011 and 2020 are avoiding paying actual FAS 87 expense between $5 million and $15 million each year, while customers in the 2040's are forgoing rate credits of between $20 million and $35 million. Considering some of the customers in 2047 are not even born yet, this intergenerational transfer of wealth is truly *inter*-generational.

[81] *See* CUB Exhibit 121.

Taking away rate credits of $25 million to $35 million per year from customers after 2040 makes little sense. The world is not stagnant; climate change is affecting how fossil fuels are viewed and used. While the focus has been first on coal, then gasoline, policies seeking to reduce greenhouse gases from natural gas will likely be in place before 2040. These policies may raise the price of natural gas or lead to the development of renewable natural gas. Whether retail natural gas loads will be growing or declining after 2040 is unknown. However, it is likely customers after 2040 will not be enthusiastic about helping to fund a pension expense that was incurred today, during a time when natural gas prices are at historic lows.

It is important to note, however, while this mechanism has not worked as forecasted, the parties negotiated it in good faith. At the time, NWN was prohibited from filing a new general rate case. A general rate case at that time could have addressed a pension expense higher than forecasted. Some of that stipulation's terms made it hard to address the current circumstances--such as the prohibition on increasing FAS 87 expense, but they were likely put in place to protect customers.

Q. How accurate is this new forecast of the balancing account?

A. A thirty year forecast of pension expense is unlikely to be accurate. Pension forecasts are dependent on a variety of factors, including returns on plan assets, interest rates, and retirees' longevity. NWN's pension plan was near full funding at the beginning of 2008, but by the end of that year it was significantly underfunded, due to financial losses, the recession, and a decrease in interest rates, which increased the present value of future liabilities.[82] After ten years, it still has not recovered. The pension plan was underfunded by $196 million in 2015, and by $200 million in 2016.[83] If another recession hits in the next few years, this balancing account could grow significantly.

In addition, the long term assumption of FAS 87 growing to negative $30 million seems wildly optimistic. There has never been anything like that in the history of NWN's pension. CUB is concerned the annual return (interest) on the balancing account will grow from its current $5 million to a level larger than the reductions in FAS 87. This means it will reach a point where it will keep growing in perpetuity, and that problem merits investigation.

Q. Is the Company proposing change to this mechanism?

A. No. The stipulation limits the ability of parties to propose changes to the mechanism. And, because this grew out of a stipulation, the Company is understandably reluctant to propose changes. But the mechanism provides some benefits to the Company, as compared to treating pension expense like other costs as a forecasted item in general rate cases. First, the Company is earning interest at its rate of return, thus effectively turning this balancing account into a rate based asset. It is recognized in the Company's earnings.[84] Second, this shows up on NWN's balance sheet as a growing asset.[85] Third, this insulates the Company from the traditional ratemaking risk of actual costs being different than forecasting costs.

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[82] UM 1475 - NW Natural/100/Miller/5.
[83] Northwest Natural 2016 10-K, page 73
[84] Northwest Natural 2016 10-K, page 74.
[85] Northwest Natural 2016 10-K, page 60.

Q. Is this balancing account essentially risk-free to the Company?

A. No. There is a big risk of rate recovery for the Company. This balancing account was developed based on the theory that over time, it will net out to zero. The Company and parties are prohibited by the stipulation from increasing pension expense in rates to reduce the growth in the balancing account.[86] There are no off-ramps built into the mechanism. If the balancing account fails to reverse and keeps growing, or if fails to net to zero, there are no provisions in the mechanism to allow NWN to collect the remaining amount in rates.

In addition, CUB understands this mechanism did not include deferred accounting,[87] something that is normally required for a past cost to be recovered from future customers. NWN's current forecast has the balancing accounting growing until about 2030. If we continue with this current balancing account, it is not difficult to imagine a circumstance where this balancing account continues to grow after 2030. At some point, with a balance reaching hundreds of millions of dollars, stakeholders will realize this will never net to zero. At that point, the dollars are so significant, the legal and regulatory fight over who absorbs this balance would likely be significant.

Q. What does CUB recommend on this issue?

[86] UM 1475, Joint Brief in Support of Stipulation, page 7.
[87] UM 1475 – NW Natural/100/Miller/8.

A. The balancing account has no off ramps. The stipulation states the account will terminate after the balancing account becomes negative,[88] currently projected in 2047.[89]

Parties to the stipulation are prohibited from proposing an increase in FAS 87 recovered in rates to be effective prior to the termination of the balancing account. CUB believes there are some options available.

First, the Commission could reduce the interest rate which will in turn reduce the growth in the balancing account. Currently, the interest rate is the same rate of return used to compensate the Company for capital investments. This pension balancing account is not a capital investment, nor does it carry the same level of risk. FAS 87 expense is an expense under accrual accounting, it is not an actual cash outlay by the company. This is more about the time value of money then it is about a return on an investment. The Commission could instead choose the company's weighted-average discount rate for pensions, which was 4.00% in 2016.[90]

Second, since no changes can be made to pension expense in rates prior to the termination of the balancing account, CUB recommends terminating the balancing account.

[88] OPUC Order No 11-051 at 4.
[89] *See* CUB Exhibit 121
[90] NWN 10-K page 46

Third, the recovery of FAS 87 should be reset to reflect a more likely forecast for pension expense. Pension expense has some volatility, so normalizing it makes sense. Based on the actual FAS 87 expense from 2016, as well as the forecasted amount for 2017 and 2018, full recovery of FAS 87 is approximately $12.0 million. However, because of the balancing account, the Company only asked for $3.8 million. CUB recommends updating the FAS 87 forecast. We note that under the terms of the stipulation, this increase in FAS 87 expense can only be added to rates after termination of the balancing account.

Fourth, the Commission will have to determine what to do with the balance in the balancing account. CUB plans to discuss this with stakeholders during the settlement conference.

Q. Does this conclude your testimony?

A. Yes.

WITNESS QUALIFICATION STATEMENT

NAME:	Bob Jenks
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ADDRESS:	610 SW Broadway, Suite 400 Portland, OR 97205
EDUCATION:	Bachelor of Science, Economics Willamette University, Salem, OR
EXPERIENCE:	Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UE 233, UE 246, UE 283, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, UM 1355, UM 1635, UM 1633, and UM 1654. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates. Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.
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NW Natural®

Rates & Regulatory Affairs
UG 344
2017 General Rate Revision
Data Request Response

Request No.: UG 344 CUB DR 37

37. Please provide a narrative explanation explaining the difference between a employee, officer and executive at NW Natural. Please define each term.

Response:

Officers of the company must be designated/appointed by the Board of Directors. Officers have the authority to act on behalf of the company and are in charge of a principal business unit, division or function. While all officers are also considered executives, we do have executive(s) that may not be officers.

When referring to executives, this would include all officers as well as some non-officers. Executives that are non-officers participate in certain activities and compensation programs in a manner similar to officers but who have not been approved by the Board of Directors as being an officer of NW Natural Gas.

Both officers and executives are employees but for this purpose we will refer to an employee as someone other than an officer or executive.

CUB Exhibit 103 is Confidential and will be provided to parties who have signed protective order 18-002.

Survey of Natural Gas Companies

Investor Owned Utility	At Risk	Benefit
NICOR GAS	0	0
SOUTHERN CALIFORNIA GAS COMPANY	0	0
PACIFIC GAS	0	0
CONSUMERS ENERGY COMPANY	0	0
ATMOS ENERGY CORPORATION	0	0
PUBLIC SERVICE ELECTRIC GAS CO	0	0
THE BROOKLYN UNION GAS CO	0	0
EAST OHIO GAS COMP DOMINION EAST OH	0	0
COLUMBIA GAS OF OHIO	0	1
PEOPLES GAS LIGHT AND COKE COMPANY	1	1
CONSOLIDATED EDISON NEW YORK INC	0	0
PUB SERVICE CO OF COLORADO	0	0
WASHINGTON GAS LIGHT COMPANY	0	0
LACLEDE GAS COMPANY	0	0
QUESTAR GAS COMPANY	0	0
SOUTHWEST GAS CORPORATION	0	0
CENTERPOINT ENERGY	0	0
NORTHERN INDIANA PUBLIC SERVICE CO	0	1
AMEREN ILLINOIS	0	0
PIEDMONT NATURAL GAS	0	0
KEYSPAN ENERGY DBA NATIOAL GRID NY	0	0
NIAGARA MOHAWK DBA NATIONAL GRID	0	0
BOSTON GAS CO DBA NATIONAL GRID	0	0
MIDAMERICAN ENERGY COMPANY	0	0
NATIONAL FUEL GAS DIST NY	0	0
OKLAHOMA NATURAL GAS CO	0	1
NEW JERSEY NATURAL GAS	0	0
NORTHERN STATES PWR CO	0	0
INDIANA GAS COMPANY INC	1	0
BGE	1	1
PECO ENERGY COMPANY	1	1
KANSAS GAS SERVICE COMPANY	1	1
NORTHWEST NATURAL GAS CO	1	1
	6	8
	18.18%	24.24%

on its common stock would be subject to the prior rights of holders of the holding company's debt securities (including guarantees) and preferred stock, if any.

In addition, the right of the holding company, as a shareholder, to receive assets of any of its direct or indirect subsidiaries upon the subsidiary's liquidation or reorganization would be subject to the prior rights of the holders of existing and future debt securities and preferred stock issued by such subsidiaries, and, as in the case of dividends, the rights of holders of the holding company common stock to receive any such assets would be subject to the prior rights of the holders of the holding company's debt securities (including guarantees) and preferred stock.

HOLDING COMPANY DIVERSIFICATION RISK. *The holding company may invest in unregulated activities that may prove to be riskier than the current activities of NW Natural, which could result in losses and adversely affect the holding company's financial condition, results of operations and cash flows.*

The holding company structure may allow us greater opportunities to invest in regulated and unregulated businesses. These investments may involve greater risk than an investment in NW Natural. If losses are incurred in unregulated businesses, they will likely not be recoverable through utility rates and they could adversely affect the holding company's financial condition, results of operations and cash flows.

EMPLOYEE BENEFIT RISK. *The cost of providing pension and postretirement healthcare benefits is subject to changes in pension assets and liabilities, changing employee demographics and changing actuarial assumptions, which may have an adverse effect on our financial condition, results of operations and cash flows.*

Until we closed the pension plans to new hires, which for non-union employees was in 2006 and for union employees was in 2009, we provided pension plans and postretirement healthcare benefits to eligible full-time utility employees and retirees. Most of our current utility employees were hired prior to these dates, and therefore remain eligible for these plans. Our cost of providing such benefits is subject to changes in the market value of our pension assets, changes in employee demographics including longer life expectancies, increases in healthcare costs, current and future legislative changes, and various actuarial calculations and assumptions. The actuarial assumptions used to calculate our future pension and postretirement healthcare expense may differ materially from actual results due to significant market fluctuations and changing withdrawal rates, wage rates, interest rates and other factors. These differences may result in an adverse impact on the amount of pension contributions, pension expense or other postretirement benefit costs recorded in future periods. Sustained declines in equity markets and reductions in bond rates may have a material adverse effect on the value of our pension fund assets and liabilities. In these circumstances, we may be required to recognize increased contributions and pension expense earlier than we had planned to the extent that the value of pension assets is less than the total anticipated liability under the plans, which could have a negative impact on our financial condition, results of operations and cash flows.

WORKFORCE RISK. *Our business is heavily dependent on being able to attract and retain qualified employees and maintain a competitive cost structure with market-based salaries and employee benefits, and workforce disruptions could adversely affect our operations and results.*

Our ability to implement our business strategy and serve our customers is dependent upon our continuing ability to attract and retain talented professionals and a technically skilled workforce, and being able to transfer the knowledge and expertise of our workforce to new employees as our largely older workforce retires. We expect that a significant portion of our workforce will retire within the current decade, which will require that we attract, train and retain skilled workers to prevent loss of institutional knowledge or skills gap. Without an appropriately skilled workforce, our ability to provide quality service and meet our regulatory requirements will be challenged and this could negatively impact our earnings. Additionally, within our utility segment, a majority of our workers are represented by the OPEIU Local No.11 AFL-CIO, and are covered by a collective bargaining agreement that extends to November 30, 2019. Disputes with the union representing our employees over terms and conditions of their agreement could result in instability in our labor relationship and work stoppages that could impact the timely delivery of gas and other services from our utility and storage facilities, which could strain relationships with customers and state regulators and cause a loss of revenues. Our collective bargaining agreements may also limit our flexibility in dealing with our workforce, and our ability to change work rules and practices and implement other efficiency-related improvements to successfully compete in today's challenging marketplace, which may negatively affect our financial condition and results of operations.

LEGISLATIVE, COMPLIANCE AND TAXING AUTHORITY RISK. *We are subject to governmental regulation, and compliance with local, state and federal requirements, including taxing requirements, and unforeseen changes in or interpretations of such requirements could affect our financial condition and results of operations.*

We are subject to regulation by federal, state and local governmental authorities. We are required to comply with a variety of laws and regulations and to obtain authorizations, permits, approvals and certificates from governmental agencies in various aspects of our business. Significant changes in federal, state, or local governmental leadership can accelerate or amplify changes in existing laws or regulations, or the manner in which they are interpreted or enforced. For example, the U.S. Presidential Administration has made numerous leadership changes at federal administrative agencies since the 2016 U.S. Presidential election. Moreover, the U.S. Congress and the U.S. Presidential Administration may make substantial changes to fiscal, tax, regulation and other federal policies. The U.S. Presidential Administration has called for significant changes to U.S. fiscal policies, U.S. trade, healthcare, immigration, foreign, and government regulatory policy. To the extent the U.S. Congress or U.S. Presidential Administration implements changes to U.S. policy, those

CUB Exhibit 106 is Confidential and will be provided to parties who have signed protective order 18-002.

Total direct compensation includes salary, annual cash incentive, and the grant-date value of stock and option awards in a fiscal year. This measure of CEO compensation increased by 11%, 13%, and 10% in 2015 for market cap groups 1, 2, and 3 respectively.

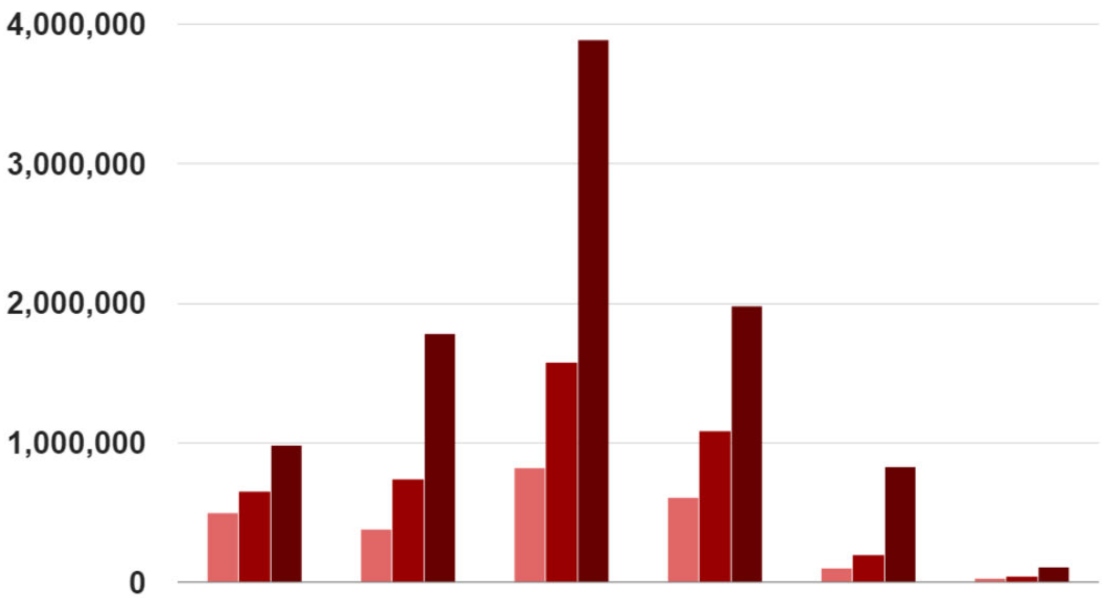
Table 1 shows the median total direct compensation for Russell 3000 Chief Executive Officers in 2015

Table 1 - 2015 CEO Total Direct Compensation

Market Cap Group	Total Direct Compensation ($)		
	25th Percentile	Median	75th Percentile
Small	1,069,955	1,869,511	3,202,381
Mid	2,004,291	3,801,650	5,555,637
Large	5,875,251	8,695,703	12,659,156

Figure 2 shows values for two other traditional summary compensation table elements. *Pension* refers to above-market earnings in, or direct payouts to, retirement or non-qualified deferred compensation plans. *Other* refers to executive benefits and perquisites (e.g., use of the company aircraft) that are not included in one of the other categories.

Figure 2 - Median CEO Compensation by Market Cap Group for 2015



	Salary	Incentive	Stock	Option	Pension	Other
Small Cap	500,000	380,599	819,060	612,275	105,113	25,757
Mid Cap	650,000	738,892	1,581,041	1,087,927	196,164	41,028
Large Cap	980,000	1,783,000	3,891,486	1,985,282	832,584	110,055

Figure 2 displays median values for the four components of total direct compensation, separated by market cap group

CEO Base Salary

CEO salaries increased across the board in 2015. The small and large market cap group CEOs saw modest median salary increases of 5% and 2% respectively. The median salary for the mid cap group grew by almost 11% in 2015. Median CEO salaries for the three market cap groups were fairly consistent. The typical salary for a mid cap CEO was about 50% higher than his or her small cap counterpart, while the typical salary for a large cap CEO was about twice as high.

Rates & Regulatory Affairs
UG 344
2017 General Rate Revision
Data Request Response

Request No.: UG 344 CUB DR 34

34. On page 16 of NW Natural 700, the Company states "RSU involve a grant of stock units that vest over time if certain retention and individual performance threshold conditions are satisfied." Please provide the retention and individual performance threshold conditions for the top ten executive with regards to potential performance share compensation.

Response:

Note: We are assuming that this question intended to say " Please provide the retention and performance threshold conditions for the top ten executives with regards to **potential RSU compensation**", instead of "potential **performance share** compensation".

Awards of Restricted Stock Units (RSUs) made to select managers, officers and key employees are intended to reward, motivate, and retain high performers and encourage continued performance and alignment with shareholders' interests. The number of RSUs awarded to an individual are based on job level, individual performance and market data.

An RSU obligates the Company upon vesting to issue to the RSU holder one share of common stock plus a cash payment equal to the total amount of dividends paid per share between grant and vesting of the RSU. The performance threshold for the RSUs will be met on each vesting date if the Company's return on common equity for the preceding year is greater than the Company's average cost of long-term debt for the preceding five years (as specified in the RSU grant agreement). No RSUs with performance threshold will vest in a given year if the Company's performance threshold is not met, and shares subject to vesting in that year will be forfeited. In general, if the Company performance threshold is met, RSUs vest for 25 percent of the awarded shares on March 1 of each of the four years after the grant date.

An employee must be an active employee of NW Natural on the vesting date (and the performance threshold described above must be satisfied) for the vesting to occur which provides the retention advantage of such awards. If the RSU recipient ceases to be employed by the Company, any RSUs that are unvested at the time of termination shall be forfeited to the Company. However, in limited circumstances including retirement, death or physical disability the employee may vest as normally scheduled if performance conditions are met. For information related to the vesting provisions for

Retirement, death or physical disability, please refer to the attachments provided for Request UG 344 CUB DR 32.

RSU awards are granted annually and therefore employees may have multiple vesting events occur in the same year if they have multiple RSU awards outstanding. For example: An employee received an RSU Award of 100 shares in 2015, a second award of 100 shares in 2016, a third award of 100 shares in 2017 and a fourth award of 100 shares in 2018. Assuming the Performance Threshold was satisfied for the calendar year of 2018 and the employee was still employed, the employee would vest 25% of the 2015 award, 25% of the 2016 award, 25% of the 2017 award and 25% of the 2018 in 2019.

NW Natural®

Rates & Regulatory Affairs
UG 344
2017 General Rate Revision
Data Request Response

Request No.: UG 344 CUB DR 38

38. In page 17 of NW Natural 700, the Company states "Performance Share are earned over three years if the officers can meet certain financial targets over the three-year period." Please provide the financial targets for the top ten officer in potential performance share compensation.

Response:

The Performance Shares provide participants the ability to earn company stock and cash dividend equivalents considering performance over a three year cycle. Performance Shares can payout between 30% - 200% (unless 0%) based on the achievement of pre-established performance/financial targets. The performance criteria for the 2018-2020 Performance Shares consists of: (1) A three-year ROIC Threshold which must be satisfied before any awards from the cycle can be paid, (2) Cumulative Earnings Per Share for the three-year cycle relative to annually established targets which will determine the payout prior to any modification, and (3) a relative total shareholder return (TSR) modifier of +/-25% which can be applied to final determination of the award if we greatly outperform or underperform our peer companies.

For the 2018-2020 performance share cycle, the ROIC Performance Threshold shall be satisfied if the Company's Average ROIC for the 3-year award period is greater than or equal to 4.54%. The Company's "Cumulative EPS Target" for the 3-year award period shall equal the sum of the EPS targets approved by the Committee for each of the three years in the award period. The EPS target for the first year of the award period (2018) is $2.20. The Committee will approve the EPS target for second and third years of the award period at the beginning of the respective years. The TSR modifier will be determined based on the TSR percentile rank of the Company compared to the peer group companies included in the Russell 2500 Utilities Index.

Note: The financial targets established for performance share cycles are the same for all recipients of performance share awards, regardless of whether they are an officer, executive and/or employee.

NW Natural

Q & A

Restricted Stock Unit Program

Questions and Answers about
Awarding, Vesting and Receiving
NW Natural Restricted Stock Units

NW Natural Restricted Stock Unit Program

Prepared 2/28/13
Revised 2/24/15
Revised 2/24/16
Revised 2/23/17
Revised 2/22/18

The Power of Stock Ownership

Awards of restricted stock units to key NW Natural employees are specifically intended to reward high performers and encourage continued performance and alignment with shareholders' interests. Recognizing that the Company relies on its key employees to stay committed to the Company and deliver shareholder return through both stock price appreciation and dividends, the Company offers a restricted stock unit program which will reward and motivate key employees who have and will continue to be leaders of business success.

You can impact the receipt of shares of company stock and what these shares are worth by leading business, cultural and process improvements to impact the success of NW Natural as we continue to perform as an operationally excellent company while achieving our growth targets.

About the Restricted Stock Unit Program

■ Introduction

Q. What is a restricted stock unit award?

A. A restricted stock unit (RSU) award entitles you to receive one or more shares of NW Natural stock if the vesting requirements of continued employment and the satisfaction of the company performance threshold are met.

Q. What makes a restricted stock unit valuable?

A. You are being awarded a specific number of shares which have value upon the date of the award. This is the fair market value of the shares on the award date (Award Date Value). If the fair market value of the shares increases from the date of grant until the date the shares are vested, the potential value of the shares will have increased. Conversely, if the share value decreases from the Award Date Value, the award is likely to still have value even if it is not as much as the original Award Date Value. Improved performance of the Company may result in stock price appreciation and may increase the value of your RSU award.

Example: A key employee is awarded 100 restricted stock units in 2018 with an assumed Award Date Value of $55 and the stock is still worth $55 on the first vesting date of March 1, 2019. Because the RSU award will vest at 25% per year, we assume the employee will receive 25 shares (25% x 100) on March 1, 2019. These 25 shares will be worth $1,375 ($55 x 25) plus a cash dividend equivalent equal to the dividends that would have been earned over the year on 25 shares.

The next year on March 1, 2020, we assume the employee will vest into another 25 shares (25% x 100) from the 2018 award. However, at this point the shares are worth $57. Due to the appreciation in the stock value these 25 shares are worth $1,425 ($57 x25) plus a cash dividend equivalent equal to the dividends on 25 shares that would have been earned over 2 years. The employee has now received a total of 50 shares or half of his/her total award with value at the time of vesting of $2,800 plus cash dividend equivalents.

Assuming the stock price holds at $57, and the vesting and performance requirements are satisfied, the employee will receive the additional following shares and cash dividend equivalents from the 2018 award:

March 1, 2021 - 25 shares valued at $1,425 (accumulated total of $4,225) + cash div. eqv.
March 1, 2022 - 25 shares valued at $1,425 (accumulated total of $5,650) + cash div. eqv.

■ RSU Vesting and Performance Threshold

Q. How does vesting of my RSUs occur?

A. Your award of restricted stock units will vest and be payable as follows if the Performance Threshold for each vesting event is satisfied:

- 25% on March 1st following the first anniversary date of your award
- 25% on March 1st following the second anniversary date of your award
- 25% on March 1st following the third anniversary date of your award
- 25% on March 1st following the fourth anniversary date of your award

Q. Can I have multiple vesting events occur in the same year?

A. It is possible to have more than one vesting event occur in the same year if you had multiple RSU Awards.

Example: An employee received an RSU Award of 100 shares in 2015, a second award of 100 shares in 2016, a third award of 100 shares in 2017 and a fourth award of 100 shares in 2018. Assuming the Performance Threshold was satisfied for the calendar year of 2018 and the employee was still employed, the employee would vest 25% of the 2015 award, 25% of the 2016 award, 25% of the 2017 award and 25% of the 2018 in 2019. The vesting event in 2018 would include the following:

Award Date	Number of Shares Initially Awarded	Shares Vesting on March 1, 2019 Vesting Date (25% of Shares Initially Awarded)
February 2015	100	25
February 2016	100	25
February 2017	100	25
February 2018	100	25
		100 Total Shares Vested

Q. How does the Performance Threshold apply?

A. The Performance Threshold must be satisfied for each vesting event. The Performance Threshold for each vesting event requires that the Return on Equity (ROE) under the RSU Agreement, for the year prior to the vesting event exceeds the 5-year average cost of long-term debt.

For example, in order for the first 25% of the 2018 grant to be distributed, the 2018 ROE, with any adjustments, must be greater than the 5-year average cost of long-term debt. If the ROE exceeds this threshold, the first 25% will vest on March 1, 2019.

If the Performance Threshold is not satisfied, the portion of the award that would have vested will be forfeited. For example, if the Performance Threshold is not satisfied for 2018, all RSUs that were scheduled to vest on March 1, 2019, and any dividends allocable to those RSUs, shall be forfeited effective as of December 31, 2018.

Because each vesting period has its own Performance Threshold, you will still have the opportunity to earn the portion of the award that vests in future years (e.g., 2020, 2021 and 2022).

Distributing Vested Awards when Performance Threshold is Satisfied

Q. What happens when my award vests?

A. When your award vests, the Company will take steps to deliver to you the vested portion plus the cash dividend equivalent after withholding to satisfy taxes. Your award, after tax withholding, will be distributed to you in shares of NWN stock that will be deposited into an account for you at American Stock Transfer (AST).

Q. What is a cash dividend equivalent?

A. A cash dividend equivalent is a cash payment equal to the dividends that would have been paid per share from the date of the award through the delivery date of the vested portion. As an example, if on February 25, 2018, you received an award of 100 shares and 25% (or 25 shares) vested on March 1, 2019, the Company would calculate a cash amount equivalent to the dividend you would have earned over the 12-month period from award date to vesting date. If the quarterly dividends were 30 cents per share, your cash dividend equivalent would be $30.00 (25 shares x 30 cents x 4 dividend payment dates).

Q. How do I get taxed on my vested award?

A. The Company will calculate the value of your award on the date the award vests to determine the income basis for tax purposes. Using the example above, where your vested award equals 25 shares valued at $1,375 ($55 x 25) and your cash dividend equivalent is $30.00, your taxable compensation is $1,405. Assuming a tax rate of 38.65%, an example of how your total taxes would be calculated follows:

Concept	Explanation	Calculation	Result
Award Vests	Shares Vested x Fair Market Value	25 x $55 share	$1,375.00
Cash Dividend Equivalent Earned	Shares Vested x Dividend	25 x 30 cents x 4 dividend payment dates	$30.00
Taxable Income	Shares Vested + Cash Dividend Equivalent	$1,375 + $30	$1,405.00
Taxes (1)	Income x Tax Rate	$1,405 x .3865	$(543.03)
Withhold Cash Dividend First	Taxes Due – Cash Dividend Equivalent	$543.03 - $30 = remaining taxes due	$(513.03)
Withhold Shares For Remaining Taxes (2)	Remaining Taxes Due / Fair Market Value - Employee (Shares held to satisfy taxes)	$513.03/ $55 = 9(3) shares for tax withholding	
Net Share Award after Withholding Shares to Satisfy Remaining Taxes	Initial Share Award – Shares Held to Satisfy Taxes	25 Shares – 9 Shares = Net Shares	16 Shares
Value of After Tax Shares	Net After Tax Shares x Fair Market Value	16 Net Shares x $55	$880.00

(1) For simplicity, we used an estimated tax rate of 38.65% (22% Federal, 9% state, 6.2% Social Security, 1.45% Medicare). Actual tax rates will vary based upon tax rates in effect, employee's residence and other factors.

(2) If you prefer to present a check to satisfy taxes rather than having the Company withhold shares, you must notify the Company in writing 4 weeks prior to the vesting date.

(3) This number was rounded to simplify the illustration.

Q. What happens to my net shares after taxes?

A. Your net shares after taxes will be deposited into your personal stock account held at American Stock Transfer set up by the Company on your behalf if you do not already have one. You will receive a confirmation statement from American Stock Transfer with your net shares and account number. You may leave the shares in this account and continue to earn dividends or you may transfer the shares to your personal brokerage account.

Q. What if I want to sell the shares, what do I do?

A. The first step would be to notify the Corporate Secretary's office and cc: Shareholder Services to get preclearance to sell your shares. Once you have preclearance, you may work with Shareholder Services and/or AST to sell some or all of the shares in your account. **Please be aware that there may be additional tax obligations when you do ultimately dispose of your shares.**

Q: Do I need preclearance to sell, gift or transfer my shares?

A. Yes, please e-mail Shawn Filippi (smf@nwnatural.com) or MardiLyn Saathoff (mys@nwnatural.com) and cc: Chu Lee of Shareholder Services (c4l@nwnatural.com) for preclearance *before* each trade, gift or transfer of shares to your brokerage account.

Q. Who do I contact if I wish to sell my shares once I have clearance to proceed?

A. Please contact Chu Lee in Shareholder Services @ extension 2402 or American Stock Transfer at (888) 777-0321.

Q. What if I leave the Company?

A. Different restrictions apply depending on the circumstances of your leaving the Company as provided below:

- If you were to terminate prior to one year after the Award Date for reasons other than disability, you would forfeit all unvested RSUs.
- If you retire (1) on or after the first anniversary of the Award Date of your RSU award, and (2) after awardee is (a) age 62 with at least 5-years of service, or (b) age 55 with age plus years of service totaling at least 70), your award would remain outstanding until it would have otherwise vested and would be awarded after the Performance Threshold for the vesting period was satisfied. It may be up to four years following retirement before your full award would be vested and earned. Tax withholding after retirement would be the same as described above.
- If you were to terminate due to permanent physical disability, your award would be treated the same as described above for retirees.
- If you were to die, your award would be treated the same as described above for retirees, however, upon receipt of a signed and medallion guaranteed Equity Power and Transfer, your award would be payable to your legal beneficiary.

Q. Are there clawback or retrenchment provisions in the Restricted Stock Unit Agreement?

A. Yes, refer to your Restricted Stock Unit Agreement.

■ Contacts

Questions about your RSU awards should be addressed to:
Lea Anne Doolittle (ext. 2408 or lad@nwnatural.com) SVP & Chief Administrative Officer or
Leanne St. Clair (ext. 3312 or lsc@nwnatural.com) HR Consultant

Questions about your AST stock account should be addressed to:
Chu Lee (ext. 2402 or c4l@nwnatural.com) Shareholder Services Administrator

Disclaimer: This is a summary document and is not intended to replace or override the terms and conditions stated in the Restricted Stock Unit Agreement (RSU Agreement). If there are differences between what is stated here and the RSU Agreement, the RSU Agreement will prevail.

NW Natural

Rates & Regulatory Affairs

Oregon General Rate Case – December 2017

Standard Data Request Response

Request No. 104: For the questions below related to advertising expense, please see the definitions and descriptions in OAR 860-026-0022. For questions related to promotional activities or concessions, please see OAR 860-026-0015 & 0020.

a. Please identify the Category A advertising expense included in the test year; including references to the appropriate testimony and / or exhibit pages;
b. Please provide a work paper that shows the calculation of the Category A limit provided in OAR 860-026-0022 (3) (a);
c. If the test year Category A advertising expense exceeds the OAR 860 026-0022(3)(a) limit, please provide support for including the additional expense in rates;
d. Please identify the Category B advertising expense included in the test year revenue requirement; including references to the appropriate testimony and / or exhibit pages;
e. For any Category C advertising expense included in the test year rates that is associated with a promotional activity or a promotional concession program, please provide a summary table that includes:
    i. A description of the activity or program, and justification for inclusion into rates;
    ii. A breakout of the related expense by labor & non-labor; and
    iii. The FERC and internal utility account to which the expense will be booked and include references to appropriate exhibit pages.
f. Please identify any other budgeted advertising expense for the test year that will NOT be included in base rates, including below-the-line or nonutility expense, or advertising expense expected to be collected through a tariff. Please include how the expense is allocated between the categories identified in OAR 860-026-0022(2). Please describe the activities and associated expense (broken out by labor & non-labor) associated with marketing research and sales activities (include fuel switching and retention of customers) that is included in the test year. Please include references to the testimony and exhibits, and to which FERC and internal utility accounts this expense is booked.

Response:

a. Category A expenditures identified for the test year total $1,696,500 (or $2.52 per customer); *(Heiting/1000, 3).*

b. The calculation allowed by OAR 860-026-0022(3)(a) would have been $1.27 during the test period 2018/19:

NW Natural Operating Revenue = $682,535,000
Category A allowed – 0.125%

(Calculation = $682,535,000 x .00125 = $853,169)

Number of customers = 669,691
Category A per customer = $1.27

(Calculation = 853,169/669,691 = $1.27)

c. Support for the proposed Category A advertising expense is provided at: *(Heiting 1000/5-9).*

d. Category B expenditures identified for the test year total $810,000; *(Heiting 1000/10-12).*

e. None of the Category C expenses are included in rates.

f. $630,000 in marketing and advertising activities are budgeted in Category C for the Test Year period, none of which will be included in base rates. See below for activities and account numbers planned for this category expenditure. All activities are designed to aid in retention of customers. It is noted below which activities are labor and non-labor and which are more geared to encourage the use of high-efficiency natural gas products over in-efficient alternatives.

Budget Activity	Internal #	FERC #	Test Year $
Department Expenses (non-labor)	502400 11550	913-20000	$ 10,000
Department Expenses (labor)	502100 11550	913-20000	$ 90,000
Home shows / Event Support (non-labor, retention & fuel switching)	507500 11550	913-26000	$ 100,000

Marketing Support / Research / Production (labor & non-labor, fuel switching)	505100 11550	913-26000	$	75,000
Website support (labor & non-labor, retention & fuel switching)	505100 11550	913-26000	$	25,000
Media - TV (non-labor, retention & fuel switching)	505200 11550	913-26000	$	230,000
Media - Online (non-labor, retention & fuel switching)	505200 11550	913-26000	$	100,000
			$	630,000

$80,000 is budgeted for below the line for district advertising, promotional concessions, incentives and sponsorships. See below for activities and account numbers planned for this category expenditure.

Budget Activity	Internal #	FERC #	Test Year $	
District Advertising (non-labor, retention & fuel switching)	505200 11550	416-04080	$	30,000
Sponsorship support (non-labor, retention & fuel switching)	507500 11550	416-04080	$	35,000
Special promotion incentives (non-labor)	505100 11550	913-26000	$	15,000
			$	80,000

State	County	Accounts	Portland	Eugene
Oregon	Benton	19435	0	1
Oregon	Clackamas	92486	1	0
Oregon	Clatsop	13365	1	0
Oregon	Columbia	8452	1	0
Oregon	Coos	1821	0	1
Oregon	Hood River	4020	1	0
Oregon	Lane	41319	0	1
Oregon	Lincoln	10655	1	0
Oregon	Linn	23852	1	0
Oregon	Marion	66198	1	0
Oregon	Multnomah	202196	1	0
Oregon	Polk	14747	1	0
Oregon	Wasco	2043	1	0
Oregon	Washington	141020	1	0
Oregon	Yamhill	12498	1	0
Washington	Clark	79582	1	0
Washington	Klicktat	1514	1	0
Washington	Skamania	513	1	0

County Source: DMA County Coverage
Nielsen Media Research

Percentage of NW Natural Customers in Portland Media Market	91%
Percentage of NW Natural Customers in Eugene Media Market	9%

2017 Average Annual Media Costs By Market

(Source: CMD Agency - Portland, OR, Patti Cody, Media Director)

Market	Station	Program	Day	Time	Cost/Spot
Portland	KATU	KATU News Rotator	M-F	4p-7p	$265
	KGW	KGW News @ 4pm	M-F	4p-5p	$200
	KGW	Live @ 7pm	M-F	7p-730p	$250
	KGW	KGW News @ 11p	M-F	11p-1135p	$340
	KOIN	KOIN6 News @ 4pm	M-F	4p-5p	$175
	KOIN	KOIN6 News @ 530p	M-F	530p-6p	$250
	KOIN	KOIN6 News @ 11p	M-F	11p-1135p	$250
	KPTV	5 O'Clock News	M-F	530p-6p	$350
	KPTV	6 O'Clock News	M-F	6p-630p	$325
	KPTV	10 O'Clock News	M-Su	10p-11p	$550
Total					***$2,955***
Eugene	KEZI	Good Morning AM	M-F	7a-9a	$75
	KEZI	KEZI News @ 5pm	M-F	5p-7p	$165
	KEZI	KEZI News @ 11p	M-F	11p-1135p	$75
	KMTR	NBC 16 News Today	M-F	6a-7a	$20
	KMTR	Ellen	M-F	4p-5p	$50
	KMTR	NBC 16 News Today	M-F	6-7p	$75
	KMTR	Big Bang	M-F	7p-8p	$100
	KVAL	KVAL News @ 6am	M-F	6a-7a	$35
	KVAL	CBS Morning	M-F	7a-9a	$40
	KVAL	Wheel of Fortune	M-F	730p-8p	$180
Total					***$815***
Medford	KDRV	CBS Morning	M-F	7a-9a	$95
	KDRV	Newswatch12 ROS	M-F	5p-7p	$135
	KDRV	Wheel of Fortune	M-F	730p-8p	$165
	KDRV	Newswatch12 @ 11p	M-F	11p-1135p	$65
	KOBI	Today Show	M-F	7a-9a	$55
	KOBI	NBC5 News	M-F	6p-7p	$65
	KOBI	Entertainment Tonight	M-F	730p-8p	$35
	KTVL	News10 @ 6pm	M-F	6p-630p	$75
	KTVL	Millionaire	M-F	630p-7p	$50
	KTVL	News10 @ 11pm	M-F	11p-1135p	$40
Total					***$780***

Market	Station	Program	Day	Time	Cost/Spot
Bend	KTVZ	NC21 @Sunrise News	M-F	6a-7a	$200
	KTVZ	Today Show	M-F	7a-9a	$150
	KTVZ	NC21 @ 5pm	M-F	5p-530p	$165
	KTVZ	NC21 @ 6pm	M-F	6p-630p	$200
	KTVZ	NC21 @ 630pm	M-F	630p-7p	$200
	KTVZ	Family Feud	M-F	730p-8p	$125
	KTVZ	NC21 @ 11p	M-F	11p-1130p	$100
	KFXO	NC21 @ Sunrise	M-F	7a-8a	$40
	KFXO	Big Bang Theory	M-F	7p-730p	$110
	KFXO	NC21 First on Fox	M-F	10p-11p	$125
Total					***$1,415***

Cost Per Point: A measure of cost efficiency which enables you to compare the cost of an advertisement that ran during a particular broadcast.

How CPP is calculated: Media cost divided by Gross Rating Points (estimated rating or reac
1 rating equates to reaching 1% of the audience population.

A25-54 Rating	CPP
1.0	$265.00
1.4	$142.86
1.3	$192.31
1.1	$309.09
1.0	$175.00
1.2	$208.33
1.0	$250.00
2.2	$159.09
2.5	$130.00
2.5	$220.00
15.2	***$194.41***
2.2	$34.09
2.8	$58.93
1.8	$41.67
1.2	$16.67
1.5	$33.33
2.9	$25.86
4.9	$20.41
1.9	$18.42
1.9	$21.05
2.2	$81.82
23.3	***$34.98***
4.2	$22.62
3.2	$42.19
4.2	$39.29
1.0	$65.00
2.8	$19.64
2.7	$24.07
0.9	$38.89
3.1	$24.19
2.2	$22.73
1.9	$21.05
26.2	***$29.77***

A25-54 Rating	**CPP**
7.4	$27.03
7.4	$20.27
12.1	$13.64
11.2	$17.86
8.9	$22.47
5.4	$23.15
4.5	$22.22
2.9	$13.79
3.0	$36.67
3.2	$39.06
66.0	***$21.44***

ch).

DR - 153

Project Number	Category A Project Description	Media Channel	Final Copy of Communication	Estimated OR Customer Reach	Estimated OR Non-Customer Reach	Budget	Actual Cost
1	January Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	01_JanuaryComfortZone2017.pdf	497,000	0	$ 16,289.00	$ 16,349.00
2	High-Efficiency Heating Bill Insert - Bill insert discussing the cost advantage, performance and environmental benefits of high-efficiency natural gas heating equipment.	Customer Bill Insert	2_FebruaryHeatinginsert2017.pdf	46,900	0	$ 8,052.00	$ 8,946.00
3	March Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	3_MarchComfortZone2017.pdf	496,000	0	$ 16,289.00	$ 27,155.00
4	Tune-Up Bill Insert - Communicating an annual equipment tune up service option for customers to save energy and money.	Customer Bill Insert	4_MarchTuneUpinsert2017.pdf	496,000	0	$ 6,644.00	$ 6,644.00
5	Paperless Billing Insert - Bill insert providing the paperless-billing payment option.	Customer Bill Insert	5_MarchPaperlessCampaigninsert.pdf	496,000	0	$ 12,553.00	$ 12,691.00
6	May Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	6_MayComfortZone2017.pdf	494,000	0	$ 16,767.00	$ 17,737.50
7	Smart Energy Bill Insert - Customer bill insert communicating the Smart Energy service option, NW Natural's program to inform customers how to reduce their impact on the environment.	Customer Bill Insert	7_MaySmartEnergyinsert2017.pdf	494,000	0	$ 14,314.00	$ 14,245.00
8	High-Efficiency Heating Bill Insert - Bill insert discussing the cost advantage, performance and environmental benefits of high-efficiency natural gas heating equipment.	Customer Bill Insert	8_JuneHVACinsert2017.pdf	494,000	0	$ 5,958.00	$ 6,627.00
9	July Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	9_JulyComfortZoneOregon2017.pdf	493,000	0	$ 17,018.00	$ 17,018.00
10	WARM Brochure - Communication about the WARM payment and program option for customers.	Customer Bill Insert	10_July WARM brochure 2017.pdf	493,000	0	$ 16,000.00	$ 16,300.00
11	Rights and Responsibilities insert - Communication about payment and program options; online customer service options; price changes; phone numbers and contact information.	Customer Bill Insert	11_AugustResidentialRROregon2017.pdf 11_AugustRRNonresidentialinsert2017.pdf	493,000	0	$ 28,060.00	$ 28,060.00
12	Houseline Maintenance Brochure - Service communication educating customers about their responsibility with respect to the houseline to the home.	Customer Bill Insert	12_AugustHouselineMaintenance2017.pdf	493,000	0	$ 4,509.00	$ 4,509.00
	Tune-Up Bill Insert - Communicating a service option for customers to have an annual equipment tune up to save energy and money.	Customer Bill Insert	13_TuneUp2017FINAL.pdf	492,000	0	$ 5,958.00	$ 6,483.00
14	September Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	14_SeptemberComfortZoneOregon2017.pdf	491,000	0	$ 18,628.00	$ 18,628.00
15	High-Efficiency Heating Bill Insert - Bill insert discussing the cost advantage, performance and environmental benefits of high-efficiency natural gas heating equipment.	Customer Bill Insert	15_OctoberHVACinsert2017.pdf	490,000	0	$ 6,225.00	$ 6,970.00
16	Natural gas system and emissions insert - Communication to educate customers about the natural gas system and environmental considerations about energy use, a carbon reduction goal and the opportunities to reduce use and lower carbon emission.	Customer Bill Insert	16_OctoberLowCarboninsert2017.pdf	490,000	0	$ 29,160.00	$ 30,201.75
17	Gas Assistance Program insert - Communicating about a customer program that supports low-income energy assistance	Customer Bill Insert	17_NovemberGAPinsert2017.pdf	491,000	0	$ 6,225.00	$ 7,251.25
18	December Comfort Zone - Customer newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	Customer Bill Insert	18_DecemberComfortZone2017.pdf	492,000		$ 17,722.00	$ 18,628.75
19	ETO Sponsored Water Heater Insert - Customer insert introducing the energy-saving benefits and incentives for natural gas water heating. Insert was funded by Energy Trust of Oregon.	Customer Bill Insert	19_April Water Heaterinsert.pdf	494,000	0	$ -	$ -
20	Natural Gas Fireplace Insert - Customer insert promoting high-efficiency natural gas fireplaces. Insert was funded by Energy Trust of Oregon.	Customer Bill Insert	20_Gas Fireplace insert 2017.pdf	491,000	0	$ -	$ -

21	eNewsletter (12 issues) - Electronic newsletter addressing topics such as the efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	eMail	21_EComfortZones.pdf	2,200,000	0	$ 18,279.50	$ 18,777.25
22	CNG Honda Civic Wrap - Development of a car wrap to inform customers and the public about the cost, and emissions advantages of natural gas vehicles.	Car Wrap	22_nwn_hondawrap_design.pdf	NA	NA	$ 3,595.00	$ 3,595.00
23	NW Annual Report website	Internet	https://www.nwnatural.com/Content/AnnualReport/2016/	633*	NA	$ 3,727.50	$ 3,727.50
24	2017 media planning and buying fees	TV, Digital, Print, Strategy	24_2017 NW Natural SOW.pdf	NA	NA	$ 59,000.00	$ 59,000.00
25	Category A TV media across the NW Natural service territory	TV	26_CutomerBenefitTV.mov	11,118,000**	NA	$ 75,000.00	$ 64,050.00
26	Category A production - Cost to produce one :30 second television commercial focusing on online customer service and payment options.	TV	26_CutomerBenefitTV.mov	NA	NA	$ 50,000.00	$ 50,000.00
27	Category A digital media	Internet	28_NWNBanners.pdf	13,898,920**	NA	$ 55,000.00	$ 50,250.00
28	Category A digital production - Cost to produce two digital ads communicating the cost savings, environmental benefits and value of high efficiency natural gas equipment..	Internet	28_NWNBanners.pdf	NA	NA	$ 3,300.00	$ 3,300.00
29	Telephone Directory media - Customer service contact numbers in telephone directories across the service territory. (sample includes only one directory. All directories include the same information)	Telephone Directories	29_Portland Metro.pdf	1,856,576**	NA	$ 55,000.00	$ 55,000.00
30	Welcome Letter - Letter sent to new residential and commercial customers. Includes printing and postage.	Direct Mail	30_WelcomeLetter ORCommercial NOV 2017.pdf 30A_WelcomeLetter ORResidentialNOV2017.pdf	153,400	0	$ 100,000.00	$ 98,545.04
31	Important Notice - Communication to notify a customer of a potential service shut off.	Direct Mail	31_Important Notice - multi language.pdf	550000 (print qty, mail as needed)	0	$ 12,000.00	$ 11,895.13
32	Ways to Pay - Communication informing customers how to pay a late when their account is past due.	Direct Mail	32_Ways to Pay This Notice.pdf	350000 (print qty, mail as needed)	0	$ 5,000.00	$ 4,173.54
33	Company van graphics - NW Natural customer service van graphics to inform on the cost and emissions reductions of natural gas vehicles.	Service Vans	33_VanGraphics.jpg	NA	NA	$ 13,870.00	$ 13,870.00
34	Low Income Brochure - Communication mailed to customers having trouble paying their bill. The brochure provides contact information for bill payment assistance agencies.	Direct Mail	34_Low IncomeOR.pdf	421170 (print qty, mail as needed)	0	$ 7,500.00	$ 5,858.00
35	Environmental issues testing - Development of test materials and survey instrument to identify areas of awareness and concern about the natural gas system and environmental issues.	Online Survey	35_Customer insights panel survey instrument .pdf	NA	NA	$ 17,180.00	$ 17,180.00
36	Environmental issues focus group - awareness and message testing to hear environmental attitudes, reaction to messages and comprehension.	In-person focus group	36_Customer focus group discussion guide .pdf	NA	NA	$ 27,845.00	$ 27,845.00
37	Environmental / emissions planning and buying fees	TV/Digital/Strategy	37_TVDigital media buy.pdf	NA	NA	$ 35,000.00	$ 35,000.00
38	Environmental / emissions testing - Concept testing to validate message approach	Online/Strategy	38_OnlineTesting_ QuestionnaireFINAL.pdf	NA	NA	$ 28,900.00	$ 28,900.00
39	Environmental / emission TV - Development of a :30 second TV commercial addressing ways to lower energy use and reduce carbon emissions	TV	40_NWN_CAN_WEB.mp4	NA	NA	$ 139,000.00	$ 139,000.00
40	Environmental TV media throughout the NW Natural service territory	TV	40_NWN_CAN_WEB.mp4	10,744,480**	NA	$ 162,078.00	$ 162,078.00
41	Environmental - RNG website video - Development of a :20 second web video educating about renewable natural gas	Website	41_RNG.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
42	Environmental - Decoupling website video - Development of a :20 second web video explaining the NW Natural conservation tariff to help promote energy efficiency.	Website	42_DECOUPLE.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
43	Environmental - Conservation website video - Development of a :20 second web video showcasing ways consumers could save energy.	Website	43_CONSERVE.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
44	Environmental - Power to Gas website video - Development of a :20 second web video shows how wind and solar can contribute to a low carbon future.	Website	44_POWER TO GAS.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
45	Environmental - Transportation website video - Development of a :20 second web video promoting clean air and carbon emissions reductions through CNG vehicles.	Website	45_Transportation.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
46	Environmental - Equipment innovation website video - Development of a :20 second web video Highlighting the importance new equipment will play in reducing carbon emissions.	Website	46_EQUIPMENT INNOVATION.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
47	Environmental - High-efficiency Equipment website video - Development of a :20 second web video showcasing how high-efficiency natural gas equipment can reduce carbon emissions.	Website	47_UPGRADE.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
48	Environmental - Smart Energy website video - Development of a :20 second web video introducing the carbon offset program as a method to offset the emissions associated with natural gas use.	Website	48_OFFSET.mp4	(Included in 2018 social media and digital buy)	NA	$ 27,435.00	$ 27,435.00
49	Environmental digital ad creative development	Online	49_LessWeCan-bannerads.pdf	NA	NA	$ 34,510.00	$ 34,510.00
50	Environmental digital media throughout the NW Natural service territory	Online	49_LessWeCan-bannerads.pdf	8,770,114	NA	$ 37,922.00	$ 37,922.00
51	Environmental website development - Development of a comprehensive website housing all video content, supporting elements and long-format educational content about environmental considerations and reducing carbon emissions.	Online	http://www.lesswecan.com/	28,185* (Late Oct. Site launch)	NA	$ 86,000.00	$ 86,000.00
52	Monthly on-hold messages - Messaging for customers while on hold waiting for a customer service representative. Messages include: efficient use of natural gas; payment and program options; online customer service options; price changes; cost, performance and environmental benefits of high-efficiency natural gas equipment; information about the ways NW Natural's pipeline system and customers can reduce greenhouse gas emissions; phone numbers and contact information; important safety information.	IVR	52_2017 On Hold Messages.pdf	NA	NA	$ 5,616.00	$ 5,616.00

53	Major Account Service Customer Energy Report - Communication for industrial customers regarding support needed to better serve their business and natural gas needs.	Printed Presentation	53_NWNatural_MAS_EnergyReport.pdf	As needed	NA	$ 12,000.00	$ 11,125.00

* Estimated reach includes all unique visitors to the website.
** Estimated reach includes total household impressions for the NW Natural service territory.

Script for NW Natural Communication Category A Television Commercial.

Filename:40_NWN_CAN_WEB.mp4.[1]

Can a natural gas company be serious when it wants us to use less gas?

Can we really raise our families and lower emissions?

Can we heat our homes and fight climate change?

Can we expand our economy and use less?

Yes.

By conserving, offsetting and innovating.

Together we are reducing emissions today.

While we create a even better tomorrow.

Join the effort at LessWeCan.com.

NW Natural. Less We Can.

[1] UG 344 NW Natural Response to OPUC DR 372.

Category: All categories

Region	United States
Week	less we can: (United States)
2017-01-01	23
2017-01-08	31
2017-01-15	42
2017-01-22	57
2017-01-29	48
2017-02-05	69
2017-02-12	74
2017-02-19	57
2017-02-26	83
2017-03-05	59
2017-03-12	30
2017-03-19	51
2017-03-26	48
2017-04-02	57
2017-04-09	61
2017-04-16	65
2017-04-23	76
2017-04-30	66
2017-05-07	47
2017-05-14	33
2017-05-21	41
2017-05-28	34
2017-06-04	19
2017-06-11	29
2017-06-18	28
2017-06-25	22
2017-07-02	21
2017-07-09	39
2017-07-16	24
2017-07-23	29
2017-07-30	26
2017-08-06	14
2017-08-13	23
2017-08-20	23
2017-08-27	36
2017-09-03	29
2017-09-10	55
2017-09-17	53
2017-09-24	65
2017-10-01	63
2017-10-08	59
2017-10-15	53
2017-10-22	72
2017-10-29	71
2017-11-05	75
2017-11-12	76
2017-11-19	42
2017-11-26	57

Category: All categories	
Region	United States
Week	less we can: (United States)
2017-12-03	62
2017-12-10	69
2017-12-17	25
2017-12-24	12
2017-12-31	14
2018-01-07	40
2018-01-14	46
2018-01-21	57
2018-01-28	49
2018-02-04	57
2018-02-11	74
2018-02-18	57
2018-02-25	100
2018-03-04	65
2018-03-11	81
2018-03-18	91
2018-03-25	79
2018-04-01	65
2018-04-08	73

Source

https://trends.google.com/trends/explore?date=2017-01-01%202018-04-12&geo=US&q=less%20we%20can

Collected 04/12/2018

NW Natural®

Rates & Regulatory Affairs
UG 344
2017 General Rate Revision
Data Request Response

Request No.: UG 344 CUB DR 46

46. Please refer to Northwest Natural's Response to Staff's DR 372. Please reference the videos located in the TV_WEBVideos.zip file.

a. Were any of the videos in the table below broadcast on television?

b. How does Northwest Natural calculate their return on investment for digital advertising?

c. Please complete the table below

Name of File	Views on Youtube	Production Cost	Total Cost
40_NWN_CAN_WEB.mp4			
41_RNG.mp4			
42_DECOUPLE.mp4			
43_CONSERVE.mp4			
44_POWER_TO_GAS.mp4			
45_Transporation.mp4			
46_EQUIPMENT_INNOVATION.mp4			
47_UPGRADE.mp4			
48_OFFSET.mp4			

Response:

A. The video titled: **40_NWN_CAN_WEB. mp4** was produced as a 30 second TV commercial and broadcast on TV.

B. The return on a digital advertising investment is calculated based on impressions achieved, click-through-rates and cost per clicks.

Digital advertising measurement factors

1) Impressions = Number of the target audience reached (how effectively media is purchased to reach the target audience).

    a. Did the ads achieve the number of impressions purchased?

2) Click-through rate (CTR) = Percentage of audience that clicked the ad (how effective/compelling was the creative to generate interest).

    a. Did the ads achieve the benchmark CTRs provided by the media outlets?

3) Cost-per-click (CPC) = Cost of each click on the ad (combination of both – effective media targeting + effective creative execution).

    a. Did the ads produce a CPC at or below the benchmark CPC provided by the media outlets?

The effectiveness of a digital advertising purchase is associated with meeting or exceeding established targets for each of the factors above.

C. Media used to increase awareness and views of videos concluded in Dec. 2017. Media planned to resume in 2018. Videos will continue to be leveraged in the Less We Can initiative for a multi-year effort.

Name of File	Total Views on Youtube and Social Media	Production Cost	Total Cost
40_NWN_CAN_WEB. mp4	1,245 digital views (11,778,165 TV viewer impressions)	$139,000	$301,078 (production cost plus TV media cost)
41_RNG.mp4	250	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.

42_DECOUPLE.mp4	321	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
43_CONSERVE.mp4	269	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
44_POWER_TO_GAS.mp4	272	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
45_Transporation.mp4	414	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
46_EQUIPMENT_INNOVATION.mp4	215	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
47_UPGRADE.mp4	249	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.
48_OFFSET.mp4	455	$27,435	$27,435 (Multi-year digital ad purchase scheduled to start in 2018.

RESULTS OF OPERATIONS

Regulatory Matters

Regulation and Rates

UTILITY. Our utility business is subject to regulation by the OPUC, WUTC, and FERC with respect to, among other matters, rates and terms of service. The OPUC and WUTC also regulate the system of accounts and issuance of securities by our utility. In 2017, approximately 89% of our utility gas customers were located in Oregon, with the remaining 11% in Washington. Earnings and cash flows from utility operations are largely determined by rates set in general rate cases and other proceedings in Oregon and Washington. They are also affected by the local economies in Oregon and Washington, the pace of customer growth in the residential, commercial, and industrial markets, and our ability to remain price competitive, control expenses, and obtain reasonable and timely regulatory recovery of our utility-related costs, including operating expenses and investment costs in utility plant and other regulatory assets. See "*Most Recent General Rate Cases*" below.

GAS STORAGE. Our gas storage business is subject to regulation by the OPUC, WUTC, CPUC, and FERC with respect to, among other matters, rates and terms of service. The OPUC and CPUC also regulate the issuance of securities, system of accounts, and regulate intrastate storage services. The FERC regulates interstate storage services. The FERC uses a maximum cost of service model which allows for gas storage prices to be set at or below the cost of service as approved by each agency in their last regulatory filing. The OPUC Schedule 80 rates are tied to the FERC rates, and are updated whenever we modify our FERC maximum rates. The CPUC regulates Gill Ranch under a market-based rate model which allows for the price of storage services to be set by the marketplace. In 2017, approximately 70% of our storage revenues were derived from FERC, Oregon, and Washington regulated operations and approximately 30% from California operations.

Most Recent General Rate Cases

OREGON. Effective November 1, 2012, the OPUC authorized rates to customers based on an ROE of 9.5%, an overall rate of return of 7.78%, and a capital structure of 50% common equity and 50% long-term debt.

WASHINGTON. Effective January 1, 2009, the WUTC authorized rates to customers based on an ROE of 10.1% and an overall rate of return of 8.4% with a capital structure of 51% common equity, 5% short-term debt, and 44% long-term debt.

FERC. We are required under our Mist interstate storage certificate authority and rate approval orders to file every five years either a petition for rate approval or a cost and revenue study to change or justify maintaining the existing rates for our interstate storage services. In December 2013, we filed a rate petition, which was approved in 2014, and allows for the maximum cost-based rates for our interstate gas storage services. These rates were effective January 1, 2014, with the rate changes having no significant impact on our revenues. In January 2018, various state parties filed a request with the FERC to adjust the revenue requirements of public utilities to reflect the recent reduction in the federal corporate income tax rate and other impacts resulting from the TCJA. We will monitor this request and work the FERC to evaluate the potential impact to these approved rates.

We continuously monitor the utility and evaluate the need for a rate case. In December 2017, we filed a rate case in Oregon with the OPUC. For additional information, see "Regulatory Proceeding Updates—*Rate Case*" below.

Regulatory Proceeding Updates

During 2017, we were involved in the regulatory activities discussed below.

HEDGING. In 2014, the OPUC opened a docket to discuss broader gas hedging practices across gas utilities in Oregon. In January 2018, the OPUC accepted the parties' proposal to follow a uniform process to address any future proposed long-term hedges and closed the docket.

The WUTC also conducted an investigation into the hedging practices of gas utilities operating in Washington and considered whether it should require gas utilities to implement certain hedging practices. The WUTC issued and outlined their policy in March 2017. The policy supports risk-responsive hedging strategies that are adaptable to variability in the market and required gas utilities to submit with their 2017 PGA a preliminary hedging plan that outlines the utilities' intended path to incorporate risk-responsive hedging strategies. Beginning with the 2018 PGA, gas utilities must submit an annual comprehensive hedging plan that supports integration of risk responsive strategies into their hedging framework. Beginning with the 2019 PGA filing, utilities must provide a full strategy implementation plan for year 2020 and beyond. As directed by the WUTC, we submitted our preliminary hedging plan with our 2017 PGA in September 2017, and plan to submit our annual comprehensive hedging plan with our 2018 PGA.

INTERSTATE STORAGE AND OPTIMIZATION SHARING. We received an Order from the OPUC in March 2015 on their review of the current revenue sharing arrangement that allocates a portion of the net revenues generated from non-utility Mist storage services and third-party asset management services to utility customers. The Order requires a third-party cost study to be performed and the results of the cost study may initiate a new docket or the re-opening of the original docket. In 2017, a third-party consultant completed a cost study. We will continue to work with all stakeholders as we review this completed study, and expect resolution of this docket in 2018.

INTEGRATED RESOURCE PLAN (IRP). We file a full IRP with Oregon and Washington bi-annually and file updates between filings. Our last full IRPs were filed in 2016, and we received a letter of compliance from the WUTC in December of 2016 and acknowledgment by the OPUC in February of 2017. The IRP included analysis of different growth scenarios and corresponding resource acquisition strategies. The analysis is needed to develop supply and demand resource requirements, consider uncertainties in the planning process, and establish a plan for providing reliable and low cost natural gas service. We anticipate filing our next full IRP in 2018.

DEPRECIATION STUDY. Under OPUC regulations, the utility is required to file a depreciation study every five years to update or justify maintaining the existing depreciation rates. In December 2016, we filed the required depreciation study with the Commission. In September 2017, the parties to the docket filed a settlement with the Commission requesting approval of updated depreciation rates negotiated with the parties. In January 2018, OPUC issued an order adopting the stipulation. The depreciation rates included in the stipulation do not materially change our current depreciation rates.

HOLDING COMPANY APPLICATION. In February 2017, we filed applications with the OPUC, WUTC, and CPUC for approval to reorganize under a holding company structure. In 2017, the OPUC and WUTC approved our applications subject to certain restrictions or "ring-fencing" provisions applicable to NW Natural, the entity that currently, and would continue to, house our utility operations, and the holding company. We continue to work with the CPUC, and expect resolutions by the end of the first quarter of 2018.

MULTI-FAMILY TARIFF. In June 2017, we filed a request with the OPUC to create a multi-family tariff to establish an optional program to serve the mixed-use, multi-family residential market. Under the tariff, NW Natural will provide upfront incentives for builders to offset the initial cost of installing natural gas piping to individual units, and then recover the costs of the incentives through a fixed charge on the customer's monthly bills. In July 2017, the OPUC approved the tariff allowing us to further serve the multi-family customer sector.

TAX REFORM DEFERRAL. In December 2017, we filed applications with the OPUC and WUTC to defer the overall net benefit associated with the TCJA that was enacted on December 22, 2017 with a January 1, 2018 effective date. We anticipate the impacts from the TCJA will accrue to our customers in a manner approved by the Commissions. We will continue to work with the OPUC and WUTC on this throughout 2018. See Note 9 for more information on TCJA.

REGULATED WATER UTILITY. In December 2017, we entered into agreements to acquire two privately-owned water utilities: Salmon Valley Water Company, based in Welches, Oregon, and Falls Water Company, based in Idaho Falls, Idaho. These transactions are subject to certain conditions, including approvals from the OPUC and the Idaho Public Utilities Commission (IPUC), respectively. In January 2018, we filed our application with the OPUC to acquire Salmon Valley Water Company and filed with the IPUC in February 2018 to acquire Falls Water Company. We do not expect these transactions or their continuing operations to have a material financial impact. We continue to work with the OPUC and IPUC and anticipate receiving approvals and completing these acquisitions in 2018.

GENERAL RATE CASE. On December 29, 2017, we filed an Oregon general rate case requesting a 6% revenue increase, after an adjustment for the conservation tariff deferral, to continue operating and maintaining our distribution system and continue providing safe, reliable service to our customers. Our December general rate case filing was based on the following:

- forward test year from November 1, 2018 through October 31, 2019;
- capital structure of 50% debt and 50% equity;
- return on equity of 10.0%;
- cost of capital of 7.62%; and
- rate base of $1.19 billion, an increase of $304 million since the last Oregon rate case in 2012.

The general rate case filing in December 2017 does not include the benefit to customers' rates of the newly passed federal tax legislation. In the coming months, we will be working with the OPUC to determine how to return these benefits to customers, and we expect to amend or refile our rate case to incorporate the benefit of the TCJA, which would likely lower the original revenue requirement requested. It is possible through this rate case proceeding or another proceeding that the OPUC will also determine how to treat historical deferred tax liabilities, which may result in additional changes to our rate case request as well. The general rate case review and approval process could take up to 10 months with new rates anticipated to be effective November 1, 2018.

Rate Mechanisms

During 2017, our approved rates and recovery mechanisms for each service area included:

	Oregon	Washington
Authorized Rate Structure:		
ROE	9.5%	10.1%
ROR	7.8%	8.4%
Debt/Equity Ratio	50%/50%	49%/51%
Key Regulatory Mechanisms:		
PGA	X	X
Gas Cost Incentive Sharing	X	
Decoupling	X	
WARM	X	
Environmental Cost Deferral	X	X
SRRM	X	
Pension Balancing	X	
Interstate Storage Sharing	X	X

PURCHASED GAS ADJUSTMENT. Rate changes are established for the utility each year under PGA mechanisms in Oregon and Washington to reflect changes in the expected cost of natural gas commodity purchases. This includes gas costs under spot purchases as well as contract supplies, gas costs hedged with financial derivatives, gas costs from the withdrawal of storage inventories, the production of gas reserves, interstate pipeline demand costs, temporary rate adjustments, which amortize balances of deferred regulatory accounts, and the removal of temporary rate adjustments effective for the previous year.

In September 2017, we filed our PGA and received OPUC and WUTC approval in October 2017. PGA rate changes were effective November 1, 2017. The rate changes decreased the average monthly bills of residential customers by approximately 6.4% and 3.1% in Oregon and Washington, respectively. The decrease in Oregon reflected customers' portion of adjustments mainly for the effect of changes in wholesale natural gas costs and for a portion of WARM amounts that exceeded the maximum monthly allowable amount to be returned to customers during the 2016-17 gas year. Oregon rates were offset by adjustments related to our energy efficiency programs and additional annual adjustments based on ongoing orders with the OPUC. Washington rates reflected the effect of changes in wholesale natural gas costs.

Each year, we typically hedge gas prices on a portion of our utility's annual sales requirement based on normal weather, including both physical and financial hedges. We entered the 2017-18 gas year with our forecasted sales volumes hedged at 49% in financial swap and option contracts and 26% in physical gas supplies. For additional hedging matters from the WUTC and OPUC, see "Regulatory Proceeding Updates—*Hedging*" above.

As of December 31, 2017, we have also hedged future gas years with approximately 24% for the 2018-19 gas year and between 4% and 11% over the subsequent five gas years for utility's annual sales requirements based on normal weather. Our hedge levels are subject to change based on actual load volumes, which depend, to a certain extent, on weather, economic conditions, and estimated gas reserve production. Also, our gas storage inventory levels may increase or decrease with storage expansion, changes in storage contracts with third parties, variations in the heat content of the gas, and/or storage recall by the utility.

Under the current PGA mechanism in Oregon, there is an incentive sharing provision whereby we are required to select each year an 80% deferral or a 90% deferral of higher or lower actual gas costs compared to estimated PGA prices, such that the impact on current earnings from the incentive sharing is either 20% or 10% of the difference between actual and estimated gas costs, respectively. For the 2016-17 and 2017-18 gas years, we selected the 90% deferral option. Under the Washington PGA mechanism, we defer 100% of the higher or lower actual gas costs, and those gas cost differences are passed on to customers through the annual PGA rate adjustment.

EARNINGS TEST REVIEW. We are subject to an annual earnings review in Oregon to determine if the utility is earning above its authorized ROE threshold. If utility earnings exceed a specific ROE level, then 33% of the amount above that level is required to be deferred or refunded to customers. Under this provision, if we select the 80% deferral gas cost option, then we retain all of our earnings up to 150 basis points above the currently authorized ROE. If we select the 90% deferral option, then we retain all of our earnings up to 100 basis points above the currently authorized ROE. For the 2015-16 gas year, we selected the 80% deferral option. For the 2016-17 and 2017-18 gas years, we selected the 90% deferral option. The ROE threshold is subject to adjustment annually based on movements in long-term interest rates. For calendar years 2015, 2016, and 2017, the ROE threshold was 10.60%, 11.06%, and 10.66%, respectively. There were no refunds required for 2015 and 2016. We do not expect a refund for 2017 based on our results and anticipate filing the 2017 earnings test in May 2018.

GAS RESERVES. In 2011, the OPUC approved the Encana gas reserves transaction to provide long-term gas price protection for our utility customers and determined our costs under the agreement would be recovered on an ongoing basis through our annual PGA mechanism. Gas produced from our interests is sold at then prevailing market prices, and revenues from such sales, net of associated operating and production costs and amortization, are included in our cost of gas. The cost of gas, including a carrying cost for the rate base investment made under the original agreement, is included in our annual Oregon PGA filing, which allows us to recover these costs through customer rates. Our net investment under the original agreement earns a rate of return.

In 2014, we amended the original gas reserves agreement in response to Encana's sale of its interest in the Jonah field located in Wyoming to Jonah Energy. Under our amended agreement with Jonah Energy, we have the option to invest in additional wells on a well-by-well basis with drilling costs and resulting gas volumes shared at our amended proportionate working interest for each well in which we invest. Volumes produced from the additional wells drilled after our amended agreement are included in our Oregon PGA at a fixed rate of $0.4725. We did not have the opportunity to participate in additional wells in 2015, 2016, or 2017.

DECOUPLING. In Oregon, we have a decoupling mechanism. Decoupling is intended to break the link between utility earnings and the quantity of gas consumed by customers, removing any financial incentive by the utility to discourage customers' efforts to conserve energy.

The Oregon decoupling mechanism was reauthorized and the baseline expected usage per customer was set in the 2012 Oregon general rate case. This mechanism employs a use-per-customer decoupling calculation, which adjusts margin revenues to account for the difference between actual and expected customer volumes. The margin adjustment resulting from differences between actual and expected volumes under the decoupling component is recorded to a deferral account, which is included in the annual PGA filing. In Washington, customer use is not covered by such a tariff.

WARM. In Oregon, we have an approved weather normalization mechanism, which is applied to residential and commercial customer bills. This mechanism is designed to help stabilize the collection of fixed costs by adjusting residential and commercial customer billings based on temperature variances from average weather, with rate decreases when the weather is colder than average and rate increases when the weather is warmer than average. The mechanism is applied to bills from December through May of each heating season. The mechanism adjusts the margin component of customers' rates to reflect average weather, which uses the 25-year average temperature for each day of the billing period. Daily average temperatures and 25-year average temperatures are based on a set point temperature of 59 degrees Fahrenheit for residential customers and 58 degrees Fahrenheit for commercial customers. The collections of any unbilled WARM amounts due to tariff caps and floors are deferred and earn a carrying charge until collected in the PGA the following year. This weather normalization mechanism was reauthorized in the

2012 Oregon general rate case without an expiration date. Residential and commercial customers in Oregon are allowed to opt out of the weather normalization mechanism, and as of December 31, 2017, 9% of total customers had opted out. We do not have a weather normalization mechanism approved for residential and commercial Washington customers, which account for about 11% of total customers. See "Business Segments—Local Gas Distribution Utility Operations" below.

INDUSTRIAL TARIFFS. The OPUC and WUTC have approved tariffs covering utility service to our major industrial customers, which are intended to give us certainty in the level of gas supplies we need to acquire to serve this customer group. The approved terms include, among other things, an annual election period, special pricing provisions for out-of-cycle changes, and a requirement that industrial customers complete the term of their service election under our annual PGA tariff.

ENVIRONMENTAL COST DEFERRAL AND SRRM. We have a SRRM through which we track and have the ability to recover past deferred and future prudently incurred environmental remediation costs allocable to Oregon, subject to an earnings test.

Under the SRRM collection process, there are three types of deferred environmental remediation expense:

- Pre-review - This class of costs represents remediation spend that has not yet been deemed prudent by the OPUC. Carrying costs on these remediation expenses are recorded at our authorized cost of capital. We anticipate the prudence review for annual costs and approval of the earnings test prescribed by the OPUC to occur by the third quarter of the following year.
- Post-review - This class of costs represents remediation spend that has been deemed prudent and allowed after applying the earnings test, but is not yet included in amortization. We earn a carrying cost on these amounts at a rate equal to the five-year treasury rate plus 100 basis points.
- Amortization - This class of costs represents amounts included in current customer rates for collection and is generally calculated as one-fifth of the post-review deferred balance. We earn a carrying cost equal to the amortization rate determined annually by the OPUC, which approximates a short-term borrowing rate. We included $7.4 million and $10.0 million of deferred remediation expense approved by the OPUC for collection during the 2017-18 and 2016-17 PGA years, respectively.

In addition, the SRRM also provides for the annual collection of $5.0 million from Oregon customers through a tariff rider. As we collect amounts from customers, we recognize these collections as revenue and separately amortize an equal and offsetting amount of our deferred regulatory asset balance through the environmental remediation operating expense line shown separately in the operating expense section of our Consolidated Statement of Comprehensive Income (Loss). See Note 15 for more information on our environmental matters.

The SRRM earnings test is an annual review of our adjusted utility ROE compared to our authorized utility ROE, which is currently 9.5%. To apply the earnings test first we must determine what if any costs are subject to the test through the following calculation:

Annual spend
Less: $5.0 million base rate rider[1]
Prior year carry-over[2]
$5.0 million insurance + interest on insurance
Total deferred annual spend subject to earnings test
Less: over-earnings adjustment, if any
Add: deferred interest on annual spend[3]
Total amount transferred to post-review

(1) Base rate rider went into Oregon customer rates beginning November 1, 2015.

(2) Prior year carry-over results when the prior year amount transferred to post-review is negative. The negative amount is carried over to offset annual spend in the following year.

(3) Deferred interest is added to annual spend to the extent the spend is recoverable.

To the extent the utility earns at or below its authorized ROE, the total amount transferred to post-review is recoverable through the SRRM. To the extent the utility earns more than its authorized ROE in a year, the amount transferred to post-review would be reduced by those earnings that exceed its authorized ROE.

For 2017, we have performed this test, which we anticipate submitting to the OPUC in May 2018, and we do not expect an earnings test adjustment for 2017.

The WUTC has also previously authorized the deferral of environmental costs, if any, that are appropriately allocated to Washington customers. This Order was effective in January 2011 with cost recovery and carrying charges on amount deferred for costs associated with services provided to Washington customers to be determined in a future proceeding. Annually, or more often if circumstances warrant, we review all regulatory assets for recoverability. If we should determine all or a portion of these regulatory assets no longer meet the criteria for continued application of regulatory accounting, then we would be required to write-off the net unrecoverable balances against earnings in the period such a determination was made.

PENSION COST DEFERRAL AND PENSION BALANCING ACCOUNT. The OPUC permits us to defer annual pension expenses above the amount set in rates, with recovery of these deferred amounts through the implementation of a balancing account, which includes the expectation of higher and lower pension expenses in future years. Our recovery of these deferred balances includes accrued interest on the account balance at the utility's authorized rate of return. Future years' deferrals will depend on changes in plan assets and projected benefit liabilities based on a number of key assumptions and our pension contributions. Pension expense deferrals, excluding interest, were $6.5 million, $6.3 million, and $8.2 million in 2017, 2016 and 2015, respectively.

CUB Exhibit 119 is Confidential and will be provided to parties who have signed protective order 18-002.

Or. Op. Atty. Gen. OP-6076 (Or.A.G.), 1987 WL 278316

Office of the Attorney General

State of Oregon
Opinion Request OP-6076
March 18, 1987

***1** Charles Davis
Public Utility Commissioner
Labor & Industries Building
Salem, OR 97310

Dear Mr. Davis:
You ask whether you may issue four orders that implicate the rule against retroactive ratemaking. We conclude that retroactive ratemaking orders are absolutely impermissible unless they are expressly authorized by the legislature and do not violate the Oregon and United States Constitutions.

Each of the orders you propose violates the rule against retroactive ratemaking. The orders you propose that would create balancing accounts to adjust for power costs would not violate the rule if the legislature authorizes the Public Utility Commissioner (commissioner) to include 'cost of service' adjustment clauses in utility tariffs.

This opinion is in two parts. Part I explains the rule against retroactive ratemaking and its origins. Part II applies that rule to each of the orders you propose.

PART I

The Rule Against Retroactive Ratemaking.

Retroactive ratemaking is
'the setting of rates which permit a utility to recover past losses or which require it to refund past excess profits collected under a rate that did not perfectly match expenses plus rate-of-return with the rate actually established.' State ex rel Util. Consumers Council v. P.S.C., 585 SW2d 41, 59 (Mo 1979) (hereafter Consumers Council) [1]

See Board of Commrs. v. N.Y. Tel. Co., 271 US 23, 31, 46 S Ct 363, 70 L Ed 808 (1926) (hereafter NY Tel).

Another court stated the rule slightly differently:
'Technically, retroactive rate making occurs when an additional charge is made for past use of utility service, or the utility is required to refund revenues collected, pursuant to then lawfully established rates, for such past use.

'* * *

'* * * Prospective rate making to recover unexpected past expense, or to refund expected past expense which did not materialize, is as improper as is retroactive rate making.' State ex rel Utilities Com'n. v. Edmisten, 291 NC 451, 232 SE2d 184, 194–95 (1977).

However the rule is stated, it applies when past profits or losses, including past expenses, are incorporated in future rates. The rule is not in issue when the regulator employs a past 'test year' to predict future expenses and rate base. [2] The rule is implicated when the regulator, after determining expected costs and revenues, supplements that determination by employing past profits or losses in setting the future return the utility will be authorized to earn.

Although Oregon courts never have addressed the question, the rule against retroactive ratemaking has been adopted by the highest court of every jurisdiction in the United States that has considered the issue. [3]

Strong policy considerations support the rule against retroactive ratemaking:
'The rule against retroactive ratemaking serves two basic functions. Initially, it protects the public by ensuring that present consumers will not be required to pay for past deficits of the company in their future payments. The Supreme Court of New Jersey has expressed this legitimate concern as follows:
***2** "The present practice, as set forth in these cases, is fair to the public utility, for it can act as speedily as it sees fit to move for a correction of inadequate rates, and it is fair to the consumer in safeguarding him from surprise surcharges dating back over years that he had a right to assume were finished business for him and possibly over years when he was not even a consumer.' New Jersey Power & Light Co. v. State Department of Public Utilities, Board of Public Utility Comm'rs, 15 N.J. 82, 93, 104 A.2d 1, 7 (1954). See Western Oklahoma Gas & Fuel Co. v. State, 113 Okl. 126, 239 P. 588 (1925).

'The rule also prevents the company from employing future rates as a means of ensuring the investments of its stockholders. Georgia Ry. & Power Co. v. Railroad Commission of Georgia, 278 F. 242 (D.C. Ga. 1922). If a utility's income were guaranteed, the company would lose all incentive to operate in an efficient, cost-effective manner, thereby leading to higher operating costs and eventual rate increases.' Narragansett Elec. Co. v. Burke, 415 A2d 177, 178–79 (RI 1980).

Thus, the rule protects ratepayers by ensuring that they know the maximum cost of service at the time they use the service. The rule also promotes efficiency by the utilities in two ways. First, the utility is encouraged to keep costs down because it cannot recoup its excess past or present costs in the future. Second, if the utility's cost containment measures result in unexpected profits for the utility, those profits are a bonus to the utility that cannot be taken from it.

Origins of the Rule Against Retroactive Ratemaking

Courts and commissions have long recognized the rule against retroactive ratemaking. Cases applying the rule often refer to it as a well-settled principle, but those decisions do not discuss the origins or legal bases of the rule. See, e.g., T.W.A. v. Civil Aeronautics Board, 336 US 601, 605, 69 S Ct 756, 93 L Ed 911 (1949) ('customary pattern of fixing rates prospectively'); Pennsylvania Pub. Util. Comm'n. v. Philadelphia Elec. Co., 56 PUR 4th 637, 672 (1983), aff'd in part 93 Pa Commw 410, 502 A2d 722 (1985) ('It is axiomatic that ratemaking is prospective in nature').

The principle that a utility is entitled to an opportunity to earn a reasonable rate of return underlies any discussion of ratemaking. See Southern Cal. Edison Co. v. Public Util. Comm'n., 20 Cal3d 813, 144 Cal Rptr 905, 576 P2d 945, 949 n 8 (1978) (hereafter Edison). Rates that are set too low to allow a utility an opportunity to earn a reasonable rate of return are confiscatory. The setting of such rates violates the Fifth and Fourteenth Amendments to the United States Constitution by depriving a utility of property without just compensation. NY Tel., supra, 271 US at 31. A utility, however, must bear the risk that it will be unable to achieve its authorized, reasonable rate of return. Id.

a. Use of Past Losses in Rate-Setting

***3** The earliest United States Supreme Court case discussing the use of past losses in setting future rates is Knoxville v. Water Co., 212 US 1, 29 S Ct 148, 53 L Ed 371 (1909). The Court stated that the company's duty is to exact sufficient returns to ensure that investment in the company is kept unimpaired. Id. at 14. The Court held that in a rate case, if unwarranted dividends or other managerial imprudence resulted in past losses, the true value of the company's property cannot be enhanced by a consideration of the past losses. Id. The Court concluded, 'The precise subject of inquiry was, what would be the effect of the ordinance in the future.' Id. at 15.

The Court in Knoxville reversed the lower court's holding that rates set by the city that did not take into account the company's past losses were confiscatory. Thus, the Court refused to enjoin operation of the city's rate ordinance. The Court, however, stated that the company could later apply to enjoin the statute if it proved to operate as a confiscation of property. Id. at 17–19.

b. Use of Past Profits in Rate-Setting

The United States Supreme Court considered the use of past profits in setting future rates in Newton v. Consolidated Gas Co., 258 US 165, 42 S Ct 264, 66 L Ed 538 (1922). The state had sought to justify the rates it set by statute on the basis of past profits earned by the company. The Court stated:
'Since 1907 the Gas Company has been subject to supervision by a Commission empowered to prohibit unreasonable rates and the presumption is that any profits from its business were lawfully acquired. Mere past success could not support a demand that it continue to operate indefinitely at a loss. The public has no such right in respect of private property although dedicated to public use. When it became clear that the prescribed rate had yielded no fair return for more than a year and that this condition would almost certainly continue for many months the company was clearly entitled to relief.' Id. at 175 (citation omitted).

The Court affirmed that portion of the lower court order holding that the rates were confiscatory. [4] Id. at 177.

Thus, Newton and Knoxville provide the first statements of two well-settled ratemaking principles: (1) Past profits cannot be used to sustain confiscatory rates for the future. Los Angeles Gas Co. v. R.R. Comm'n., 289 US 287, 313, 53 S Ct 637, 77 L Ed 1180 (1933); Newton v. Consolidated Gas Co., supra, 258 US at 177; and (2) A utility cannot rely on past losses to argue that future rates are confiscatory. Galveston Elec. Co. v. Galveston, 258 US 388, 395, 42 S Ct 351, 66 L Ed 678 (1922); Knoxville v. Water Co., supra, 212 US at 14. These two principles combined form the rule against retroactive ratemaking. See Consumers Council, 585 SW2d at 59, discussed supra at 1.

The rule against retroactive ratemaking prohibits incorporation of past profits or losses in future rates. The bar against incorporation of past profits derives from the constitutional prohibition on setting confiscatory rates; use of past profits in setting future rates may produce confiscatory rates. In contrast, the prohibition against incorporation of past losses is not a constitutional rule, although the concept of confiscation plays a role in its operation. A utility is entitled to relief if its rates are confiscatory. If a utility tries to argue that future rates are confiscatory when past losses are not incorporated into the future rates, Galveston and Knoxville require rejection of the utility's argument. The utility cannot erect a constitutional violation out of rates which, viewed prospectively, are compensatory.

***4** All public utility regulators are empowered to set just and reasonable rates. In most jurisdictions, the enabling statute explicitly grants the regulator such authority. See Pacific Tel. & Tel. Co. v. Public Util. Com., 62 Cal2d 634, 44 Cal Rptr 1, 401 P2d 353, 363 (1965). Most jurisdictions also explicitly state that the rates are to be observed in the future. Id. The Oregon Public Utility Commissioner is empowered to protect utility customers and the public 'from unjust and unreasonable exactions and practices and to obtain for them adequate service at fair and reasonable rates.' ORS 756.040(1). No regulator has ever been authorized to set rates that are not just and reasonable.

These principles, and thus the rule against retroactive ratemaking, operate in the following manner. Suppose a utility had profits of $5,000,000 in excess of the rate of return established in the last rate case. The regulator then determines the utility's revenue requirement for the next year to be $100,000,000 and establishes a rate of return to produce that revenue. Just and reasonable rates would be designed to yield $100,000,000 in revenue. If the regulator considers the previous year's $5,000,000 excess profits and sets rates to produce only $95,000,000 in revenue, then the rates are less than just and reasonable and are confiscatory because, viewed prospectively, they do not allow the utility to earn a reasonable rate of return. Thus, the regulator has violated its statutory duty to set just and reasonable rates, and the rates violate the utility's constitutional right to an opportunity to earn a reasonable rate of return. In effect, the regulator has taken the utility's property from the utility without just compensation. The property that is taken is the utility's future earnings. The amount of future earnings taken in this case is equal to the utility's past profits.

Similarly, past losses cannot be used in setting future rates. Suppose a utility earned $5,000,000 less than authorized last year, and has a revenue requirement of $100,000,000 for next year. If the ratesetting body considers the $5,000,000 shortfall and sets rates designed to produce $105,000,000 in revenue, then the rates will exceed just and reasonable rates. [5] Rates set to make up for a previous shortfall have the effect of shifting to the ratepayer the utility's risk that it will not earn its authorized rate of return.

One court has suggested that this shift of risk may violate the ratepayers' constitutional rights by depriving them of property without due process of law in the same way that a utility would be deprived of property without due process if it were required to apply past profits to future rates in order to earn a reasonable rate of return: The ratepayer has paid for and received service. Then, after the transaction is done, the ratepayer must pay more without receiving any more service. See In re Cent. Vermont Public Service Corp., supra, 473 A2d at 1158. Moreover, the change in past obligations may violate the impairment of contracts clause of Article I, section 10 of the United States Constitution. [6]

***5** The nature of the ratemaking process further supports the rule against retroactive ratemaking. Ratemaking is purely legislative in character, derives its authority from the legislature and is regarded as an exercise of the legislative power. [7] Rates established by regulators enjoy a presumption of validity and, therefore, have the force and effect of statutes. Arizona Grocery, supra, 284 US at 386 and n 15; New Eng. T. & T. Co. v. Public Utilities Commission, supra, 358 A2d at 20. See ORS 756.561. Legislative acts are prospective; retroactivity, even where permissible, is not favored except upon the clearest mandate. Claridge Apartments Co. v. Comm'r, 323 US 141, 164, 65 S Ct 172, 89 L Ed 139 (1944).

Thus, the rule against retroactive ratemaking is a combination of several other rules and legal principles. First, the rule against retroactive ratemaking, insofar as it prohibits incorporation of past profits in future rates, derives from and is rooted in the constitutional prohibition against setting confiscatory rates. The rule against retroactive ratemaking, insofar as it prohibits incorporation of past losses in future rates, has no constitutional basis. One might argue that this part of the rule derives from notions of fairness; if past profits cannot be used to make future rates lower, past losses should not be used to make future rates higher. The United States Supreme Court, however, in the earliest pronouncements on this part of the rule, did not consider these notions of fairness, but ruled that the proper inquiry was the effect of the rates in the future. Knoxville v. Water Co., supra, 212 US at 15.

Second, ratepayers' constitutional rights may be violated if ratepayers are required to pay in the future a surcharge for services they used under lawful rates. See In re Cent. Vermont Public Service Corp., supra, 473 A2d at 1158. Such a surcharge may deprive ratepayers of property without due process or violate the contracts clause of the United States or Oregon Constitution.

Third, as suggested by Knoxville, the rule against retroactive ratemaking is derived from and rooted in the legislative nature of the ratemaking process. A legislature, however, can explicitly authorize a regulator to set rates retroactively. For example, a legislature may permit rates to be set retroactively to the date that the utility applied for the new rates.

See, e.g., T.W.A. v. Civil Aeronautics Board, supra, 336 US at 605. Legislative authorizations of retroactive ratemaking are subject to constitutional limitations. American Can v. Lobdell, 55 Or App 451, 461, 638 P2d 1152, rev den 293 Or 190 (1982). Thus, a legislature could not authorize a regulator to use past profits in setting future rates.

The fourth component of the rule against retroactive ratemaking is the regulator's statutory duty to set just and reasonable rates. Incorporation of past profits in future rates may result in rates that, when viewed prospectively, are confiscatory. Similarly, incorporation of past losses in future rates may result in rates that exceed just and reasonable rates.

***6** To the extent that components of the rule against retroactive ratemaking are constitutional in genesis, they are inviolable. Because some components of the rule are not constitutional rules, those components may be changed by legislation so long as the legislation does not violate the United States or Oregon Constitution.

PART II

Application of the Rule to Oregon

Although Oregon courts have never ruled on the issue of retroactive ratemaking, we have no question that retroactive ratemaking is unlawful in Oregon. First, as already noted, to the extent that the rule has its genesis in the United States Constitution (or in parallel Oregon constitutional provisions), the rule necessarily applies in Oregon. Second, the aspect of the rule that derives from the generally prospective nature of substantive laws finds support in Oregon. See American Can v. Lobdell, supra, 55 Or App at 461 (ratemaking is a legislative function); Joseph v. Lowery, 261 Or 545, 495 P2d 273 (1972) (substantive legislation applied prospectively). Third, in Oregon as elsewhere a public utility's rates must be 'reasonable and just,' a requirement violated by retroactive ratemaking. And fourth, we strongly believe that Oregon courts would follow the unanimous and well-reasoned authorities in other jurisdictions that have held that retroactive ratemaking is invalid.

Having so concluded, we turn to your specific questions. With respect to each proposed order, we first must determine whether the commissioner has statutory authority to issue the order. Second, we must determine whether the order is retroactive and, if so, whether the order involves ratemaking. If the first two determinations support issuance of the order, we must then determine whether the rule against retroactive ratemaking and state or federal constitutional guarantees have not been violated.

1 (a): Deferral of Revenue Collection

You ask whether you may issue an order establishing the expected level of operating costs and the return on the added rate base of a new electric generation plant, but deferring the collection of revenues to cover the operating costs and return on rate base until a specific later period. We conclude that the commissioner has no statutory authority to issue such an order.

The commissioner is authorized to exercise jurisdiction over utilities 'to protect [their] customers, and the public generally, from unjust and unreasonable exactions and practices and to obtain for them adequate service at fair and reasonable rates.' ORS 756.040(1). The commissioner has power 'to do all things necessary and convenient in the exercise of such power and jurisdiction' over the utilities. ORS 756.040(2).

Thus, the Public Utility Commissioner has been granted the broadest authority, commensurate with that of the legislature itself, for the exercise of the commissioner's regulatory function. American Can Co. v. Davis, 28 Or App 207, 216, 559 P2d 898, rev den (1977). That authority, however, is not without limits. For example, the Oregon Court of Appeals invalidated the commissioner's 'tagline rule,' whereby all investor-owned utilities were required to include in all advertisements a line that the advertisement was paid for by customers or stockholders of the utility, because the rule was not within the limits of the commissioner's delegated authority. Pacific Northwest Bell v. Davis, 43 Or App 999, 1006, 608 P2d 547 (1979), rev den 289 Or 107 (1980).

***7** The legislature has specifically set forth the commissioner's ratemaking authority in ORS chapter 757. ORS 757.210(1) permits the commissioner to hold a hearing upon any rate filing by a utility. That statute requires the commissioner to conduct hearings on rates upon a written complaint filed by the utility, its customers or other proper party within 60 days of the filing of new rates by a utility. No hearing is required if the rate change is the result of an automatic adjustment clause.

The commissioner may suspend the new rates pending investigation of them. ORS 757.210(1). If the commissioner holds a hearing on the proposed rates and does not order a suspension of the rates, any increased revenue received by the utility is subject to refund if the commissioner approves rates that are less than the proposed rates. ORS 757.215(4).

Because the legislature has granted specific ratemaking authority to the commissioner, the legislature impliedly has limited the commissioner's ratemaking authority to that which the legislature has specifically granted. The commissioner also has such implied powers as are necessary to carry out the powers expressly granted. See Warren v. Marion County, 222 Or 307, 319–20, 353 P2d 257 (1960). Thus, the commissioner's ratemaking authority is limited to the powers bestowed on the commissioner by the legislature and those implied powers necessary to carry out the explicitly granted powers. See, e.g., Niagara Mohawk Power v. Pub. Serv. Comm'n, 118 AD2d 908, 499 NYS2d 477 (1986) (no statutory authority to refund overcollections pursuant to fuel adjustment clause). Because ratemaking is a legislative function and substantive legislation is applied prospectively absent explicit direction to the contrary, a ratemaking order that has retroactive effect is lawful only if specifically authorized by the legislature and cannot be supported only by the commissioner's general powers.

The commissioner has no explicit authority to issue a deferred accounting order. The commissioner, therefore, only has power to issue a deferred accounting order if the order is necessary to carry out the commissioner's ratemaking powers.

We conclude that the commissioner's general power 'to do all things necessary and convenient' to protect the public from 'unjust and unreasonable exactions and practices,' ORS 756.040(1) and (2), does not authorize the commissioner to issue a deferred accounting order. Deferred collection would not protect ratepayers in the required manner. On the contrary, deferred collections harm ratepayers because deferred collections mask the true cost of service and result in ratepayers at one time paying for service that was provided to other customers in the past. A deferred collection order, therefore, would violate the rule against retroactive ratemaking.

Two cases from other jurisdictions expose the retroactive ratemaking nature of deferred accounting orders. In Chesapeake & Potomac Tel. Co. v. Public Serv. Com'n, 330 A2d 236 (DC 1974) (hereafter Chesapeake), the commission granted Chesapeake interim rate relief when it filed for a rate increase, but deferred actual collection under the interim rates until after the establishment of permanent rate schedules to which the interim increase would be added as a surcharge. The company objected. It argued that the plan violated the rule against retroactive ratemaking because it created higher future rates to recoup past losses. Id. at 238, 240.

***8** The court of appeals held that the rule against retroactive ratemaking was not violated because the relief granted by the commission was prospective only. [8] Id. at 241. The court, however, acknowledged that the consumers who used the service during the interim period would be different from those who would pay for the service after the new rates went into effect. Id. at 242–43. This argument did not persuade the court that its order had retroactive effect. Instead, the court found that the two groups of consumers were substantially the same. Id. at 243.

A Pennsylvania court considered a deferred accounting issue in Philadelphia Elec. Co. v. Pa. Pub. Util. Com'n, 93 Pa Commw 410, 502 A2d 722 (1985) (hereafter PECO). In that case, the utility had voluntarily deferred depreciation and maintenance expenses and sought to have those expenses applied to future rates. Id. at 724. The court affirmed the commission's refusal to apply the deferred accounts to future rates because the expenses were usual and expected expenses that the utility could have recovered in an earlier rate proceeding. Id. at 728.

A comparison of Chesapeake and PECO shows that Chesapeake was wrongly decided. In PECO, the commission and court did not order the utility to defer past expenses. In Chesapeake, the commission and court, over the utility's objection, ordered the utility to defer revenue. The commission's statement, and the Chesapeake court's reliance on the statement, that the order had prospective effect, underscores the commission's and the court's misunderstanding of the rule against retroactive ratemaking. The order operated prospectively only insofar as the deferral took place after the order and collection of the deferred revenues took place after that. 'Prospective' used in that sense, however, is not 'prospective' in the sense permitted by the rule against retroactive ratemaking.

The rule prohibits a rate order for the future that allows recovery of past losses or imposes an additional charge arising from past use of utility service. See supra at 1–2. In both Chesapeake and PECO, the deferrals would operate prospectively in that the recovery for expenses or the revenue would have occurred after issuance of the order. In PECO, however, the utility's proposal would have allowed the utility to recover in the future for its past expenses. That is a patent violation of the rule against retroactive ratemaking. Similarly, in Chesapeake, the commission's order deferring revenues meant that Chesapeake had to operate under its old rates despite the interim order allowing, but deferring, a rate increase. Thus, Chesapeake incurred losses because it was forced to operate under its old rates despite the commission's finding that Chesapeake was entitled to increased rates.

After the new rates were finally set and collection of the deferred interim increase allowed, the result was that the company was allowed to recover under new rates for losses incurred under old rates. That is the essence of retroactive ratemaking, that is, an attempt to produce a sum from future rates which would have been produced had rates been higher in the past. The company was allowed to charge rates exceeding just and reasonable rates (the new just and reasonable rates plus the surcharge for the interim increase).

***9** The deferred interim rate relief in Chesapeake offends the underlying rationale of the rule. Customers who used service during the deferral period were unaware of the actual cost of service. Even if they knew the actual cost, the deferral offended the policy that service should be paid for when it is used. Customers would have to pay for past service when the new rates went into effect. Furthermore, new customers at the time the new rates went into effect would be paying for past use of service by other customers.[9] Moreover, a deferred revenue order offends the policy embodied in ORS 757.310(1)(a) that a utility may charge no more or no less for service than that stated in public rate schedules at the time the service is rendered.

Thus, analysis of Chesapeake and PECO demonstrates that deferred accounting, that is, deferral of a utility's current expenses to be applied to future rates, violates the rule against retroactive ratemaking. The rule is violated whether the utility voluntarily defers accounting with the hope or expectation that the regulator will allow future recovery or the regulator orders the utility to use deferred accounting.

Under the deferred collection order that you propose, like the proposed order in PECO and the order in Chesapeake, the deferral and subsequent collection would occur after the order is issued. That timing, however, does not mean that the deferred collection order satisfies the rule against retroactive ratemaking. If ratepayers at a given time are required to pay costs of service at a previous time, the rule against retroactive ratemaking is violated even if the order authorizing the deferral is antecedent to the time during which revenue is deferred.

For example, if the commissioner issued an order in 1987 setting rates for Utility Company for 1990 with the provision that in 1991 ratepayers would be subject to a surcharge if Utility did not achieve its authorized rate of return in 1990, such an order would violate the rule against retroactive ratemaking because customers in 1991 would be required to pay for past losses, even though the utility's shortfall and the surcharge against ratepayers both occur after the order is issued. Such an order is precisely the type of deferred collection order you propose and the type approved by the court in Chesapeake. Such an order would offend the policy of the rule against retroactive ratemaking that a customer should know and pay the cost of service when the ratepayer uses the service. In the absence of a threat to the financial integrity of the Company, such a surcharge also might unconstitutionally impair the obligation of contracts and violate the ratepayers' right not to be deprived of property without just compensation.

Similarly, if the commissioner issued an order in 1987 setting rates for 1990 with the provision that in 1991 ratepayers would be entitled to a refund if the utility exceeded its authorized rate of return in 1990, such an order would violate the rule against retroactive ratemaking because the company would be required to refund its past profits. Such a requirement would be a confiscation in violation of the Fourteenth Amendment to the United States Constitution. Moreover, such an order would be economically inefficient and contrary to the policy of the rule; the company would lose any incentive to economize during 1990.

***10** A rate order establishing a mechanism that, like a deferred accounting order, balances past costs and future rates, might satisfy the cited constitutional provisions if (1) the commissioner were authorized to establish such a balancing mechanism; (2) the balancing mechanism is a part of the tariff; and (3) the balancing mechanism applies to rates in effect after the balancing mechanism is established. Despite the potential lawfulness of such a balancing mechanism, the mechanism could violate the spirit of the rule against retroactive ratemaking. On one hand, the policy behind the rule that a customer should know and pay the cost of service when the customer uses the service would not be served by inclusion of a balancing mechanism in the tariff. Although the customer would know that the service was subject to refund or surcharge, the customer would never know the actual cost of service until after the service is used. On the other hand, utilities would lose their incentive to operate efficiently and to reduce costs if they knew that they could easily surcharge their customers to cover any shortfalls. [10]

In Order No. 86–1078, issued October 23, 1986, the commissioner allowed Pacific Power & Light (PP&L) to defer billing and revenue collection with respect to its investment in the Jim Bridger Unit 2 flue gas desulfurization system, with the proviso that all deferred accruals were subject to the commissioner's final approval before being included in rates. This situation is similar to that in PECO, supra: PP&L voluntarily deferred revenue when it could have sought and obtained an interim order including the expense in its current rates. The only difference in PP&L's case is that the commissioner issued an order approving the deferral. PP&L is entitled to defer revenues, but it is not entitled to recoup the deferred revenue. The commissioner may, however, allow the utility to recoup the deferred revenue if, and only if, the regulator has authority to do so. Under Oregon law, the commissioner has no authority to allow PP&L to recoup its deferred revenue.

The United States Supreme Court has said that if a utility agrees by contract to a rate that affords it less than a reasonable rate of return, the utility is not entitled to be relieved of its improvident bargain. F.P.C. v. Sierra Pacific Power Co., 350 US 348, 355, 76 S Ct 368, 100 L Ed 388 (1956). A utility, however, may be relieved of its bargain if the utility is on the verge of financial collapse. Id. Thus, as in PECO, a utility may agree to defer revenues, but it is not entitled to recoup the deferred revenue in a ratemaking proceeding.

Order No. 86–1078 was part of docket UE 52. Order No. 86–605, issued June 20, 1986, also was part of docket UE 52. In Order No. 86–605, the commissioner approved PP&L's motion for an interim rate increase. The commissioner also approved PP&L's request that its share of Colstrip Unit 4 be placed in rate base effective June 23, 1986, and that it defer the revenue on Colstrip Unit 4 from June 23, 1986, forward. Collection of the deferred revenue accruals pursuant to both orders was made subject to the commissioner's approval of inclusion of the accruals in PP&L's rates.

***11** The deferrals pursuant to both orders continued until issuance of the final order in UE 52 in January 1987. The deferral of revenues approved in Order No. 86–605 violated the rule against retroactive ratemaking for the same reasons that Order No. 86–1078 violated the rule: Upon collection of the deferred revenues, customers would be required to pay an additional charge for past use of utility service. New customers who were not customers during the deferral period would be required to pay for past service rendered by PP&L.

The deferral of revenues meant that PP&L had to continue to operate under old rates despite the commissioner's recognition that PP&L was entitled to a revenue increase. Thus, PP&L incurred losses during the period of the deferral. Upon collection of the deferred revenue, ratepayers would pay for that past loss. This was the situation in Chesapeake, supra. UE 52, however, differed from Chesapeake in one respect: In UE 52, PP&L requested the deferral.

The commissioner lacked authority to issue the deferred collection order. Thus, if the commissioner were to disallow collection of the deferred revenue in the final order in UE 52, PP&L could not argue successfully that the commissioner was estopped from issuing the denial by his approval of the interim orders deferring the revenue. The commissioner cannot be estopped from overturning a previous order he had no authority to issue.

1 (b): Use of Balancing Account to Recover Additional Power Costs

You ask whether you may issue an order establishing a balancing account for fuel costs. The order you propose would state: power costs incurred as a part of normal operations cannot be accurately predicted; the utility should account for such costs in a balancing account; and the utility should increase rates to recover those accumulated costs in a specific later period. We conclude that the commissioner may employ an automatic adjustment clause to adjust rates prospectively to reflect future costs more accurately, but that the commissioner lacks authority to allow the utility retroactively to recover past fuel costs.

There are two types of fuel adjustment clauses. A 'cost of service' tariff is a fuel adjustment clause that is designed to recover all past costs on a dollar-for-dollar basis. It is, in essence, a deferred billing system. Under a cost of service tariff actual fuel costs for a given month are recovered through a surcharge in a later month. A typical cost of service tariff permits a utility to recover costs incurred two months earlier by allowing the utility to adjust its bills to customers to recover fuel costs incurred two months before the billing month. The regulator must have statutory authority to include a fuel adjustment clause in a tariff. See Detroit Edison Co. v. Mich. Pub. Serv. Com'n, 416 Mich 510, 331 NW2d 159, 161–62 (1982). Compare Colo. Energy Advocacy v. Pub. Serv. Co. of Colo., 704 P2d 298 (Colo 1985) (upholding cost of service tariff) with In re Cent. Vermont Public Service Corp., supra, 473 A2d at 1155 (no statutory authority to enact cost of service tariff).

***12** A 'fixed rate' tariff, on the other hand, is a fuel adjustment clause that uses costs incurred in a past month to estimate current expenses. Each month acts as a test period for setting fuel costs for the following month. Under a fixed rate tariff, deferred billing is not permitted because the fixed rate tariff is intended to estimate cost and not to provide recovery of actual costs. Thus, surcharges are not authorized under a fixed rate fuel adjustment clause. See Detroit Edison Co. v. Mich. Pub. Serv. Com'n, supra, 331 NW2d at 162. See also Virginia Elec. & Power Co. v. FERC, 580 F2d 710 (4th Cir 1978) (fixed rate tariff, surcharge disallowed); Maine Public Serv. Co. v. Federal Power Com'n, 579 F2d 659 (1st Cir 1978) (remanded to determine whether surcharge was pursuant to an acceptable adaptation of earlier cost of service fuel adjustment clause or forbidden retroactive ratemaking).

Both cost of service and fixed rate tariffs allow a utility to adjust its rates with respect to fuel costs without the necessity of a full blown rate case. In most jurisdictions, including Oregon, the utility must apply to the regulatory body for approval of the adjustment mechanism, but no hearing is necessary for each adjustment once the clause has been approved for use. See id. at 663; Edison, supra, 576 P2d at 947; ORS 757.210.

Fixed rate fuel adjustment clauses do not violate the rule against retroactive ratemaking because they operate prospectively in the same way that general ratemaking proceedings operate prospectively; a test period is used to predict future rates that operate in futuro.

ORS 757.210(1) states, in pertinent part:
'The term 'automatic adjustment clause' means a provision of a rate schedule which provides for rate increases or decreases or both, without prior hearing, reflecting increases or decreases or both in costs incurred by a utility and which is subject to review by the commissioner at least once every two years.'

No hearing is necessary for rate changes that are the result of automatic adjustment clauses. ORS 757.210(1).

ORS 757.210(1) authorizes the commissioner to include automatic adjustment clauses in utility tariffs. The automatic adjustment clauses authorized by ORS 757.210(1), unlike the adjustment clauses in most other jurisdictions, apply to all utility costs and not fuel costs only. ORS 757.210(1) does not specify whether it authorizes fixed rate or cost of service adjustment clauses.

The general rule is that ratemaking is prospective unless the legislature expressly authorizes retroactive ratemaking. See Joseph v. Lowery, supra, 261 Or at 545 (substantive legislation operates prospectively absent express direction to the contrary); American Can v. Lobdell, supra, 55 Or App at 461 (ratemaking is legislative function). Thus, the legislature's grant of authority to the commissioner to include automatic adjustment clauses in utility tariffs does not authorize cost of service adjustment clauses because cost of service clauses have retroactive effect. The commissioner, therefore, is authorized by ORS 757.210(1) to include fixed rate fuel adjustment clauses in utility tariffs.

***13** If the commissioner were authorized to include cost of service adjustment clauses in utility tariffs, the rule against retroactive ratemaking would be implicated. A cost of service tariff, however, while retroactive in operation, does not violate the rule for at least three reasons.

First, the regulator must be authorized to include a cost of service adjustment clause in the tariff. By that authorization, the legislature explicitly declares its intention that retroactive treatment is permitted for the limited purpose of allowing a utility to recover actual fuel costs and to refund overcollections of anticipated fuel costs. Second, the constitutional prohibition against setting confiscatory rates is not implicated by a cost of service fuel adjustment clause. Even where the utility is required to refund overcollections of fuel costs, there is no impact on the utility's authorized rate of return and the utility still recovers its actual fuel costs. Third, past losses or excess profits are not used in setting future rates under a fuel adjustment clause. The clause does not guarantee the utility a rate of return, nor does it require the utility to refund excess profits to the ratepayers. On the contrary, a cost of service fuel adjustment clause is a true-up mechanism that assures that a utility will recover no more or less than its actual fuel costs.

The constitutional prohibition against setting confiscatory rates is not violated by a cost of service adjustment clause because the rates authorized originally, and which met the constitutional standard, contemplated that the utility would recover only its actual fuel costs. All else being equal, theoretically if a utility recovered more than its fuel costs, it would be overearning, and if it recovered less, it would be underearning. Therefore, a mechanism which in effect can completely remove one element of cost cannot affect the constitutionality of rates otherwise set at a constitutional level.

If the legislature authorizes the commissioner to include cost of service fuel adjustment clauses in utility tariffs, establishment of a balancing account may be appropriate. A balancing account may be used in conjunction with a cost of service fuel adjustment clause. See Utah Dept. of Bus. Reg. v. Public Service Com'n, 720 P2d 420 (Utah 1986). If there is an overcollection in one month, the money can be placed in the balancing account rather than refunded to customers. Rates are then adjusted downward so that there is no overcollection in the subsequent month and so that money in the balancing account is applied toward costs. If the adjustment causes the balancing account to dip below zero, rates in the next month would be raised to reflect higher costs and to enable the utility to recover its expenses. Thus, a balancing account in conjunction with a cost of service adjustment clause replaces refunds and surcharges as the true-up mechanism.

Hence, we conclude that the commissioner may not authorize a utility to set up a balancing account for anticipated power costs. The commissioner may, however, include an automatic adjustment clause in the utility's tariff, and that clause must be subject to review by the commissioner at least once every two years. See ORS 757.210(1). The automatic adjustment clause must be of the 'fixed rate' type.

1 (c): Use of Balancing Account to Review Costs Under Cogeneration Contracts

***14** Next, you ask whether you may issue an order establishing a balancing account for costs incurred under a series of cogeneration contracts. This question and the order you propose are precisely like the previous one, except that the previous question involved power costs incurred as a part of normal operations and this involves power costs incurred pursuant to cogeneration contracts. We conclude that you may authorize use of an automatic adjustment clause to apply to power costs under cogeneration contracts to the same extent as to fuel costs from normal operations.

The definition of 'automatic adjustment clause' refers to increases or decreases in costs without differentiating between the sources of costs. ORS 757.210(1). [11] Costs pursuant to cogeneration contracts, therefore, may be the subject of an automatic adjustment clause in the same way as any other volatile cost. The automatic adjustment clause must be of the fixed rate type and must be included in the utility's tariff and be subject to the commissioner's review at least once every two years. See ORS 757.210(1). The balancing account you propose, therefore, could not be used for the reasons previously stated, supra at 14–17.

2. Revenue Adjustment Clause

You ask whether there is any legal basis for you to issue an order that would (1) forecast expected net revenues from a customer class; (2) set rates based on that net revenue level; (3) require the utility to account for any differences between expected and actual net revenues in a balancing account; and (4) require the utility to adjust rates and surcharge or refund accumulated differences in a specific later period. We conclude that such an order is not authorized by statute and that it would violate the rule against retroactive ratemaking.

This question posits an order that in all respects is similar to the orders in questions 1(b) and 1(c) except that the proposed order here seeks to adjust for revenues rather than for costs. The only adjustment clauses authorized in the commissioner's enabling legislation are those that adjust for costs incurred by utilities. No statute authorizes or even remotely contemplates a 'revenue adjustment clause.' The commissioner, therefore, has no authority to issue an order containing a 'revenue adjustment clause.'

In addition, a 'revenue adjustment clause' would violate the rule against retroactive ratemaking. Revenue adjustments are the precise evil against which the rule against retroactive ratemaking protects. Under that rule, if actual revenues fall short of predictions, the utility must bear that loss. If actual revenues exceed predictions, the utility is permitted to retain that excess profit. Thus, the utility is encouraged to operate efficiently.

The commissioner must protect the public from 'unjust and unreasonable exactions and practices' and obtain for the public 'adequate service at fair and reasonable rates.' ORS 756.040(1). A 'revenue adjustment clause' would be an unjust and unreasonable practice for at least two reasons. First, if all other elements of the revenue requirement remain unchanged, a revenue adjustment clause would ensure that a utility would earn its rate of return. Utilities would have no incentive to operate efficiently because their rate of return would be insured by an eventual surcharge against ratepayers. The cost to consumers, therefore, would rise. Regulators must allow regulated utilities an opportunity to earn a reasonable rate of return. Regulators cannot ensure that utilities will earn a reasonable rate of return.

***15** Second, even if the revenue adjustment clause did not ensure that the utility would earn its authorized rate of return, as may be the case where only one revenue class is subject to the revenue adjustment clause, a revenue adjustment would result in ratepayers paying an additional charge for past service if the forecasted revenues were not achieved. If, on the other hand, forecasted revenues were exceeded, the utility would be required to refund past profits to ratepayers without just compensation to the utility. Thus, the proposed revenue adjustment clause violates the rule against retroactive ratemaking whether forecasted revenues are exceeded or not achieved.

Very truly yours,

Dave Frohnmayer
Attorney General

Footnotes

1 'Excessive profits' and 'past losses' have unique meanings in the ratemaking context. A utility is said to have 'excess profits' when it earns a rate of return greater than that authorized by the regulator. Similarly, past losses occur when a utility has failed to earn its authorized rate of return even if the utility does not actually lose money. See, e.g., Utah Dept. of Bus. Reg. v. Public Service Com'n, supra, 720 P2d at 422 (company earned 13.25 percent compared to authorized 16.3 percent rate of return).

2 A 'test year' is a year of actual experience that is adjusted to remove abnormalities. The regulator determines expected operating expenses and rate base for the rate period based upon the test year.

3 See F.P.C. v. Tennessee Gas Co., 371 US 145, 153, 83 S Ct 211, 9 L Ed2d 199 (1962); Arizona Grocery v. Atchison Ry., 284 US 370, 52 S Ct 183, 76 L Ed 348 (1932) (hereafter Arizona Grocery); City of Los Angeles v. Public Utilities Com'n, 7 Cal 3d 331, 356 57, 102 Cal Rptr 313, 332, 497 P2d 785, 803 04 (1972); People's Natural Gas v. Public Util. Com'n, 197 Colo 152, 590 P2d 960 (1979); Westwood Lake, Inc. v. Dade County, 264 So2d 7, 12 (Fla 1972); Georgia Public Service Com'n v. Atlanta Gas Light Co., 205 Ga 863, 883 84, 55 SE2d 618, 631 (1949); Metropolitan Dist. Com'n v. Department of Pub. Util., 352 Mass 18, 16, 224 NE2d 502, 508 (1967); Detroit Edison Co. v. Mich. Pub. Serv. Com'n, 82 Mich App 59, 67, 266 NW2d 665, 669 70 (1978); Mississippi Public Serv. Com'n v. Home Telephone Co., 236 Miss 444, 455, 110 So2d 618, 624 (1959); Consumers Council, supra, 585 SW2d at 58 59; Montana Horse Products Co. v. Great Northern Ry. Co., 91 Mont 194, 202, 7 P2d 919, 925 (1932); Southwest Gas Corporation v. Public Serv. Com'n, 86 Nev 662, 669, 474 P2d 379, 383 (1970); Appeal of Granite State Elec., 120 NH 536, 538, 421 A2d 121, 122 (1980); New Jersey Power & Light Co. v. State Dept. of P.U., 15 NJ 82, 94, 104 A2d 1, 7 (1954); Matter of Yonkers Elec. Light & P. Co. v. Maltbie, 245 AD 419, 423, 283 NYS 839, 844 (1935); State ex rel Utilities Com'n v. Edmisten, 291 NC 575, 232 SE2d 177, 194 95 (1977); Pike County Light & Power Co. v. Pennsylvania Pub. Util. Comm'n., 87 Pa Commw 451, 487 A2d 118 (1985); Narragansett Elec. Co. v. Burke, 415 A2d 177, 179 (RI 1980); Producers' Refining Co. v. Missouri, K. & T. Ry. Co., 13 SW2d 680, 681 (Tex 1929); City of Norfolk v. Virginia Elec. & Power Co., 197 Va 505, 511, 90 SE2d 140, 145 (1955); In re Cent. Vermont Public Service Corp., 144 Vt 46, 473 A2d 1155, 1159 (1984); Chesapeake v. Public Service Com'n, 300 SE 2d 607, 619 (W Va 1982); Friends of the Earth v. Public Service Com'n, 78 Wis2d 388, 254 NW2d 299, 309 (1977).

4 The Supreme Court reversed that portion of the lower court order subjecting the company to some unknown rate to be proclaimed in the future. The Court said that '[r]ate making is no function of the courts.' Newton v. Consolidated Gas Co., supra, 258 US at 177.

5 The language 'just and reasonable' implies that there is a range of rates that the regulator may approve. It could be argued that rates that take into account past losses may still be within the bounds of reasonableness. While this may be true in the case of very small past shortfalls, it is not likely to be true where, as in the example above at 6, the difference in the revenue requirement is 5 percent. The precise point at which rates go beyond the bounds of reasonableness may differ from court to court. Moreover, upon judicial review, if the calculation of the revenue requirement appears to contain an element of past loss, a court likely will reverse and remand even if a regulator could lawfully find that the revenue requirement falls within the bounds of reasonableness.

6 If a utility's past losses are so great that the utility's financial integrity and, hence, its ability to provide service is jeopardized, a retroactive ratemaking order may be permissible. See Hearde v. City of Seattle, 26 Wash App 219, 611 P2d 1375 (1980).

7 Knoxville v. Water Co., supra, 212 US at 8. See Arizona Grocery, supra, 284 US at 389; Pacific Tel. & Tel. Co. v. Public Util. Com., supra, 401 P2d at 363; People's Natural Gas v. Public Util. Com'n, 197 Colo 152, 590 P2d 960 (1979); Michigan Bell Tel. Co. v. Michigan Pub. Serv. Com'n, 315 Mich 533, 24 NW2d 200, 205 (1946); Lambertville Water Co. v. N.J. Bd. of P.U.C., 79 NJ 449, 401 A2d 211 (1979); New Eng. T. & T. Co. v. Public Utilities Commission, 116 RI 356, 358 A2d 1, 20 (1976).

8 Chesepeake is the only case in this country ever to uphold a deferred accounting order in the absence of a fuel adjustment clause. Fuel adjustment clauses are discussed infra at 15.

9 The Chesapeake court pointed to no statutes authorizing the deferred accounting treatment ordered by the commission and approved by the court.

10 The balancing mechanism need not be an automatic adjustment clause. For the mechanism to avoid constitutional violations, the customer must have notice of the balancing mechanism.

11 Although the statute itself does not differentiate between the sources of cost, the legislative history indicates that fluctuations in natural gas wholesale prices and power costs were the only examples given to the legislative committees to illustrate the function of the automatic adjustment clause. House Committee on Environment and Energy (SB 259), July 7, 1981, tape H 81 EE 255, side B; House Committee on Environment and Energy (SB 259), July 10, 1981, tape H 81 EE 264, side B.

Or. Op. Atty. Gen. OP-6076 (Or.A.G.), 1987 WL 278316

CUB Exhibit 121 is Confidential and will be provided to parties who have signed protective order 18-002.

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UG 344 – CERTIFICATE OF SERVICE

I hereby certify that, on this 20th day of April, 2018, I served the foregoing **CUB Confidential Opening Testimony & Exhibits** in docket UG 344 upon the Commission and each party designated to receive confidential information pursuant to Order 18-002 by U.S. mail, postage prepaid.

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