



Oregon

Kate Brown, Governor

Public Utility Commission

201 High St SE Suite 100

Salem, OR 97301

Mailing Address: PO Box 1088

Salem, OR 97308-1088

Consumer Services

1-800-522-2404

Local: 503-378-6600

Administrative Services

503-373-7394

January 22, 2016

Via Electronic Filing

OREGON PUBLIC UTILITY COMMISSION
ATTENTION: FILING CENTER
PO BOX: 1088
SALEM OR 97308-1088

**RE: Docket No. UM 1623 – In the Matter of
PORTLAND GENERAL ELECTRIC COMPANY
Application for Deferral Accounting of Excess Pension Costs
and Carrying Costs on Cash Contributions.**

Attached for electronic filing is a copy of Staff's Redacted
Opening Testimony.

Page 10 of Exhibit 100 contains confidential information. The confidential
page is mailed today to parties who have signed Protective Order 12-327.

A copy of Certificate of Service and Service List is included with this filing.

/s/ Kay Barnes

Kay Barnes

PUC- Utility Program

(503) 378-5763

kay.barnes@state.or.us

CASE: UM 1623
WITNESS: BRIAN BAHR

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 100

Opening Testimony

REDACTED
January 22, 2016

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS**
2 **ADDRESS.**

3 A. My name is Brian Bahr. I am a Senior Utility Analyst in the Energy - Rates,
4 Finance, & Audit Section of the Oregon Public Utility Commission. My current
5 business address is 201 High St SE, Suite 100, Salem, Oregon 97301.

6 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK**
7 **EXPERIENCE.**

8 A. My Witness Qualification Statement is found in Exhibit Staff/101.

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to address Portland General Electric's (PGE or
11 Company) request for a deferral related to pension costs.

12 **Q. DID YOU PREPARE AN EXHIBIT FOR THIS DOCKET?**

13 A. Yes. In addition to my Witness Qualification Statement, included as Exhibit
14 Staff/101, Bahr/1, I prepared Exhibit Staff/102, Bahr/1, which shows
15 calculations made by Staff as part of its analysis of PGE's request.

16 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

17 A. My testimony is organized as follows:
18 Part I – Summary of Recommendations
19 Part II – Background
20 Part III –Analysis
21 Part IV –Conclusion

PART I – SUMMARY OF RECOMMENDATIONS**Q. PLEASE SUMMARIZE STAFF'S RECOMMENDATIONS IN THIS DOCKET.**

A. Staff recommends that the Commission deny the Company's application to defer amounts related to its pension expense for partial year 2012 and full year 2013. The events causing the unexpected increased expense are not unprecedented and the financial impact on the Company is not substantial. However, should the Commission elect to approve part or all of the amounts of the deferral request, Staff recommends that the Commission apply an earnings test at the time of amortization to determine whether amortization is warranted in light of PGE's earnings during the deferral period.

PART II – BACKGROUND**Q. WHAT IS REQUESTED BY PGE IN ITS DEFERRAL APPLICATION?**

A. PGE originally asked to defer certain costs associated with its pension expense; namely, Financial Account Standard (FAS) 87 expenses in excess of those set in Docket No. UE 215, test year 2011, and carrying costs on cash contributions. Under PGE's original proposal these amounts would go into a balancing account and amortization would not be subject to an earnings test.¹

Subsequent to the conclusion of Docket No. UM 1633, in which the Commission investigated pension cost recovery in Oregon, the Company modified its original request as follows:²

1. Removed amounts in the original request related to the prepaid pension asset (i.e. carrying costs associated with cash contributions);
2. Narrowed the original deferral period from August 22, 2012, through August 21, 2015, to only pro-rated 2012 and full year 2013;³ and
3. Withdrew the request for a balancing account and instead proposed amortizing the deferral subject to an earnings test using the Company's authorized ROE at the time the deferral was filed.

The Company states these changes are based primarily on the Order issued in Docket No. UM 1633 and the stipulation reached in Docket No. UE 262.⁴

¹ See Company's application, filed August 22, 2012.

² See PGE/100, Batzler-Hager/5-6.

³ The Company first filed for deferral on August 22, 2012, and filed subsequent reauthorization requests in 2013 and 2014.

⁴ See PGE/100, Batzler-Hager/5-6, generally, and PGE/100, Batzler-Hager/6, line 9, specifically.

1 **Q. WHAT ARE THE PRIMARY REASONS PGE IS REQUESTING THIS**
2 **DEFERRAL?**

3 A. In Docket No. UE 215 (test year 2011), PGE's annual pension expense was
4 set at approximately \$5.1 million. However, the Company's actual FAS 87
5 pension expense was \$13.2 million⁵ in 2012 and \$18.6 million in 2013. PGE
6 asks to defer, for later recovery in rates, the difference between the forecasted
7 pension expense in rates and actual FAS 87 expense. Thus, the amount
8 subject to deferral is approximately \$2.9 million for 2012⁶ and \$13.5 million for
9 2013.⁷ PGE asserts that the difference in forecasted and actual FAS 87
10 expense was caused by decreases in discount rates and poor market
11 performance in 2011. PGE asserts these factors, resulting in the difference
12 between forecasted FAS 87 expense and actual FAS 87 expense, were not
13 predictable, occurred due to actions outside the Company's control, and
14 significantly affect the Company.⁸

⁵ Company's testimony notes amount as \$13.2 million at PGE/100, Batzler-Hager/3 at line 17. However, the Company's Exhibit 101 lists the amount as \$13.6 million. Per discussion with the Company, Staff verified the correct expense amount is \$13.2 million. The resulting pro-rata calculation would result in an amount subject to deferral of \$2.9 million rather than the \$3.0 million listed in PGE's testimony and exhibit.

⁶ Ibid.

⁷ 2012 requested deferral amount of \$3 million is calculated by subtracting \$5.1 million expense in rates from \$13.2 actual expense and multiplying result by 131/366 to prorate.

⁸ See PGE/100, Batzler-Hager/1, at line 20.

PART III – ANALYSIS**Q. PLEASE DESCRIBE HOW STAFF ANALYZED THE COMPANY'S
DEFERRAL REQUEST.**

A. Having recently participated in an extensive investigation into the treatment of pension costs in Oregon, Docket No. UM 1633, Staff's review was limited to discussing the matter with the Company, issuing ten requests for information, conducting research on market trends, and reading the Company's application, testimony, and exhibits. In doing so, Staff identified several key issues bearing analysis.

**Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN DECIDING
WHETHER TO APPROVE THIS REQUEST?**

A. The Commission determines whether a deferral application should be granted with a two-stage review. During the first stage, the Commission examines whether a deferral application is authorized by Oregon Revised Statute (ORS) 757.259. To be authorized under ORS 757.259(2)(e), the subsection on which PGE relies, the facts of a proposed deferral must indicate that the requested deferral will either minimize the frequency of rate changes, or appropriately match the costs borne by, and the benefits received by, ratepayers.

With regard to the discretionary part of the Commission's analysis, the Commission considers two interrelated factors: the type of event giving rise to the deferral and the magnitude of the amount to be deferred. If a deferral application is based on an event deemed to be a stochastic risk, deferral is

1 warranted only if the financial magnitude of the event is substantial,
2 whereas deferral of a scenario event is appropriate if the financial effect of the
3 event is material.

4 The Commission has explained that a stochastic risk can be predicted to
5 occur as part of the normal course of events, whereas a scenario risk is not
6 susceptible to prediction or quantification. If an event was modeled in rates, the
7 Commission evaluates whether the event was within a foreseen range of risk,
8 or whether extenuating circumstances were involved that rendered the event
9 unforeseeable. If the event was not modeled in rates, the Commission
10 assesses whether it was otherwise foreseeable in the normal course of
11 business.⁹

12 **Q. DOES PGE'S DEFERRAL APPLICATION SATISFY THE LEGAL CRITERIA**
13 **FOR DEFERRAL UNDER ORS 757.259(2)(e)?**

14 A. PGE's testimony does not specifically address how its application satisfies
15 either of the requirements in ORS 757.259(2)(e). Because this deferral would
16 result in a rate change that otherwise would not occur without the deferral, Staff
17 concludes it does not minimize the frequency of rate changes. Staff also
18 concludes it does not satisfy the other criteria – matching costs and benefits.
19 FAS 87 expense, which is an accrual cost, is used as a proxy for the actual
20 cash costs that fund a pension program. FAS 87, is used to smooth potentially
21 substantial volatility in a utility's annual cash payments to its pension fund.

⁹ See Order No. 07-049 at 8-10.

1 **Q. DOES PGE'S APPLICATION SATISFY THE DISCRETIONARY CRITERIA**
2 **FOR DEFERRAL?**

3 A. No.

4 **Q. ARE THE AMOUNTS PGE IS REQUESTING BE DEFERRED THE**
5 **CONSEQUENCE OF STOCHASTIC RISK OR PARADIGM RISK?**

6 A. Stochastic risk. Pension expense is forecasted in rates. The possibility that the
7 actual expense will be different than what is forecasted in rates is a foreseeable
8 risk. Because FAS 87 expense is modeled in rates, whether deferral is
9 warranted turns in part on whether the difference between actual expense and
10 forecasted expense during the proposed deferral period was within a foreseen
11 range of risk.

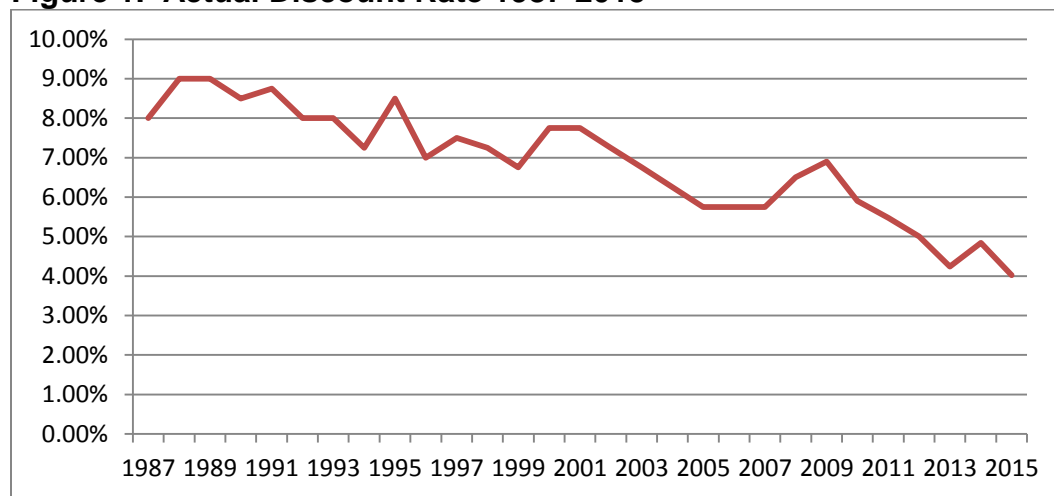
12 **Q. IS THE VARIANCE BETWEEN PGE'S ACTUAL FAS 87 EXPENSE AND**
13 **PENSION EXPENSE FORECASTED IN RATES WITHIN A FORSEEN**
14 **RANGE OF RISK?**

15 A. Yes. PGE asserts that the difference is due to a lower discount rate than
16 forecasted and poor market conditions in 2011. While it is true the discount
17 rate has dropped lower in recent years than at any time since 1987 (when FAS
18 87 was implemented), the percentage decrease in discount rate is not as
19 unprecedented as the Company asserts. For example, discount rates sank a
20 full 200 basis points between 2001 and 2005. From 1991 to 1994 discount

1 rates decreased 150 basis points, and in the single year time period between
2 1995 and 1996 rates decreased 150 basis points.¹⁰

3 Additionally, Staff determined that between 1987 and 2015, from year to year,
4 the discount rate remained the same five times, increased eight times, and
5 decreased 15 times.¹¹ This represents a long-term trend of declining interest
6 rates, but also clearly demonstrates that there is more short-term variability in
7 discount rates than portrayed by the Company's testimony. The graph below
8 depicts PGE's discount rate from 1987 through 2015.

9 **Figure 1. Actual Discount Rate 1987-2015**



10
11 Given the long-term trend of declining discount rates and short term variability
12 from year to year, the decrease in discount rates in 2012 and 2013, decreases
13 of 47 basis points and 76 basis points, respectively, do not appear as
14 unprecedented or unexpected as claimed by the Company.

¹⁰ Staff made these calculations based on the information provided in the Company's workpapers, namely, the file "PGE Discount Rate for Pension Expense 1987-2015."

¹¹ Ibid.

1 **Q. ARE THE POOR RETURNS ON PENSION ASSETS UNPRECEDENTED?**

2 A. The Company asserts that a lower-than-expected return in 2011 led to
3 increased FAS 87 expense in subsequent years. The Company does not
4 discuss in detail whether the poor market performance in 2011 is
5 unprecedented, only stating that the return on pension assets in 2011 was well
6 below the expected return and that, over the past five years, the Company has
7 been in the top 12 percent of returns earned by other similar utilities.¹²

8 According to information provided by CUB in Docket No. UM 1633, the
9 Company's returns on its pension asset are obviously extremely variable from
10 year to year:¹³

¹² See PGE/100, Batzler-Hager/12, at line 7.

¹³ PGE provided the information in response to a data request from the Citizens Utility Board (CUB) in Docket No. UM 1633. CUB included the information in Docket No. UM 1633 in confidential CUB Exhibit 107.

1

Figure 2. Annual Returns on PGE's Pension Investment 1989-2013

<u>Year</u>	<u>Return</u>	<u>Change (percentage points)*</u>
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		

2

*change in returns calculated by Staff

3

4

5

6

A year in which the Company earns a lower-than-expected return on its pension assets should be hardly considered extraordinary. Consider also the variability in returns from year to year of the S&P 500 index fund shown below.¹⁴

¹⁴ See http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html.

1

Figure 3. Annual Returns on S&P 500, 1987-2015

<u>Year</u>	<u>Return</u>	<u>Change (percentage points)*</u>
1987	5.81%	-
1988	16.54%	11.80
1989	31.48%	10.66
1990	-3.06%	4.53
1991	30.23%	-33.06
1992	7.49%	-11.59
1993	9.97%	62.90
1994	1.33%	-13.16
1995	37.20%	-30.81
1996	22.68%	13.49
1997	33.10%	12.01
1998	28.34%	13.22
1999	20.89%	-36.44
2000	-9.03%	25.12
2001	-11.85%	1.92
2002	-21.97%	-16.19
2003	28.36%	25.09
2004	10.74%	-12.74
2005	4.83%	-12.68
2006	15.61%	10.72
2007	5.48%	14.94
2008	-36.55%	-34.54
2009	25.94%	33.30
2010	14.82%	-22.74
2011	2.10%	2.47
2012	15.89%	-8.64
2013	32.15%	35.87
2014	13.52%	-14.51
2015	1.36%	10.42

2

*change in returns calculated by Staff

3

Clearly, returns on investments of almost any kind can vary greatly from year

4

to year and are by nature unpredictable. For this precise reason FAS 87

5

expense calculations specify that a long-term forecast of returns should be

1 used. A discrepancy between actual and forecasted returns in any given year
2 should NOT be considered an extraordinary event.

3 The Commission has observed that the difference in stochastic risk and
4 scenario risk is that the costs caused by stochastic risk may swing above or
5 below the average included in rates, whereas the paradigm risk likely only
6 swings one way (to the detriment of the Company). The risk that a return may
7 be either higher or lower than anticipated is a stochastic risk, and years in
8 which a utility obtains a lower return than anticipated should be offset by years
9 in which the utility earns a higher return than anticipated. Accordingly, to
10 warrant deferral, costs resulting from a stochastic risk must be such that a
11 utility could not expect the costs to balance out over time.

12 **Q. ARE THE AMOUNTS AT ISSUE OF SUFFICIENT MAGNITUDE TO**
13 **WARRANT DEFERRAL?**

14 A. Given that the deferral amounts in this case result from stochastic risk then, the
15 Company's threshold is raised, and it must show that the deferral amounts in
16 question are not merely material, but actually substantial. To determine
17 whether the amounts subject to deferral are indeed substantial, Staff referenced
18 the Company's financial statements included in its annual 10k SEC filings to
19 obtain information on revenues and income.

20 The Company's 2012 revenues were approximately \$1.805 billion and net
21 income was approximately \$141 million. The Company's 2013 revenues and

1 net income, respectively, were \$1.810 billion and \$105 million.¹⁵ As shown in
2 the table below, the Company's requested deferral amounts in 2012 and 2013
3 represent less than one percent of the Company's actual revenues.

4 **Figure 4. Revenues, Income, and Deferrals**

	<u>2012</u>	<u>2013</u>
Requested Deferral Amount	\$2,900,000	\$13,500,000
Revenues	\$1,805,000,000	\$1,810,000,000
Deferral as % of Revenues*	0.16%	0.75%
Net Income	\$141,000,000	\$105,000,000
Deferral as % of Net Income*	2.06%	12.86%

5 *percentages calculated by Staff

6 The \$16.5 million dollar question, then, is whether amounts that are less than
7 1 percent of revenues should be considered substantial. On page eight of
8 Order 04-108 the Commission addresses what is or isn't considered substantial
9 for the sake of determining approval of a deferral request:

10 *Although we decline to set a numerical criterion, we can give*
11 *negative and positive examples. In UM 995, for instance, we*
12 *established a deadband around PacifiCorp's baseline of 250*
13 *basis points of return on equity. We allowed no recovery of*
14 *costs or refunds to customers within that deadband,*
15 *reasoning that the band represented risks assumed, or*
16 *rewards gained, in the course of the utility business. In the*

¹⁵ Revenue and income amounts for 2012 and 2013 retrieved from Company's Consolidated Statements of Income of its 10k filed with the SEC.

1 *Idaho Power cases, discussed below, we allowed partial*
2 *recovery for a financial impact that represented*
3 *approximately 700 basis points of Idaho Power's return on*
4 *equity.*

5 In the same docket that Order No. 04-108 was issued, Docket No. UM 1071,
6 the Commission denied PGE's request for deferral of hydro replacement power
7 costs in part because the financial impact was not substantial.

8 *In the present application, PGE claims that it has incurred*
9 *\$31.6 million in excess NVPC, only some of which is*
10 *attributable to hydro replacement costs. PGE asserts that*
11 *this excess NVPC amounts to 172 basis points of return on*
12 *equity. This is well short of the 250 basis points of return on*
13 *equity within which we allowed no recovery in UM 995.*

14 ...

15 *We find that the cause of PGE's request is not extraordinary*
16 *enough to justify deferred accounting. We further find that*
17 *the financial impact to PGE of excess hydro costs is not*
18 *significant enough to warrant a deferral. Accordingly, we*
19 *conclude that PGE's application for deferred accounting*
20 *should be denied.*¹⁶

21 Exhibit 101 of the Company's testimony indicates the Company's regulated
22 adjusted ROE for 2012 and 2013 was 9.48 percent and 6.43 percent,

¹⁶ Order No. 04-108 at 9-11.

1 respectively. During this time, the Company's authorized ROE was 10
2 percent.¹⁷

3 To show the effect of the deferral amounts on PGE's 2012 and 2013 ROE,
4 Staff referred to the Company's annual Statement of Operations from those
5 years. Staff calculated that the proposed deferral amounts, \$2.9 million for
6 2012 and \$13.5 million for 2013, are equal to approximately 18 basis points
7 and 86 basis points of PGE's authorized ROE.¹⁸ These amounts are well
8 within the 250 basis point range that the Commission has concluded
9 represents a reasonable level of risk between rate cases.

10 The Commission has also determined that earning a return less than that
11 authorized by the Commission is not reason alone for deferred accounting.¹⁹

12 *Finally, we note that PGE claims that without deferral, its*
13 *return on equity will drop to 8 percent. That is far from a dire*
14 *figure. We find that the impact of excess hydro costs is not*
15 *significant enough in this case to warrant a deferral.*

16 Though the Company earned less than that authorized by the Commission in
17 2012 and 2013, PGE'S actual ROE in 2012 was only slightly less. From a
18 review of the Company's financial statements, it appears that a major reason for
19 the Company's lower 2013 ROE was expenses attributed to the Columbia
20 Crossing project.

¹⁷ See PGE/100, Batzler-Hager/6, line 14.

¹⁸ Staff's calculations are included as Exhibit Staff/102, Bahr/1.

¹⁹ See Order 04-108 at page 9.

PART IV – CONCLUSION**Q. PLEASE PROVIDE A SUMMARY OF STAFF'S CONCLUSIONS AND RECOMMENDATIONS.**

A. Given the above analysis, Staff concludes the following:

1. A steep decline in discount rates over a short time period is not unprecedented, and the long-term historical information has generally indicated a trend of declining discount rates;
2. The poor return on pension assets experienced in 2011 is within expectations given historical information that shows extreme volatility in returns from year to year;
3. Given the two points above, the Company's current deferral request should be considered the result of stochastic risk;
4. For a deferral to be approved that is the result of stochastic risk, the threshold is that the financial impact to the Company is substantial;
5. The deferral amounts represent less than one percent of the Company's annual revenues and are equal to approximately 18 and 86 basis points of PGE's authorized ROE in 2012 and 2013, respectively;
6. The Company's ROE was healthy enough to sustain the minimal impact of the higher-than-expected FAS 87 expense;
7. The deferral amounts are not substantial;
8. The deferral request should not be approved.

Q. DOES THIS CONCLUDE STAFF'S TESTIMONY?

A. Yes.

CASE: UM 1623
WITNESS: BRIAN BAHR

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 101

Witness Qualifications Statement

January 22, 2016

WITNESS QUALIFICATIONS STATEMENT

NAME: Brian Bahr

EMPLOYER: Public Utility Commission of Oregon

TITLE: Senior Utility Analyst
Energy Rates, Finance & Audit Division

ADDRESS: 201 High Street SE., Suite 100
Salem, OR. 97301

EDUCATION: Certificate of Public Management, Willamette University,
Salem OR

Bachelor of Science, Accountancy, Brigham Young
University, Provo UT

EXPERIENCE: Employed with the Oregon Public Utility Commission from
March 2011 to present, currently serving as Senior Utility
Analyst in the Rates, Finance, & Audit Section of the Energy
Division.

Employed by Modern Seouf Plastics in Alexandria, Egypt as
a Managerial Intern from January 2010 to June 2010.
Assisted in variety of duties including supervision of
production facilities and staff, market analysis, budget
forecasting, sales, and office administration.

Employed by PricewaterhouseCoopers LLP in New York
City as a Financial Assurance Associate from October 2007
to November 2009. Performed audits of various financial
institutions, including investment banks, hedge funds, and
insurance companies.

Employed by TESRA, SA in Antofagasta, Chile as a Project
Management Assistant from September 2005 to April 2006.
Assisted in design process and implementation of rail road
crossing and other civil engineering projects.

CASE: UM 1623
WITNESS: BRIAN BAHR

**PUBLIC UTILITY COMMISSION
OF
OREGON**

STAFF EXHIBIT 102

**Exhibit in Support
Of Opening Testimony**

January 22, 2016

All information for calculations retrieved from 2012 and 2013 Annual Reports of Operations, docketed as RE 119.

2012

	a	b	c=a/b	d	e	f=(c-d)/e
	Utility Operating Income (Regulated Adjusted Results)	Total Average Rate Base	ROR	Weighted Percent Cost of Long Term Debt	Common Equity Percent of Capital	ROE
actual results	\$241,930,000	\$3,057,942,000	7.91%	3.01%	51.74%	9.47%
w/ \$2.9 m deferral amount	\$244,830,000	\$3,057,942,000	8.01%	3.01%	51.74%	9.66%
					basis point increase	18.33

2013

	a	b	c=a/b	d	e	f=(c-d)/e
	Utility Operating Income (Regulated Adjusted Results)	Total Average Rate Base	ROR	Weighted Percent Cost of Long Term Debt	Common Equity Percent of Capital	ROE
actual results	\$191,152,000	\$3,051,299,000	6.26%	2.95%	51.53%	6.43%
w/ \$13.5 m deferral amount	\$204,652,000	\$3,051,299,000	6.71%	2.95%	51.53%	7.29%
					basis point increase	85.86

CERTIFICATE OF SERVICE

UM 1623

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 22nd day of January, 2016 at Salem, Oregon



Kay Barnes
Public Utility Commission
201 High Street SE Suite 100
Salem, Oregon 97301-3612
Telephone: (503) 378-5763

**UM 1623
SERVICE LIST**

CITIZENS' UTILITY BOARD OF OREGON	610 SW BROADWAY, STE 400 PORTLAND OR 97205 dockets@oregoncub.org
STEPHANIE S ANDRUS (C) PUC STAFF--DEPARTMENT OF JUSTICE	BUSINESS ACTIVITIES SECTION 1162 COURT ST NE SALEM OR 97301-4096 stephanie.andrus@state.or.us
BRIAN BAHR (C) PUBLIC UTILITY COMMISSION OF OREGON	PO BOX 1088 SALEM OR 97308-1088 brian.bahr@state.or.us
ROBERT JENKS (C) CITIZENS' UTILITY BOARD OF OREGON	610 SW BROADWAY, STE 400 PORTLAND OR 97205 bob@oregoncub.org
JUDY JOHNSON (C) PUBLIC UTILITY COMMISSION OF OREGON	PO BOX 1088 SALEM OR 97308-1088 judy.johnson@state.or.us
SOMMER MOSER (C) CITIZENS' UTILITY BOARD OF OREGON	610 SW BROADWAY, STE. 400 PORTLAND OR 97205 sommer@oregoncub.org
BRADLEY MULLINS (C) MOUNTAIN WEST ANALYTICS	333 SW TAYLOR STE 400 PORTLAND OR 97204 brmullins@mwanalytics.com
TYLER C PEPPE (C) DAVISON VAN CLEVE, PC	333 SW TAYLOR SUITE 400 PORTLAND OR 97204 tcp@dvclaw.com
DOUGLAS C TINGEY (C) PORTLAND GENERAL ELECTRIC	121 SW SALMON 1WTC1301 PORTLAND OR 97204 doug.tingey@pgn.com
JAY TINKER (C) PORTLAND GENERAL ELECTRIC	121 SW SALMON ST 1WTC-0702 PORTLAND OR 97204 pge.opuc.filings@pgn.com
S BRADLEY VAN CLEVE (C) DAVISON VAN CLEVE PC	333 SW TAYLOR - STE 400 PORTLAND OR 97204 bvc@dvclaw.com