



DEPARTMENT OF JUSTICE
GENERAL COUNSEL DIVISION

March 9, 2017

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-1166
PUC.FilingCenter@state.or.us

Attn: Filing Center

Re: UG 325 – Second Errata Filing

Commission Staff hereby submits for filing the attached errata to the following Staff Opening Testimony:

- Staff/100, Gardner/3: correct table for Staff S-18 adjustment.
- Staff/100, Gardner/4: correct table for Staff S-19 adjustment.
- Staff/600, St. Brown/2: correct total load forecasting adjustment on line 2.
- Staff/600, St. Brown/21: correct components of load forecasting adjustment on lines 2, 6, and 10.
- Staff/606, St. Brown/1: correct formula on the last line of the page.
- Staff/607, St. Brown/1: correct table to reflect correct components of load forecasting adjustment.

Included with this filing are the updated redacted pages, as appropriate. Confidential materials will be mailed to those parties that have signed the protective order in this docket.

Sincerely,

Johanna M. Riemenschneider
Assistant Attorney General
Business Activities Section

JLM:pjr/JUSTICE-#8098888
Attachments

1

PART 1. REVENUE REQUIREMENT

2

Q. Please provide a list of the rate case topics that Staff reviewed and

3

introduce the responsible Staff.

4

A. I have provided a listing of rate topics in Table A.

TABLE A		Company filed Incremental Revenue Requirement		\$8,539
Opening Testimony Exhibit No.	Staff Witness	Adj. No.	Proposed Staff Adjustments	Revenue Requirement Effect
100	Marianne Gardner	S-1	Uncollectible rate	(\$48)
100	Marianne Gardner	S-1	Uncollectible Expense	(263)
100	Marianne Gardner	S-1.2	OPUC & Franchise Fees	(143)
100	Marianne Gardner	S-2	Interest Synchronization	373
100	Marianne Gardner	S-3	Working Capital	(327)
100	Marianne Gardner	S-4	Wages & Salaries	(970)
100	Marianne Gardner	S-5	Property Taxes (placeholder)	-
100	Marianne Gardner	S-6	Amortization (placeholder)	-
100	Marianne Gardner	S-7	Income Taxes & ADIT (placeholder)	-
100	Marianne Gardner	S-8	Regulatory Expenses (Acct 928)	(183)
100	Marianne Gardner	S-9	Escalation	-
200	Matt Muldoon	S-10	Cost of Capital	(2,998)
200	Matt Muldoon	S-11	Pension/Retirement	(263)
200	Matt Muldoon	S-12	AFUDC	-
300	Lisa Gorsuch	S-13	Gas Storage in Rate Base	-
300	Lisa Gorsuch	S-14	Underground Storage	(21)
300	Lisa Gorsuch	S-15	Other Gas Supply Expense	(118)
400	Judy Johnson	S-16	Insurance, D&O Insurance	■
500	Ming Peng	S-17	Depreciation expense & Reserves (placeholder)	-
600	Max St. Brown	S-18	Load Forecast	(394)

1

PART 1. REVENUE REQUIREMENT

2



Q. Please provide a list of the rate case topics that Staff reviewed and introduce the responsible Staff.


3

4

A. I have provided a listing of rate topics in Table A.

TABLE A		Company filed Incremental Revenue Requirement		\$8,539
Opening Testimony Exhibit No.	Staff Witness	Adj. No.	Proposed Staff Adjustments	Revenue Requirement Effect
100	Marianne Gardner	S-1	Uncollectible rate	(\$48)
100	Marianne Gardner	S-1	Uncollectible Expense	(263)
100	Marianne Gardner	S-1.2	OPUC & Franchise Fees	(143)
100	Marianne Gardner	S-2	Interest Synchronization	373
100	Marianne Gardner	S-3	Working Capital	(327)
100	Marianne Gardner	S-4	Wages & Salaries	(970)
100	Marianne Gardner	S-5	Property Taxes (placeholder)	-
100	Marianne Gardner	S-6	Amortization (placeholder)	-
100	Marianne Gardner	S-7	Income Taxes & ADIT (placeholder)	-
100	Marianne Gardner	S-8	Regulatory Expenses (Acct 928)	(183)
100	Marianne Gardner	S-9	Escalation	-
200	Matt Muldoon	S-10	Cost of Capital	(2,998)
200	Matt Muldoon	S-11	Pension/Retirement	(263)
200	Matt Muldoon	S-12	AFUDC	-
300	Lisa Gorsuch	S-13	Gas Storage in Rate Base	-
300	Lisa Gorsuch	S-14	Underground Storage	(21)
300	Lisa Gorsuch	S-15	Other Gas Supply Expense	(118)
400	Judy Johnson	S-16	Insurance, D&O Insurance	■
500	Ming Peng	S-17	Depreciation expense & Reserves (placeholder)	-
600	Max St. Brown	S-18	Load Forecast	(394369)

Opening Testimony Exhibit No.	Staff Witness	Adj. No.	Proposed Staff Adjustments	Revenue Requirement Effect
600	Max St. Brown	S-19	Sales & Transportation Revenues	39
600	Max St. Brown	S-20	DSM-Lost Revenues	-
700	Lance Kaufman	S-21	Information Technology & General Plant	(775)
700	Lance Kaufman	S-22	Cost Allocations /Affiliated Interests	(972)
800	Mitch Moore	S-23	Utility Plant in Service	(925)
800	Mitch Moore	S-24	General Plant Maintenance	-
900	Rose Anderson	S-25	Other Revenues - Misc. Revenue	(94)
900	Rose Anderson	S-26	Atmospheric Testing	(66)
900	Rose Anderson	S-27	Customer Service & Informational Sales Expenses; Advertising; Promotional Activities	(20)
1000	Abdoulaye Barry	S-28	Distribution O&M	(37)
1000	Abdoulaye Barry	S-29	Customer Accounting	(113)
1000	Abdoulaye Barry	S-30	Various A&G; Prepaid Expenses	(4)
1000	Abdoulaye Barry	S-31	Memberships, Dues & Donations	(55)
1000	Abdoulaye Barry	S-32	Meals & Entertainment, Gifts, Travel, Awards	(236)
1100	Scott Gibbens	S-33	Medical Benefits	(238)
1100	Scott Gibbens	S-34	Workforce Levels & FTE; Outside Services	-
1200	Geoff Ihle	S-35	Hedging	-
1300	Phil Boyle	S-36	Fee Free Bankcard	(45)
1400	Kathy Zarate	S-37	Property Sales	-
1400	Kathy Zarate	S-38	Material and Supplies - Non-fuel	(12)
			Total Staff-Proposed Adjustments (Base Rates):	
			Staff-Calculated Revenue Requirement Change (Base Rates):	

Opening Testimony Exhibit No.	Staff Witness	Adj. No.	Proposed Staff Adjustments	Revenue Requirement Effect
600	Max St. Brown	S-19	Sales & Transportation Revenues	25 38
600	Max St. Brown	S-20	DSM-Lost Revenues	-
700	Lance Kaufman	S-21	Information Technology & General Plant	(775)
700	Lance Kaufman	S-22	Cost Allocations /Affiliated Interests	(972)
800	Mitch Moore	S-23	Utility Plant in Service	(925)
800	Mitch Moore	S-24	General Plant Maintenance	-
900	Rose Anderson	S-25	Other Revenues - Misc. Revenue	(94)
900	Rose Anderson	S-26	Atmospheric Testing	(66)
900	Rose Anderson	S-27	Customer Service & Informational Sales Expenses; Advertising; Promotional Activities	(20)
1000	Abdoulaye Barry	S-28	Distribution O&M	(37)
1000	Abdoulaye Barry	S-29	Customer Accounting	(113)
1000	Abdoulaye Barry	S-30	Various A&G; Prepaid Expenses	(4)
1000	Abdoulaye Barry	S-31	Memberships, Dues & Donations	(55)
1000	Abdoulaye Barry	S-32	Meals & Entertainment, Gifts, Travel, Awards	(236)
1100	Scott Gibbens	S-33	Medical Benefits	(238)
1100	Scott Gibbens	S-34	Workforce Levels & FTE; Outside Services	-
1200	Geoff Ihle	S-35	Hedging	-
1300	Phil Boyle	S-36	Fee Free Bankcard	(45)
1400	Kathy Zarate	S-37	Property Sales	-
1400	Kathy Zarate	S-38	Material and Supplies - Non-fuel	(12)
			Total Staff-Proposed Adjustments (Base Rates):	
			Staff-Calculated Revenue Requirement Change (Base Rates):	

1 **Q. Did this review result in any adjustments?**

2 A. Yes, I forecast that present rates will provide test-year revenues of \$355,642 in
3 excess of the Company's forecast.

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

5 A. My testimony is organized as follows:

6	Issue 1, Long Run Incremental Cost (LRIC) Study.....	3
7	Issue 2, S-18, S-19, Sales and Transportation Revenue.....	8
8	(Load Forecast)	8
9	Issue 3, Decoupling	22
10	Issue 4, S-20 DSM Lost Revenue	25

1 **Q. Did this review result in any adjustments?**

2 A. Yes, I forecast that present rates will provide test-year revenues of

3 \$~~355,64244,625~~ in excess of the Company's forecast.

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

5 A. My testimony is organized as follows:

6	Issue 1, Long Run Incremental Cost (LRIC) Study.....	3
7	Issue 2, S-18, S-19, Sales and Transportation Revenue.....	8
8	(Load Forecast)	8
9	Issue 3, Decoupling	22
10	Issue 4, S-20 DSM Lost Revenue	25

1 by the per unit additional margin for the Company at base rates as provided in
2 Avista/903, Ehrbar/4, resulting in a \$367,356 increase in test-year revenue.
3 Additional sales from new large commercial customers are the product of new
4 customers and the most recent PUC Statistics Book value for revenue per non-
5 residential-customer, resulting in a \$26,343 revenue increase. Summing,
6 Staff's total S-18 Sales revenue adjustment is an increase of \$393,699.
7 Transportation Schedule 456 needed a weighted average margin, which Staff
8 prepared using the ratios of actual transportation usage found in the "903.4
9 tab" of the Company workpaper "UG-325 Ehrbar Workpaper.xlsx." Staff's total
10 S-19 Transportation revenue adjustment is a decrease of \$38,057.

1 by the per unit additional margin for the Company at base rates as provided in
2 Avista/903, Ehrbar/4, resulting in a \$367,35618,282 increase in test-year
3 revenue. Additional sales from new large commercial customers are the
4 product of new customers and the most recent PUC Statistics Book value for
5 revenue per non-residential-customer, resulting in a \$26,343 revenue increase.
6 Summing, Staff's total S-18 Sales revenue adjustment is an increase of
7 \$393,69969,305.
8 Transportation Schedule 456 needed a weighted average margin, which Staff
9 prepared using the ratios of actual transportation usage found in the "903.4
10 tab" of the Company workpaper "UG-325 Ehrbar Workpaper.xlsx." Staff's total
11 S-19 Transportation revenue adjustment is a decrease of \$38,05724,679.

1. Medford, OR Forecasting Models

The forecasting models for the Medford region (Jackson County) are given below for the residential, commercial, and industrial sectors:

Residential Sector, THM:

$$THM/C_{t,y,MED410.r} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \lambda RAP_{t,y-1,OR410} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,2)(0,0,0)_{12} \text{ for } t,y \text{ January} = 2005 \uparrow$$

Model notes:

1. $\omega_{SD} D_{t,y}$ are 11 indicator variables for January through November to control for monthly variations in gas usage.
2. Model starts with January 2005 data.

Commercial Sector, THM:

$$THM/C_{t,y,MED420.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12}$$

$$THM/C_{t,y,MED424.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (0,1,1)(0,0,0)_{12}$$

$$THM/C_{t,y,MED440.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,0,0)(0,0,0)_{12} \text{ for } t,y = \text{May } 2007 \uparrow$$

$$THM/C_{t,y,MED456.c} = \alpha_0 + \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12}$$

Industrial Sector, THM:

$$THM/C_{t,y,MED420.i} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \delta_1 IP_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12} \text{ for } y = \text{April } 2007 \uparrow$$

$$THM/C_{t,y,MED424.i} = \delta_1 IP_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (2,0,0)(0,0,0)_{12} \text{ for } y = \text{Mar } 2009 \uparrow$$

$$THM/C_{t,y,MED456.i} = \delta_1 WHS_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,2)(0,0,0)_{12}$$

1. Medford, OR Forecasting Models

The forecasting models for the Medford region (Jackson County) are given below for the residential, commercial, and industrial sectors:

Residential Sector, THM:

$$THM/C_{t,y,MED410.r} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \lambda RAP_{t,y-1,OR410} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,2)(0,0,0)_{12} \text{ for } t, y \text{ January} = 2005 \uparrow$$

Model notes:

1. $\omega_{SD} D_{t,y}$ are 11 indicator variables for January through November to control for monthly variations in gas usage.
2. Model starts with January 2005 data.

Commercial Sector, THM:

$$THM/C_{t,y,MED420.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12}$$

$$THM/C_{t,y,MED424.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (0,1,1)(0,0,0)_{12}$$

$$THM/C_{t,y,MED440.c} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,0,0)(0,0,0)_{12} \text{ for } t, y = \text{May } 2007 \uparrow$$

$$THM/C_{t,y,MED456.c} = \alpha_0 + \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12}$$

Industrial Sector, THM:

$$THM/C_{t,y,MED420.i} = \alpha_1 HDD_{t,y}^{AVA} + \alpha_2 (HDD_{t,y}^{AVA})^2 + \alpha_3 QHDD_{t,y}^{AVA} + \alpha_4 (QHDD_{t,y}^{AVA})^2 + \delta_1 IP_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,1)(0,0,0)_{12} \text{ for } y = \text{April } 2007 \uparrow$$

$$THM/C_{t,y,MED424.i} = \delta_1 IP_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (2,0,0)(0,0,0)_{12} \text{ for } y = \text{Mar } 2009 \uparrow$$

$$| THM/C_{t,y,MED456.i} = \delta_1 WHS_{t,y} + \omega_{SD} D_{t,y} + ARIMA\epsilon_{t,y} (1,1,2)(0,0,0)_{12}$$

UG 325 Load Forecasting Adjustment	change Staff minus Company	Price per unit	Adjustment	
residential S410 therms -Company	632,438	0.5806	\$ 367,206	
commercial S420 therms	(41,392)	0.4802	\$ (19,874)	
commercial S424 therms	111,446	0.1389	\$ 15,477	
commercial S440 therms	75,079	0.1165	\$ 8,748	
commercial S456 therms	(509,173)	0.0571	\$ (29,066)	
industrial S420 therms	(13,297)	0.4802	\$ (6,385)	
industrial S424 therms	(787)	0.1389	\$ (109)	
industrial S440 therms	19,680	0.1165	\$ 2,293	
industrial S456 therms	(157,498)	0.0571	\$ (8,991)	\$ 329,299
other large commercial	3	9507.2752	\$ 26,343	
Increase in Revenue			\$ 355,642	

UG 325 Load Forecasting Adjustment	change Staff minus Company	Price per unit	Adjustment	
residential S410 therms -Company	632,438	0.5806	\$ 367,206	
commercial S420 therms	(41,392)	0.4802	\$ (19,874)	
commercial S424 therms	111,446	0.1389	\$ 15,477	
commercial S440 therms	75,079	0.1165	\$ 8,748	
commercial S456 therms	(509,173)	0.0571	\$ (29,066)	
industrial S420 therms	(13,297)	0.4802	\$ (6,385)	
industrial S424 therms	(787)	0.1389	\$ (109)	
industrial S440 therms	19,680	0.1165	\$ 2,293	
industrial S456 therms	(157,498)	0.0571	\$ (8,991)	\$ 329,299
other large commercial	3	9507.2752	\$ 26,343	
Increase in Revenue			\$ 355,642	