APPENDIX 5.1

CURRENT TRANSPORTATION RATES

Appendix 5.1 - Current Transportation/Storage Rates and Assumptions
Rates in US$/Dth/Day

	Reservation	Commodity	Fuel Rate 3/	Rate Change Assumptions
TransCanada Alberta System Firm Rates -				
Postage Stamp Rates				
AECo/NIT to ABC	0.1410	-	0.00%	Changes every three years
AECo/NIT to ABC Winter Only	0.1763	-	0.00%	Changes every three years
TransCanada BC System Firm Rates -				
Postage Stamp Rates				
ABC to Kingsgate	0.0460	-	0.80%	Changes every three years
GTN FTS-1 Rates				
Mileage Based - Representative Example				
Kingsgate to Spokane	0.0885	0.0017	0.37%	Changes every five years
Kingsgate to Medford	0.3236	0.0096	2.04%	Changes every five years
Meford Lateral	0.6518	-	0.00%	Changes every five years
Spectra Energy/Westcoast System Firm Rates -				
Postage Stamp Rates				
Station 2 to Huntington/Sumas	0.3991	-	0.80%	Changes every three years
Williams NWP				
Postage Stamp Rates				
TF-1 1/	0.3798	0.03000	1.85%	Changes every five years
TF-2 1/	0.3798	0.03000	1.85%	Changes every five years
SGS-2F 2/	0.4718	0.01703	0.52%	Changes every five years

1/ TF-1 based upon annual delivery capability. TF-2 based upon approximately 32 days of delivery capability
2/ Not applicable for WA/ID Customers
3/ Fuel retained in-kind

APPENDIX 5.2

ALTERNATE SUPPLY SCENARIOS SUMMARY OF ASSUMPTIONS

Appendix 5.2 - Alternate Supply Scenarios

Scenarios

	Existing Resources	Existing + Expected Available	GTN Rate Escallation	GTN Fully Subscribed
INPUT ASSUMPTIONS				
Resources:				
	Currently contracted capacity net of long term releases	Currently contracted capacity net of long term releases	Currently contracted capacity net of long term releases	Currently contracted capacity net of long term releases
		Currently available GTN	Currently available GTN	
		Capacity Release Recalls	Capacity Release Recalls	Capacity Release Recalls
		NWP Expansions	NWP Expansions	NWP Expansions
		Satellite LNG	Satellite LNG	Satellite LNG
		Backhaul plus add'l compression	Backhaul plus add'l compression	
		Liquifiaction LNG	Liquifiaction LNG	Liquifiaction LNG
		Klamath Falls Lateral Purchase	Klamath Falls Lateral Purchase	Klamath Falls Lateral Purchase
Rates:	Current Rates	Current Rates	GTN rate doubles	Current Rates

APPENDIX 6.1

MONTHLY PRICE DATA

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Expected Case	AECo	2009-2010	$ 4.33	$ 4.85	$ 4.97	$ 5.05	$ 4.99	$ 4.75	$ 4.65	$ 4.78	$ 4.80	$ 4.89	$ 4.90	$ 5.09
Expected Case	AECo	2010-2011	$ 5.39	$ 5.62	$ 5.56	$ 5.58	$ 5.29	$ 5.03	$ 5.00	$ 5.06	$ 5.06	$ 5.10	$ 5.13	$ 5.27
Expected Case	AECo	2011-2012	$ 5.46	$ 5.63	$ 5.73	$ 5.73	$ 5.42	$ 5.17	$ 5.17	$ 5.22	$ 5.22	$ 5.24	$ 5.22	$ 5.37
Expected Case	AECo	2012-2013	$ 5.55	$ 5.66	$ 6.20	$ 6.25	$ 5.76	$ 5.50	$ 5.50	$ 5.54	$ 5.56	$ 5.59	$ 5.57	$ 5.66
Expected Case	AECo	2013-2014	$ 5.11	$ 5.19	$ 5.25	$ 5.27	$ 5.06	$ 4.94	$ 5.01	$ 5.04	$ 5.06	$ 5.07	$ 5.03	$ 5.16
Expected Case	AECo	2014-2015	$ 6.10	$ 6.22	$ 7.54	$ 7.60	$ 7.34	$ 7.16	$ 7.22	$ 7.27	$ 7.30	$ 7.34	$ 7.28	$ 7.43
Expected Case	AECo	2015-2016	$ 7.83	$ 7.97	$ 8.39	$ 8.42	$ 8.24	$ 8.13	$ 8.20	$ 8.27	$ 8.27	$ 8.29	$ 8.28	$ 8.37
Expected Case	AECo	2016-2017	$ 8.77	$ 8.86	$ 9.18	$ 9.16	$ 8.80	$ 8.69	$ 8.71	$ 8.74	$ 8.78	$ 8.81	$ 8.79	$ 8.92
Expected Case	AECo	2017-2018	$ 9.40	$ 9.47	$ 10.34	$ 10.36	$ 10.03	$ 9.83	$ 9.78	$ 9.86	$ 9.85	$ 9.91	$ 9.89	$ 10.08
Expected Case	AECo	2018-2019	$ 10.62	$ 10.71	$ 10.83	$ 10.82	$ 10.57	$ 10.31	$ 10.31	$ 10.35	$ 10.39	$ 10.43	$ 10.38	$ 10.54
Expected Case	AECo	2019-2020	$ 10.91	$ 11.06	$ 11.22	$ 11.25	$ 10.71	$ 10.58	$ 10.56	$ 10.58	$ 10.61	$ 10.65	$ 10.34	$ 10.41
Expected Case	AECo	2020-2021	$ 10.79	$ 10.92	$ 11.08	$ 11.13	$ 10.92	$ 10.59	$ 10.61	$ 10.63	$ 10.65	$ 10.67	$ 10.49	$ 10.55
Expected Case	AECo	2021-2022	$ 10.91	$ 10.98	$ 11.14	$ 11.17	$ 10.91	$ 10.60	$ 10.61	$ 10.66	$ 10.61	$ 10.66	$ 10.67	$ 10.78
Expected Case	AECo	2022-2023	$ 11.12	$ 11.26	$ 11.43	$ 11.47	$ 11.12	$ 10.87	$ 10.84	$ 10.86	$ 10.87	$ 10.79	$ 10.72	$ 10.86
Expected Case	AECo	2023-2024	$ 11.10	$ 11.18	$ 11.19	$ 11.16	$ 10.74	$ 10.61	$ 10.62	$ 10.65	$ 10.63	$ 10.68	$ 10.70	$ 10.71
Expected Case	AECo	2024-2025	$ 10.99	$ 11.11	$ 11.30	$ 11.38	$ 10.97	$ 10.77	$ 10.78	$ 10.80	$ 10.78	$ 10.82	$ 10.83	$ 10.84
Expected Case	AECo	2025-2026	$ 11.14	$ 11.29	$ 11.46	$ 11.45	$ 11.16	$ 10.97	$ 10.98	$ 10.99	$ 10.98	$ 11.02	$ 11.03	$ 11.06
Expected Case	AECo	2026-2027	$ 11.38	$ 11.52	$ 11.73	$ 11.71	$ 11.34	$ 11.18	$ 11.23	$ 11.21	$ 11.27	$ 11.31	$ 11.34	$ 11.48
Expected Case	AECo	2027-2028	$ 11.55	$ 11.66	$ 11.88	$ 11.91	$ 11.51	$ 11.37	$ 11.40	$ 11.40	$ 11.45	$ 11.50	$ 11.55	$ 11.67
Expected Case	AECo	2028-2029	$ 11.76	$ 11.85	$ 12.08	$ 12.11	$ 11.73	$ 11.55	$ 11.58	$ 11.60	$ 11.62	$ 11.66	$ 11.68	$ 11.84
Expected Case	AECo	2029-2030	$ 11.84	$ 11.84										
Expected Case	Malin	2009-2010	$ 4.67	$ 5.19	$ 5.32	$ 5.40	$ 5.26	$ 5.03	$ 4.91	$ 5.08	$ 5.13	$ 5.24	$ 5.24	$ 5.41
Expected Case	Malin	2010-2011	$ 5.74	$ 5.95	$ 5.88	$ 5.90	$ 5.57	$ 5.31	$ 5.29	$ 5.35	$ 5.36	$ 5.41	$ 5.44	$ 5.57
Expected Case	Malin	2011-2012	$ 5.74	$ 5.92	$ 6.00	$ 6.00	$ 5.65	$ 5.41	$ 5.40	$ 5.46	$ 5.48	$ 5.51	$ 5.49	$ 5.63
Expected Case	Malin	2012-2013	$ 5.80	$ 5.92	$ 6.45	$ 6.50	$ 5.95	$ 5.71	$ 5.72	$ 5.75	$ 5.81	$ 5.86	$ 5.83	$ 5.91
Expected Case	Malin	2013-2014	$ 5.36	$ 5.45	$ 5.48	$ 5.51	$ 5.22	$ 5.14	$ 5.22	$ 5.24	$ 5.28	$ 5.31	$ 5.27	$ 5.40
Expected Case	Malin	2014-2015	$ 6.33	$ 6.45	$ 7.75	$ 7.83	$ 7.49	$ 7.35	$ 7.41	$ 7.45	$ 7.52	$ 7.56	$ 7.51	$ 7.66
Expected Case	Malin	2015-2016	$ 8.04	$ 8.18	$ 8.59	$ 8.62	$ 8.37	$ 8.30	$ 8.37	$ 8.44	$ 8.49	$ 8.51	$ 8.51	$ 8.58
Expected Case	Malin	2016-2017	$ 8.99	$ 9.09	$ 9.39	$ 9.37	$ 8.95	$ 8.88	$ 8.91	$ 8.94	$ 9.01	$ 9.05	$ 9.02	$ 9.15
Expected Case	Malin	2017-2018	$ 9.61	$ 9.69	$ 10.54	$ 10.57	$ 10.17	$ 10.01	$ 9.99	$ 10.05	$ 10.08	$ 10.16	$ 10.14	$ 10.31
Expected Case	Malin	2018-2019	$ 10.85	$ 10.94	$ 11.00	$ 11.00	$ 10.71	$ 10.48	$ 10.50	$ 10.53	$ 10.63	$ 10.67	$ 10.63	$ 10.78
Expected Case	Malin	2019-2020	$ 11.14	$ 11.28	$ 11.39	$ 11.44	$ 10.87	$ 10.76	$ 10.76	$ 10.78	$ 10.86	$ 10.89	$ 10.60	$ 10.64
Expected Case	Malin	2020-2021	$ 11.02	$ 11.15	$ 11.26	$ 11.31	$ 11.06	$ 10.78	$ 10.79	$ 10.83	$ 10.88	$ 10.91	$ 10.74	$ 10.76
Expected Case	Malin	2021-2022	$ 11.12	$ 11.20	$ 11.30	$ 11.34	$ 11.04	$ 10.78	$ 10.79	$ 10.84	$ 10.84	$ 10.89	$ 10.90	$ 10.98
Expected Case	Malin	2022-2023	$ 11.32	$ 11.46	$ 11.59	$ 11.63	$ 11.26	$ 11.03	$ 11.00	$ 11.02	$ 11.07	$ 11.03	$ 10.99	$ 11.14
Expected Case	Malin	2023-2024	$ 11.42	$ 11.52	$ 11.46	$ 11.45	$ 11.00	$ 10.87	$ 10.90	$ 10.92	$ 10.98	$ 11.03	$ 11.07	$ 11.07
Expected Case	Malin	2024-2025	$ 11.33	$ 11.45	$ 11.62	$ 11.71	$ 11.25	$ 11.06	$ 11.07	$ 11.09	$ 11.14	$ 11.18	$ 11.21	$ 11.19
Expected Case	Malin	2025-2026	$ 11.49	$ 11.64	$ 11.79	$ 11.80	$ 11.44	$ 11.27	$ 11.29	$ 11.30	$ 11.34	$ 11.38	$ 11.40	$ 11.42
Expected Case	Malin	2026-2027	$ 11.74	$ 11.88	$ 12.06	$ 12.05	$ 11.63	$ 11.48	$ 11.53	$ 11.54	$ 11.62	$ 11.67	$ 11.71	$ 11.85
Expected Case	Malin	2027-2028	$ 11.91	$ 12.03	$ 12.20	$ 12.24	$ 11.79	$ 11.66	$ 11.72	$ 11.73	$ 11.80	$ 11.85	$ 11.91	$ 12.04
Expected Case	Malin	2028-2029	$ 12.13	$ 12.23	$ 12.42	$ 12.46	$ 12.01	$ 11.84	$ 11.90	$ 11.91	$ 11.96	$ 12.00	$ 12.04	$ 12.20
Expected Case	Malin	2029-2030	$ 12.20	$ 12.20										
Expected Case	Rockies	2009-2010	$ 4.42	$ 4.92	$ 5.05	$ 5.17	$ 4.99	$ 4.75	$ 4.70	$ 4.70	$ 4.78	$ 4.88	$ 4.94	$ 5.16
Expected Case	Rockies	2010-2011	$ 5.55	$ 5.75	$ 5.69	$ 5.71	$ 5.36	$ 5.07	$ 5.07	$ 4.99	$ 5.06	$ 5.10	$ 5.13	$ 5.32
Expected Case	Rockies	2011-2012	$ 5.60	$ 5.73	$ 5.84	$ 5.84	$ 5.46	$ 5.23	$ 5.25	$ 5.15	$ 5.22	$ 5.24	$ 5.21	$ 5.41
Expected Case	Rockies	2012-2013	$ 5.59	$ 5.66	$ 6.20	$ 6.25	$ 5.68	$ 5.46	$ 5.49	$ 5.39	$ 5.48	$ 5.52	$ 5.50	$ 5.62
Expected Case	Rockies	2013-2014	$ 5.06	$ 5.10	$ 5.15	$ 5.19	$ 4.89	$ 4.84	$ 4.93	$ 4.83	$ 4.91	$ 4.93	$ 4.88	$ 5.03
Expected Case	Rockies	2014-2015	$ 5.97	$ 6.05	$ 7.36	$ 7.45	$ 7.09	$ 6.96	$ 7.04	$ 6.95	$ 7.07	$ 7.09	$ 7.03	$ 7.19
Expected Case	Rockies	2015-2016	$ 7.60	$ 7.73	$ 8.13	$ 8.16	$ 7.88	$ 7.84	$ 7.93	$ 7.86	$ 7.94	$ 7.95	$ 7.95	$ 8.04
Expected Case	Rockies	2016-2017	$ 8.54	$ 8.60	$ 8.91	$ 8.90	$ 8.50	$ 8.47	$ 8.53	$ 8.43	$ 8.53	$ 8.57	$ 8.54	$ 8.69
Expected Case	Rockies	2017-2018	$ 9.13	$ 9.16	$ 10.03	$ 10.06	$ 9.68	$ 9.57	$ 9.58	$ 9.51	$ 9.58	$ 9.64	$ 9.62	$ 9.83
Expected Case	Rockies	2018-2019	$ 10.32	$ 10.38	$ 10.49	$ 10.49	$ 10.23	$ 10.04	$ 10.09	$ 10.00	$ 10.11	$ 10.14	$ 10.09	$ 10.27
Expected Case	Rockies	2019-2020	$ 10.60	$ 10.71	$ 10.87	$ 10.91	$ 10.34	$ 10.29	$ 10.30	$ 10.19	$ 10.27	$ 10.31	$ 10.01	$ 10.10
Expected Case	Rockies	2020-2021	$ 10.41	$ 10.50	$ 10.67	$ 10.70	$ 10.40	$ 10.18	$ 10.20	$ 10.09	$ 10.16	$ 10.19	$ 10.00	$ 10.08
Expected Case	Rockies	2021-2022	$ 10.41	$ 10.44	$ 10.58	$ 10.62	$ 10.33	$ 10.11	$ 10.14	$ 10.06	$ 10.08	$ 10.12	$ 10.14	$ 10.26
Expected Case	Rockies	2022-2023	$ 10.57	$ 10.68	$ 10.83	$ 10.87	$ 10.52	$ 10.35	$ 10.33	$ 10.21	$ 10.31	$ 10.27	$ 10.26	$ 10.45
Expected Case	Rockies	2023-2024	$ 10.74	$ 10.80	$ 10.91	$ 10.94	$ 10.56	$ 10.42	$ 10.47	$ 10.35	$ 10.40	$ 10.45	$ 10.49	$ 10.54
Expected Case	Rockies	2024-2025	$ 10.83	$ 10.93	$ 11.12	$ 11.20	$ 10.80	$ 10.60	$ 10.63	$ 10.52	$ 10.56	$ 10.60	$ 10.63	$ 10.67
Expected Case	Rockies	2025-2026	$ 10.98	$ 11.10	$ 11.25	$ 11.27	$ 10.97	$ 10.77	$ 10.81	$ 10.66	$ 10.72	$ 10.75	$ 10.76	$ 10.82
Expected Case	Rockies	2026-2027	$ 11.15	$ 11.27	$ 11.46	$ 11.46	$ 11.12	$ 10.93	$ 10.98	$ 10.83	$ 10.94	$ 10.98	$ 11.02	$ 11.19
Expected Case	Rockies	2027-2028	$ 11.24	$ 11.32	$ 11.52	$ 11.55	$ 11.20	$ 11.03	$ 11.09	$ 10.95	$ 11.06	$ 11.09	$ 11.15	$ 11.33
Expected Case	Rockies	2028-2029	$ 11.41	$ 11.47	$ 11.66	$ 11.70	$ 11.35	$ 11.19	$ 11.21	$ 11.09	$ 11.20	$ 11.23	$ 11.27	$ 11.48
Expected Case	Rockies	2029-2030	$ 11.48	$ 11.48										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Expected Case	Stanfield	2009-2010	$ 4.53	$ 5.04	$ 5.17	$ 5.25	$ 5.14	$ 4.90	$ 4.79	$ 4.94	$ 4.97	$ 5.07	$ 5.08	$ 5.26
Expected Case	Stanfield	2010-2011	$ 5.58	$ 5.80	$ 5.75	$ 5.77	$ 5.45	$ 5.18	$ 5.16	$ 5.21	$ 5.21	$ 5.26	$ 5.29	$ 5.43
Expected Case	Stanfield	2011-2012	$ 5.62	$ 5.79	$ 5.88	$ 5.88	$ 5.55	$ 5.29	$ 5.29	$ 5.35	$ 5.35	$ 5.38	$ 5.36	$ 5.51
Expected Case	Stanfield	2012-2013	$ 5.69	$ 5.81	$ 6.34	$ 6.39	$ 5.86	$ 5.62	$ 5.61	$ 5.65	$ 5.69	$ 5.73	$ 5.71	$ 5.79
Expected Case	Stanfield	2013-2014	$ 5.25	$ 5.33	$ 5.38	$ 5.41	$ 5.15	$ 5.04	$ 5.12	$ 5.14	$ 5.16	$ 5.19	$ 5.15	$ 5.28
Expected Case	Stanfield	2014-2015	$ 6.22	$ 6.35	$ 7.66	$ 7.73	$ 7.42	$ 7.25	$ 7.31	$ 7.35	$ 7.41	$ 7.44	$ 7.39	$ 7.55
Expected Case	Stanfield	2015-2016	$ 7.95	$ 8.09	$ 8.50	$ 8.53	$ 8.31	$ 8.22	$ 8.29	$ 8.35	$ 8.38	$ 8.39	$ 8.39	$ 8.48
Expected Case	Stanfield	2016-2017	$ 8.89	$ 8.99	$ 9.29	$ 9.28	$ 8.89	$ 8.78	$ 8.81	$ 8.84	$ 8.89	$ 8.93	$ 8.91	$ 9.04
Expected Case	Stanfield	2017-2018	$ 9.52	$ 9.59	$ 10.45	$ 10.48	$ 10.11	$ 9.92	$ 9.89	$ 9.95	$ 9.96	$ 10.03	$ 10.01	$ 10.20
Expected Case	Stanfield	2018-2019	$ 10.75	$ 10.84	$ 10.92	$ 10.93	$ 10.65	$ 10.40	$ 10.40	$ 10.44	$ 10.50	$ 10.54	$ 10.50	$ 10.66
Expected Case	Stanfield	2019-2020	$ 11.04	$ 11.18	$ 11.32	$ 11.36	$ 10.80	$ 10.67	$ 10.66	$ 10.68	$ 10.73	$ 10.76	$ 10.47	$ 10.53
Expected Case	Stanfield	2020-2021	$ 10.92	$ 11.05	$ 11.18	$ 11.23	$ 11.00	$ 10.69	$ 10.70	$ 10.73	$ 10.76	$ 10.79	$ 10.61	$ 10.66
Expected Case	Stanfield	2021-2022	$ 11.03	$ 11.10	$ 11.23	$ 11.27	$ 10.97	$ 10.69	$ 10.71	$ 10.75	$ 10.72	$ 10.77	$ 10.79	$ 10.88
Expected Case	Stanfield	2022-2023	$ 11.24	$ 11.37	$ 11.52	$ 11.56	$ 11.19	$ 10.95	$ 10.91	$ 10.93	$ 10.97	$ 10.91	$ 10.86	$ 11.01
Expected Case	Stanfield	2023-2024	$ 11.28	$ 11.36	$ 11.34	$ 11.32	$ 10.88	$ 10.74	$ 10.76	$ 10.79	$ 10.81	$ 10.86	$ 10.90	$ 10.90
Expected Case	Stanfield	2024-2025	$ 11.18	$ 11.30	$ 11.48	$ 11.56	$ 11.12	$ 10.92	$ 10.93	$ 10.95	$ 10.96	$ 11.00	$ 11.03	$ 11.02
Expected Case	Stanfield	2025-2026	$ 11.33	$ 11.48	$ 11.64	$ 11.64	$ 11.31	$ 11.13	$ 11.14	$ 11.15	$ 11.16	$ 11.20	$ 11.23	$ 11.25
Expected Case	Stanfield	2026-2027	$ 11.58	$ 11.72	$ 11.91	$ 11.90	$ 11.49	$ 11.34	$ 11.39	$ 11.38	$ 11.44	$ 11.49	$ 11.53	$ 11.68
Expected Case	Stanfield	2027-2028	$ 11.75	$ 11.86	$ 12.05	$ 12.09	$ 11.66	$ 11.52	$ 11.56	$ 11.57	$ 11.63	$ 11.68	$ 11.74	$ 11.87
Expected Case	Stanfield	2028-2029	$ 11.96	$ 12.06	$ 12.26	$ 12.30	$ 11.88	$ 11.71	$ 11.75	$ 11.76	$ 11.79	$ 11.83	$ 11.87	$ 12.03
Expected Case	Stanfield	2029-2030	$ 12.03	$ 12.03										
Expected Case	Sumas	2009-2010	$ 4.63	$ 5.15	$ 5.28	$ 5.36	$ 5.23	$ 4.86	$ 4.64	$ 4.75	$ 4.78	$ 4.88	$ 4.91	$ 5.19
Expected Case	Sumas	2010-2011	$ 5.70	$ 5.92	$ 5.87	$ 5.89	$ 5.54	$ 5.15	$ 5.01	$ 5.05	$ 5.05	$ 5.10	$ 5.15	$ 5.37
Expected Case	Sumas	2011-2012	$ 5.71	$ 5.88	$ 5.99	$ 6.00	$ 5.63	$ 5.30	$ 5.18	$ 5.21	$ 5.22	$ 5.25	$ 5.24	$ 5.44
Expected Case	Sumas	2012-2013	$ 5.80	$ 5.91	$ 6.45	$ 6.50	$ 5.93	$ 5.61	$ 5.51	$ 5.54	$ 5.57	$ 5.61	$ 5.61	$ 5.71
Expected Case	Sumas	2013-2014	$ 5.34	$ 5.43	$ 5.48	$ 5.51	$ 5.21	$ 5.04	$ 5.03	$ 5.05	$ 5.07	$ 5.09	$ 5.07	$ 5.22
Expected Case	Sumas	2014-2015	$ 6.31	$ 6.43	$ 7.75	$ 7.83	$ 7.48	$ 7.25	$ 7.25	$ 7.28	$ 7.33	$ 7.36	$ 7.33	$ 7.50
Expected Case	Sumas	2015-2016	$ 8.02	$ 8.17	$ 8.59	$ 8.62	$ 8.37	$ 8.22	$ 8.24	$ 8.30	$ 8.30	$ 8.32	$ 8.34	$ 8.45
Expected Case	Sumas	2016-2017	$ 8.97	$ 9.07	$ 9.39	$ 9.38	$ 8.94	$ 8.78	$ 8.76	$ 8.77	$ 8.81	$ 8.85	$ 8.84	$ 9.00
Expected Case	Sumas	2017-2018	$ 9.60	$ 9.67	$ 10.54	$ 10.58	$ 10.17	$ 9.92	$ 9.82	$ 9.88	$ 9.88	$ 9.95	$ 9.95	$ 10.16
Expected Case	Sumas	2018-2019	$ 10.83	$ 10.92	$ 11.04	$ 11.04	$ 10.71	$ 10.39	$ 10.36	$ 10.38	$ 10.43	$ 10.48	$ 10.45	$ 10.63
Expected Case	Sumas	2019-2020	$ 11.12	$ 11.27	$ 11.43	$ 11.48	$ 10.87	$ 10.67	$ 10.61	$ 10.63	$ 10.65	$ 10.70	$ 10.43	$ 10.51
Expected Case	Sumas	2020-2021	$ 11.01	$ 11.14	$ 11.30	$ 11.35	$ 11.06	$ 10.69	$ 10.67	$ 10.68	$ 10.70	$ 10.73	$ 10.58	$ 10.66
Expected Case	Sumas	2021-2022	$ 11.13	$ 11.20	$ 11.37	$ 11.42	$ 11.04	$ 10.69	$ 10.67	$ 10.71	$ 10.66	$ 10.72	$ 10.75	$ 10.88
Expected Case	Sumas	2022-2023	$ 11.32	$ 11.46	$ 11.64	$ 11.69	$ 11.25	$ 10.97	$ 10.90	$ 10.90	$ 10.92	$ 10.84	$ 10.80	$ 10.95
Expected Case	Sumas	2023-2024	$ 11.38	$ 11.48	$ 11.50	$ 11.46	$ 10.92	$ 10.68	$ 10.64	$ 10.65	$ 10.64	$ 10.70	$ 10.74	$ 10.77
Expected Case	Sumas	2024-2025	$ 11.31	$ 11.43	$ 11.62	$ 11.71	$ 11.17	$ 10.86	$ 10.80	$ 10.81	$ 10.80	$ 10.84	$ 10.88	$ 10.91
Expected Case	Sumas	2025-2026	$ 11.48	$ 11.63	$ 11.79	$ 11.80	$ 11.35	$ 11.07	$ 11.01	$ 11.01	$ 11.01	$ 11.05	$ 11.08	$ 11.14
Expected Case	Sumas	2026-2027	$ 11.71	$ 11.85	$ 12.06	$ 12.06	$ 11.48	$ 11.28	$ 11.26	$ 11.16	$ 11.22	$ 11.26	$ 11.39	$ 11.56
Expected Case	Sumas	2027-2028	$ 11.87	$ 11.99	$ 12.20	$ 12.24	$ 11.65	$ 11.48	$ 11.44	$ 11.35	$ 11.41	$ 11.46	$ 11.62	$ 11.76
Expected Case	Sumas	2028-2029	$ 12.10	$ 12.20	$ 12.42	$ 12.46	$ 11.92	$ 11.67	$ 11.62	$ 11.55	$ 11.58	$ 11.62	$ 11.74	$ 11.93
Expected Case	Sumas	2029-2030	$ 11.93	$ 11.93										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Updated Expected	AECo	2009-2010	$ 3.91	$ 4.43	$ 4.57	$ 4.56	$ 4.52	$ 4.33	$ 4.23	$ 4.34	$ 4.35	$ 4.41	$ 4.41	$ 4.58
Updated Expected	AECo	2010-2011	$ 4.80	$ 5.02	$ 5.18	$ 5.19	$ 4.97	$ 4.73	$ 4.74	$ 4.80	$ 4.82	$ 4.87	$ 4.83	$ 4.97
Updated Expected	AECo	2011-2012	$ 5.09	$ 5.24	$ 5.32	$ 5.32	$ 5.19	$ 4.93	$ 4.90	$ 4.95	$ 4.94	$ 4.97	$ 5.01	$ 5.14
Updated Expected	AECo	2012-2013	$ 5.26	$ 5.38	$ 5.44	$ 5.46	$ 5.29	$ 5.06	$ 5.02	$ 5.06	$ 5.04	$ 5.08	$ 5.11	$ 5.23
Updated Expected	AECo	2013-2014	$ 4.62	$ 4.69	$ 4.85	$ 4.87	$ 4.66	$ 4.55	$ 4.55	$ 4.56	$ 4.52	$ 4.54	$ 4.57	$ 4.68
Updated Expected	AECo	2014-2015	$ 5.56	$ 5.63	$ 6.57	$ 6.60	$ 6.37	$ 6.25	$ 6.26	$ 6.27	$ 6.25	$ 6.27	$ 6.30	$ 6.42
Updated Expected	AECo	2015-2016	$ 6.75	$ 6.83	$ 6.84	$ 6.86	$ 6.69	$ 6.55	$ 6.55	$ 6.58	$ 6.55	$ 6.58	$ 6.61	$ 6.73
Updated Expected	AECo	2016-2017	$ 7.05	$ 7.13	$ 7.16	$ 7.19	$ 6.70	$ 6.58	$ 6.58	$ 6.60	$ 6.57	$ 6.59	$ 6.63	$ 6.75
Updated Expected	AECo	2017-2018	$ 7.07	$ 7.15	$ 7.18	$ 7.21	$ 6.65	$ 6.51	$ 6.48	$ 6.51	$ 6.48	$ 6.52	$ 6.55	$ 6.68
Updated Expected	AECo	2018-2019	$ 7.00	$ 7.07	$ 7.06	$ 7.09	$ 6.83	$ 6.67	$ 6.66	$ 6.68	$ 6.65	$ 6.68	$ 6.71	$ 6.85
Updated Expected	AECo	2019-2020	$ 7.16	$ 7.24	$ 7.26	$ 7.28	$ 7.04	$ 6.89	$ 6.87	$ 6.89	$ 6.86	$ 6.88	$ 6.92	$ 7.04
Updated Expected	AECo	2020-2021	$ 7.36	$ 7.43	$ 7.48	$ 7.52	$ 7.36	$ 7.16	$ 7.16	$ 7.18	$ 7.15	$ 7.17	$ 7.21	$ 7.32
Updated Expected	AECo	2021-2022	$ 7.66	$ 7.74	$ 7.85	$ 7.88	$ 7.23	$ 7.03	$ 7.02	$ 7.05	$ 7.02	$ 7.05	$ 7.09	$ 7.20
Updated Expected	AECo	2022-2023	$ 7.56	$ 7.64	$ 7.60	$ 7.63	$ 7.28	$ 7.08	$ 7.05	$ 7.07	$ 7.04	$ 6.99	$ 6.94	$ 6.96
Updated Expected	AECo	2023-2024	$ 7.11	$ 7.17	$ 7.50	$ 7.45	$ 6.43	$ 6.33	$ 6.33	$ 6.36	$ 6.36	$ 6.39	$ 6.42	$ 6.53
Updated Expected	AECo	2024-2025	$ 6.84	$ 6.91	$ 6.88	$ 6.91	$ 6.66	$ 6.54	$ 6.55	$ 6.57	$ 6.56	$ 6.59	$ 6.63	$ 6.74
Updated Expected	AECo	2025-2026	$ 7.06	$ 7.14	$ 7.08	$ 7.11	$ 6.87	$ 6.75	$ 6.75	$ 6.77	$ 6.74	$ 6.77	$ 6.80	$ 6.91
Updated Expected	AECo	2026-2027	$ 7.21	$ 7.30	$ 7.54	$ 7.56	$ 6.97	$ 6.85	$ 6.87	$ 6.90	$ 6.87	$ 6.90	$ 6.93	$ 7.04
Updated Expected	AECo	2027-2028	$ 7.36	$ 7.43	$ 7.37	$ 7.41	$ 7.05	$ 6.96	$ 6.96	$ 7.00	$ 6.97	$ 7.00	$ 7.04	$ 7.14
Updated Expected	AECo	2028-2029	$ 7.47	$ 7.54	$ 7.46	$ 7.49	$ 7.22	$ 7.08	$ 7.10	$ 7.13	$ 7.04	$ 7.04	$ 7.15	$ 7.23
Updated Expected	AECo	2029-2030	$ 7.23	$ 7.23										
Updated Expected	Malin	2009-2010	$ 4.25	$ 4.77	$ 4.92	$ 4.91	$ 4.80	$ 4.60	$ 4.49	$ 4.64	$ 4.69	$ 4.75	$ 4.75	$ 4.90
Updated Expected	Malin	2010-2011	$ 5.14	$ 5.36	$ 5.50	$ 5.52	$ 5.25	$ 5.01	$ 5.03	$ 5.08	$ 5.12	$ 5.19	$ 5.15	$ 5.28
Updated Expected	Malin	2011-2012	$ 5.37	$ 5.52	$ 5.59	$ 5.59	$ 5.43	$ 5.17	$ 5.14	$ 5.19	$ 5.20	$ 5.23	$ 5.27	$ 5.40
Updated Expected	Malin	2012-2013	$ 5.52	$ 5.63	$ 5.69	$ 5.71	$ 5.48	$ 5.27	$ 5.25	$ 5.28	$ 5.29	$ 5.34	$ 5.38	$ 5.48
Updated Expected	Malin	2013-2014	$ 4.88	$ 4.95	$ 5.08	$ 5.11	$ 4.83	$ 4.75	$ 4.75	$ 4.76	$ 4.74	$ 4.78	$ 4.81	$ 4.92
Updated Expected	Malin	2014-2015	$ 5.78	$ 5.86	$ 6.79	$ 6.82	$ 6.52	$ 6.43	$ 6.44	$ 6.46	$ 6.46	$ 6.49	$ 6.53	$ 6.64
Updated Expected	Malin	2015-2016	$ 6.96	$ 7.04	$ 7.04	$ 7.06	$ 6.82	$ 6.72	$ 6.73	$ 6.75	$ 6.77	$ 6.80	$ 6.84	$ 6.94
Updated Expected	Malin	2016-2017	$ 7.27	$ 7.35	$ 7.37	$ 7.41	$ 6.85	$ 6.77	$ 6.78	$ 6.80	$ 6.80	$ 6.83	$ 6.87	$ 6.98
Updated Expected	Malin	2017-2018	$ 7.28	$ 7.36	$ 7.38	$ 7.42	$ 6.79	$ 6.69	$ 6.69	$ 6.70	$ 6.72	$ 6.76	$ 6.80	$ 6.91
Updated Expected	Malin	2018-2019	$ 7.22	$ 7.30	$ 7.23	$ 7.27	$ 6.97	$ 6.84	$ 6.85	$ 6.87	$ 6.88	$ 6.92	$ 6.96	$ 7.08
Updated Expected	Malin	2019-2020	$ 7.39	$ 7.47	$ 7.44	$ 7.48	$ 7.19	$ 7.07	$ 7.07	$ 7.09	$ 7.11	$ 7.13	$ 7.17	$ 7.27
Updated Expected	Malin	2020-2021	$ 7.59	$ 7.67	$ 7.66	$ 7.70	$ 7.51	$ 7.34	$ 7.35	$ 7.37	$ 7.38	$ 7.41	$ 7.45	$ 7.54
Updated Expected	Malin	2021-2022	$ 7.88	$ 7.96	$ 8.01	$ 8.05	$ 7.36	$ 7.21	$ 7.20	$ 7.22	$ 7.24	$ 7.28	$ 7.32	$ 7.41
Updated Expected	Malin	2022-2023	$ 7.76	$ 7.84	$ 7.75	$ 7.79	$ 7.41	$ 7.23	$ 7.21	$ 7.23	$ 7.24	$ 7.24	$ 7.21	$ 7.25
Updated Expected	Malin	2023-2024	$ 7.44	$ 7.51	$ 7.76	$ 7.75	$ 6.69	$ 6.60	$ 6.61	$ 6.64	$ 6.71	$ 6.74	$ 6.79	$ 6.89
Updated Expected	Malin	2024-2025	$ 7.18	$ 7.25	$ 7.19	$ 7.23	$ 6.93	$ 6.83	$ 6.85	$ 6.86	$ 6.92	$ 6.96	$ 7.01	$ 7.09
Updated Expected	Malin	2025-2026	$ 7.41	$ 7.49	$ 7.41	$ 7.45	$ 7.15	$ 7.05	$ 7.07	$ 7.08	$ 7.10	$ 7.13	$ 7.18	$ 7.28
Updated Expected	Malin	2026-2027	$ 7.57	$ 7.65	$ 7.86	$ 7.90	$ 7.26	$ 7.15	$ 7.18	$ 7.23	$ 7.22	$ 7.26	$ 7.30	$ 7.41
Updated Expected	Malin	2027-2028	$ 7.72	$ 7.80	$ 7.70	$ 7.73	$ 7.34	$ 7.25	$ 7.28	$ 7.33	$ 7.32	$ 7.35	$ 7.39	$ 7.51
Updated Expected	Malin	2028-2029	$ 7.84	$ 7.92	$ 7.80	$ 7.84	$ 7.50	$ 7.37	$ 7.41	$ 7.44	$ 7.38	$ 7.38	$ 7.50	$ 7.59
Updated Expected	Malin	2029-2030	$ 7.59	$ 7.59										
Updated Expected	Rockies	2009-2010	$ 4.00	$ 4.50	$ 4.65	$ 4.68	$ 4.53	$ 4.33	$ 4.27	$ 4.26	$ 4.34	$ 4.39	$ 4.44	$ 4.65
Updated Expected	Rockies	2010-2011	$ 4.95	$ 5.15	$ 5.31	$ 5.33	$ 5.04	$ 4.78	$ 4.81	$ 4.73	$ 4.82	$ 4.88	$ 4.83	$ 5.03
Updated Expected	Rockies	2011-2012	$ 5.23	$ 5.34	$ 5.42	$ 5.44	$ 5.23	$ 4.99	$ 4.98	$ 4.87	$ 4.95	$ 4.97	$ 4.99	$ 5.18
Updated Expected	Rockies	2012-2013	$ 5.30	$ 5.38	$ 5.44	$ 5.47	$ 5.21	$ 5.02	$ 5.02	$ 4.92	$ 4.96	$ 5.00	$ 5.04	$ 5.19
Updated Expected	Rockies	2013-2014	$ 4.57	$ 4.60	$ 4.75	$ 4.79	$ 4.49	$ 4.45	$ 4.47	$ 4.35	$ 4.38	$ 4.40	$ 4.42	$ 4.56
Updated Expected	Rockies	2014-2015	$ 5.42	$ 5.46	$ 6.40	$ 6.44	$ 6.12	$ 6.05	$ 6.07	$ 5.96	$ 6.01	$ 6.01	$ 6.05	$ 6.18
Updated Expected	Rockies	2015-2016	$ 6.52	$ 6.58	$ 6.57	$ 6.61	$ 6.33	$ 6.26	$ 6.28	$ 6.17	$ 6.22	$ 6.24	$ 6.28	$ 6.40
Updated Expected	Rockies	2016-2017	$ 6.83	$ 6.86	$ 6.89	$ 6.93	$ 6.40	$ 6.37	$ 6.40	$ 6.29	$ 6.32	$ 6.35	$ 6.38	$ 6.52
Updated Expected	Rockies	2017-2018	$ 6.80	$ 6.84	$ 6.87	$ 6.91	$ 6.30	$ 6.25	$ 6.28	$ 6.17	$ 6.22	$ 6.25	$ 6.28	$ 6.42
Updated Expected	Rockies	2018-2019	$ 6.69	$ 6.74	$ 6.72	$ 6.76	$ 6.48	$ 6.40	$ 6.44	$ 6.33	$ 6.37	$ 6.39	$ 6.43	$ 6.58
Updated Expected	Rockies	2019-2020	$ 6.85	$ 6.90	$ 6.91	$ 6.94	$ 6.67	$ 6.60	$ 6.61	$ 6.49	$ 6.52	$ 6.55	$ 6.58	$ 6.72
Updated Expected	Rockies	2020-2021	$ 6.97	$ 7.02	$ 7.07	$ 7.10	$ 6.85	$ 6.74	$ 6.75	$ 6.64	$ 6.66	$ 6.69	$ 6.72	$ 6.85
Updated Expected	Rockies	2021-2022	$ 7.16	$ 7.20	$ 7.29	$ 7.33	$ 6.65	$ 6.54	$ 6.55	$ 6.44	$ 6.48	$ 6.51	$ 6.56	$ 6.69
Updated Expected	Rockies	2022-2023	$ 7.01	$ 7.06	$ 6.99	$ 7.03	$ 6.68	$ 6.55	$ 6.54	$ 6.42	$ 6.47	$ 6.47	$ 6.48	$ 6.56
Updated Expected	Rockies	2023-2024	$ 6.75	$ 6.79	$ 7.22	$ 7.24	$ 6.25	$ 6.15	$ 6.18	$ 6.07	$ 6.13	$ 6.16	$ 6.21	$ 6.36
Updated Expected	Rockies	2024-2025	$ 6.68	$ 6.73	$ 6.69	$ 6.73	$ 6.49	$ 6.37	$ 6.41	$ 6.29	$ 6.35	$ 6.37	$ 6.43	$ 6.56
Updated Expected	Rockies	2025-2026	$ 6.90	$ 6.95	$ 6.88	$ 6.92	$ 6.68	$ 6.55	$ 6.59	$ 6.44	$ 6.48	$ 6.51	$ 6.54	$ 6.68
Updated Expected	Rockies	2026-2027	$ 6.99	$ 7.04	$ 7.27	$ 7.31	$ 6.75	$ 6.60	$ 6.63	$ 6.52	$ 6.54	$ 6.57	$ 6.61	$ 6.75
Updated Expected	Rockies	2027-2028	$ 7.04	$ 7.08	$ 7.01	$ 7.04	$ 6.74	$ 6.62	$ 6.66	$ 6.54	$ 6.58	$ 6.59	$ 6.63	$ 6.79
Updated Expected	Rockies	2028-2029	$ 7.12	$ 7.16	$ 7.04	$ 7.08	$ 6.84	$ 6.71	$ 6.72	$ 6.62	$ 6.62	$ 6.62	$ 6.74	$ 6.88
Updated Expected	Rockies	2029-2030	$ 6.88	$ 6.88										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Updated Expected	Stanfield	2009-2010	$ 4.11	$ 4.63	$ 4.77	$ 4.77	$ 4.67	$ 4.47	$ 4.36	$ 4.50	$ 4.53	$ 4.58	$ 4.59	$ 4.75
Updated Expected	Stanfield	2010-2011	$ 4.99	$ 5.21	$ 5.37	$ 5.38	$ 5.13	$ 4.88	$ 4.89	$ 4.95	$ 4.98	$ 5.03	$ 4.99	$ 5.13
Updated Expected	Stanfield	2011-2012	$ 5.25	$ 5.39	$ 5.47	$ 5.47	$ 5.32	$ 5.06	$ 5.03	$ 5.08	$ 5.07	$ 5.11	$ 5.14	$ 5.28
Updated Expected	Stanfield	2012-2013	$ 5.40	$ 5.52	$ 5.58	$ 5.60	$ 5.40	$ 5.17	$ 5.14	$ 5.18	$ 5.17	$ 5.21	$ 5.25	$ 5.36
Updated Expected	Stanfield	2013-2014	$ 4.76	$ 4.83	$ 4.97	$ 5.01	$ 4.75	$ 4.64	$ 4.65	$ 4.66	$ 4.63	$ 4.66	$ 4.69	$ 4.81
Updated Expected	Stanfield	2014-2015	$ 5.68	$ 5.76	$ 6.69	$ 6.72	$ 6.45	$ 6.34	$ 6.35	$ 6.36	$ 6.35	$ 6.37	$ 6.41	$ 6.54
Updated Expected	Stanfield	2015-2016	$ 6.87	$ 6.94	$ 6.95	$ 6.97	$ 6.76	$ 6.64	$ 6.64	$ 6.66	$ 6.65	$ 6.68	$ 6.73	$ 6.84
Updated Expected	Stanfield	2016-2017	$ 7.17	$ 7.25	$ 7.27	$ 7.31	$ 6.79	$ 6.68	$ 6.68	$ 6.70	$ 6.68	$ 6.71	$ 6.75	$ 6.87
Updated Expected	Stanfield	2017-2018	$ 7.19	$ 7.27	$ 7.29	$ 7.33	$ 6.73	$ 6.60	$ 6.59	$ 6.61	$ 6.59	$ 6.63	$ 6.67	$ 6.80
Updated Expected	Stanfield	2018-2019	$ 7.12	$ 7.20	$ 7.15	$ 7.19	$ 6.90	$ 6.76	$ 6.76	$ 6.77	$ 6.76	$ 6.79	$ 6.84	$ 6.97
Updated Expected	Stanfield	2019-2020	$ 7.29	$ 7.37	$ 7.36	$ 7.39	$ 7.13	$ 6.98	$ 6.97	$ 6.99	$ 6.98	$ 7.00	$ 7.05	$ 7.16
Updated Expected	Stanfield	2020-2021	$ 7.48	$ 7.56	$ 7.58	$ 7.62	$ 7.44	$ 7.25	$ 7.26	$ 7.27	$ 7.26	$ 7.29	$ 7.33	$ 7.44
Updated Expected	Stanfield	2021-2022	$ 7.78	$ 7.86	$ 7.94	$ 7.97	$ 7.29	$ 7.12	$ 7.12	$ 7.14	$ 7.13	$ 7.16	$ 7.21	$ 7.31
Updated Expected	Stanfield	2022-2023	$ 7.67	$ 7.75	$ 7.68	$ 7.72	$ 7.35	$ 7.16	$ 7.13	$ 7.14	$ 7.13	$ 7.11	$ 7.08	$ 7.11
Updated Expected	Stanfield	2023-2024	$ 7.29	$ 7.35	$ 7.65	$ 7.62	$ 6.57	$ 6.47	$ 6.47	$ 6.51	$ 6.54	$ 6.57	$ 6.61	$ 6.72
Updated Expected	Stanfield	2024-2025	$ 7.02	$ 7.10	$ 7.05	$ 7.08	$ 6.81	$ 6.69	$ 6.71	$ 6.72	$ 6.75	$ 6.78	$ 6.83	$ 6.92
Updated Expected	Stanfield	2025-2026	$ 7.25	$ 7.33	$ 7.26	$ 7.30	$ 7.02	$ 6.91	$ 6.92	$ 6.93	$ 6.92	$ 6.95	$ 7.01	$ 7.11
Updated Expected	Stanfield	2026-2027	$ 7.41	$ 7.49	$ 7.72	$ 7.75	$ 7.12	$ 7.01	$ 7.03	$ 7.07	$ 7.05	$ 7.08	$ 7.12	$ 7.23
Updated Expected	Stanfield	2027-2028	$ 7.55	$ 7.63	$ 7.55	$ 7.58	$ 7.21	$ 7.11	$ 7.13	$ 7.17	$ 7.14	$ 7.18	$ 7.22	$ 7.34
Updated Expected	Stanfield	2028-2029	$ 7.67	$ 7.74	$ 7.64	$ 7.68	$ 7.37	$ 7.24	$ 7.26	$ 7.29	$ 7.21	$ 7.21	$ 7.33	$ 7.42
Updated Expected	Stanfield	2029-2030	$ 7.42	$ 7.42										
Updated Expected	Sumas	2009-2010	$ 4.22	$ 4.73	$ 4.88	$ 4.88	$ 4.77	$ 4.43	$ 4.22	$ 4.31	$ 4.34	$ 4.40	$ 4.42	$ 4.68
Updated Expected	Sumas	2010-2011	$ 5.10	$ 5.33	$ 5.49	$ 5.51	$ 5.22	$ 4.86	$ 4.74	$ 4.79	$ 4.81	$ 4.87	$ 4.85	$ 5.07
Updated Expected	Sumas	2011-2012	$ 5.34	$ 5.49	$ 5.58	$ 5.59	$ 5.40	$ 5.06	$ 4.92	$ 4.94	$ 4.94	$ 4.97	$ 5.03	$ 5.21
Updated Expected	Sumas	2012-2013	$ 5.51	$ 5.62	$ 5.69	$ 5.71	$ 5.47	$ 5.17	$ 5.04	$ 5.06	$ 5.06	$ 5.09	$ 5.15	$ 5.28
Updated Expected	Sumas	2013-2014	$ 4.85	$ 4.92	$ 5.08	$ 5.11	$ 4.81	$ 4.64	$ 4.57	$ 4.57	$ 4.54	$ 4.56	$ 4.61	$ 4.74
Updated Expected	Sumas	2014-2015	$ 5.77	$ 5.84	$ 6.79	$ 6.82	$ 6.52	$ 6.34	$ 6.29	$ 6.29	$ 6.27	$ 6.29	$ 6.35	$ 6.49
Updated Expected	Sumas	2015-2016	$ 6.94	$ 7.02	$ 7.04	$ 7.07	$ 6.82	$ 6.64	$ 6.59	$ 6.60	$ 6.58	$ 6.61	$ 6.67	$ 6.81
Updated Expected	Sumas	2016-2017	$ 7.26	$ 7.34	$ 7.37	$ 7.41	$ 6.84	$ 6.67	$ 6.63	$ 6.63	$ 6.60	$ 6.63	$ 6.69	$ 6.84
Updated Expected	Sumas	2017-2018	$ 7.27	$ 7.35	$ 7.38	$ 7.42	$ 6.79	$ 6.60	$ 6.52	$ 6.54	$ 6.52	$ 6.55	$ 6.61	$ 6.76
Updated Expected	Sumas	2018-2019	$ 7.21	$ 7.29	$ 7.27	$ 7.31	$ 6.96	$ 6.75	$ 6.71	$ 6.71	$ 6.69	$ 6.72	$ 6.78	$ 6.94
Updated Expected	Sumas	2019-2020	$ 7.38	$ 7.45	$ 7.48	$ 7.52	$ 7.19	$ 6.98	$ 6.92	$ 6.93	$ 6.91	$ 6.93	$ 7.00	$ 7.14
Updated Expected	Sumas	2020-2021	$ 7.57	$ 7.65	$ 7.70	$ 7.74	$ 7.51	$ 7.25	$ 7.22	$ 7.23	$ 7.21	$ 7.23	$ 7.30	$ 7.43
Updated Expected	Sumas	2021-2022	$ 7.88	$ 7.96	$ 8.08	$ 8.13	$ 7.36	$ 7.12	$ 7.08	$ 7.09	$ 7.07	$ 7.11	$ 7.17	$ 7.30
Updated Expected	Sumas	2022-2023	$ 7.76	$ 7.84	$ 7.80	$ 7.84	$ 7.41	$ 7.17	$ 7.11	$ 7.11	$ 7.09	$ 7.05	$ 7.01	$ 7.05
Updated Expected	Sumas	2023-2024	$ 7.39	$ 7.47	$ 7.80	$ 7.75	$ 6.61	$ 6.40	$ 6.34	$ 6.36	$ 6.37	$ 6.41	$ 6.46	$ 6.59
Updated Expected	Sumas	2024-2025	$ 7.15	$ 7.23	$ 7.19	$ 7.23	$ 6.85	$ 6.63	$ 6.58	$ 6.59	$ 6.58	$ 6.61	$ 6.67	$ 6.80
Updated Expected	Sumas	2025-2026	$ 7.40	$ 7.48	$ 7.41	$ 7.45	$ 7.06	$ 6.85	$ 6.79	$ 6.79	$ 6.77	$ 6.80	$ 6.86	$ 6.99
Updated Expected	Sumas	2026-2027	$ 7.54	$ 7.62	$ 7.86	$ 7.91	$ 7.11	$ 6.95	$ 6.90	$ 6.85	$ 6.82	$ 6.85	$ 6.98	$ 7.11
Updated Expected	Sumas	2027-2028	$ 7.68	$ 7.75	$ 7.70	$ 7.73	$ 7.20	$ 7.07	$ 7.00	$ 6.95	$ 6.93	$ 6.96	$ 7.10	$ 7.23
Updated Expected	Sumas	2028-2029	$ 7.81	$ 7.88	$ 7.80	$ 7.84	$ 7.41	$ 7.20	$ 7.14	$ 7.09	$ 7.00	$ 7.01	$ 7.21	$ 7.32
Updated Expected	Sumas	2029-2030	$ 7.32	$ 7.32										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Low Prices	AECo	2009-2010	$ 5.44	$ 5.80	$ 5.49	$ 5.53	$ 5.44	$ 4.79	$ 4.84	$ 4.92	$ 4.99	$ 5.07	$ 5.08	$ 5.13
Low Prices	AECo	2010-2011	$ 5.83	$ 6.00	$ 5.94	$ 5.95	$ 5.82	$ 5.08	$ 5.09	$ 5.15	$ 5.21	$ 5.26	$ 5.29	$ 5.35
Low Prices	AECo	2011-2012	$ 5.76	$ 5.89	$ 5.76	$ 5.78	$ 5.63	$ 4.92	$ 4.91	$ 4.98	$ 5.04	$ 5.09	$ 5.13	$ 5.17
Low Prices	AECo	2012-2013	$ 5.68	$ 5.80	$ 6.16	$ 6.15	$ 5.99	$ 5.26	$ 5.28	$ 5.35	$ 5.37	$ 5.41	$ 5.43	$ 5.53
Low Prices	AECo	2013-2014	$ 5.30	$ 5.32	$ 5.09	$ 5.12	$ 4.98	$ 4.39	$ 4.38	$ 4.44	$ 4.47	$ 4.49	$ 4.50	$ 4.53
Low Prices	AECo	2014-2015	$ 5.70	$ 5.77	$ 6.82	$ 6.86	$ 6.77	$ 6.13	$ 6.14	$ 6.18	$ 6.25	$ 6.25	$ 6.26	$ 6.30
Low Prices	AECo	2015-2016	$ 6.92	$ 7.07	$ 7.17	$ 7.22	$ 7.12	$ 6.44	$ 6.44	$ 6.42	$ 6.53	$ 6.51	$ 6.56	$ 6.63
Low Prices	AECo	2016-2017	$ 7.26	$ 7.32	$ 7.26	$ 7.29	$ 7.06	$ 6.39	$ 6.43	$ 6.41	$ 6.42	$ 6.42	$ 6.44	$ 6.50
Low Prices	AECo	2017-2018	$ 7.13	$ 7.16	$ 7.73	$ 7.76	$ 7.60	$ 7.01	$ 7.04	$ 7.05	$ 7.09	$ 7.09	$ 7.08	$ 7.11
Low Prices	AECo	2018-2019	$ 7.76	$ 7.78	$ 7.69	$ 7.68	$ 7.53	$ 6.95	$ 6.96	$ 6.98	$ 6.99	$ 6.97	$ 6.99	$ 7.08
Low Prices	AECo	2019-2020	$ 7.69	$ 7.73	$ 7.60	$ 7.63	$ 7.55	$ 6.87	$ 6.89	$ 6.92	$ 6.98	$ 6.96	$ 7.03	$ 7.12
Low Prices	AECo	2020-2021	$ 7.74	$ 7.74	$ 7.80	$ 7.82	$ 7.54	$ 6.98	$ 6.98	$ 7.00	$ 7.03	$ 6.97	$ 6.98	$ 7.00
Low Prices	AECo	2021-2022	$ 7.61	$ 7.65	$ 7.65	$ 7.67	$ 7.49	$ 6.94	$ 6.97	$ 7.00	$ 7.03	$ 7.04	$ 7.08	$ 7.12
Low Prices	AECo	2022-2023	$ 7.73	$ 7.72	$ 7.75	$ 7.78	$ 7.64	$ 7.04	$ 7.08	$ 7.12	$ 7.16	$ 7.15	$ 7.20	$ 7.26
Low Prices	AECo	2023-2024	$ 7.88	$ 7.90	$ 8.02	$ 8.00	$ 7.84	$ 7.24	$ 7.27	$ 7.32	$ 7.34	$ 7.35	$ 7.41	$ 7.47
Low Prices	AECo	2024-2025	$ 8.07	$ 8.12	$ 8.20	$ 8.19	$ 7.98	$ 7.41	$ 7.44	$ 7.48	$ 7.51	$ 7.52	$ 7.56	$ 7.62
Low Prices	AECo	2025-2026	$ 8.28	$ 8.23	$ 8.36	$ 8.35	$ 8.19	$ 7.59	$ 7.62	$ 7.66	$ 7.68	$ 7.68	$ 7.73	$ 7.79
Low Prices	AECo	2026-2027	$ 8.36	$ 8.37	$ 8.52	$ 8.57	$ 8.41	$ 7.82	$ 7.84	$ 7.87	$ 7.88	$ 7.92	$ 7.92	$ 7.97
Low Prices	AECo	2027-2028	$ 8.55	$ 8.56	$ 8.71	$ 8.76	$ 8.60	$ 8.01	$ 8.02	$ 8.06	$ 8.07	$ 8.11	$ 8.11	$ 8.16
Low Prices	AECo	2028-2029	$ 8.74	$ 8.75	$ 8.91	$ 8.95	$ 8.79	$ 8.20	$ 8.22	$ 8.25	$ 8.26	$ 8.30	$ 8.31	$ 8.35
Low Prices	AECo	2029-2030	$ 7.25	$ 7.61										
Low Prices	Malin	2009-2010	$ 5.57	$ 5.93	$ 5.59	$ 5.64	$ 5.54	$ 4.86	$ 4.90	$ 4.98	$ 5.06	$ 5.16	$ 5.15	$ 5.21
Low Prices	Malin	2010-2011	$ 5.96	$ 6.14	$ 6.05	$ 6.06	$ 5.93	$ 5.14	$ 5.14	$ 5.20	$ 5.27	$ 5.33	$ 5.36	$ 5.42
Low Prices	Malin	2011-2012	$ 5.86	$ 5.99	$ 5.86	$ 5.88	$ 5.62	$ 4.97	$ 4.94	$ 5.01	$ 5.08	$ 5.14	$ 5.18	$ 5.23
Low Prices	Malin	2012-2013	$ 5.80	$ 5.91	$ 6.18	$ 6.17	$ 5.89	$ 5.29	$ 5.30	$ 5.37	$ 5.40	$ 5.45	$ 5.47	$ 5.58
Low Prices	Malin	2013-2014	$ 5.43	$ 5.45	$ 4.99	$ 5.02	$ 4.81	$ 4.38	$ 4.34	$ 4.46	$ 4.49	$ 4.52	$ 4.53	$ 4.58
Low Prices	Malin	2014-2015	$ 5.85	$ 5.91	$ 6.70	$ 6.73	$ 6.50	$ 6.04	$ 6.06	$ 6.21	$ 6.29	$ 6.29	$ 6.31	$ 6.37
Low Prices	Malin	2015-2016	$ 7.06	$ 7.15	$ 6.99	$ 7.42	$ 6.71	$ 6.27	$ 6.27	$ 6.45	$ 6.57	$ 6.56	$ 6.62	$ 6.72
Low Prices	Malin	2016-2017	$ 7.41	$ 7.53	$ 6.93	$ 6.99	$ 6.73	$ 6.23	$ 6.31	$ 6.28	$ 6.41	$ 6.42	$ 6.46	$ 6.54
Low Prices	Malin	2017-2018	$ 7.17	$ 7.17	$ 7.51	$ 7.55	$ 7.29	$ 6.90	$ 6.94	$ 6.94	$ 7.08	$ 7.09	$ 7.08	$ 7.13
Low Prices	Malin	2018-2019	$ 7.83	$ 7.83	$ 7.88	$ 7.58	$ 7.41	$ 6.92	$ 6.93	$ 6.95	$ 6.96	$ 6.94	$ 6.97	$ 7.10
Low Prices	Malin	2019-2020	$ 7.89	$ 7.92	$ 7.49	$ 7.52	$ 7.52	$ 6.80	$ 6.81	$ 6.86	$ 6.95	$ 6.92	$ 7.02	$ 7.15
Low Prices	Malin	2020-2021	$ 7.95	$ 7.94	$ 8.01	$ 8.03	$ 7.71	$ 6.92	$ 6.89	$ 6.91	$ 6.94	$ 6.85	$ 6.91	$ 6.92
Low Prices	Malin	2021-2022	$ 7.74	$ 7.82	$ 7.73	$ 7.76	$ 7.59	$ 6.79	$ 6.79	$ 6.81	$ 6.85	$ 6.87	$ 6.95	$ 7.02
Low Prices	Malin	2022-2023	$ 7.88	$ 7.92	$ 7.82	$ 7.84	$ 7.73	$ 6.84	$ 6.87	$ 6.90	$ 6.96	$ 6.96	$ 7.10	$ 7.17
Low Prices	Malin	2023-2024	$ 8.06	$ 8.14	$ 8.13	$ 8.10	$ 7.94	$ 7.04	$ 7.06	$ 7.12	$ 7.15	$ 7.16	$ 7.28	$ 7.42
Low Prices	Malin	2024-2025	$ 8.35	$ 8.40	$ 8.33	$ 8.30	$ 8.07	$ 7.19	$ 7.21	$ 7.26	$ 7.28	$ 7.32	$ 7.44	$ 7.56
Low Prices	Malin	2025-2026	$ 8.60	$ 8.49	$ 8.51	$ 8.48	$ 8.32	$ 7.35	$ 7.37	$ 7.42	$ 7.44	$ 7.45	$ 7.58	$ 7.73
Low Prices	Malin	2026-2027	$ 8.65	$ 8.63	$ 8.67	$ 8.70	$ 8.58	$ 7.61	$ 7.63	$ 7.66	$ 7.67	$ 7.72	$ 7.81	$ 7.93
Low Prices	Malin	2027-2028	$ 8.84	$ 8.82	$ 8.86	$ 8.89	$ 8.77	$ 7.80	$ 7.82	$ 7.85	$ 7.85	$ 7.91	$ 7.99	$ 8.12
Low Prices	Malin	2028-2029	$ 9.03	$ 9.01	$ 9.06	$ 9.09	$ 8.97	$ 8.00	$ 8.01	$ 8.04	$ 8.05	$ 8.11	$ 8.19	$ 8.32
Low Prices	Malin	2029-2030	$ 8.32	$ 8.32										
Low Prices	Rockies	2009-2010	$ 4.21	$ 4.62	$ 4.32	$ 4.39	$ 4.19	$ 2.46	$ 2.51	$ 2.59	$ 2.68	$ 2.75	$ 2.75	$ 2.83
Low Prices	Rockies	2010-2011	$ 4.80	$ 4.98	$ 4.91	$ 4.92	$ 4.67	$ 2.88	$ 2.89	$ 2.91	$ 2.96	$ 3.00	$ 3.03	$ 3.08
Low Prices	Rockies	2011-2012	$ 5.77	$ 5.90	$ 5.77	$ 5.80	$ 5.55	$ 4.92	$ 4.91	$ 4.94	$ 5.00	$ 5.03	$ 5.03	$ 5.07
Low Prices	Rockies	2012-2013	$ 5.57	$ 5.67	$ 6.03	$ 6.01	$ 5.72	$ 5.15	$ 5.15	$ 5.20	$ 5.22	$ 5.26	$ 5.27	$ 5.34
Low Prices	Rockies	2013-2014	$ 5.04	$ 5.05	$ 4.81	$ 4.84	$ 4.57	$ 4.17	$ 4.15	$ 4.17	$ 4.16	$ 4.18	$ 4.18	$ 4.21
Low Prices	Rockies	2014-2015	$ 5.45	$ 5.51	$ 6.55	$ 6.59	$ 6.31	$ 5.87	$ 5.91	$ 5.93	$ 5.97	$ 5.96	$ 5.97	$ 5.99
Low Prices	Rockies	2015-2016	$ 6.60	$ 6.73	$ 6.81	$ 6.84	$ 6.55	$ 6.10	$ 6.15	$ 6.14	$ 6.18	$ 6.16	$ 6.18	$ 6.24
Low Prices	Rockies	2016-2017	$ 6.79	$ 6.85	$ 6.79	$ 6.83	$ 6.56	$ 6.10	$ 6.17	$ 6.15	$ 6.16	$ 6.18	$ 6.19	$ 6.23
Low Prices	Rockies	2017-2018	$ 6.79	$ 6.81	$ 7.38	$ 7.41	$ 7.17	$ 6.74	$ 6.79	$ 6.80	$ 6.83	$ 6.84	$ 6.82	$ 6.84
Low Prices	Rockies	2018-2019	$ 7.41	$ 7.43	$ 7.34	$ 7.35	$ 7.15	$ 6.68	$ 6.68	$ 6.70	$ 6.69	$ 6.66	$ 6.70	$ 6.78
Low Prices	Rockies	2019-2020	$ 7.30	$ 7.35	$ 7.24	$ 7.28	$ 7.18	$ 6.65	$ 6.69	$ 6.72	$ 6.75	$ 6.77	$ 6.82	$ 6.87
Low Prices	Rockies	2020-2021	$ 7.43	$ 7.44	$ 7.51	$ 7.55	$ 7.34	$ 6.79	$ 6.83	$ 6.85	$ 6.87	$ 6.88	$ 6.90	$ 6.95
Low Prices	Rockies	2021-2022	$ 7.49	$ 7.59	$ 7.65	$ 7.69	$ 7.45	$ 6.91	$ 6.95	$ 6.98	$ 7.02	$ 7.04	$ 7.07	$ 7.12
Low Prices	Rockies	2022-2023	$ 7.74	$ 7.77	$ 7.84	$ 7.86	$ 7.72	$ 7.09	$ 7.12	$ 7.16	$ 7.20	$ 7.23	$ 7.28	$ 7.33
Low Prices	Rockies	2023-2024	$ 7.98	$ 8.01	$ 8.11	$ 8.10	$ 7.92	$ 7.32	$ 7.35	$ 7.39	$ 7.42	$ 7.44	$ 7.48	$ 7.56
Low Prices	Rockies	2024-2025	$ 8.16	$ 8.22	$ 8.30	$ 8.29	$ 8.06	$ 7.48	$ 7.52	$ 7.55	$ 7.59	$ 7.62	$ 7.66	$ 7.73
Low Prices	Rockies	2025-2026	$ 8.38	$ 8.34	$ 8.47	$ 8.45	$ 8.26	$ 7.67	$ 7.70	$ 7.73	$ 7.76	$ 7.76	$ 7.79	$ 7.83
Low Prices	Rockies	2026-2027	$ 8.47	$ 8.52	$ 8.63	$ 8.66	$ 8.47	$ 7.92	$ 7.95	$ 7.98	$ 7.99	$ 8.03	$ 8.06	$ 8.12
Low Prices	Rockies	2027-2028	$ 8.66	$ 8.71	$ 8.82	$ 8.85	$ 8.66	$ 8.11	$ 8.14	$ 8.17	$ 8.18	$ 8.22	$ 8.25	$ 8.31
Low Prices	Rockies	2028-2029	$ 8.85	$ 8.90	$ 9.02	$ 9.05	$ 8.86	$ 8.30	$ 8.34	$ 8.37	$ 8.38	$ 8.41	$ 8.44	$ 8.50
Low Prices	Rockies	2029-2030	$ 6.78	$ 7.13										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Low Prices	Stanfield	2009-2010	$ 5.51	$ 5.88	$ 5.54	$ 5.58	$ 5.49	$ 4.82	$ 4.86	$ 4.94	$ 5.02	$ 5.09	$ 5.10	$ 5.17
Low Prices	Stanfield	2010-2011	$ 5.90	$ 6.08	$ 5.99	$ 6.00	$ 5.87	$ 5.09	$ 5.10	$ 5.16	$ 5.22	$ 5.27	$ 5.31	$ 5.37
Low Prices	Stanfield	2011-2012	$ 5.80	$ 5.93	$ 5.80	$ 5.82	$ 5.68	$ 4.92	$ 4.90	$ 4.97	$ 5.03	$ 5.08	$ 5.13	$ 5.17
Low Prices	Stanfield	2012-2013	$ 5.74	$ 5.85	$ 6.22	$ 6.20	$ 6.05	$ 5.25	$ 5.25	$ 5.33	$ 5.35	$ 5.39	$ 5.42	$ 5.53
Low Prices	Stanfield	2013-2014	$ 5.37	$ 5.38	$ 5.15	$ 5.18	$ 5.05	$ 4.37	$ 4.30	$ 4.41	$ 4.44	$ 4.46	$ 4.48	$ 4.52
Low Prices	Stanfield	2014-2015	$ 5.77	$ 5.84	$ 6.89	$ 6.93	$ 6.87	$ 6.11	$ 6.11	$ 6.15	$ 6.23	$ 6.23	$ 6.25	$ 6.30
Low Prices	Stanfield	2015-2016	$ 7.01	$ 7.17	$ 7.27	$ 7.33	$ 7.25	$ 6.44	$ 6.42	$ 6.39	$ 6.51	$ 6.49	$ 6.55	$ 6.65
Low Prices	Stanfield	2016-2017	$ 7.38	$ 7.44	$ 7.39	$ 7.42	$ 7.19	$ 6.35	$ 6.37	$ 6.33	$ 6.34	$ 6.35	$ 6.39	$ 6.46
Low Prices	Stanfield	2017-2018	$ 7.23	$ 7.24	$ 7.82	$ 7.85	$ 7.71	$ 6.95	$ 6.96	$ 6.96	$ 7.01	$ 7.01	$ 7.00	$ 7.05
Low Prices	Stanfield	2018-2019	$ 7.85	$ 7.87	$ 7.78	$ 7.77	$ 7.64	$ 6.88	$ 6.86	$ 6.88	$ 6.88	$ 6.85	$ 6.89	$ 7.01
Low Prices	Stanfield	2019-2020	$ 7.78	$ 7.81	$ 7.69	$ 7.72	$ 7.67	$ 6.76	$ 6.76	$ 6.79	$ 6.87	$ 6.83	$ 6.93	$ 7.06
Low Prices	Stanfield	2020-2021	$ 7.85	$ 7.84	$ 7.90	$ 7.92	$ 7.61	$ 6.84	$ 6.82	$ 6.83	$ 6.86	$ 6.76	$ 6.83	$ 6.83
Low Prices	Stanfield	2021-2022	$ 7.64	$ 7.72	$ 7.63	$ 7.65	$ 7.49	$ 6.70	$ 6.71	$ 6.74	$ 6.77	$ 6.78	$ 6.86	$ 6.93
Low Prices	Stanfield	2022-2023	$ 7.77	$ 7.79	$ 7.71	$ 7.73	$ 7.62	$ 6.76	$ 6.79	$ 6.82	$ 6.88	$ 6.87	$ 7.00	$ 7.07
Low Prices	Stanfield	2023-2024	$ 7.95	$ 7.99	$ 8.02	$ 7.99	$ 7.83	$ 6.95	$ 6.98	$ 7.04	$ 7.06	$ 7.07	$ 7.19	$ 7.30
Low Prices	Stanfield	2024-2025	$ 8.20	$ 8.25	$ 8.21	$ 8.19	$ 7.96	$ 7.09	$ 7.13	$ 7.18	$ 7.19	$ 7.23	$ 7.33	$ 7.43
Low Prices	Stanfield	2025-2026	$ 8.44	$ 8.33	$ 8.39	$ 8.36	$ 8.20	$ 7.26	$ 7.29	$ 7.33	$ 7.34	$ 7.35	$ 7.47	$ 7.59
Low Prices	Stanfield	2026-2027	$ 8.48	$ 8.46	$ 8.54	$ 8.58	$ 8.46	$ 7.51	$ 7.52	$ 7.55	$ 7.55	$ 7.60	$ 7.66	$ 7.76
Low Prices	Stanfield	2027-2028	$ 8.67	$ 8.65	$ 8.73	$ 8.77	$ 8.65	$ 7.70	$ 7.70	$ 7.74	$ 7.74	$ 7.79	$ 7.85	$ 7.95
Low Prices	Stanfield	2028-2029	$ 8.86	$ 8.84	$ 8.93	$ 8.97	$ 8.85	$ 7.90	$ 7.90	$ 7.94	$ 7.93	$ 7.98	$ 8.05	$ 8.15
Low Prices	Stanfield	2029-2030	$ 8.15	$ 8.15										
Low Prices	Sumas	2009-2010	$ 5.65	$ 6.01	$ 5.70	$ 5.75	$ 5.54	$ 4.88	$ 4.84	$ 4.89	$ 4.98	$ 5.06	$ 5.11	$ 5.22
Low Prices	Sumas	2010-2011	$ 6.05	$ 6.23	$ 6.17	$ 6.18	$ 5.92	$ 5.13	$ 5.10	$ 5.14	$ 5.21	$ 5.26	$ 5.33	$ 5.44
Low Prices	Sumas	2011-2012	$ 5.95	$ 6.08	$ 5.96	$ 5.98	$ 5.74	$ 5.01	$ 4.92	$ 4.96	$ 5.04	$ 5.09	$ 5.17	$ 5.26
Low Prices	Sumas	2012-2013	$ 5.89	$ 6.00	$ 6.37	$ 6.36	$ 6.10	$ 5.33	$ 5.28	$ 5.33	$ 5.37	$ 5.42	$ 5.47	$ 5.60
Low Prices	Sumas	2013-2014	$ 5.51	$ 5.53	$ 5.30	$ 5.33	$ 5.09	$ 4.46	$ 4.40	$ 4.43	$ 4.47	$ 4.50	$ 4.54	$ 4.61
Low Prices	Sumas	2014-2015	$ 5.92	$ 5.98	$ 7.03	$ 7.06	$ 6.90	$ 6.21	$ 6.17	$ 6.19	$ 6.27	$ 6.28	$ 6.32	$ 6.40
Low Prices	Sumas	2015-2016	$ 7.15	$ 7.29	$ 7.37	$ 7.41	$ 7.25	$ 6.54	$ 6.49	$ 6.46	$ 6.58	$ 6.57	$ 6.62	$ 6.75
Low Prices	Sumas	2016-2017	$ 7.51	$ 7.57	$ 7.52	$ 7.55	$ 7.21	$ 6.51	$ 6.47	$ 6.45	$ 6.46	$ 6.48	$ 6.51	$ 6.62
Low Prices	Sumas	2017-2018	$ 7.39	$ 7.41	$ 7.99	$ 8.02	$ 7.76	$ 7.13	$ 7.10	$ 7.10	$ 7.15	$ 7.16	$ 7.15	$ 7.24
Low Prices	Sumas	2018-2019	$ 8.06	$ 8.05	$ 7.95	$ 7.95	$ 7.71	$ 7.08	$ 7.03	$ 7.04	$ 7.05	$ 7.04	$ 7.09	$ 7.22
Low Prices	Sumas	2019-2020	$ 7.97	$ 8.00	$ 7.88	$ 7.91	$ 7.72	$ 7.00	$ 6.95	$ 6.97	$ 7.05	$ 7.03	$ 7.14	$ 7.26
Low Prices	Sumas	2020-2021	$ 8.00	$ 8.01	$ 8.07	$ 8.10	$ 7.80	$ 7.10	$ 7.04	$ 7.06	$ 7.09	$ 7.03	$ 7.08	$ 7.21
Low Prices	Sumas	2021-2022	$ 7.97	$ 8.02	$ 8.09	$ 8.12	$ 7.78	$ 7.07	$ 7.04	$ 7.07	$ 7.10	$ 7.11	$ 7.17	$ 7.36
Low Prices	Sumas	2022-2023	$ 8.10	$ 8.10	$ 8.17	$ 8.20	$ 8.01	$ 7.32	$ 7.20	$ 7.22	$ 7.26	$ 7.24	$ 7.39	$ 7.56
Low Prices	Sumas	2023-2024	$ 8.27	$ 8.29	$ 8.41	$ 8.40	$ 8.21	$ 7.51	$ 7.43	$ 7.46	$ 7.48	$ 7.50	$ 7.57	$ 7.77
Low Prices	Sumas	2024-2025	$ 8.53	$ 8.58	$ 8.67	$ 8.66	$ 8.35	$ 7.68	$ 7.59	$ 7.62	$ 7.65	$ 7.68	$ 7.75	$ 7.92
Low Prices	Sumas	2025-2026	$ 8.77	$ 8.71	$ 8.84	$ 8.83	$ 8.56	$ 7.88	$ 7.76	$ 7.80	$ 7.82	$ 7.83	$ 7.92	$ 8.09
Low Prices	Sumas	2026-2027	$ 8.86	$ 8.86	$ 8.97	$ 9.00	$ 8.79	$ 8.11	$ 8.03	$ 8.05	$ 8.05	$ 8.10	$ 8.14	$ 8.29
Low Prices	Sumas	2027-2028	$ 9.05	$ 9.05	$ 9.16	$ 9.19	$ 8.98	$ 8.30	$ 8.22	$ 8.23	$ 8.24	$ 8.29	$ 8.33	$ 8.48
Low Prices	Sumas	2028-2029	$ 9.23	$ 9.24	$ 9.36	$ 9.39	$ 9.17	$ 8.50	$ 8.42	$ 8.43	$ 8.44	$ 8.48	$ 8.53	$ 8.68
Low Prices	Sumas	2029-2030	$ 7.38	$ 7.76										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Supply Constrained	AECo	2009-2010	$ 6.60	$ 7.01	$ 7.34	$ 7.38	$ 7.16	$ 6.96	$ 6.90	$ 7.04	$ 7.09	$ 7.15	$ 7.13	$ 7.27
Supply Constrained	AECo	2010-2011	$ 8.10	$ 8.37	$ 8.40	$ 8.44	$ 8.07	$ 7.80	$ 7.80	$ 7.88	$ 7.91	$ 7.98	$ 7.96	$ 8.08
Supply Constrained	AECo	2011-2012	$ 8.80	$ 9.01	$ 9.34	$ 9.36	$ 8.93	$ 8.65	$ 8.66	$ 8.74	$ 8.81	$ 8.85	$ 8.80	$ 8.90
Supply Constrained	AECo	2012-2013	$ 9.64	$ 9.83	$ 10.29	$ 10.34	$ 9.90	$ 9.64	$ 9.67	$ 9.75	$ 9.80	$ 9.87	$ 9.77	$ 9.86
Supply Constrained	AECo	2013-2014	$ 9.92	$ 10.06	$ 9.98	$ 10.04	$ 9.59	$ 9.44	$ 9.50	$ 9.56	$ 9.60	$ 9.64	$ 9.56	$ 9.64
Supply Constrained	AECo	2014-2015	$ 11.35	$ 11.51	$ 12.71	$ 12.81	$ 12.28	$ 12.13	$ 12.19	$ 12.25	$ 12.30	$ 12.41	$ 12.27	$ 12.35
Supply Constrained	AECo	2015-2016	$ 13.02	$ 13.18	$ 13.47	$ 13.52	$ 13.00	$ 12.84	$ 12.91	$ 12.98	$ 13.03	$ 13.10	$ 13.00	$ 13.10
Supply Constrained	AECo	2016-2017	$ 13.76	$ 13.92	$ 14.07	$ 14.09	$ 13.55	$ 13.38	$ 13.46	$ 13.51	$ 13.60	$ 13.66	$ 13.54	$ 13.65
Supply Constrained	AECo	2017-2018	$ 14.32	$ 14.47	$ 15.20	$ 15.25	$ 14.73	$ 14.54	$ 14.59	$ 14.67	$ 14.71	$ 14.77	$ 14.69	$ 14.80
Supply Constrained	AECo	2018-2019	$ 15.54	$ 15.70	$ 15.66	$ 15.73	$ 15.14	$ 14.94	$ 15.00	$ 15.08	$ 15.13	$ 15.19	$ 15.10	$ 15.25
Supply Constrained	AECo	2019-2020	$ 15.94	$ 16.10	$ 16.13	$ 16.19	$ 15.61	$ 15.42	$ 15.46	$ 15.53	$ 15.61	$ 15.69	$ 15.55	$ 15.71
Supply Constrained	AECo	2020-2021	$ 16.43	$ 16.59	$ 16.59	$ 16.67	$ 16.18	$ 15.93	$ 16.01	$ 16.08	$ 16.16	$ 16.22	$ 16.12	$ 16.25
Supply Constrained	AECo	2021-2022	$ 16.95	$ 17.12	$ 17.13	$ 17.19	$ 16.66	$ 16.42	$ 16.50	$ 16.57	$ 16.61	$ 16.69	$ 16.62	$ 16.74
Supply Constrained	AECo	2022-2023	$ 17.46	$ 17.62	$ 17.65	$ 17.72	$ 17.11	$ 16.87	$ 16.91	$ 16.96	$ 17.07	$ 17.02	$ 16.92	$ 17.06
Supply Constrained	AECo	2023-2024	$ 17.68	$ 17.85	$ 17.71	$ 17.71	$ 17.06	$ 16.92	$ 17.00	$ 17.08	$ 17.13	$ 17.20	$ 17.13	$ 17.21
Supply Constrained	AECo	2024-2025	$ 17.89	$ 18.04	$ 18.08	$ 18.20	$ 17.54	$ 17.38	$ 17.47	$ 17.54	$ 17.58	$ 17.65	$ 17.58	$ 17.65
Supply Constrained	AECo	2025-2026	$ 18.37	$ 18.55	$ 18.88	$ 18.96	$ 18.32	$ 18.16	$ 18.25	$ 18.31	$ 18.36	$ 18.44	$ 18.35	$ 18.47
Supply Constrained	AECo	2026-2027	$ 19.17	$ 19.37	$ 19.75	$ 19.78	$ 19.11	$ 18.95	$ 19.06	$ 19.12	$ 19.19	$ 19.27	$ 19.19	$ 19.30
Supply Constrained	AECo	2027-2028	$ 20.01	$ 20.19	$ 20.58	$ 20.66	$ 19.94	$ 19.79	$ 19.90	$ 19.98	$ 20.05	$ 20.14	$ 20.07	$ 20.16
Supply Constrained	AECo	2028-2029	$ 20.90	$ 21.07	$ 21.48	$ 21.57	$ 20.84	$ 20.66	$ 20.77	$ 20.87	$ 20.92	$ 21.00	$ 20.90	$ 21.02
Supply Constrained	AECo	2029-2030	$ 21.02	$ 21.02										
Supply Constrained	Malin	2009-2010	$ 6.94	$ 7.35	$ 7.69	$ 7.73	$ 7.44	$ 7.24	$ 7.16	$ 7.34	$ 7.42	$ 7.50	$ 7.47	$ 7.59
Supply Constrained	Malin	2010-2011	$ 8.44	$ 8.70	$ 8.73	$ 8.77	$ 8.36	$ 8.08	$ 8.09	$ 8.16	$ 8.21	$ 8.29	$ 8.27	$ 8.38
Supply Constrained	Malin	2011-2012	$ 9.08	$ 9.30	$ 9.60	$ 9.62	$ 9.17	$ 8.89	$ 8.90	$ 8.97	$ 9.06	$ 9.11	$ 9.06	$ 9.16
Supply Constrained	Malin	2012-2013	$ 9.89	$ 10.08	$ 10.54	$ 10.60	$ 10.10	$ 9.85	$ 9.89	$ 9.96	$ 10.05	$ 10.13	$ 10.04	$ 10.11
Supply Constrained	Malin	2013-2014	$ 10.17	$ 10.32	$ 10.21	$ 10.28	$ 9.76	$ 9.64	$ 9.70	$ 9.76	$ 9.82	$ 9.88	$ 9.80	$ 9.88
Supply Constrained	Malin	2014-2015	$ 11.58	$ 11.74	$ 12.92	$ 13.03	$ 12.44	$ 12.31	$ 12.38	$ 12.44	$ 12.52	$ 12.63	$ 12.50	$ 12.57
Supply Constrained	Malin	2015-2016	$ 13.23	$ 13.39	$ 13.67	$ 13.73	$ 13.14	$ 13.01	$ 13.08	$ 13.15	$ 13.25	$ 13.32	$ 13.23	$ 13.31
Supply Constrained	Malin	2016-2017	$ 13.98	$ 14.14	$ 14.28	$ 14.30	$ 13.70	$ 13.57	$ 13.66	$ 13.71	$ 13.82	$ 13.90	$ 13.78	$ 13.88
Supply Constrained	Malin	2017-2018	$ 14.53	$ 14.69	$ 15.40	$ 15.47	$ 14.88	$ 14.73	$ 14.80	$ 14.86	$ 14.94	$ 15.01	$ 14.94	$ 15.03
Supply Constrained	Malin	2018-2019	$ 15.76	$ 15.92	$ 15.84	$ 15.91	$ 15.28	$ 15.11	$ 15.19	$ 15.27	$ 15.36	$ 15.43	$ 15.34	$ 15.48
Supply Constrained	Malin	2019-2020	$ 16.17	$ 16.33	$ 16.30	$ 16.38	$ 15.77	$ 15.60	$ 15.66	$ 15.73	$ 15.86	$ 15.93	$ 15.80	$ 15.95
Supply Constrained	Malin	2020-2021	$ 16.66	$ 16.82	$ 16.77	$ 16.85	$ 16.33	$ 16.12	$ 16.20	$ 16.27	$ 16.39	$ 16.46	$ 16.36	$ 16.47
Supply Constrained	Malin	2021-2022	$ 17.16	$ 17.34	$ 17.29	$ 17.36	$ 16.79	$ 16.60	$ 16.67	$ 16.75	$ 16.84	$ 16.91	$ 16.85	$ 16.94
Supply Constrained	Malin	2022-2023	$ 17.66	$ 17.82	$ 17.80	$ 17.88	$ 17.25	$ 17.02	$ 17.06	$ 17.12	$ 17.27	$ 17.27	$ 17.20	$ 17.35
Supply Constrained	Malin	2023-2024	$ 18.00	$ 18.19	$ 17.98	$ 18.01	$ 17.32	$ 17.19	$ 17.28	$ 17.36	$ 17.49	$ 17.55	$ 17.50	$ 17.56
Supply Constrained	Malin	2024-2025	$ 18.23	$ 18.38	$ 18.40	$ 18.52	$ 17.81	$ 17.66	$ 17.76	$ 17.83	$ 17.94	$ 18.01	$ 17.96	$ 18.00
Supply Constrained	Malin	2025-2026	$ 18.72	$ 18.90	$ 19.21	$ 19.30	$ 18.61	$ 18.47	$ 18.57	$ 18.63	$ 18.72	$ 18.80	$ 18.73	$ 18.83
Supply Constrained	Malin	2026-2027	$ 19.53	$ 19.73	$ 20.08	$ 20.12	$ 19.40	$ 19.24	$ 19.36	$ 19.45	$ 19.54	$ 19.62	$ 19.56	$ 19.67
Supply Constrained	Malin	2027-2028	$ 20.37	$ 20.55	$ 20.90	$ 20.99	$ 20.22	$ 20.09	$ 20.21	$ 20.31	$ 20.40	$ 20.49	$ 20.43	$ 20.53
Supply Constrained	Malin	2028-2029	$ 21.27	$ 21.45	$ 21.82	$ 21.92	$ 21.13	$ 20.96	$ 21.08	$ 21.18	$ 21.26	$ 21.34	$ 21.25	$ 21.38
Supply Constrained	Malin	2029-2030	$ 21.38	$ 21.38										
Supply Constrained	Rockies	2009-2010	$ 6.69	$ 7.08	$ 7.42	$ 7.50	$ 7.17	$ 6.96	$ 6.95	$ 6.96	$ 7.07	$ 7.14	$ 7.16	$ 7.33
Supply Constrained	Rockies	2010-2011	$ 8.25	$ 8.50	$ 8.54	$ 8.58	$ 8.14	$ 7.85	$ 7.87	$ 7.81	$ 7.91	$ 7.98	$ 7.95	$ 8.13
Supply Constrained	Rockies	2011-2012	$ 8.94	$ 9.12	$ 9.44	$ 9.47	$ 8.98	$ 8.72	$ 8.74	$ 8.66	$ 8.81	$ 8.85	$ 8.79	$ 8.93
Supply Constrained	Rockies	2012-2013	$ 9.68	$ 9.83	$ 10.29	$ 10.35	$ 9.83	$ 9.60	$ 9.66	$ 9.60	$ 9.72	$ 9.79	$ 9.70	$ 9.82
Supply Constrained	Rockies	2013-2014	$ 9.87	$ 9.97	$ 9.88	$ 9.96	$ 9.43	$ 9.35	$ 9.42	$ 9.35	$ 9.45	$ 9.50	$ 9.42	$ 9.52
Supply Constrained	Rockies	2014-2015	$ 11.22	$ 11.35	$ 12.53	$ 12.65	$ 12.03	$ 11.93	$ 12.01	$ 11.93	$ 12.06	$ 12.15	$ 12.02	$ 12.10
Supply Constrained	Rockies	2015-2016	$ 12.79	$ 12.93	$ 13.20	$ 13.27	$ 12.65	$ 12.54	$ 12.64	$ 12.57	$ 12.70	$ 12.76	$ 12.67	$ 12.77
Supply Constrained	Rockies	2016-2017	$ 13.54	$ 13.65	$ 13.81	$ 13.83	$ 13.25	$ 13.17	$ 13.27	$ 13.20	$ 13.34	$ 13.42	$ 13.30	$ 13.42
Supply Constrained	Rockies	2017-2018	$ 14.04	$ 14.17	$ 14.89	$ 14.96	$ 14.38	$ 14.29	$ 14.39	$ 14.32	$ 14.44	$ 14.50	$ 14.42	$ 14.55
Supply Constrained	Rockies	2018-2019	$ 15.23	$ 15.36	$ 15.33	$ 15.40	$ 14.80	$ 14.67	$ 14.78	$ 14.73	$ 14.84	$ 14.90	$ 14.81	$ 14.98
Supply Constrained	Rockies	2019-2020	$ 15.63	$ 15.76	$ 15.77	$ 15.85	$ 15.24	$ 15.13	$ 15.20	$ 15.13	$ 15.27	$ 15.36	$ 15.22	$ 15.40
Supply Constrained	Rockies	2020-2021	$ 16.05	$ 16.18	$ 16.18	$ 16.25	$ 15.67	$ 15.52	$ 15.60	$ 15.54	$ 15.67	$ 15.74	$ 15.63	$ 15.78
Supply Constrained	Rockies	2021-2022	$ 16.45	$ 16.58	$ 16.57	$ 16.64	$ 16.09	$ 15.93	$ 16.02	$ 15.97	$ 16.07	$ 16.15	$ 16.08	$ 16.22
Supply Constrained	Rockies	2022-2023	$ 16.91	$ 17.05	$ 17.04	$ 17.12	$ 16.52	$ 16.35	$ 16.39	$ 16.31	$ 16.50	$ 16.50	$ 16.47	$ 16.66
Supply Constrained	Rockies	2023-2024	$ 17.32	$ 17.47	$ 17.43	$ 17.50	$ 16.88	$ 16.74	$ 16.85	$ 16.79	$ 16.91	$ 16.97	$ 16.92	$ 17.04
Supply Constrained	Rockies	2024-2025	$ 17.73	$ 17.85	$ 17.89	$ 18.02	$ 17.36	$ 17.20	$ 17.32	$ 17.26	$ 17.36	$ 17.43	$ 17.38	$ 17.48
Supply Constrained	Rockies	2025-2026	$ 18.21	$ 18.36	$ 18.68	$ 18.77	$ 18.14	$ 17.96	$ 18.09	$ 17.99	$ 18.10	$ 18.18	$ 18.09	$ 18.23
Supply Constrained	Rockies	2026-2027	$ 18.94	$ 19.12	$ 19.48	$ 19.53	$ 18.89	$ 18.69	$ 18.81	$ 18.74	$ 18.86	$ 18.94	$ 18.86	$ 19.00
Supply Constrained	Rockies	2027-2028	$ 19.69	$ 19.84	$ 20.22	$ 20.30	$ 19.63	$ 19.46	$ 19.59	$ 19.53	$ 19.66	$ 19.73	$ 19.67	$ 19.81
Supply Constrained	Rockies	2028-2029	$ 20.55	$ 20.68	$ 21.07	$ 21.17	$ 20.47	$ 20.30	$ 20.40	$ 20.36	$ 20.50	$ 20.58	$ 20.49	$ 20.66
Supply Constrained	Rockies	2029-2030	$ 20.66	$ 20.66										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Supply Constrained	Stanfield	2009-2010	$ 6.79	$ 7.21	$ 7.54	$ 7.59	$ 7.32	$ 7.11	$ 7.04	$ 7.20	$ 7.26	$ 7.33	$ 7.31	$ 7.44
Supply Constrained	Stanfield	2010-2011	$ 8.29	$ 8.55	$ 8.59	$ 8.63	$ 8.23	$ 7.95	$ 7.95	$ 8.03	$ 8.07	$ 8.14	$ 8.12	$ 8.24
Supply Constrained	Stanfield	2011-2012	$ 8.96	$ 9.17	$ 9.48	$ 9.50	$ 9.06	$ 8.78	$ 8.79	$ 8.86	$ 8.94	$ 8.99	$ 8.94	$ 9.03
Supply Constrained	Stanfield	2012-2013	$ 9.78	$ 9.97	$ 10.43	$ 10.48	$ 10.01	$ 9.75	$ 9.78	$ 9.86	$ 9.93	$ 10.00	$ 9.91	$ 9.99
Supply Constrained	Stanfield	2013-2014	$ 10.06	$ 10.20	$ 10.11	$ 10.17	$ 9.68	$ 9.54	$ 9.60	$ 9.66	$ 9.70	$ 9.76	$ 9.68	$ 9.77
Supply Constrained	Stanfield	2014-2015	$ 11.48	$ 11.64	$ 12.83	$ 12.93	$ 12.36	$ 12.22	$ 12.29	$ 12.34	$ 12.40	$ 12.51	$ 12.39	$ 12.46
Supply Constrained	Stanfield	2015-2016	$ 13.13	$ 13.29	$ 13.58	$ 13.64	$ 13.07	$ 12.93	$ 13.00	$ 13.06	$ 13.13	$ 13.20	$ 13.12	$ 13.20
Supply Constrained	Stanfield	2016-2017	$ 13.88	$ 14.04	$ 14.19	$ 14.21	$ 13.63	$ 13.48	$ 13.56	$ 13.61	$ 13.70	$ 13.78	$ 13.66	$ 13.77
Supply Constrained	Stanfield	2017-2018	$ 14.43	$ 14.59	$ 15.31	$ 15.37	$ 14.81	$ 14.64	$ 14.70	$ 14.76	$ 14.81	$ 14.88	$ 14.81	$ 14.92
Supply Constrained	Stanfield	2018-2019	$ 15.66	$ 15.82	$ 15.76	$ 15.83	$ 15.22	$ 15.03	$ 15.10	$ 15.17	$ 15.24	$ 15.30	$ 15.22	$ 15.37
Supply Constrained	Stanfield	2019-2020	$ 16.07	$ 16.23	$ 16.22	$ 16.30	$ 15.70	$ 15.51	$ 15.56	$ 15.63	$ 15.73	$ 15.81	$ 15.68	$ 15.84
Supply Constrained	Stanfield	2020-2021	$ 16.56	$ 16.72	$ 16.69	$ 16.77	$ 16.26	$ 16.03	$ 16.11	$ 16.18	$ 16.27	$ 16.34	$ 16.24	$ 16.36
Supply Constrained	Stanfield	2021-2022	$ 17.07	$ 17.25	$ 17.22	$ 17.29	$ 16.73	$ 16.51	$ 16.59	$ 16.66	$ 16.72	$ 16.80	$ 16.73	$ 16.84
Supply Constrained	Stanfield	2022-2023	$ 17.57	$ 17.73	$ 17.73	$ 17.81	$ 17.18	$ 16.95	$ 16.98	$ 17.03	$ 17.16	$ 17.14	$ 17.06	$ 17.22
Supply Constrained	Stanfield	2023-2024	$ 17.86	$ 18.04	$ 17.86	$ 17.87	$ 17.20	$ 17.06	$ 17.15	$ 17.23	$ 17.31	$ 17.38	$ 17.33	$ 17.40
Supply Constrained	Stanfield	2024-2025	$ 18.08	$ 18.23	$ 18.26	$ 18.38	$ 17.68	$ 17.52	$ 17.62	$ 17.69	$ 17.76	$ 17.83	$ 17.78	$ 17.83
Supply Constrained	Stanfield	2025-2026	$ 18.57	$ 18.74	$ 19.07	$ 19.15	$ 18.48	$ 18.32	$ 18.42	$ 18.48	$ 18.54	$ 18.63	$ 18.55	$ 18.66
Supply Constrained	Stanfield	2026-2027	$ 19.36	$ 19.57	$ 19.93	$ 19.97	$ 19.26	$ 19.10	$ 19.21	$ 19.29	$ 19.36	$ 19.45	$ 19.38	$ 19.49
Supply Constrained	Stanfield	2027-2028	$ 20.20	$ 20.38	$ 20.76	$ 20.84	$ 20.09	$ 19.95	$ 20.06	$ 20.15	$ 20.22	$ 20.31	$ 20.26	$ 20.36
Supply Constrained	Stanfield	2028-2029	$ 21.10	$ 21.27	$ 21.67	$ 21.77	$ 20.99	$ 20.82	$ 20.93	$ 21.03	$ 21.09	$ 21.17	$ 21.08	$ 21.21
Supply Constrained	Stanfield	2029-2030	$ 21.21	$ 21.21										
Supply Constrained	Sumas	2009-2010	$ 6.90	$ 7.31	$ 7.65	$ 7.70	$ 7.41	$ 7.07	$ 6.89	$ 7.01	$ 7.07	$ 7.14	$ 7.13	$ 7.37
Supply Constrained	Sumas	2010-2011	$ 8.40	$ 8.67	$ 8.71	$ 8.76	$ 8.33	$ 7.93	$ 7.80	$ 7.87	$ 7.90	$ 7.98	$ 7.97	$ 8.18
Supply Constrained	Sumas	2011-2012	$ 9.05	$ 9.27	$ 9.59	$ 9.63	$ 9.14	$ 8.79	$ 8.68	$ 8.72	$ 8.81	$ 8.85	$ 8.82	$ 8.97
Supply Constrained	Sumas	2012-2013	$ 9.88	$ 10.07	$ 10.54	$ 10.60	$ 10.08	$ 9.75	$ 9.68	$ 9.75	$ 9.82	$ 9.88	$ 9.81	$ 9.91
Supply Constrained	Sumas	2013-2014	$ 10.15	$ 10.29	$ 10.22	$ 10.28	$ 9.75	$ 9.54	$ 9.52	$ 9.56	$ 9.61	$ 9.66	$ 9.60	$ 9.71
Supply Constrained	Sumas	2014-2015	$ 11.56	$ 11.72	$ 12.92	$ 13.03	$ 12.43	$ 12.22	$ 12.22	$ 12.27	$ 12.32	$ 12.43	$ 12.32	$ 12.42
Supply Constrained	Sumas	2015-2016	$ 13.21	$ 13.37	$ 13.67	$ 13.73	$ 13.13	$ 12.92	$ 12.95	$ 13.01	$ 13.06	$ 13.13	$ 13.07	$ 13.18
Supply Constrained	Sumas	2016-2017	$ 13.97	$ 14.13	$ 14.28	$ 14.30	$ 13.68	$ 13.48	$ 13.50	$ 13.54	$ 13.63	$ 13.70	$ 13.60	$ 13.74
Supply Constrained	Sumas	2017-2018	$ 14.52	$ 14.68	$ 15.40	$ 15.47	$ 14.87	$ 14.63	$ 14.63	$ 14.69	$ 14.74	$ 14.81	$ 14.75	$ 14.88
Supply Constrained	Sumas	2018-2019	$ 15.75	$ 15.91	$ 15.88	$ 15.95	$ 15.28	$ 15.03	$ 15.05	$ 15.11	$ 15.17	$ 15.23	$ 15.16	$ 15.34
Supply Constrained	Sumas	2019-2020	$ 16.16	$ 16.32	$ 16.34	$ 16.42	$ 15.76	$ 15.51	$ 15.51	$ 15.57	$ 15.66	$ 15.74	$ 15.64	$ 15.81
Supply Constrained	Sumas	2020-2021	$ 16.65	$ 16.81	$ 16.82	$ 16.90	$ 16.33	$ 16.03	$ 16.08	$ 16.13	$ 16.22	$ 16.28	$ 16.21	$ 16.36
Supply Constrained	Sumas	2021-2022	$ 17.17	$ 17.34	$ 17.36	$ 17.44	$ 16.79	$ 16.51	$ 16.55	$ 16.62	$ 16.66	$ 16.74	$ 16.70	$ 16.84
Supply Constrained	Sumas	2022-2023	$ 17.66	$ 17.82	$ 17.85	$ 17.93	$ 17.25	$ 16.96	$ 16.97	$ 17.01	$ 17.12	$ 17.07	$ 17.00	$ 17.16
Supply Constrained	Sumas	2023-2024	$ 17.96	$ 18.16	$ 18.02	$ 18.01	$ 17.24	$ 16.99	$ 17.02	$ 17.08	$ 17.14	$ 17.21	$ 17.17	$ 17.26
Supply Constrained	Sumas	2024-2025	$ 18.21	$ 18.36	$ 18.40	$ 18.52	$ 17.73	$ 17.46	$ 17.50	$ 17.56	$ 17.60	$ 17.67	$ 17.63	$ 17.72
Supply Constrained	Sumas	2025-2026	$ 18.72	$ 18.89	$ 19.22	$ 19.30	$ 18.51	$ 18.26	$ 18.29	$ 18.34	$ 18.39	$ 18.47	$ 18.41	$ 18.55
Supply Constrained	Sumas	2026-2027	$ 19.50	$ 19.70	$ 20.08	$ 20.12	$ 19.25	$ 19.04	$ 19.09	$ 19.07	$ 19.14	$ 19.22	$ 19.24	$ 19.37
Supply Constrained	Sumas	2027-2028	$ 20.33	$ 20.51	$ 20.91	$ 20.99	$ 20.08	$ 19.90	$ 19.94	$ 19.93	$ 20.01	$ 20.10	$ 20.13	$ 20.24
Supply Constrained	Sumas	2028-2029	$ 21.24	$ 21.41	$ 21.83	$ 21.92	$ 21.04	$ 20.78	$ 20.81	$ 20.83	$ 20.88	$ 20.96	$ 20.96	$ 21.11
Supply Constrained	Sumas	2029-2030	$ 21.11	$ 21.11										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Green Future	AECo	2009-2010	$ 4.33	$ 4.85	$ 4.97	$ 5.05	$ 4.99	$ 4.75	$ 4.65	$ 4.78	$ 4.80	$ 4.89	$ 4.90	$ 5.09
Green Future	AECo	2010-2011	$ 5.39	$ 5.62	$ 5.56	$ 5.58	$ 5.29	$ 5.03	$ 5.00	$ 5.06	$ 5.06	$ 5.10	$ 5.13	$ 5.27
Green Future	AECo	2011-2012	$ 5.46	$ 5.63	$ 6.03	$ 6.03	$ 5.72	$ 5.47	$ 5.47	$ 5.52	$ 5.52	$ 5.54	$ 5.52	$ 5.67
Green Future	AECo	2012-2013	$ 5.85	$ 5.96	$ 6.50	$ 6.55	$ 6.06	$ 5.80	$ 5.80	$ 5.84	$ 5.86	$ 5.89	$ 5.87	$ 5.96
Green Future	AECo	2013-2014	$ 5.41	$ 5.49	$ 5.55	$ 5.57	$ 5.36	$ 5.24	$ 5.31	$ 5.34	$ 5.36	$ 5.37	$ 5.33	$ 5.46
Green Future	AECo	2014-2015	$ 6.40	$ 6.52	$ 9.46	$ 9.53	$ 9.26	$ 9.09	$ 9.14	$ 9.19	$ 9.23	$ 9.26	$ 9.21	$ 9.36
Green Future	AECo	2015-2016	$ 9.76	$ 9.90	$ 10.13	$ 10.16	$ 9.98	$ 9.87	$ 9.94	$ 10.01	$ 10.01	$ 10.03	$ 10.02	$ 10.11
Green Future	AECo	2016-2017	$ 10.51	$ 10.61	$ 11.05	$ 11.03	$ 10.67	$ 10.56	$ 10.58	$ 10.61	$ 10.65	$ 10.68	$ 10.65	$ 10.79
Green Future	AECo	2017-2018	$ 11.27	$ 11.34	$ 11.83	$ 11.85	$ 11.52	$ 11.32	$ 11.28	$ 11.35	$ 11.34	$ 11.41	$ 11.38	$ 11.57
Green Future	AECo	2018-2019	$ 12.12	$ 12.20	$ 12.47	$ 12.46	$ 12.21	$ 11.95	$ 11.95	$ 11.99	$ 12.03	$ 12.07	$ 12.02	$ 12.19
Green Future	AECo	2019-2020	$ 12.55	$ 12.70	$ 13.02	$ 13.05	$ 12.52	$ 12.38	$ 12.36	$ 12.39	$ 12.41	$ 12.45	$ 12.15	$ 12.22
Green Future	AECo	2020-2021	$ 12.59	$ 12.72	$ 13.06	$ 13.11	$ 12.90	$ 12.58	$ 12.59	$ 12.61	$ 12.63	$ 12.65	$ 12.47	$ 12.53
Green Future	AECo	2021-2022	$ 12.89	$ 12.96	$ 13.32	$ 13.35	$ 13.08	$ 12.78	$ 12.79	$ 12.84	$ 12.79	$ 12.84	$ 12.85	$ 12.95
Green Future	AECo	2022-2023	$ 13.30	$ 13.43	$ 13.82	$ 13.86	$ 13.51	$ 13.26	$ 13.23	$ 13.24	$ 13.26	$ 13.17	$ 13.11	$ 13.24
Green Future	AECo	2023-2024	$ 13.49	$ 13.56	$ 13.81	$ 13.77	$ 13.36	$ 13.23	$ 13.24	$ 13.27	$ 13.25	$ 13.30	$ 13.32	$ 13.33
Green Future	AECo	2024-2025	$ 13.61	$ 13.73	$ 14.18	$ 14.26	$ 13.85	$ 13.65	$ 13.65	$ 13.67	$ 13.65	$ 13.69	$ 13.70	$ 13.71
Green Future	AECo	2025-2026	$ 14.01	$ 14.16	$ 14.61	$ 14.60	$ 14.31	$ 14.11	$ 14.12	$ 14.13	$ 14.13	$ 14.17	$ 14.17	$ 14.21
Green Future	AECo	2026-2027	$ 14.53	$ 14.67	$ 15.18	$ 15.16	$ 14.79	$ 14.63	$ 14.68	$ 14.66	$ 14.72	$ 14.76	$ 14.79	$ 14.93
Green Future	AECo	2027-2028	$ 15.00	$ 15.11	$ 15.66	$ 15.69	$ 15.29	$ 15.15	$ 15.18	$ 15.18	$ 15.23	$ 15.28	$ 15.33	$ 15.45
Green Future	AECo	2028-2029	$ 15.54	$ 15.63	$ 16.21	$ 16.25	$ 15.87	$ 15.69	$ 15.72	$ 15.74	$ 15.76	$ 15.79	$ 15.82	$ 15.98
Green Future	AECo	2029-2030	$ 15.98	$ 15.98										
Green Future	Malin	2009-2010	$ 4.67	$ 5.19	$ 5.32	$ 5.40	$ 5.26	$ 5.03	$ 4.91	$ 5.08	$ 5.13	$ 5.24	$ 5.24	$ 5.41
Green Future	Malin	2010-2011	$ 5.74	$ 5.95	$ 5.88	$ 5.90	$ 5.57	$ 5.31	$ 5.29	$ 5.35	$ 5.36	$ 5.41	$ 5.44	$ 5.57
Green Future	Malin	2011-2012	$ 5.74	$ 5.92	$ 6.30	$ 6.30	$ 5.95	$ 5.71	$ 5.70	$ 5.76	$ 5.78	$ 5.81	$ 5.79	$ 5.93
Green Future	Malin	2012-2013	$ 6.10	$ 6.22	$ 6.75	$ 6.80	$ 6.25	$ 6.01	$ 6.02	$ 6.05	$ 6.11	$ 6.16	$ 6.13	$ 6.21
Green Future	Malin	2013-2014	$ 5.66	$ 5.75	$ 5.78	$ 5.81	$ 5.52	$ 5.44	$ 5.52	$ 5.54	$ 5.58	$ 5.61	$ 5.57	$ 5.70
Green Future	Malin	2014-2015	$ 6.63	$ 6.75	$ 9.68	$ 9.75	$ 9.41	$ 9.27	$ 9.33	$ 9.37	$ 9.45	$ 9.49	$ 9.43	$ 9.58
Green Future	Malin	2015-2016	$ 9.96	$ 10.11	$ 10.33	$ 10.36	$ 10.11	$ 10.04	$ 10.12	$ 10.19	$ 10.23	$ 10.25	$ 10.25	$ 10.32
Green Future	Malin	2016-2017	$ 10.73	$ 10.83	$ 11.26	$ 11.24	$ 10.82	$ 10.75	$ 10.78	$ 10.81	$ 10.87	$ 10.92	$ 10.89	$ 11.02
Green Future	Malin	2017-2018	$ 11.48	$ 11.55	$ 12.03	$ 12.07	$ 11.66	$ 11.50	$ 11.48	$ 11.54	$ 11.58	$ 11.65	$ 11.63	$ 11.81
Green Future	Malin	2018-2019	$ 12.34	$ 12.43	$ 12.64	$ 12.64	$ 12.35	$ 12.12	$ 12.14	$ 12.18	$ 12.27	$ 12.31	$ 12.27	$ 12.42
Green Future	Malin	2019-2020	$ 12.78	$ 12.93	$ 13.20	$ 13.25	$ 12.67	$ 12.57	$ 12.56	$ 12.59	$ 12.66	$ 12.69	$ 12.40	$ 12.45
Green Future	Malin	2020-2021	$ 12.82	$ 12.95	$ 13.24	$ 13.29	$ 13.04	$ 12.76	$ 12.77	$ 12.81	$ 12.86	$ 12.89	$ 12.72	$ 12.74
Green Future	Malin	2021-2022	$ 13.10	$ 13.18	$ 13.48	$ 13.52	$ 13.22	$ 12.95	$ 12.97	$ 13.02	$ 13.01	$ 13.06	$ 13.08	$ 13.16
Green Future	Malin	2022-2023	$ 13.50	$ 13.63	$ 13.98	$ 14.02	$ 13.65	$ 13.41	$ 13.39	$ 13.40	$ 13.46	$ 13.42	$ 13.38	$ 13.53
Green Future	Malin	2023-2024	$ 13.81	$ 13.90	$ 14.07	$ 14.07	$ 13.62	$ 13.49	$ 13.52	$ 13.54	$ 13.60	$ 13.65	$ 13.69	$ 13.69
Green Future	Malin	2024-2025	$ 13.95	$ 14.07	$ 14.49	$ 14.58	$ 14.12	$ 13.93	$ 13.94	$ 13.96	$ 14.01	$ 14.06	$ 14.08	$ 14.06
Green Future	Malin	2025-2026	$ 14.36	$ 14.52	$ 14.94	$ 14.94	$ 14.59	$ 14.42	$ 14.44	$ 14.45	$ 14.49	$ 14.53	$ 14.55	$ 14.57
Green Future	Malin	2026-2027	$ 14.89	$ 15.03	$ 15.51	$ 15.50	$ 15.08	$ 14.93	$ 14.99	$ 14.99	$ 15.07	$ 15.12	$ 15.16	$ 15.30
Green Future	Malin	2027-2028	$ 15.36	$ 15.48	$ 15.98	$ 16.01	$ 15.57	$ 15.44	$ 15.49	$ 15.51	$ 15.58	$ 15.63	$ 15.69	$ 15.82
Green Future	Malin	2028-2029	$ 15.91	$ 16.01	$ 16.55	$ 16.59	$ 16.15	$ 15.98	$ 16.03	$ 16.04	$ 16.10	$ 16.13	$ 16.17	$ 16.34
Green Future	Malin	2029-2030	$ 16.34	$ 16.34										
Green Future	Rockies	2009-2010	$ 4.42	$ 4.92	$ 5.05	$ 5.17	$ 4.99	$ 4.75	$ 4.70	$ 4.70	$ 4.78	$ 4.88	$ 4.94	$ 5.16
Green Future	Rockies	2010-2011	$ 5.55	$ 5.75	$ 5.69	$ 5.71	$ 5.36	$ 5.07	$ 5.07	$ 4.99	$ 5.06	$ 5.10	$ 5.13	$ 5.32
Green Future	Rockies	2011-2012	$ 5.60	$ 5.73	$ 6.14	$ 6.14	$ 5.76	$ 5.53	$ 5.55	$ 5.45	$ 5.52	$ 5.54	$ 5.51	$ 5.71
Green Future	Rockies	2012-2013	$ 5.89	$ 5.96	$ 6.50	$ 6.55	$ 5.98	$ 5.76	$ 5.79	$ 5.69	$ 5.78	$ 5.82	$ 5.80	$ 5.92
Green Future	Rockies	2013-2014	$ 5.36	$ 5.40	$ 5.45	$ 5.49	$ 5.19	$ 5.14	$ 5.23	$ 5.13	$ 5.21	$ 5.23	$ 5.18	$ 5.33
Green Future	Rockies	2014-2015	$ 6.27	$ 6.35	$ 9.29	$ 9.37	$ 9.01	$ 8.89	$ 8.96	$ 8.87	$ 8.99	$ 9.01	$ 8.95	$ 9.11
Green Future	Rockies	2015-2016	$ 9.52	$ 9.65	$ 9.87	$ 9.90	$ 9.63	$ 9.58	$ 9.67	$ 9.61	$ 9.68	$ 9.69	$ 9.69	$ 9.78
Green Future	Rockies	2016-2017	$ 10.28	$ 10.34	$ 10.78	$ 10.77	$ 10.37	$ 10.34	$ 10.40	$ 10.30	$ 10.39	$ 10.43	$ 10.41	$ 10.56
Green Future	Rockies	2017-2018	$ 11.00	$ 11.03	$ 11.52	$ 11.56	$ 11.17	$ 11.06	$ 11.07	$ 11.00	$ 11.08	$ 11.14	$ 11.11	$ 11.32
Green Future	Rockies	2018-2019	$ 11.81	$ 11.87	$ 12.13	$ 12.13	$ 11.87	$ 11.68	$ 11.73	$ 11.64	$ 11.75	$ 11.78	$ 11.73	$ 11.91
Green Future	Rockies	2019-2020	$ 12.24	$ 12.35	$ 12.67	$ 12.71	$ 12.15	$ 12.09	$ 12.10	$ 11.99	$ 12.07	$ 12.12	$ 11.81	$ 11.90
Green Future	Rockies	2020-2021	$ 12.21	$ 12.31	$ 12.65	$ 12.68	$ 12.38	$ 12.16	$ 12.18	$ 12.07	$ 12.14	$ 12.17	$ 11.98	$ 12.06
Green Future	Rockies	2021-2022	$ 12.39	$ 12.42	$ 12.75	$ 12.80	$ 12.51	$ 12.28	$ 12.31	$ 12.23	$ 12.25	$ 12.30	$ 12.31	$ 12.44
Green Future	Rockies	2022-2023	$ 12.75	$ 12.86	$ 13.22	$ 13.26	$ 12.91	$ 12.73	$ 12.71	$ 12.60	$ 12.70	$ 12.65	$ 12.65	$ 12.84
Green Future	Rockies	2023-2024	$ 13.12	$ 13.18	$ 13.53	$ 13.56	$ 13.18	$ 13.04	$ 13.09	$ 12.97	$ 13.02	$ 13.07	$ 13.11	$ 13.16
Green Future	Rockies	2024-2025	$ 13.45	$ 13.55	$ 13.99	$ 14.08	$ 13.67	$ 13.47	$ 13.50	$ 13.39	$ 13.44	$ 13.47	$ 13.50	$ 13.54
Green Future	Rockies	2025-2026	$ 13.85	$ 13.97	$ 14.40	$ 14.42	$ 14.12	$ 13.92	$ 13.96	$ 13.81	$ 13.87	$ 13.90	$ 13.91	$ 13.97
Green Future	Rockies	2026-2027	$ 14.30	$ 14.41	$ 14.91	$ 14.91	$ 14.57	$ 14.38	$ 14.43	$ 14.28	$ 14.39	$ 14.43	$ 14.47	$ 14.64
Green Future	Rockies	2027-2028	$ 14.69	$ 14.77	$ 15.30	$ 15.33	$ 14.97	$ 14.81	$ 14.87	$ 14.72	$ 14.84	$ 14.87	$ 14.93	$ 15.11
Green Future	Rockies	2028-2029	$ 15.19	$ 15.25	$ 15.80	$ 15.84	$ 15.49	$ 15.32	$ 15.35	$ 15.23	$ 15.34	$ 15.37	$ 15.41	$ 15.62
Green Future	Rockies	2029-2030	$ 15.62	$ 15.62										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Green Future	Stanfield	2009-2010	$ 4.53	$ 5.04	$ 5.17	$ 5.25	$ 5.14	$ 4.90	$ 4.79	$ 4.94	$ 4.97	$ 5.07	$ 5.08	$ 5.26
Green Future	Stanfield	2010-2011	$ 5.58	$ 5.80	$ 5.75	$ 5.77	$ 5.45	$ 5.18	$ 5.16	$ 5.21	$ 5.21	$ 5.26	$ 5.29	$ 5.43
Green Future	Stanfield	2011-2012	$ 5.62	$ 5.79	$ 6.18	$ 6.18	$ 5.85	$ 5.59	$ 5.59	$ 5.65	$ 5.65	$ 5.68	$ 5.66	$ 5.81
Green Future	Stanfield	2012-2013	$ 5.99	$ 6.11	$ 6.64	$ 6.69	$ 6.16	$ 5.92	$ 5.91	$ 5.95	$ 5.99	$ 6.03	$ 6.01	$ 6.09
Green Future	Stanfield	2013-2014	$ 5.55	$ 5.63	$ 5.68	$ 5.71	$ 5.45	$ 5.34	$ 5.42	$ 5.44	$ 5.46	$ 5.49	$ 5.45	$ 5.58
Green Future	Stanfield	2014-2015	$ 6.52	$ 6.65	$ 9.58	$ 9.65	$ 9.34	$ 9.18	$ 9.24	$ 9.28	$ 9.33	$ 9.37	$ 9.32	$ 9.47
Green Future	Stanfield	2015-2016	$ 9.87	$ 10.01	$ 10.25	$ 10.27	$ 10.05	$ 9.96	$ 10.03	$ 10.09	$ 10.12	$ 10.13	$ 10.14	$ 10.22
Green Future	Stanfield	2016-2017	$ 10.63	$ 10.73	$ 11.16	$ 11.15	$ 10.75	$ 10.65	$ 10.68	$ 10.71	$ 10.75	$ 10.79	$ 10.77	$ 10.91
Green Future	Stanfield	2017-2018	$ 11.39	$ 11.46	$ 11.94	$ 11.97	$ 11.60	$ 11.41	$ 11.38	$ 11.44	$ 11.45	$ 11.52	$ 11.51	$ 11.69
Green Future	Stanfield	2018-2019	$ 12.24	$ 12.33	$ 12.56	$ 12.57	$ 12.29	$ 12.04	$ 12.05	$ 12.08	$ 12.14	$ 12.18	$ 12.14	$ 12.31
Green Future	Stanfield	2019-2020	$ 12.68	$ 12.82	$ 13.12	$ 13.16	$ 12.61	$ 12.48	$ 12.47	$ 12.49	$ 12.53	$ 12.57	$ 12.28	$ 12.34
Green Future	Stanfield	2020-2021	$ 12.72	$ 12.85	$ 13.16	$ 13.21	$ 12.98	$ 12.67	$ 12.68	$ 12.71	$ 12.74	$ 12.77	$ 12.59	$ 12.64
Green Future	Stanfield	2021-2022	$ 13.01	$ 13.08	$ 13.41	$ 13.44	$ 13.15	$ 12.87	$ 12.88	$ 12.93	$ 12.90	$ 12.94	$ 12.97	$ 13.06
Green Future	Stanfield	2022-2023	$ 13.41	$ 13.54	$ 13.90	$ 13.95	$ 13.58	$ 13.34	$ 13.30	$ 13.32	$ 13.35	$ 13.29	$ 13.25	$ 13.40
Green Future	Stanfield	2023-2024	$ 13.66	$ 13.75	$ 13.96	$ 13.94	$ 13.50	$ 13.36	$ 13.38	$ 13.41	$ 13.43	$ 13.48	$ 13.52	$ 13.52
Green Future	Stanfield	2024-2025	$ 13.80	$ 13.92	$ 14.35	$ 14.43	$ 13.99	$ 13.79	$ 13.80	$ 13.82	$ 13.83	$ 13.88	$ 13.90	$ 13.89
Green Future	Stanfield	2025-2026	$ 14.21	$ 14.36	$ 14.79	$ 14.79	$ 14.46	$ 14.27	$ 14.29	$ 14.30	$ 14.31	$ 14.35	$ 14.37	$ 14.40
Green Future	Stanfield	2026-2027	$ 14.73	$ 14.87	$ 15.36	$ 15.35	$ 14.94	$ 14.79	$ 14.84	$ 14.83	$ 14.89	$ 14.94	$ 14.98	$ 15.13
Green Future	Stanfield	2027-2028	$ 15.20	$ 15.31	$ 15.83	$ 15.87	$ 15.44	$ 15.30	$ 15.34	$ 15.35	$ 15.40	$ 15.45	$ 15.52	$ 15.65
Green Future	Stanfield	2028-2029	$ 15.74	$ 15.84	$ 16.40	$ 16.44	$ 16.02	$ 15.84	$ 15.88	$ 15.90	$ 15.93	$ 15.96	$ 16.00	$ 16.16
Green Future	Stanfield	2029-2030	$ 16.16	$ 16.16										
Green Future	Sumas	2009-2010	$ 4.63	$ 5.15	$ 5.28	$ 5.36	$ 5.23	$ 4.86	$ 4.64	$ 4.75	$ 4.78	$ 4.88	$ 4.91	$ 5.19
Green Future	Sumas	2010-2011	$ 5.70	$ 5.92	$ 5.87	$ 5.89	$ 5.54	$ 5.15	$ 5.01	$ 5.05	$ 5.05	$ 5.10	$ 5.15	$ 5.37
Green Future	Sumas	2011-2012	$ 5.71	$ 5.88	$ 6.29	$ 6.30	$ 5.93	$ 5.60	$ 5.48	$ 5.51	$ 5.52	$ 5.55	$ 5.54	$ 5.74
Green Future	Sumas	2012-2013	$ 6.10	$ 6.21	$ 6.75	$ 6.80	$ 6.23	$ 5.91	$ 5.81	$ 5.84	$ 5.87	$ 5.91	$ 5.91	$ 6.01
Green Future	Sumas	2013-2014	$ 5.64	$ 5.73	$ 5.78	$ 5.81	$ 5.51	$ 5.34	$ 5.33	$ 5.35	$ 5.37	$ 5.39	$ 5.37	$ 5.52
Green Future	Sumas	2014-2015	$ 6.61	$ 6.73	$ 9.68	$ 9.75	$ 9.40	$ 9.18	$ 9.17	$ 9.21	$ 9.25	$ 9.29	$ 9.26	$ 9.43
Green Future	Sumas	2015-2016	$ 9.95	$ 10.09	$ 10.34	$ 10.36	$ 10.11	$ 9.96	$ 9.98	$ 10.04	$ 10.05	$ 10.06	$ 10.08	$ 10.19
Green Future	Sumas	2016-2017	$ 10.71	$ 10.81	$ 11.26	$ 11.24	$ 10.80	$ 10.65	$ 10.63	$ 10.64	$ 10.68	$ 10.71	$ 10.71	$ 10.87
Green Future	Sumas	2017-2018	$ 11.47	$ 11.54	$ 12.03	$ 12.07	$ 11.66	$ 11.41	$ 11.32	$ 11.37	$ 11.38	$ 11.45	$ 11.44	$ 11.66
Green Future	Sumas	2018-2019	$ 12.32	$ 12.42	$ 12.68	$ 12.68	$ 12.35	$ 12.03	$ 12.00	$ 12.02	$ 12.07	$ 12.12	$ 12.09	$ 12.27
Green Future	Sumas	2019-2020	$ 12.77	$ 12.91	$ 13.24	$ 13.29	$ 12.67	$ 12.47	$ 12.41	$ 12.43	$ 12.46	$ 12.50	$ 12.23	$ 12.31
Green Future	Sumas	2020-2021	$ 12.81	$ 12.94	$ 13.29	$ 13.33	$ 13.04	$ 12.67	$ 12.65	$ 12.66	$ 12.68	$ 12.71	$ 12.56	$ 12.64
Green Future	Sumas	2021-2022	$ 13.11	$ 13.18	$ 13.55	$ 13.60	$ 13.21	$ 12.87	$ 12.85	$ 12.88	$ 12.84	$ 12.89	$ 12.93	$ 13.05
Green Future	Sumas	2022-2023	$ 13.50	$ 13.63	$ 14.03	$ 14.07	$ 13.64	$ 13.35	$ 13.29	$ 13.29	$ 13.31	$ 13.23	$ 13.18	$ 13.34
Green Future	Sumas	2023-2024	$ 13.76	$ 13.87	$ 14.12	$ 14.07	$ 13.54	$ 13.30	$ 13.25	$ 13.26	$ 13.26	$ 13.31	$ 13.36	$ 13.39
Green Future	Sumas	2024-2025	$ 13.92	$ 14.05	$ 14.49	$ 14.58	$ 14.04	$ 13.73	$ 13.68	$ 13.69	$ 13.67	$ 13.71	$ 13.75	$ 13.78
Green Future	Sumas	2025-2026	$ 14.36	$ 14.50	$ 14.94	$ 14.94	$ 14.50	$ 14.22	$ 14.16	$ 14.16	$ 14.15	$ 14.20	$ 14.23	$ 14.28
Green Future	Sumas	2026-2027	$ 14.86	$ 15.00	$ 15.51	$ 15.51	$ 14.93	$ 14.73	$ 14.71	$ 14.61	$ 14.67	$ 14.71	$ 14.84	$ 15.01
Green Future	Sumas	2027-2028	$ 15.32	$ 15.44	$ 15.98	$ 16.02	$ 15.43	$ 15.26	$ 15.22	$ 15.13	$ 15.19	$ 15.24	$ 15.39	$ 15.54
Green Future	Sumas	2028-2029	$ 15.88	$ 15.98	$ 16.56	$ 16.60	$ 16.06	$ 15.80	$ 15.76	$ 15.69	$ 15.72	$ 15.76	$ 15.88	$ 16.06
Green Future	Sumas	2029-2030	$ 16.06	$ 16.06										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
High Prices	AECo	2009-2010	$ 6.92	$ 7.30	$ 7.66	$ 7.71	$ 7.51	$ 6.87	$ 6.94	$ 7.03	$ 7.14	$ 7.22	$ 7.21	$ 7.26
High Prices	AECo	2010-2011	$ 8.45	$ 8.66	$ 8.71	$ 8.74	$ 8.47	$ 7.73	$ 7.78	$ 7.86	$ 7.95	$ 8.02	$ 8.02	$ 8.07
High Prices	AECo	2011-2012	$ 9.02	$ 9.19	$ 10.19	$ 10.24	$ 9.91	$ 9.21	$ 9.24	$ 9.33	$ 9.44	$ 9.51	$ 9.50	$ 9.53
High Prices	AECo	2012-2013	$ 10.64	$ 10.80	$ 11.31	$ 11.32	$ 10.95	$ 10.23	$ 10.29	$ 10.39	$ 10.47	$ 10.53	$ 10.50	$ 10.59
High Prices	AECo	2013-2014	$ 11.00	$ 11.07	$ 10.99	$ 11.06	$ 10.67	$ 10.08	$ 10.13	$ 10.22	$ 10.31	$ 10.37	$ 10.31	$ 10.34
High Prices	AECo	2014-2015	$ 12.19	$ 12.32	$ 13.54	$ 13.61	$ 13.24	$ 12.60	$ 12.68	$ 12.76	$ 12.90	$ 12.94	$ 12.88	$ 12.91
High Prices	AECo	2015-2016	$ 13.68	$ 13.90	$ 14.17	$ 14.27	$ 13.86	$ 13.19	$ 13.26	$ 13.29	$ 13.46	$ 13.49	$ 13.46	$ 13.52
High Prices	AECo	2016-2017	$ 14.31	$ 14.45	$ 14.55	$ 14.62	$ 14.08	$ 13.41	$ 13.52	$ 13.55	$ 13.63	$ 13.67	$ 13.62	$ 13.66
High Prices	AECo	2017-2018	$ 14.47	$ 14.57	$ 15.29	$ 15.36	$ 14.87	$ 14.28	$ 14.39	$ 14.45	$ 14.57	$ 14.62	$ 14.52	$ 14.53
High Prices	AECo	2018-2019	$ 15.37	$ 15.47	$ 15.51	$ 15.56	$ 15.06	$ 14.49	$ 14.57	$ 14.64	$ 14.73	$ 14.76	$ 14.70	$ 14.77
High Prices	AECo	2019-2020	$ 15.57	$ 15.69	$ 15.71	$ 15.79	$ 15.35	$ 14.67	$ 14.77	$ 14.86	$ 15.01	$ 15.03	$ 15.02	$ 15.09
High Prices	AECo	2020-2021	$ 15.90	$ 15.99	$ 16.00	$ 16.07	$ 15.42	$ 14.87	$ 14.95	$ 15.03	$ 15.15	$ 15.13	$ 15.06	$ 15.06
High Prices	AECo	2021-2022	$ 15.87	$ 16.00	$ 15.94	$ 16.02	$ 15.47	$ 14.92	$ 15.03	$ 15.12	$ 15.24	$ 15.30	$ 15.24	$ 15.26
High Prices	AECo	2022-2023	$ 16.07	$ 16.16	$ 16.15	$ 16.22	$ 15.71	$ 15.12	$ 15.24	$ 15.34	$ 15.47	$ 15.51	$ 15.47	$ 15.50
High Prices	AECo	2023-2024	$ 16.33	$ 16.44	$ 16.51	$ 16.55	$ 16.01	$ 15.42	$ 15.53	$ 15.64	$ 15.75	$ 15.81	$ 15.78	$ 15.82
High Prices	AECo	2024-2025	$ 16.63	$ 16.77	$ 16.81	$ 16.85	$ 16.26	$ 15.69	$ 15.80	$ 15.91	$ 16.03	$ 16.09	$ 16.04	$ 16.08
High Prices	AECo	2025-2026	$ 16.95	$ 16.99	$ 17.41	$ 17.45	$ 16.88	$ 16.29	$ 16.40	$ 16.51	$ 16.63	$ 16.68	$ 16.63	$ 16.67
High Prices	AECo	2026-2027	$ 17.47	$ 17.57	$ 18.00	$ 18.10	$ 17.51	$ 16.93	$ 17.04	$ 17.14	$ 17.25	$ 17.35	$ 17.25	$ 17.28
High Prices	AECo	2027-2028	$ 18.09	$ 18.20	$ 18.65	$ 18.76	$ 18.15	$ 17.56	$ 17.68	$ 17.78	$ 17.90	$ 18.00	$ 17.90	$ 17.92
High Prices	AECo	2028-2029	$ 18.75	$ 18.87	$ 19.34	$ 19.44	$ 18.81	$ 18.22	$ 18.35	$ 18.46	$ 18.58	$ 18.68	$ 18.57	$ 18.59
High Prices	AECo	2029-2030	$ 18.59	$ 18.59										
High Prices	Malin	2009-2010	$ 7.04	$ 7.42	$ 7.76	$ 7.82	$ 7.61	$ 6.94	$ 7.00	$ 7.10	$ 7.20	$ 7.31	$ 7.28	$ 7.34
High Prices	Malin	2010-2011	$ 8.58	$ 8.79	$ 8.83	$ 8.86	$ 8.58	$ 7.79	$ 7.83	$ 7.91	$ 8.01	$ 8.09	$ 8.09	$ 8.14
High Prices	Malin	2011-2012	$ 9.13	$ 9.29	$ 10.29	$ 10.34	$ 9.90	$ 9.25	$ 9.27	$ 9.37	$ 9.48	$ 9.55	$ 9.55	$ 9.59
High Prices	Malin	2012-2013	$ 10.76	$ 10.92	$ 11.32	$ 11.34	$ 10.85	$ 10.25	$ 10.31	$ 10.41	$ 10.49	$ 10.57	$ 10.54	$ 10.64
High Prices	Malin	2013-2014	$ 11.13	$ 11.20	$ 10.89	$ 10.96	$ 10.50	$ 10.07	$ 10.09	$ 10.24	$ 10.33	$ 10.39	$ 10.35	$ 10.39
High Prices	Malin	2014-2015	$ 12.33	$ 12.46	$ 13.41	$ 13.49	$ 12.97	$ 12.52	$ 12.59	$ 12.79	$ 12.94	$ 12.98	$ 12.93	$ 12.97
High Prices	Malin	2015-2016	$ 13.83	$ 13.98	$ 14.00	$ 14.47	$ 13.46	$ 13.02	$ 13.08	$ 13.31	$ 13.51	$ 13.53	$ 13.52	$ 13.61
High Prices	Malin	2016-2017	$ 14.47	$ 14.66	$ 14.22	$ 14.32	$ 13.74	$ 13.25	$ 13.40	$ 13.41	$ 13.62	$ 13.68	$ 13.64	$ 13.70
High Prices	Malin	2017-2018	$ 14.50	$ 14.58	$ 15.07	$ 15.15	$ 14.56	$ 14.18	$ 14.29	$ 14.34	$ 14.56	$ 14.61	$ 14.52	$ 14.56
High Prices	Malin	2018-2019	$ 15.44	$ 15.51	$ 15.71	$ 15.45	$ 14.94	$ 14.46	$ 14.55	$ 14.62	$ 14.70	$ 14.73	$ 14.68	$ 14.79
High Prices	Malin	2019-2020	$ 15.77	$ 15.88	$ 15.60	$ 15.67	$ 15.31	$ 14.60	$ 14.70	$ 14.80	$ 14.97	$ 14.99	$ 15.00	$ 15.12
High Prices	Malin	2020-2021	$ 16.12	$ 16.20	$ 16.21	$ 16.28	$ 15.60	$ 14.82	$ 14.86	$ 14.94	$ 15.05	$ 15.01	$ 14.99	$ 14.98
High Prices	Malin	2021-2022	$ 16.00	$ 16.17	$ 16.03	$ 16.10	$ 15.56	$ 14.77	$ 14.85	$ 14.93	$ 15.06	$ 15.12	$ 15.11	$ 15.17
High Prices	Malin	2022-2023	$ 16.23	$ 16.36	$ 16.21	$ 16.29	$ 15.80	$ 14.92	$ 15.03	$ 15.12	$ 15.27	$ 15.31	$ 15.37	$ 15.41
High Prices	Malin	2023-2024	$ 16.52	$ 16.68	$ 16.63	$ 16.65	$ 16.11	$ 15.22	$ 15.32	$ 15.44	$ 15.55	$ 15.62	$ 15.65	$ 15.77
High Prices	Malin	2024-2025	$ 16.90	$ 17.04	$ 16.94	$ 16.97	$ 16.35	$ 15.47	$ 15.58	$ 15.69	$ 15.80	$ 15.89	$ 15.92	$ 16.02
High Prices	Malin	2025-2026	$ 17.27	$ 17.25	$ 17.55	$ 17.57	$ 17.01	$ 16.05	$ 16.16	$ 16.27	$ 16.38	$ 16.45	$ 16.48	$ 16.61
High Prices	Malin	2026-2027	$ 17.75	$ 17.83	$ 18.15	$ 18.24	$ 17.69	$ 16.72	$ 16.83	$ 16.93	$ 17.04	$ 17.15	$ 17.13	$ 17.24
High Prices	Malin	2027-2028	$ 18.38	$ 18.46	$ 18.80	$ 18.89	$ 18.32	$ 17.36	$ 17.47	$ 17.57	$ 17.69	$ 17.80	$ 17.78	$ 17.88
High Prices	Malin	2028-2029	$ 19.04	$ 19.13	$ 19.48	$ 19.58	$ 18.98	$ 18.02	$ 18.14	$ 18.25	$ 18.36	$ 18.48	$ 18.45	$ 18.56
High Prices	Malin	2029-2030	$ 18.56	$ 18.56										
High Prices	Rockies	2009-2010	$ 5.69	$ 6.11	$ 6.49	$ 6.58	$ 6.27	$ 4.53	$ 4.61	$ 4.71	$ 4.82	$ 4.91	$ 4.88	$ 4.95
High Prices	Rockies	2010-2011	$ 7.42	$ 7.63	$ 7.69	$ 7.71	$ 7.32	$ 5.54	$ 5.57	$ 5.62	$ 5.70	$ 5.76	$ 5.75	$ 5.80
High Prices	Rockies	2011-2012	$ 9.03	$ 9.20	$ 10.21	$ 10.26	$ 9.84	$ 9.20	$ 9.24	$ 9.29	$ 9.39	$ 9.44	$ 9.40	$ 9.43
High Prices	Rockies	2012-2013	$ 10.52	$ 10.67	$ 11.17	$ 11.18	$ 10.68	$ 10.11	$ 10.16	$ 10.24	$ 10.32	$ 10.37	$ 10.34	$ 10.40
High Prices	Rockies	2013-2014	$ 10.74	$ 10.81	$ 10.72	$ 10.78	$ 10.26	$ 9.86	$ 9.89	$ 9.95	$ 10.01	$ 10.05	$ 10.00	$ 10.02
High Prices	Rockies	2014-2015	$ 11.94	$ 12.07	$ 13.27	$ 13.35	$ 12.78	$ 12.34	$ 12.45	$ 12.52	$ 12.62	$ 12.65	$ 12.59	$ 12.59
High Prices	Rockies	2015-2016	$ 13.36	$ 13.56	$ 13.82	$ 13.89	$ 13.29	$ 12.85	$ 12.96	$ 13.00	$ 13.12	$ 13.14	$ 13.08	$ 13.13
High Prices	Rockies	2016-2017	$ 13.85	$ 13.98	$ 14.08	$ 14.16	$ 13.57	$ 13.11	$ 13.26	$ 13.29	$ 13.37	$ 13.43	$ 13.37	$ 13.39
High Prices	Rockies	2017-2018	$ 14.12	$ 14.22	$ 14.94	$ 15.01	$ 14.44	$ 14.02	$ 14.14	$ 14.20	$ 14.31	$ 14.36	$ 14.26	$ 14.27
High Prices	Rockies	2018-2019	$ 15.02	$ 15.12	$ 15.17	$ 15.22	$ 14.68	$ 14.21	$ 14.29	$ 14.36	$ 14.44	$ 14.45	$ 14.41	$ 14.47
High Prices	Rockies	2019-2020	$ 15.18	$ 15.31	$ 15.35	$ 15.44	$ 14.98	$ 14.46	$ 14.57	$ 14.66	$ 14.78	$ 14.85	$ 14.80	$ 14.83
High Prices	Rockies	2020-2021	$ 15.60	$ 15.69	$ 15.71	$ 15.80	$ 15.23	$ 14.68	$ 14.80	$ 14.88	$ 14.99	$ 15.04	$ 14.97	$ 15.00
High Prices	Rockies	2021-2022	$ 15.75	$ 15.93	$ 15.95	$ 16.04	$ 15.42	$ 14.89	$ 15.01	$ 15.09	$ 15.23	$ 15.30	$ 15.23	$ 15.27
High Prices	Rockies	2022-2023	$ 16.08	$ 16.21	$ 16.24	$ 16.31	$ 15.79	$ 15.17	$ 15.28	$ 15.38	$ 15.51	$ 15.58	$ 15.54	$ 15.58
High Prices	Rockies	2023-2024	$ 16.43	$ 16.55	$ 16.61	$ 16.65	$ 16.09	$ 15.49	$ 15.61	$ 15.71	$ 15.83	$ 15.89	$ 15.85	$ 15.91
High Prices	Rockies	2024-2025	$ 16.72	$ 16.87	$ 16.91	$ 16.95	$ 16.34	$ 15.77	$ 15.89	$ 15.98	$ 16.10	$ 16.19	$ 16.14	$ 16.19
High Prices	Rockies	2025-2026	$ 17.05	$ 17.10	$ 17.51	$ 17.55	$ 16.95	$ 16.37	$ 16.48	$ 16.58	$ 16.70	$ 16.76	$ 16.69	$ 16.72
High Prices	Rockies	2026-2027	$ 17.58	$ 17.72	$ 18.11	$ 18.19	$ 17.58	$ 17.03	$ 17.16	$ 17.26	$ 17.36	$ 17.46	$ 17.38	$ 17.43
High Prices	Rockies	2027-2028	$ 18.20	$ 18.36	$ 18.76	$ 18.85	$ 18.21	$ 17.66	$ 17.80	$ 17.90	$ 18.01	$ 18.11	$ 18.03	$ 18.07
High Prices	Rockies	2028-2029	$ 18.86	$ 19.02	$ 19.44	$ 19.54	$ 18.87	$ 18.32	$ 18.47	$ 18.57	$ 18.69	$ 18.79	$ 18.70	$ 18.74
High Prices	Rockies	2029-2030	$ 18.74	$ 18.74										

Appendix 6.1 - Monthly Price Data by Basin

2009$

Scenario	Index	Gas Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
High Prices	Stanfield	2009-2010	$ 6.99	$ 7.37	$ 7.71	$ 7.77	$ 7.56	$ 6.89	$ 6.96	$ 7.06	$ 7.16	$ 7.25	$ 7.23	$ 7.29
High Prices	Stanfield	2010-2011	$ 8.52	$ 8.73	$ 8.77	$ 8.80	$ 8.52	$ 7.75	$ 7.78	$ 7.87	$ 7.96	$ 8.03	$ 8.04	$ 8.09
High Prices	Stanfield	2011-2012	$ 9.06	$ 9.23	$ 10.23	$ 10.28	$ 9.96	$ 9.20	$ 9.22	$ 9.32	$ 9.43	$ 9.50	$ 9.50	$ 9.54
High Prices	Stanfield	2012-2013	$ 10.69	$ 10.85	$ 11.36	$ 11.37	$ 11.01	$ 10.21	$ 10.26	$ 10.37	$ 10.44	$ 10.51	$ 10.49	$ 10.59
High Prices	Stanfield	2013-2014	$ 11.06	$ 11.13	$ 11.05	$ 11.12	$ 10.73	$ 10.06	$ 10.05	$ 10.19	$ 10.28	$ 10.34	$ 10.29	$ 10.33
High Prices	Stanfield	2014-2015	$ 12.26	$ 12.39	$ 13.61	$ 13.69	$ 13.34	$ 12.58	$ 12.65	$ 12.74	$ 12.88	$ 12.92	$ 12.87	$ 12.90
High Prices	Stanfield	2015-2016	$ 13.77	$ 14.00	$ 14.28	$ 14.38	$ 14.00	$ 13.19	$ 13.23	$ 13.25	$ 13.44	$ 13.46	$ 13.45	$ 13.53
High Prices	Stanfield	2016-2017	$ 14.44	$ 14.57	$ 14.68	$ 14.75	$ 14.20	$ 13.37	$ 13.46	$ 13.47	$ 13.55	$ 13.60	$ 13.56	$ 13.63
High Prices	Stanfield	2017-2018	$ 14.56	$ 14.66	$ 15.38	$ 15.45	$ 14.98	$ 14.22	$ 14.31	$ 14.37	$ 14.49	$ 14.54	$ 14.45	$ 14.48
High Prices	Stanfield	2018-2019	$ 15.46	$ 15.56	$ 15.61	$ 15.64	$ 15.17	$ 14.41	$ 14.47	$ 14.54	$ 14.62	$ 14.64	$ 14.60	$ 14.70
High Prices	Stanfield	2019-2020	$ 15.66	$ 15.78	$ 15.80	$ 15.88	$ 15.47	$ 14.56	$ 14.64	$ 14.73	$ 14.89	$ 14.90	$ 14.92	$ 15.03
High Prices	Stanfield	2020-2021	$ 16.01	$ 16.09	$ 16.11	$ 16.17	$ 15.49	$ 14.73	$ 14.79	$ 14.86	$ 14.97	$ 14.93	$ 14.91	$ 14.89
High Prices	Stanfield	2021-2022	$ 15.90	$ 16.06	$ 15.92	$ 16.00	$ 15.46	$ 14.68	$ 14.77	$ 14.86	$ 14.98	$ 15.03	$ 15.03	$ 15.08
High Prices	Stanfield	2022-2023	$ 16.12	$ 16.23	$ 16.10	$ 16.18	$ 15.69	$ 14.83	$ 14.95	$ 15.04	$ 15.19	$ 15.23	$ 15.26	$ 15.32
High Prices	Stanfield	2023-2024	$ 16.40	$ 16.54	$ 16.51	$ 16.54	$ 16.00	$ 15.13	$ 15.24	$ 15.35	$ 15.47	$ 15.53	$ 15.56	$ 15.65
High Prices	Stanfield	2024-2025	$ 16.75	$ 16.90	$ 16.83	$ 16.85	$ 16.23	$ 15.38	$ 15.49	$ 15.61	$ 15.71	$ 15.80	$ 15.81	$ 15.89
High Prices	Stanfield	2025-2026	$ 17.11	$ 17.09	$ 17.43	$ 17.45	$ 16.89	$ 15.95	$ 16.07	$ 16.18	$ 16.29	$ 16.35	$ 16.37	$ 16.47
High Prices	Stanfield	2026-2027	$ 17.59	$ 17.66	$ 18.02	$ 18.11	$ 17.57	$ 16.62	$ 16.72	$ 16.82	$ 16.92	$ 17.03	$ 16.99	$ 17.07
High Prices	Stanfield	2027-2028	$ 18.21	$ 18.29	$ 18.67	$ 18.77	$ 18.20	$ 17.26	$ 17.36	$ 17.46	$ 17.57	$ 17.68	$ 17.63	$ 17.72
High Prices	Stanfield	2028-2029	$ 18.87	$ 18.96	$ 19.36	$ 19.46	$ 18.86	$ 17.92	$ 18.03	$ 18.14	$ 18.24	$ 18.36	$ 18.31	$ 18.39
High Prices	Stanfield	2029-2030	$ 18.39	$ 18.39										
High Prices	Sumas	2009-2010	$ 7.12	$ 7.51	$ 7.87	$ 7.93	$ 7.62	$ 6.95	$ 6.94	$ 7.01	$ 7.12	$ 7.21	$ 7.24	$ 7.34
High Prices	Sumas	2010-2011	$ 8.67	$ 8.89	$ 8.95	$ 8.97	$ 8.58	$ 7.79	$ 7.78	$ 7.85	$ 7.95	$ 8.02	$ 8.06	$ 8.16
High Prices	Sumas	2011-2012	$ 9.21	$ 9.39	$ 10.39	$ 10.44	$ 10.02	$ 9.30	$ 9.25	$ 9.31	$ 9.43	$ 9.51	$ 9.54	$ 9.63
High Prices	Sumas	2012-2013	$ 10.84	$ 11.00	$ 11.51	$ 11.53	$ 11.06	$ 10.29	$ 10.29	$ 10.37	$ 10.46	$ 10.54	$ 10.54	$ 10.66
High Prices	Sumas	2013-2014	$ 11.21	$ 11.28	$ 11.20	$ 11.27	$ 10.78	$ 10.15	$ 10.15	$ 10.21	$ 10.32	$ 10.37	$ 10.36	$ 10.42
High Prices	Sumas	2014-2015	$ 12.41	$ 12.54	$ 13.75	$ 13.82	$ 13.37	$ 12.69	$ 12.71	$ 12.77	$ 12.92	$ 12.96	$ 12.94	$ 13.00
High Prices	Sumas	2015-2016	$ 13.91	$ 14.12	$ 14.38	$ 14.45	$ 14.00	$ 13.29	$ 13.31	$ 13.32	$ 13.52	$ 13.54	$ 13.53	$ 13.64
High Prices	Sumas	2016-2017	$ 14.56	$ 14.70	$ 14.80	$ 14.88	$ 14.22	$ 13.52	$ 13.56	$ 13.59	$ 13.67	$ 13.73	$ 13.69	$ 13.78
High Prices	Sumas	2017-2018	$ 14.73	$ 14.83	$ 15.55	$ 15.62	$ 15.03	$ 14.40	$ 14.45	$ 14.50	$ 14.62	$ 14.68	$ 14.60	$ 14.67
High Prices	Sumas	2018-2019	$ 15.67	$ 15.74	$ 15.78	$ 15.83	$ 15.24	$ 14.62	$ 14.64	$ 14.71	$ 14.79	$ 14.83	$ 14.80	$ 14.91
High Prices	Sumas	2019-2020	$ 15.85	$ 15.96	$ 15.99	$ 16.07	$ 15.52	$ 14.80	$ 14.83	$ 14.91	$ 15.07	$ 15.10	$ 15.12	$ 15.23
High Prices	Sumas	2020-2021	$ 16.16	$ 16.26	$ 16.27	$ 16.35	$ 15.68	$ 15.00	$ 15.01	$ 15.09	$ 15.21	$ 15.19	$ 15.15	$ 15.26
High Prices	Sumas	2021-2022	$ 16.23	$ 16.36	$ 16.38	$ 16.46	$ 15.76	$ 15.05	$ 15.10	$ 15.19	$ 15.31	$ 15.36	$ 15.34	$ 15.51
High Prices	Sumas	2022-2023	$ 16.45	$ 16.54	$ 16.57	$ 16.64	$ 16.08	$ 15.39	$ 15.36	$ 15.44	$ 15.57	$ 15.60	$ 15.65	$ 15.80
High Prices	Sumas	2023-2024	$ 16.72	$ 16.84	$ 16.91	$ 16.95	$ 16.38	$ 15.69	$ 15.69	$ 15.78	$ 15.89	$ 15.95	$ 15.93	$ 16.12
High Prices	Sumas	2024-2025	$ 17.08	$ 17.23	$ 17.28	$ 17.32	$ 16.63	$ 15.97	$ 15.96	$ 16.05	$ 16.16	$ 16.25	$ 16.23	$ 16.38
High Prices	Sumas	2025-2026	$ 17.44	$ 17.47	$ 17.88	$ 17.93	$ 17.25	$ 16.58	$ 16.55	$ 16.65	$ 16.77	$ 16.83	$ 16.82	$ 16.98
High Prices	Sumas	2026-2027	$ 17.96	$ 18.06	$ 18.45	$ 18.53	$ 17.89	$ 17.23	$ 17.24	$ 17.32	$ 17.43	$ 17.53	$ 17.47	$ 17.60
High Prices	Sumas	2027-2028	$ 18.59	$ 18.69	$ 19.10	$ 19.19	$ 18.52	$ 17.86	$ 17.88	$ 17.96	$ 18.07	$ 18.18	$ 18.12	$ 18.24
High Prices	Sumas	2028-2029	$ 19.24	$ 19.36	$ 19.78	$ 19.88	$ 19.19	$ 18.52	$ 18.55	$ 18.63	$ 18.75	$ 18.86	$ 18.79	$ 18.92
High Prices	Sumas	2029-2030	$ 18.92	$ 18.92										

APPENDIX 6.2

GENERAL ASSUMPTIONS

Appendix 6.2 - GDP Assumption

General Inflation (GDP) 1/

Year	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Inflation	0.86	0.82	1.28	1.35	1.87	2.16	2.12	2.08	2.04	2.02	1.95

Year	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Inflation	1.95	1.89	1.91	1.91	1.88	1.82	1.83	1.85	1.88	1.85	1.89

1/ Global Insight's Review of the U.S. Economy First Quarter 2009

Appendix 6.2 - Weighted Average Cost of Capital

OREGON
AVISTA CORPORATION
Capital Structure and Overall Rate of Return

Cost of Capital as of March 31, 2009	Amount	Percent of Total Capital	Cost	Component
L/T Debt		45.00%	6.40%	2.88%
Trust Preferred Securities		5.00%	6.57%	0.33%
Common Equity		50.00%	10.00%	5.00%
TOTAL		100.00%		8.21%

WASHINGTON
AVISTA CORPORATION
Capital Structure and Overall Rate of Return

Agreed-upon Cost of Capital		Percent of Total Capital	Cost	Component
L/T Debt		52.06%	6.84%	3.56%
Trust Preferred Securities				0.00%
Common Equity		47.94%	10.20%	4.89%
TOTAL		100.00%		8.45%

IDAHO
AVISTA CORPORATION
Capital Structure and Overall Rate of Return

Agreed-upon Cost of Capital	Amount	Percent of Total Capital	Cost	Component
L/T Debt (1)		53.70%	6.51%	3.50%
Trust Preferred Securities				0.00%
Preferred Stock				0.00%
Common Equity		46.30%	10.20%	4.72%
TOTAL		100.00%		8.22%
System Weighted Average Cost of Capital*				8.32%
GDP price deflator 2009				1.79%
Real WACC				6.42%
Tax rate				35%
Real after tax WACC				**4.17%**

*Weighting based on net rate base as of 4/30/09

Authorized Rates of Return

Washington Electric

General Case Settlement in 2008 (UE-080416)

effective 1/1/2009

Component	Capital Structure	ProForma Cost	ProForma Weighted Cost
L/T Debt [1]	53.70%	6.51%	3.50%
Pref Trust			0.00%
Common	46.30%	10.20%	4.72%
Total	100.00%		8.22%

(1) includes short-term debt

Washington Gas

General Case Settlement in 2008 (UG-080417)

effective 1/1/2009

Component	Capital Structure	ProForma Cost	ProForma Weighted Cost
L/T Debt [1]	53.70%	6.51%	3.50%
Pref Trust			0.00%
Common	46.30%	10.20%	4.72%
Total	100.00%		8.22%

(1) includes short-term debt

Idaho Electric

Case Decided in 2008-AVU-E-08-01

effective 10/1/2008

Component	Capital Structure	ProForma Cost	ProForma Weighted Cost
L/T Debt	52.06%	6.84%	3.56%
Pref Trust			0.00%
Pref Stock			0.00%
Common	47.94%	10.20%	4.89%
Total	100.00%		8.45%

(excludes short-term debt)

Idaho Gas

Case Decided in 2008-AVU-G-08-01

effective 10/1/2008

Component	Capital Structure	ProForma Cost	ProForma Weighted Cost
L/T Debt	52.06%	6.84%	3.56%
Pref Trust			0.00%
Pref Stock			0.00%
Common	47.94%	10.20%	4.89%
Total	100.00%		8.45%

(excludes short-term debt)

Oregon Gas

General Case Settlement in 2007 (UG-181)

effective 4/1/2008

Component	Capital Structure	ProForma Cost	ProForma Weighted Cost
L/T Debt	45.00%	6.40%	2.88%
Pref Trust	5.00%	6.57%	0.33%
Common	50.00%	10.00%	5.00%
Total	100.00%		8.21%

(excludes short-term debt)

ESCALATION/INFLATION FORECASTS

Implicit Price Deflators — U. S. Average 3/31/2009
Source: Randy Barcus, Finance--Analysis, Budget & Forecasting
Discount Rate: Levelizing is Not Applicable to Escalation Rates

Year	E1 Gross Domestic Product (% change)	E2 Personal Consumption Expenditures (% change)	E3 Power Equipment Investment (% change)	E4 Consumer Price Index-Urban (% change)
1996	1.9	2.2	1.6	2.9
1997	1.7	1.7	2.1	2.3
1998	1.1	0.9	1.9	1.5
1999	1.4	1.7	1.6	2.2
2000	2.2	2.5	4.1	3.4
2001	2.4	2.1	2.8	2.8
2002	1.7	1.4	2.7	1.6
2003	2.1	2.0	2.3	2.3
2004	2.9	2.6	8.4	2.7
2005	3.3	2.9	9.4	3.4
2006	3.2	2.8	6.1	3.2
2007	2.7	2.6	5.0	2.9
2008	2.2	3.3	7.7	3.8
2009	0.9	-1.0	1.6	-1.9
2010	0.8	1.4	-1.8	1.7
2011	1.3	1.8	1.6	2.2
2012	1.4	1.7	2.3	2.3
2013	1.9	2.2	3.2	2.6
2014	2.2	2.1	3.5	2.4
2015	2.1	2.1	3.2	2.4
2016	2.1	2.1	3.0	2.5
2017	2.0	2.1	3.0	2.4
2018	2.0	2.1	3.0	2.4
2019	2.0	2.0	2.8	2.3
2020	2.0	1.9	2.8	2.1

ESCALATION/INFLATION FORECASTS

Implicit Price Deflators — U. S. Average 3/31/2009
Source: Randy Barcus, Finance--Analysis, Budget & Forecasting
Discount Rate: Levelizing is Not Applicable to Escalation Rates

Year	E1 Gross Domestic Product (% change)	E2 Personal Consumption Expenditures (% change)	E3 Power Equipment Investment (% change)	E4 Consumer Price Index-Urban (% change)
2021	1.9	1.7	2.8	1.7
2022	1.9	1.8	2.6	2.0
2023	1.9	1.9	2.7	2.2
2024	1.9	1.9	2.7	2.1
2025	1.8	1.8	2.6	2.1
2026	1.8	1.9	2.6	2.1
2027	1.8	1.9	2.7	2.1
2028	1.9	1.9	2.7	2.2
2029	1.9	1.9	2.7	2.1
2030	1.9	1.9	2.7	2.2
2031	1.9	1.9	2.8	2.2
2032	1.9	1.9	2.8	2.2
2033	1.8	1.9	2.7	2.2
2034	1.8	1.9	2.7	2.2
2035	1.8	1.9	2.7	2.2
2036	1.8	1.9	2.7	2.2
2037	1.9	1.9	2.8	2.2
2038	1.9	2.0	2.8	2.2
2008-2038 Avg.	1.8	1.9	2.7	2.1
5 Year Avg.	1.3	1.4	2.3	1.6
10 Year Avg.	1.7	1.8	2.7	2.0
20 Year Avg.	1.8	1.8	2.7	2.1
25 Year Avg.	1.8	1.9	2.7	2.1
30 Year Avg.	1.8	1.9	2.7	2.1
Std. Dev.	1.0	1.0	1.5	1.0
	0.5	0.6	1.8	0.8

E1 Applies to inflation of all good & services produced & consumed in the U.S.
E2 Applies to inflation of goods & services consumed by individuals.
E3 Applies to inflation of non-residential power equipment
E4 For all urban consumers, applies to inflation of a fixed market basket of typical goods & services.

Reference: Global Insight's Review of the U.S. Economy First Quarter 2009

COST OF CAPITAL

Source: Paul Kimball, Treasury Department 4/10/2009

Projected Long-Term Cost of Capital -- Avista Utilities
for Net Present Value Analysis

	Target Capital Structure	Component Cost	Net Present Value
Debt	50%	7.60%	3.80%
Common Equity	50%	11.25%	5.63%
Weighted Cost of Capital			9.43%

Authorized Cost of Capital -- Avista Utilities
for Revenue Requirements Analysis
Washington Elec/Gas Decided 2008

	Authorized Capital Structure	Component Cost	Component Return
Debt	53.70%	6.51%	3.50%
Common Equity	46.30%	10.20%	4.72%
Rate of Return			8.22%

Authorized Cost of Capital -- Avista Utilities
for Revenue Requirements Analysis
Idaho Elec/Gas Decided 2008 AVU-08-1

	Authorized Capital Structure	Component Cost	Component Return
Debt	52.06%	6.84%	3.56%
Common Equity	47.94%	10.20%	4.89%
Rate of Return			8.45%

APPENDIX 6.3

SUPPLY SIDE RESOURCE OPTIONS

Appendix 6.3 - Supply Side Resource Additions Available to SENDOUT®

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
Capacity Release Recalls	WA/ID	20,000 Dth/d	NWPL fixed rate	2018	Recall previously released capacity
GTN Capacity	WA/ID	30,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity
GTN Capacity	OR	25,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity; requires expansion of Medford Lateral
GTN Medford Lateral Expansion	OR	25,000 Dth/d	GTN rate	2011	Additional compression to allow more gas to flow from GTN mailine to the lateral
NWP Expansion	WA/ID	50,000 Dth/d	NWPL fixed rate x 3	2013	Transport expansion from Sumas/JP to WA/ID
NWP Expansion	OR	50,000 Dth/d	NWPL fixed rate x 5	2013	Transport expansion from Sumas/JP to Oregon
Klamath Falls Lateral Capacity	OR	up to 6000 Dth/d	NWPL fixed rate	2009	Currently available unsubscribed capacity
Klamath Falls Lateral Purchase	OR	20,000 Dth/d	$2.5 million capital cost	November 2010	Agreement with NWPL to purchase the Klamath Falls lateral at net book value. Can be done with less than 1 years notice.
Statellite LNG					
WA/ID Satellite LNG	WA/ID	90,000 capacity; 30,000 delivery for 3 days	$44 million capital cost $1 million annual O&M	November 2015	
Medford/Roseburg Satellite LNG	OR	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000 annual O&M	November 2015	
Klamath Falls Satellite LNG	OR	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000 annual O&M	November 2015	
La Grande Satellite LNG	OR	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000 annual O&M	November 2015	
Company Owned Liquifaction LNG					
WA/ID	WA	600 MMcf capacity; 150,000 delivery for 4 days	$75 million capital cost, $2 million annual O&M	November 2017	
Backhauls					
Malin Backhaul	OR		GTN rate	2010	Back haul capacity is provided by displacement and is available up to the amount of scheduled forward-haul capacity through a specific point. Also requires expansion of the Medford Lateral to facilitate delivery. Not firm especially long term
Other Resources Considered					
Citygate deliveries	WA/ID/OR				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction
Import LNG					
Jordan Cove LNG to Medford	OR	7,500 Dth/d	Malin pricing less fuel	November 2012	
Transport from LNG Terminal	OR	7,500 Dth/d	Precedent agreement rate	November 2012	
Jordan Cove LNG to Malin	OR	7,500 Dth/d	Malin pricing less fuel	November 2012	
Transport from LNG Terminal	OR	7,500 Dth/d	Precedent agreement rate	November 2012	
Bradwood Landing LNG	OR	25,000 Dth/d	Malin pricing less fuel	November 2012	
Transport from LNG Terminal	OR	25,000 Dth/d	Precedent agreement rate	November 2012	
Inground Storage					
California	WA/ID/OR				Dependent on GTN backhaul or convert to bidirectional pipeline
JP Expansion	WA/ID/OR				Dependent on NWP Expansion or other Tport arrangements back to service territory
Mist	WA/ID/OR				Dependent on NWP Expansion or other Tport arrangements back to service territory; Long term subscription may not be available

Resources not modeled in SENDOUT®

Appendix 6.3 - Supply Side Resource Additions Available to SENDOUT® by Jurisdiction
Expected Case

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
Capacity Release Recalls	WA/ID	20,000 Dth/d	NWPL fixed rate	2018	Recall previously released capacity
GTN Capacity	WA/ID	40,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity
NWP Expansion	WA/ID	50,000 Dth/d	NWPL fixed rate x 3	2013	Transport expansion from Sumas/JP to WA/ID
Statellite LNG					
WA/ID Satellite LNG	WA/ID	90,000 capacity; 30,000 delivery for 3 days	$44 million capital cost $1 million	November 2015	
Company Owned Liquifaction LNG					
WA/ID	WA/ID	600 MMcf capacity; 150,000 delivery for 4 days	$75 million capital cost, $2 million	November 2017	
Other Resources Considered					
Citygate deliveries	WA/ID				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
GTN Capacity	Medford/Roseburg	25,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity; requires expansion of Medford Lateral
GTN Medford Lateral Expansion	Medford/Roseburg	25,000 Dth/d	GTN rate	2011	Additional compression to allow more gas to flow from GTN mailine to the lateral
NWP Expansion	Medford/Roseburg	50,000 Dth/d	NWPL fixed rate x 5	2013	Transport expansion from Sumas/JP to Oregon
Statellite LNG					
Medford/Roseburg Satellite LNG	Medford/Roseburg	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	Medford/Roseburg				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction
Malin Backhaul	Medford/Roseburg		GTN rate	2010	Back haul capacity is provided by displacement and is available up to the amount of scheduled forward-haul capacity through a specific point. Also requires expansion of the Medford Lateral to facilitate delivery. Not firm especially long term

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
Klamath Falls Lateral Capacity	Klamath Falls	up to 6000 Dth/d	NWPL fixed rate	2009	Currently available unsubscribed capacity
Klamath Falls Lateral Purchase	Klamath Falls	20,000 Dth/d	$2.6 million capital cost	November 2010	Agreement with NWPL to purchase the Klamath Falls lateral at net book value. Can be done with less than 1 years notice.
Statellite LNG					
Klamath Falls Satellite LNG	Klamath Falls	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	Klamath Falls				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Statellite LNG					
La Grande Satellite LNG	La Grande	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	La Grande				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

Appendix 6.3 - Supply Side Resource Additions Available to SENDOUT® by Jurisdiction
High Case

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
Capacity Release Recalls	WA/ID	20,000 Dth/d	NWPL fixed rate	2018	Recall previously released capacity
GTN Capacity	WA/ID	100,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity
NWP Expansion	WA/ID	50,000 Dth/d	NWPL fixed rate x 3	2013	Transport expansion from Sumas/JP to WA/ID
Statellite LNG					
WA/ID Satellite LNG	WA/ID	90,000 capacity; 30,000 delivery for 3 days	$44 million capital cost $1 million	November 2015	
Company Owned Liquifaction LNG					
WA/ID	WA/ID	600 MMcf capacity; 150,000 delivery for 4 days	$75 million capital cost, $2 million	November 2017	
Other Resources Considered					
Citygate deliveries	WA/ID				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
GTN Capacity	Medford/Roseburg	50,000 Dth/d	GTN rate	2010	Currently available unsubscribed capacity; requires expansion of Medford Lateral
GTN Medford Lateral Expansion	Medford/Roseburg	50,000 Dth/d	GTN rate	2011	Additional compression to allow more gas to flow from GTN mailine to the lateral
NWP Expansion	Medford/Roseburg	50,000 Dth/d	NWPL fixed rate x 5	2013	Transport expansion from Sumas/JP to Oregon
Statellite LNG					
Medford/Roseburg Satellite LNG	Medford/Roseburg	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	Medford/Roseburg				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction
Malin Backhaul	Medford/Roseburg		GTN rate	2010	Back haul capacity is provided by displacement and is available up to the amount of scheduled forward-haul capacity through a specific point. Also requires expansion of the Medford Lateral to facilitate delivery. Not firm especially long term

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Pipeline					
Klamath Falls Lateral Capacity	Klamath Falls	up to 6000 Dth/d	NWPL fixed rate	2009	Currently available unsubscribed capacity
Klamath Falls Lateral Purchase	Klamath Falls	20,000 Dth/d	$2.6 million capital cost	November 2010	Agreement with NWPL to purchase the Klamath Falls lateral at net book value. Can be done with less than 1 years notice.
Statellite LNG					
Klamath Falls Satellite LNG	Klamath Falls	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	Klamath Falls				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

Additional Resources	Jurisdiction	Size	Cost/Rates	Availability	Notes
Statellite LNG					
La Grande Satellite LNG	La Grande	45,000 capacity; 15,000 delivery for 3 days	$22 million capital cost $850,000	November 2015	
Other Resources Considered					
Citygate deliveries	La Grande				Represents the ability to buy a delivered product fron another utility or marketer. Limited counterparties to structure transaction

APPENDIX 6.4

AVOIDED COST DETAIL

Appendix 6.4

Annual Avoided Costs 1/

2009$

Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Expected	2009-2010	$ 4.98	$ 4.94	$ 5.23	$ 5.23	$ 5.23	$ 4.90	$ 4.91	$ 4.95	$ 4.92	$ 5.12
Expected	2010-2011	$ 5.42	$ 5.39	$ 5.53	$ 5.53	$ 5.53	$ 5.33	$ 5.33	$ 5.39	$ 5.35	$ 5.48
Expected	2011-2012	$ 5.54	$ 5.50	$ 5.64	$ 5.64	$ 5.64	$ 5.45	$ 5.45	$ 5.49	$ 5.46	$ 5.59
Expected	2012-2013	$ 5.85	$ 5.79	$ 5.96	$ 5.96	$ 5.96	$ 5.77	$ 5.77	$ 5.79	$ 5.78	$ 5.90
Expected	2013-2014	$ 5.25	$ 5.19	$ 5.37	$ 5.37	$ 5.37	$ 5.17	$ 5.17	$ 5.19	$ 5.18	$ 5.31
Expected	2014-2015	$ 7.32	$ 7.27	$ 7.46	$ 7.46	$ 7.46	$ 7.25	$ 7.26	$ 7.28	$ 7.26	$ 7.40
Expected	2015-2016	$ 8.40	$ 8.34	$ 8.55	$ 8.55	$ 8.55	$ 8.32	$ 8.33	$ 8.34	$ 8.33	$ 8.48
Expected	2016-2017	$ 9.05	$ 8.99	$ 9.23	$ 9.23	$ 9.23	$ 8.96	$ 8.97	$ 8.99	$ 8.97	$ 9.15
Expected	2017-2018	$ 10.11	$ 10.05	$ 10.31	$ 10.31	$ 10.31	$ 10.03	$ 10.03	$ 10.06	$ 10.04	$ 10.22
Expected	2018-2019	$ 10.72	$ 10.66	$ 10.95	$ 10.95	$ 10.95	$ 10.64	$ 10.66	$ 10.66	$ 10.66	$ 10.85
Expected	2019-2020	$ 10.95	$ 10.89	$ 11.21	$ 11.21	$ 11.21	$ 10.87	$ 10.88	$ 10.90	$ 10.88	$ 11.10
Expected	2020-2021	$ 10.96	$ 10.91	$ 11.25	$ 11.25	$ 11.25	$ 10.88	$ 10.89	$ 10.92	$ 10.90	$ 11.12
Expected	2021-2022	$ 11.01	$ 10.96	$ 11.32	$ 11.32	$ 11.32	$ 10.94	$ 10.95	$ 10.96	$ 10.95	$ 11.19
Expected	2022-2023	$ 11.21	$ 11.18	$ 11.58	$ 11.58	$ 11.58	$ 11.15	$ 11.16	$ 11.19	$ 11.17	$ 11.43
Expected	2023-2024	$ 11.11	$ 11.10	$ 11.49	$ 11.49	$ 11.49	$ 11.05	$ 11.05	$ 11.10	$ 11.06	$ 11.34
Expected	2024-2025	$ 11.23	$ 11.21	$ 11.67	$ 11.67	$ 11.67	$ 11.16	$ 11.17	$ 11.21	$ 11.18	$ 11.49
Expected	2025-2026	$ 11.42	$ 11.40	$ 11.91	$ 11.91	$ 11.91	$ 11.35	$ 11.35	$ 11.40	$ 11.37	$ 11.71
Expected	2026-2027	$ 11.69	$ 11.68	$ 12.20	$ 12.20	$ 12.20	$ 11.61	$ 11.62	$ 11.69	$ 11.64	$ 12.00
Expected	2027-2028	$ 11.87	$ 11.86	$ 12.44	$ 12.44	$ 12.44	$ 11.79	$ 11.80	$ 11.87	$ 11.82	$ 12.21
Expected	2028-2029	$ 12.08	$ 12.75	$ 12.04	$ 12.04	$ 12.04	$ 12.00	$ 12.00	$ 12.08	$ 12.02	$ 12.19

Winter Avoided Costs 1/

2009$

Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Winter	OR Winter
Expected	2009-2010	$ 4.99	$ 4.97	$ 5.67	$ 5.67	$ 5.67	$ 4.92	$ 4.93	$ 4.96	$ 4.94	$ 5.39
Expected	2010-2011	$ 5.67	$ 5.65	$ 5.98	$ 5.98	$ 5.98	$ 5.58	$ 5.58	$ 5.63	$ 5.60	$ 5.85
Expected	2011-2012	$ 5.77	$ 5.74	$ 6.07	$ 6.07	$ 6.07	$ 5.67	$ 5.68	$ 5.71	$ 5.69	$ 5.94
Expected	2012-2013	$ 6.04	$ 5.98	$ 6.38	$ 6.38	$ 6.38	$ 5.96	$ 5.98	$ 5.99	$ 5.98	$ 6.23
Expected	2013-2014	$ 5.33	$ 5.27	$ 5.71	$ 5.71	$ 5.71	$ 5.25	$ 5.25	$ 5.27	$ 5.26	$ 5.55
Expected	2014-2015	$ 7.14	$ 7.11	$ 7.56	$ 7.56	$ 7.56	$ 7.08	$ 7.09	$ 7.12	$ 7.10	$ 7.38
Expected	2015-2016	$ 8.36	$ 8.31	$ 8.81	$ 8.81	$ 8.81	$ 8.29	$ 8.29	$ 8.31	$ 8.30	$ 8.62
Expected	2016-2017	$ 9.16	$ 9.09	$ 9.67	$ 9.67	$ 9.67	$ 9.08	$ 9.08	$ 9.10	$ 9.09	$ 9.45
Expected	2017-2018	$ 10.11	$ 10.07	$ 10.68	$ 10.68	$ 10.68	$ 10.06	$ 10.07	$ 10.08	$ 10.07	$ 10.44
Expected	2018-2019	$ 10.90	$ 10.85	$ 11.53	$ 11.53	$ 11.53	$ 10.84	$ 10.86	$ 10.85	$ 10.85	$ 11.27
Expected	2019-2020	$ 11.23	$ 11.18	$ 11.91	$ 11.91	$ 11.91	$ 11.17	$ 11.18	$ 11.18	$ 11.18	$ 11.62
Expected	2020-2021	$ 11.17	$ 11.13	$ 11.91	$ 11.91	$ 11.91	$ 11.10	$ 11.13	$ 11.13	$ 11.12	$ 11.61
Expected	2021-2022	$ 11.21	$ 11.18	$ 12.03	$ 12.03	$ 12.03	$ 11.16	$ 11.18	$ 11.18	$ 11.17	$ 11.69
Expected	2022-2023	$ 11.46	$ 11.44	$ 12.37	$ 12.37	$ 12.37	$ 11.42	$ 11.44	$ 11.45	$ 11.44	$ 12.00
Expected	2023-2024	$ 11.36	$ 11.47	$ 12.36	$ 12.36	$ 12.36	$ 11.41	$ 11.42	$ 11.47	$ 11.43	$ 11.98
Expected	2024-2025	$ 11.46	$ 11.55	$ 12.55	$ 12.55	$ 12.55	$ 11.49	$ 11.49	$ 11.56	$ 11.52	$ 12.14
Expected	2025-2026	$ 11.61	$ 11.72	$ 12.82	$ 12.82	$ 12.82	$ 11.64	$ 11.65	$ 11.73	$ 11.67	$ 12.36
Expected	2026-2027	$ 11.85	$ 11.96	$ 13.19	$ 13.19	$ 13.19	$ 11.88	$ 11.89	$ 11.98	$ 11.92	$ 12.68
Expected	2027-2028	$ 12.02	$ 12.13	$ 13.48	$ 13.48	$ 13.48	$ 12.05	$ 12.05	$ 12.15	$ 12.08	$ 12.92
Expected	2028-2029	$ 12.28	$ 14.02	$ 12.27	$ 12.27	$ 12.27	$ 12.29	$ 12.29	$ 12.40	$ 12.33	$ 12.62

1/ Avoided costs are before Environmental Externalities adder.

Appendix 6.4

Annual Avoided Costs 1/

2009$

Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Low Growth	2009-2010	$ 7.25	$ 7.23	$ 7.21	$ 7.21	$ 7.21	$ 7.23	$ 7.32	$ 7.23	$ 7.26	$ 7.22
Low Growth	2010-2011	$ 8.28	$ 8.30	$ 8.26	$ 8.26	$ 8.26	$ 8.28	$ 8.30	$ 8.30	$ 8.30	$ 8.27
Low Growth	2011-2012	$ 9.59	$ 9.71	$ 9.59	$ 9.59	$ 9.59	$ 9.66	$ 9.64	$ 9.73	$ 9.68	$ 9.62
Low Growth	2012-2013	$ 10.70	$ 10.79	$ 10.70	$ 10.70	$ 10.70	$ 10.76	$ 10.80	$ 10.79	$ 10.78	$ 10.72
Low Growth	2013-2014	$ 10.55	$ 10.57	$ 10.52	$ 10.52	$ 10.52	$ 10.56	$ 10.67	$ 10.57	$ 10.60	$ 10.53
Low Growth	2014-2015	$ 12.87	$ 12.97	$ 12.86	$ 12.86	$ 12.86	$ 12.96	$ 13.04	$ 12.97	$ 12.99	$ 12.88
Low Growth	2015-2016	$ 13.62	$ 13.69	$ 13.58	$ 13.58	$ 13.58	$ 13.69	$ 13.79	$ 13.69	$ 13.72	$ 13.61
Low Growth	2016-2017	$ 13.85	$ 13.99	$ 13.85	$ 13.85	$ 13.85	$ 13.98	$ 14.09	$ 13.99	$ 14.02	$ 13.88
Low Growth	2017-2018	$ 14.59	$ 14.77	$ 14.59	$ 14.59	$ 14.59	$ 14.76	$ 14.84	$ 14.77	$ 14.79	$ 14.63
Low Growth	2018-2019	$ 14.98	$ 15.06	$ 14.98	$ 14.98	$ 14.98	$ 15.05	$ 15.15	$ 15.06	$ 15.09	$ 14.99
Low Growth	2019-2020	$ 15.21	$ 15.37	$ 15.21	$ 15.21	$ 15.21	$ 15.33	$ 15.40	$ 15.36	$ 15.36	$ 15.24
Low Growth	2020-2021	$ 15.42	$ 15.60	$ 15.42	$ 15.42	$ 15.42	$ 15.56	$ 15.57	$ 15.60	$ 15.58	$ 15.46
Low Growth	2021-2022	$ 15.41	$ 15.74	$ 15.41	$ 15.41	$ 15.41	$ 15.65	$ 15.64	$ 15.78	$ 15.69	$ 15.48
Low Growth	2022-2023	$ 15.62	$ 16.03	$ 15.62	$ 15.62	$ 15.62	$ 15.87	$ 15.85	$ 16.06	$ 15.93	$ 15.70
Low Growth	2023-2024	$ 15.94	$ 16.36	$ 15.94	$ 15.94	$ 15.94	$ 16.18	$ 16.16	$ 16.38	$ 16.24	$ 16.02
Low Growth	2024-2025	$ 16.22	$ 16.64	$ 16.22	$ 16.22	$ 16.22	$ 16.46	$ 16.44	$ 16.65	$ 16.52	$ 16.30
Low Growth	2025-2026	$ 16.76	$ 17.20	$ 16.76	$ 16.76	$ 16.76	$ 17.02	$ 16.99	$ 17.22	$ 17.08	$ 16.85
Low Growth	2026-2027	$ 17.40	$ 17.84	$ 17.40	$ 17.40	$ 17.40	$ 17.65	$ 17.62	$ 17.85	$ 17.70	$ 17.49
Low Growth	2027-2028	$ 18.04	$ 18.49	$ 18.05	$ 18.05	$ 18.05	$ 18.30	$ 18.27	$ 18.50	$ 18.35	$ 18.14
Low Growth	2028-2029	$ 18.71	$ 19.17	$ 18.72	$ 18.72	$ 18.72	$ 18.98	$ 18.95	$ 19.18	$ 19.03	$ 18.81

Winter Avoided Costs 1/

2009$

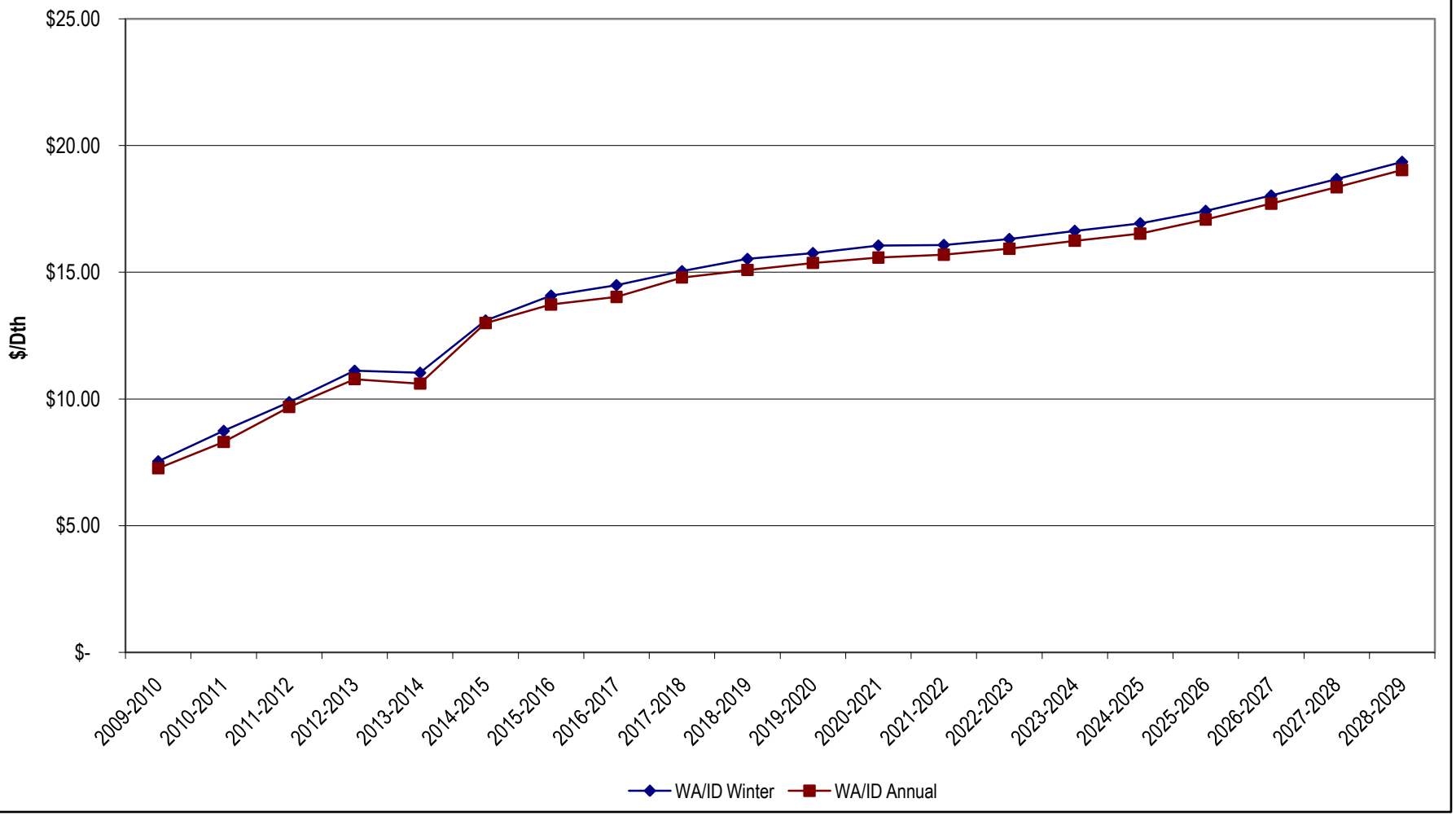
Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Winter	OR Winter
Low Growth	2009-2010	$ 7.51	$ 7.55	$ 7.51	$ 7.51	$ 7.51	$ 7.55	$ 7.51	$ 7.55	$ 7.54	$ 7.52
Low Growth	2010-2011	$ 8.72	$ 8.75	$ 8.71	$ 8.71	$ 8.71	$ 8.75	$ 8.71	$ 8.75	$ 8.74	$ 8.72
Low Growth	2011-2012	$ 9.79	$ 9.93	$ 9.81	$ 9.81	$ 9.81	$ 9.87	$ 9.83	$ 9.91	$ 9.87	$ 9.83
Low Growth	2012-2013	$ 11.04	$ 11.12	$ 11.05	$ 11.05	$ 11.05	$ 11.10	$ 11.14	$ 11.10	$ 11.11	$ 11.06
Low Growth	2013-2014	$ 10.95	$ 11.00	$ 10.94	$ 10.94	$ 10.94	$ 11.00	$ 11.09	$ 11.00	$ 11.03	$ 10.96
Low Growth	2014-2015	$ 12.94	$ 13.08	$ 12.95	$ 12.95	$ 12.95	$ 13.08	$ 13.13	$ 13.08	$ 13.09	$ 12.97
Low Growth	2015-2016	$ 13.95	$ 14.04	$ 13.94	$ 13.94	$ 13.94	$ 14.04	$ 14.14	$ 14.04	$ 14.08	$ 13.96
Low Growth	2016-2017	$ 14.30	$ 14.45	$ 14.30	$ 14.30	$ 14.30	$ 14.45	$ 14.57	$ 14.45	$ 14.49	$ 14.33
Low Growth	2017-2018	$ 14.79	$ 15.02	$ 14.79	$ 14.79	$ 14.79	$ 15.02	$ 15.09	$ 15.02	$ 15.04	$ 14.84
Low Growth	2018-2019	$ 15.43	$ 15.50	$ 15.43	$ 15.43	$ 15.43	$ 15.50	$ 15.58	$ 15.50	$ 15.52	$ 15.44
Low Growth	2019-2020	$ 15.66	$ 15.73	$ 15.66	$ 15.66	$ 15.66	$ 15.73	$ 15.81	$ 15.73	$ 15.76	$ 15.67
Low Growth	2020-2021	$ 16.09	$ 16.04	$ 16.09	$ 16.09	$ 16.09	$ 16.04	$ 16.07	$ 16.04	$ 16.05	$ 16.08
Low Growth	2021-2022	$ 15.98	$ 16.10	$ 15.98	$ 15.98	$ 15.98	$ 16.08	$ 16.05	$ 16.10	$ 16.08	$ 16.01
Low Growth	2022-2023	$ 16.19	$ 16.38	$ 16.19	$ 16.19	$ 16.19	$ 16.30	$ 16.25	$ 16.37	$ 16.31	$ 16.23
Low Growth	2023-2024	$ 16.53	$ 16.72	$ 16.53	$ 16.53	$ 16.53	$ 16.62	$ 16.57	$ 16.72	$ 16.63	$ 16.57
Low Growth	2024-2025	$ 16.85	$ 17.02	$ 16.85	$ 16.85	$ 16.85	$ 16.92	$ 16.86	$ 17.01	$ 16.93	$ 16.89
Low Growth	2025-2026	$ 17.34	$ 17.51	$ 17.35	$ 17.35	$ 17.35	$ 17.41	$ 17.34	$ 17.51	$ 17.42	$ 17.38
Low Growth	2026-2027	$ 17.94	$ 18.13	$ 17.95	$ 17.95	$ 17.95	$ 18.01	$ 17.94	$ 18.12	$ 18.02	$ 17.98
Low Growth	2027-2028	$ 18.58	$ 18.78	$ 18.59	$ 18.59	$ 18.59	$ 18.66	$ 18.59	$ 18.77	$ 18.67	$ 18.63
Low Growth	2028-2029	$ 19.25	$ 19.46	$ 19.27	$ 19.27	$ 19.27	$ 19.34	$ 19.27	$ 19.46	$ 19.35	$ 19.30

1/ Avoided costs are before Environmental Externalities adder.

Appendix 6.4 - Washington and Idaho Avoided Costs - High Price Case

Includes Commodity & Trans. Costs/Excludes Env. Ext. Adder - November to October

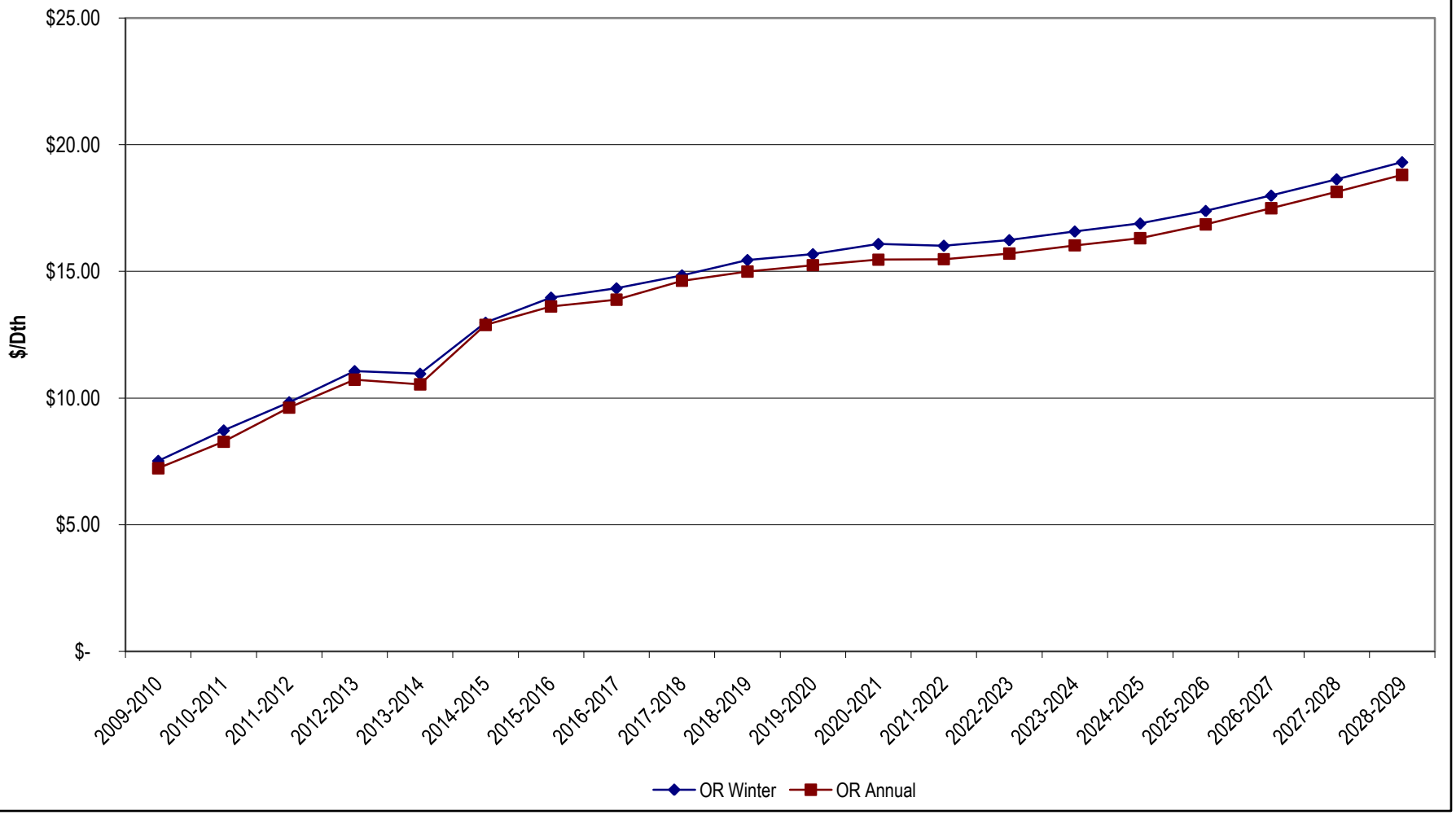
2009$/Dth



Appendix 6.4 - Natural Gas Oregon Avoided Costs - High Price Case

Includes Commodity & Trans. Costs/Excludes Env. Ext. Adder - November to October

2009$/Dth



Appendix 6.4

Annual Avoided Costs 1/

2009$

Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
High Growth	2009-2010	$ 5.23	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.28	$ 5.19	$ 5.22	$ 5.20
High Growth	2010-2011	$ 5.57	$ 5.55	$ 5.55	$ 5.55	$ 5.55	$ 5.53	$ 5.57	$ 5.55	$ 5.55	$ 5.55
High Growth	2011-2012	$ 5.40	$ 5.44	$ 5.40	$ 5.40	$ 5.40	$ 5.41	$ 5.41	$ 5.47	$ 5.43	$ 5.41
High Growth	2012-2013	$ 5.65	$ 5.67	$ 5.64	$ 5.64	$ 5.64	$ 5.65	$ 5.69	$ 5.67	$ 5.67	$ 5.65
High Growth	2013-2014	$ 4.75	$ 4.74	$ 4.72	$ 4.72	$ 4.72	$ 4.73	$ 4.81	$ 4.74	$ 4.76	$ 4.73
High Growth	2014-2015	$ 6.27	$ 6.30	$ 6.26	$ 6.26	$ 6.26	$ 6.26	$ 6.36	$ 6.30	$ 6.31	$ 6.27
High Growth	2015-2016	$ 6.72	$ 6.73	$ 6.70	$ 6.70	$ 6.70	$ 6.72	$ 6.84	$ 6.73	$ 6.76	$ 6.71
High Growth	2016-2017	$ 6.72	$ 6.77	$ 6.71	$ 6.71	$ 6.71	$ 6.75	$ 6.85	$ 6.77	$ 6.79	$ 6.72
High Growth	2017-2018	$ 7.17	$ 7.24	$ 7.16	$ 7.16	$ 7.16	$ 7.23	$ 7.32	$ 7.25	$ 7.27	$ 7.18
High Growth	2018-2019	$ 7.28	$ 7.30	$ 7.28	$ 7.28	$ 7.28	$ 7.28	$ 7.37	$ 7.30	$ 7.32	$ 7.29
High Growth	2019-2020	$ 7.26	$ 7.27	$ 7.25	$ 7.25	$ 7.25	$ 7.26	$ 7.34	$ 7.28	$ 7.29	$ 7.26
High Growth	2020-2021	$ 7.32	$ 7.38	$ 7.33	$ 7.33	$ 7.33	$ 7.33	$ 7.39	$ 7.38	$ 7.36	$ 7.34
High Growth	2021-2022	$ 7.26	$ 7.43	$ 7.24	$ 7.24	$ 7.24	$ 7.31	$ 7.36	$ 7.42	$ 7.36	$ 7.28
High Growth	2022-2023	$ 7.36	$ 7.60	$ 7.35	$ 7.35	$ 7.35	$ 7.42	$ 7.48	$ 7.61	$ 7.50	$ 7.40
High Growth	2023-2024	$ 7.58	$ 7.84	$ 7.57	$ 7.57	$ 7.57	$ 7.63	$ 7.68	$ 7.84	$ 7.72	$ 7.62
High Growth	2024-2025	$ 7.75	$ 8.02	$ 7.74	$ 7.74	$ 7.74	$ 7.80	$ 7.85	$ 8.03	$ 7.89	$ 7.80
High Growth	2025-2026	$ 7.92	$ 8.18	$ 7.90	$ 7.90	$ 7.90	$ 7.98	$ 8.03	$ 8.19	$ 8.06	$ 7.96
High Growth	2026-2027	$ 8.12	$ 8.41	$ 8.11	$ 8.11	$ 8.11	$ 8.17	$ 8.22	$ 8.42	$ 8.27	$ 8.17
High Growth	2027-2028	$ 8.31	$ 8.60	$ 8.30	$ 8.30	$ 8.30	$ 8.36	$ 8.41	$ 8.61	$ 8.46	$ 8.36
High Growth	2028-2029	$ 8.51	$ 8.79	$ 8.50	$ 8.50	$ 8.50	$ 8.56	$ 8.61	$ 8.81	$ 8.66	$ 8.56

Winter Avoided Costs 1/

2009$

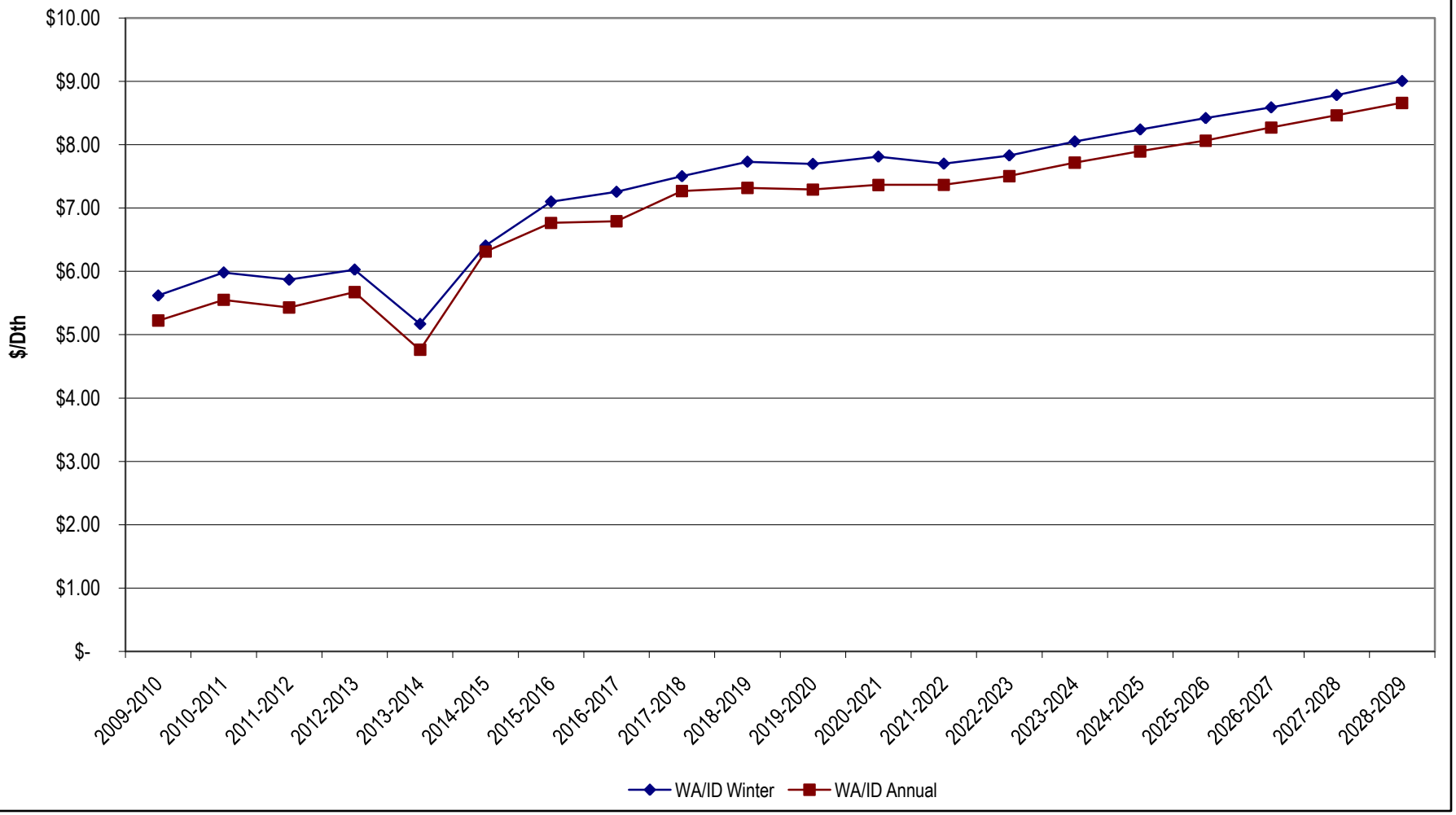
Scenario	Gas Year	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Winter	OR Winter
High Growth	2009-2010	$ 5.65	$ 5.61	$ 5.62	$ 5.62	$ 5.62	$ 5.61	$ 5.63	$ 5.61	$ 5.62	$ 5.62
High Growth	2010-2011	$ 6.02	$ 5.98	$ 6.00	$ 6.00	$ 6.00	$ 5.97	$ 5.99	$ 5.98	$ 5.98	$ 6.00
High Growth	2011-2012	$ 5.84	$ 5.90	$ 5.85	$ 5.85	$ 5.85	$ 5.85	$ 5.86	$ 5.89	$ 5.87	$ 5.86
High Growth	2012-2013	$ 5.99	$ 6.01	$ 6.00	$ 6.00	$ 6.00	$ 6.01	$ 6.05	$ 6.01	$ 6.02	$ 6.00
High Growth	2013-2014	$ 5.14	$ 5.14	$ 5.13	$ 5.13	$ 5.13	$ 5.12	$ 5.23	$ 5.15	$ 5.17	$ 5.14
High Growth	2014-2015	$ 6.34	$ 6.40	$ 6.33	$ 6.33	$ 6.33	$ 6.34	$ 6.46	$ 6.41	$ 6.40	$ 6.35
High Growth	2015-2016	$ 7.07	$ 7.06	$ 7.06	$ 7.06	$ 7.06	$ 7.04	$ 7.19	$ 7.07	$ 7.10	$ 7.06
High Growth	2016-2017	$ 7.19	$ 7.23	$ 7.19	$ 7.19	$ 7.19	$ 7.20	$ 7.33	$ 7.23	$ 7.25	$ 7.20
High Growth	2017-2018	$ 7.36	$ 7.46	$ 7.36	$ 7.36	$ 7.36	$ 7.45	$ 7.56	$ 7.48	$ 7.50	$ 7.38
High Growth	2018-2019	$ 7.73	$ 7.71	$ 7.73	$ 7.73	$ 7.73	$ 7.68	$ 7.78	$ 7.72	$ 7.73	$ 7.73
High Growth	2019-2020	$ 7.72	$ 7.68	$ 7.71	$ 7.71	$ 7.71	$ 7.65	$ 7.73	$ 7.69	$ 7.69	$ 7.71
High Growth	2020-2021	$ 7.90	$ 7.84	$ 7.90	$ 7.90	$ 7.90	$ 7.76	$ 7.82	$ 7.84	$ 7.81	$ 7.89
High Growth	2021-2022	$ 7.83	$ 7.74	$ 7.72	$ 7.72	$ 7.72	$ 7.66	$ 7.71	$ 7.72	$ 7.70	$ 7.74
High Growth	2022-2023	$ 7.93	$ 7.89	$ 7.82	$ 7.82	$ 7.82	$ 7.77	$ 7.82	$ 7.89	$ 7.83	$ 7.86
High Growth	2023-2024	$ 8.17	$ 8.14	$ 8.06	$ 8.06	$ 8.06	$ 7.98	$ 8.03	$ 8.13	$ 8.05	$ 8.09
High Growth	2024-2025	$ 8.38	$ 8.32	$ 8.26	$ 8.26	$ 8.26	$ 8.17	$ 8.21	$ 8.32	$ 8.24	$ 8.30
High Growth	2025-2026	$ 8.57	$ 8.51	$ 8.45	$ 8.45	$ 8.45	$ 8.34	$ 8.39	$ 8.52	$ 8.42	$ 8.48
High Growth	2026-2027	$ 8.73	$ 8.70	$ 8.62	$ 8.62	$ 8.62	$ 8.51	$ 8.55	$ 8.69	$ 8.58	$ 8.66
High Growth	2027-2028	$ 8.93	$ 8.89	$ 8.81	$ 8.81	$ 8.81	$ 8.71	$ 8.75	$ 8.88	$ 8.78	$ 8.85
High Growth	2028-2029	$ 9.13	$ 9.10	$ 9.02	$ 9.02	$ 9.02	$ 8.91	$ 8.95	$ 9.15	$ 9.00	$ 9.06

1/ Avoided costs are before Environmental Externalities adder.

Appendix 6.4 - Washington and Idaho Avoided Costs - Low Price Case

Includes Commodity & Trans. Costs/Excludes Env. Ext. Adder - November to October

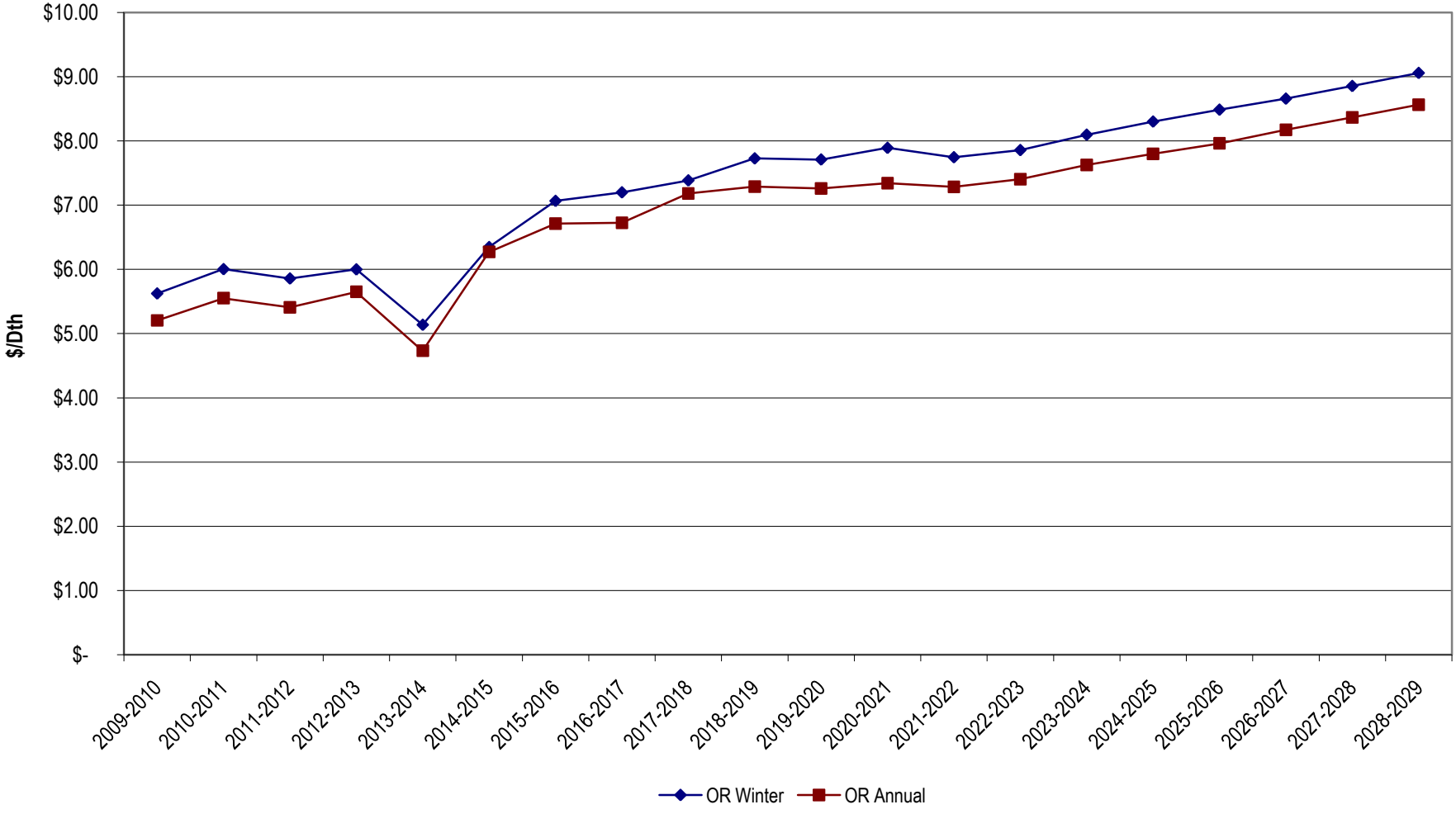
2009$/Dth



Appendix 6.4 - Natural Gas Oregon Avoided Costs - Low Price Case

Includes Commodity & Trans. Costs/Excludes Env. Ext. Adder - November to October

2009$/Dth



Appendix 6.4 - Monthly Avoided Cost Detail 1/

2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Low Growth & High Price	2009-2010	Nov	$ 7.04	$ 7.01	$ 7.02	$ 7.02	$ 7.02	$ 7.01	$ 7.01	$ 7.01	$ 7.01	$ 7.02
Low Growth & High Price	2009-2010	Dec	$ 7.43	$ 7.60	$ 7.47	$ 7.47	$ 7.47	$ 7.60	$ 7.39	$ 7.60	$ 7.53	$ 7.49
Low Growth & High Price	2009-2010	Jan	$ 7.76	$ 7.89	$ 7.76	$ 7.76	$ 7.76	$ 7.89	$ 7.75	$ 7.89	$ 7.85	$ 7.79
Low Growth & High Price	2009-2010	Feb	$ 7.82	$ 7.84	$ 7.82	$ 7.82	$ 7.82	$ 7.84	$ 7.81	$ 7.84	$ 7.83	$ 7.82
Low Growth & High Price	2009-2010	Mar	$ 7.52	$ 7.43	$ 7.47	$ 7.47	$ 7.47	$ 7.43	$ 7.60	$ 7.43	$ 7.49	$ 7.47
Low Growth & High Price	2009-2010	Apr	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.95	$ 6.94	$ 6.95	$ 6.94
Low Growth & High Price	2009-2010	May	$ 7.00	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.03	$ 6.95	$ 6.97	$ 6.96
Low Growth & High Price	2009-2010	Jun	$ 7.03	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.12	$ 6.95	$ 7.00	$ 6.96
Low Growth & High Price	2009-2010	Jul	$ 7.03	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.23	$ 6.95	$ 7.04	$ 6.97
Low Growth & High Price	2009-2010	Aug	$ 7.03	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.31	$ 6.95	$ 7.07	$ 6.97
Low Growth & High Price	2009-2010	Sep	$ 7.04	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.30	$ 6.95	$ 7.07	$ 6.97
Low Growth & High Price	2009-2010	Oct	$ 7.34	$ 7.34	$ 7.34	$ 7.34	$ 7.34	$ 7.34	$ 7.35	$ 7.34	$ 7.35	$ 7.34
Low Growth & High Price	2010-2011	Nov	$ 8.58	$ 8.55	$ 8.57	$ 8.57	$ 8.57	$ 8.55	$ 8.55	$ 8.55	$ 8.55	$ 8.57
Low Growth & High Price	2010-2011	Dec	$ 8.80	$ 8.93	$ 8.83	$ 8.83	$ 8.83	$ 8.93	$ 8.77	$ 8.93	$ 8.87	$ 8.84
Low Growth & High Price	2010-2011	Jan	$ 8.83	$ 8.99	$ 8.83	$ 8.83	$ 8.83	$ 8.99	$ 8.82	$ 8.99	$ 8.94	$ 8.87
Low Growth & High Price	2010-2011	Feb	$ 8.87	$ 8.87	$ 8.86	$ 8.86	$ 8.86	$ 8.87	$ 8.85	$ 8.87	$ 8.87	$ 8.86
Low Growth & High Price	2010-2011	Mar	$ 8.51	$ 8.41	$ 8.46	$ 8.46	$ 8.46	$ 8.41	$ 8.57	$ 8.41	$ 8.47	$ 8.46
Low Growth & High Price	2010-2011	Apr	$ 7.79	$ 7.95	$ 7.79	$ 7.79	$ 7.79	$ 7.83	$ 7.83	$ 7.95	$ 7.87	$ 7.83
Low Growth & High Price	2010-2011	May	$ 7.83	$ 7.95	$ 7.83	$ 7.83	$ 7.83	$ 7.88	$ 7.88	$ 7.95	$ 7.90	$ 7.86
Low Growth & High Price	2010-2011	Jun	$ 7.91	$ 7.96	$ 7.91	$ 7.91	$ 7.91	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 7.92
Low Growth & High Price	2010-2011	Jul	$ 8.01	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 8.05	$ 7.96	$ 7.99	$ 7.97
Low Growth & High Price	2010-2011	Aug	$ 8.05	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 8.12	$ 7.96	$ 8.01	$ 7.98
Low Growth & High Price	2010-2011	Sep	$ 8.06	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 8.12	$ 7.96	$ 8.02	$ 7.98
Low Growth & High Price	2010-2011	Oct	$ 8.14	$ 8.14	$ 8.14	$ 8.14	$ 8.14	$ 8.14	$ 8.17	$ 8.14	$ 8.15	$ 8.14
Low Growth & High Price	2011-2012	Nov	$ 9.13	$ 9.23	$ 9.13	$ 9.13	$ 9.13	$ 9.13	$ 9.13	$ 9.23	$ 9.16	$ 9.15
Low Growth & High Price	2011-2012	Dec	$ 9.31	$ 9.62	$ 9.37	$ 9.37	$ 9.37	$ 9.58	$ 9.30	$ 9.62	$ 9.50	$ 9.41
Low Growth & High Price	2011-2012	Jan	$ 10.29	$ 10.45	$ 10.29	$ 10.29	$ 10.29	$ 10.39	$ 10.32	$ 10.45	$ 10.39	$ 10.33
Low Growth & High Price	2011-2012	Feb	$ 10.34	$ 10.38	$ 10.34	$ 10.34	$ 10.34	$ 10.37	$ 10.37	$ 10.37	$ 10.37	$ 10.35
Low Growth & High Price	2011-2012	Mar	$ 9.90	$ 9.97	$ 9.90	$ 9.90	$ 9.90	$ 9.91	$ 10.03	$ 9.91	$ 9.95	$ 9.92
Low Growth & High Price	2011-2012	Apr	$ 9.25	$ 9.45	$ 9.25	$ 9.25	$ 9.25	$ 9.32	$ 9.32	$ 9.59	$ 9.41	$ 9.29
Low Growth & High Price	2011-2012	May	$ 9.27	$ 9.45	$ 9.27	$ 9.27	$ 9.27	$ 9.35	$ 9.35	$ 9.59	$ 9.43	$ 9.31
Low Growth & High Price	2011-2012	Jun	$ 9.37	$ 9.50	$ 9.37	$ 9.37	$ 9.37	$ 9.44	$ 9.44	$ 9.60	$ 9.49	$ 9.40
Low Growth & High Price	2011-2012	Jul	$ 9.48	$ 9.60	$ 9.48	$ 9.48	$ 9.48	$ 9.56	$ 9.56	$ 9.60	$ 9.57	$ 9.51
Low Growth & High Price	2011-2012	Aug	$ 9.55	$ 9.63	$ 9.55	$ 9.55	$ 9.55	$ 9.63	$ 9.63	$ 9.63	$ 9.63	$ 9.57
Low Growth & High Price	2011-2012	Sep	$ 9.55	$ 9.61	$ 9.55	$ 9.55	$ 9.55	$ 9.61	$ 9.62	$ 9.61	$ 9.61	$ 9.57
Low Growth & High Price	2011-2012	Oct	$ 9.59	$ 9.64	$ 9.59	$ 9.59	$ 9.59	$ 9.64	$ 9.65	$ 9.64	$ 9.64	$ 9.60
Low Growth & High Price	2012-2013	Nov	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77	$ 10.77
Low Growth & High Price	2012-2013	Dec	$ 10.93	$ 11.03	$ 10.95	$ 10.95	$ 10.95	$ 11.03	$ 10.93	$ 11.03	$ 11.00	$ 10.97
Low Growth & High Price	2012-2013	Jan	$ 11.33	$ 11.46	$ 11.33	$ 11.33	$ 11.33	$ 11.46	$ 11.45	$ 11.46	$ 11.45	$ 11.35
Low Growth & High Price	2012-2013	Feb	$ 11.35	$ 11.42	$ 11.35	$ 11.35	$ 11.35	$ 11.42	$ 11.46	$ 11.42	$ 11.44	$ 11.37
Low Growth & High Price	2012-2013	Mar	$ 10.86	$ 10.91	$ 10.86	$ 10.86	$ 10.86	$ 10.83	$ 11.08	$ 10.83	$ 10.92	$ 10.87
Low Growth & High Price	2012-2013	Apr	$ 10.25	$ 10.51	$ 10.25	$ 10.25	$ 10.25	$ 10.36	$ 10.36	$ 10.54	$ 10.42	$ 10.31
Low Growth & High Price	2012-2013	May	$ 10.31	$ 10.51	$ 10.31	$ 10.31	$ 10.31	$ 10.42	$ 10.42	$ 10.54	$ 10.46	$ 10.35
Low Growth & High Price	2012-2013	Jun	$ 10.41	$ 10.52	$ 10.41	$ 10.41	$ 10.41	$ 10.52	$ 10.52	$ 10.54	$ 10.53	$ 10.44
Low Growth & High Price	2012-2013	Jul	$ 10.49	$ 10.54	$ 10.49	$ 10.49	$ 10.49	$ 10.54	$ 10.60	$ 10.54	$ 10.56	$ 10.50
Low Growth & High Price	2012-2013	Aug	$ 10.58	$ 10.60	$ 10.58	$ 10.58	$ 10.58	$ 10.60	$ 10.66	$ 10.60	$ 10.62	$ 10.58
Low Growth & High Price	2012-2013	Sep	$ 10.55	$ 10.56	$ 10.55	$ 10.55	$ 10.55	$ 10.56	$ 10.63	$ 10.56	$ 10.59	$ 10.55
Low Growth & High Price	2012-2013	Oct	$ 10.65	$ 10.63	$ 10.63	$ 10.63	$ 10.63	$ 10.63	$ 10.72	$ 10.63	$ 10.66	$ 10.63
Low Growth & High Price	2013-2014	Nov	$ 11.14	$ 11.13	$ 11.14	$ 11.14	$ 11.14	$ 11.13	$ 11.13	$ 11.13	$ 11.13	$ 11.14
Low Growth & High Price	2013-2014	Dec	$ 11.21	$ 11.22	$ 11.21	$ 11.21	$ 11.21	$ 11.22	$ 11.21	$ 11.22	$ 11.21	$ 11.21
Low Growth & High Price	2013-2014	Jan	$ 10.90	$ 11.15	$ 10.90	$ 10.90	$ 10.90	$ 11.15	$ 11.12	$ 11.15	$ 11.14	$ 10.95
Low Growth & High Price	2013-2014	Feb	$ 10.99	$ 11.03	$ 10.99	$ 10.99	$ 10.99	$ 11.03	$ 11.20	$ 11.03	$ 11.09	$ 11.00
Low Growth & High Price	2013-2014	Mar	$ 10.51	$ 10.49	$ 10.50	$ 10.50	$ 10.50	$ 10.49	$ 10.80	$ 10.49	$ 10.59	$ 10.50
Low Growth & High Price	2013-2014	Apr	$ 10.07	$ 10.24	$ 10.07	$ 10.07	$ 10.07	$ 10.20	$ 10.20	$ 10.24	$ 10.22	$ 10.11
Low Growth & High Price	2013-2014	May	$ 10.09	$ 10.24	$ 10.09	$ 10.09	$ 10.09	$ 10.24	$ 10.25	$ 10.24	$ 10.25	$ 10.12
Low Growth & High Price	2013-2014	Jun	$ 10.24	$ 10.24	$ 10.24	$ 10.24	$ 10.24	$ 10.24	$ 10.35	$ 10.24	$ 10.28	$ 10.24
Low Growth & High Price	2013-2014	Jul	$ 10.33	$ 10.25	$ 10.25	$ 10.25	$ 10.25	$ 10.25	$ 10.44	$ 10.25	$ 10.31	$ 10.26
Low Growth & High Price	2013-2014	Aug	$ 10.39	$ 10.27	$ 10.27	$ 10.27	$ 10.27	$ 10.27	$ 10.50	$ 10.27	$ 10.35	$ 10.29
Low Growth & High Price	2013-2014	Sep	$ 10.35	$ 10.25	$ 10.25	$ 10.25	$ 10.25	$ 10.25	$ 10.44	$ 10.25	$ 10.31	$ 10.27
Low Growth & High Price	2013-2014	Oct	$ 10.39	$ 10.33	$ 10.33	$ 10.33	$ 10.33	$ 10.33	$ 10.47	$ 10.33	$ 10.38	$ 10.34
Low Growth & High Price	2014-2015	Nov	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34	$ 12.34
Low Growth & High Price	2014-2015	Dec	$ 12.48	$ 12.66	$ 12.52	$ 12.52	$ 12.52	$ 12.66	$ 12.47	$ 12.66	$ 12.60	$ 12.54
Low Growth & High Price	2014-2015	Jan	$ 13.42	$ 13.71	$ 13.42	$ 13.42	$ 13.42	$ 13.71	$ 13.71	$ 13.71	$ 13.71	$ 13.48
Low Growth & High Price	2014-2015	Feb	$ 13.52	$ 13.64	$ 13.52	$ 13.52	$ 13.52	$ 13.64	$ 13.78	$ 13.64	$ 13.69	$ 13.54
Low Growth & High Price	2014-2015	Mar	$ 12.98	$ 13.05	$ 12.98	$ 12.98	$ 12.98	$ 13.05	$ 13.40	$ 13.05	$ 13.17	$ 12.99
Low Growth & High Price	2014-2015	Apr	$ 12.53	$ 12.88	$ 12.53	$ 12.53	$ 12.53	$ 12.75	$ 12.75	$ 12.88	$ 12.80	$ 12.60
Low Growth & High Price	2014-2015	May	$ 12.60	$ 12.88	$ 12.60	$ 12.60	$ 12.60	$ 12.84	$ 12.84	$ 12.88	$ 12.85	$ 12.65
Low Growth & High Price	2014-2015	Jun	$ 12.80	$ 12.89	$ 12.80	$ 12.80	$ 12.80	$ 12.89	$ 12.92	$ 12.89	$ 12.90	$ 12.81
Low Growth & High Price	2014-2015	Jul	$ 12.95	$ 12.89	$ 12.89	$ 12.89	$ 12.89	$ 12.89	$ 13.06	$ 12.89	$ 12.94	$ 12.90
Low Growth & High Price	2014-2015	Aug	$ 12.99	$ 12.92	$ 12.92	$ 12.92	$ 12.92	$ 12.92	$ 13.10	$ 12.92	$ 12.98	$ 12.93
Low Growth & High Price	2014-2015	Sep	$ 12.94	$ 12.89	$ 12.89	$ 12.89	$ 12.89	$ 12.89	$ 13.04	$ 12.89	$ 12.94	$ 12.90
Low Growth & High Price	2014-2015	Oct	$ 12.98	$ 12.95	$ 12.95	$ 12.95	$ 12.95	$ 12.95	$ 13.07	$ 12.95	$ 12.99	$ 12.96
Low Growth & High Price	2015-2016	Nov	$ 13.84	$ 13.85	$ 13.84	$ 13.84	$ 13.84	$ 13.85	$ 13.85	$ 13.85	$ 13.85	$ 13.84
Low Growth & High Price	2015-2016	Dec	$ 14.02	$ 14.13	$ 14.02	$ 14.02	$ 14.02	$ 14.13	$ 14.07	$ 14.13	$ 14.11	$ 14.04
Low Growth & High Price	2015-2016	Jan	$ 14.01	$ 14.35	$ 14.01	$ 14.01	$ 14.01	$ 14.35	$ 14.34	$ 14.35	$ 14.35	$ 14.08
Low Growth & High Price	2015-2016	Feb	$ 14.46	$ 14.32	$ 14.38	$ 14.38	$ 14.38	$ 14.31	$ 14.44	$ 14.31	$ 14.36	$ 14.38
Low Growth & High Price	2015-2016	Mar	$ 13.47	$ 13.57	$ 13.47	$ 13.47	$ 13.47	$ 13.57	$ 14.03	$ 13.57	$ 13.72	$ 13.49
Low Growth & High Price	2015-2016	Apr	$ 13.03	$ 13.41	$ 13.03	$ 13.03	$ 13.03	$ 13.35	$ 13.35	$ 13.41	$ 13.37	$ 13.10
Low Growth & High Price	2015-2016	May	$ 13.09	$ 13.41	$ 13.09	$ 13.09	$ 13.09	$ 13.41	$ 13.42	$ 13.41	$ 13.42	$ 13.15
Low Growth & High Price	2015-2016	Jun	$ 13.32	$ 13.41	$ 13.32	$ 13.32	$ 13.32	$ 13.41	$ 13.45	$ 13.41	$ 13.43	$ 13.34
Low Growth & High Price	2015-2016	Jul	$ 13.52	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.62	$ 13.42	$ 13.49	$ 13.44
Low Growth & High Price	2015-2016	Aug	$ 13.54	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.65	$ 13.42	$ 13.50	$ 13.44
Low Growth & High Price	2015-2016	Sep	$ 13.53	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.42	$ 13.62	$ 13.42	$ 13.49	$ 13.44
Low Growth & High Price	2015-2016	Oct	$ 13.62	$ 13.61	$ 13.61	$ 13.61	$ 13.61	$ 13.61	$ 13.69	$ 13.61	$ 13.64	$ 13.61
Low Growth & High Price	2016-2017	Nov	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48	$ 14.48
Low Growth & High Price	2016-2017	Dec	$ 14.68	$ 14.66	$ 14.66	$ 14.66	$ 14.66	$ 14.66	$ 14.63	$ 14.66	$ 14.65	$ 14.66
Low Growth & High Price	2016-2017	Jan	$ 14.23	$ 14.74	$ 14.23	$ 14.23	$ 14.23	$ 14.74	$ 14.73	$ 14.74	$ 14.73	$ 14.33
Low Growth & High Price	2016-2017	Feb	$ 14.39	$ 14.49	$ 14.39	$ 14.39	$ 14.39	$ 14.49	$ 14.80	$ 14.49	$ 14.60	$ 14.41
Low Growth & High Price	2016-2017	Mar	$ 13.75	$ 13.86	$ 13.75	$ 13.75	$ 13.75	$ 13.86	$ 14.25	$ 13.86	$ 13.99	$ 13.77
Low Growth & High Price	2016-2017	Apr	$ 13.26	$ 13.64	$ 13.26	$ 13.26	$ 13.26	$ 13.57	$ 13.57	$ 13.65	$ 13.60	$ 13.33
Low Growth & High Price	2016-2017	May	$ 13.41	$ 13.65	$ 13.41	$ 13.41	$ 13.41	$ 13.65	$ 13.69	$ 13.65	$ 13.66	$ 13.45
Low Growth & High Price	2016-2017	Jun	$ 13.42	$ 13.65	$ 13.42	$ 13.42	$ 13.42	$ 13.65	$ 13.72	$ 13.65	$ 13.67	$ 13.46
Low Growth & High Price	2016-2017	Jul	$ 13.63	$ 13.65	$ 13.63	$ 13.63	$ 13.63	$ 13.65	$ 13.80	$ 13.65	$ 13.70	$ 13.63
Low Growth & High Price	2016-2017	Aug	$ 13.69	$ 13.71	$ 13.69	$ 13.69	$ 13.69	$ 13.71	$ 13.84	$ 13.71	$ 13.75	$ 13.69

Appendix 6.4 - Monthly Avoided Cost Detail 1/

2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Low Growth & High Price	2016-2017	Sep	$ 13.65	$ 13.66	$ 13.65	$ 13.65	$ 13.65	$ 13.66	$ 13.79	$ 13.66	$ 13.70	$ 13.65
Low Growth & High Price	2016-2017	Oct	$ 13.71	$ 13.71	$ 13.71	$ 13.71	$ 13.71	$ 13.71	$ 13.83	$ 13.71	$ 13.75	$ 13.71
Low Growth & High Price	2017-2018	Nov	$ 14.51	$ 14.65	$ 14.51	$ 14.51	$ 14.51	$ 14.65	$ 14.65	$ 14.65	$ 14.65	$ 14.53
Low Growth & High Price	2017-2018	Dec	$ 14.64	$ 14.88	$ 14.65	$ 14.65	$ 14.65	$ 14.88	$ 14.75	$ 14.88	$ 14.83	$ 14.69
Low Growth & High Price	2017-2018	Jan	$ 15.08	$ 15.49	$ 15.08	$ 15.08	$ 15.08	$ 15.49	$ 15.48	$ 15.49	$ 15.48	$ 15.16
Low Growth & High Price	2017-2018	Feb	$ 15.20	$ 15.35	$ 15.20	$ 15.20	$ 15.20	$ 15.35	$ 15.55	$ 15.35	$ 15.41	$ 15.23
Low Growth & High Price	2017-2018	Mar	$ 14.57	$ 14.74	$ 14.57	$ 14.57	$ 14.57	$ 14.74	$ 15.05	$ 14.74	$ 14.85	$ 14.60
Low Growth & High Price	2017-2018	Apr	$ 14.19	$ 14.59	$ 14.19	$ 14.19	$ 14.19	$ 14.45	$ 14.45	$ 14.59	$ 14.50	$ 14.27
Low Growth & High Price	2017-2018	May	$ 14.30	$ 14.59	$ 14.30	$ 14.30	$ 14.30	$ 14.57	$ 14.57	$ 14.59	$ 14.57	$ 14.35
Low Growth & High Price	2017-2018	Jun	$ 14.35	$ 14.59	$ 14.35	$ 14.35	$ 14.35	$ 14.59	$ 14.63	$ 14.59	$ 14.60	$ 14.40
Low Growth & High Price	2017-2018	Jul	$ 14.57	$ 14.61	$ 14.57	$ 14.57	$ 14.57	$ 14.61	$ 14.75	$ 14.61	$ 14.66	$ 14.58
Low Growth & High Price	2017-2018	Aug	$ 14.62	$ 14.66	$ 14.62	$ 14.62	$ 14.62	$ 14.66	$ 14.80	$ 14.66	$ 14.71	$ 14.63
Low Growth & High Price	2017-2018	Sep	$ 14.53	$ 14.60	$ 14.53	$ 14.53	$ 14.53	$ 14.60	$ 14.70	$ 14.60	$ 14.63	$ 14.54
Low Growth & High Price	2017-2018	Oct	$ 14.57	$ 14.57	$ 14.57	$ 14.57	$ 14.57	$ 14.57	$ 14.71	$ 14.57	$ 14.62	$ 14.57
Low Growth & High Price	2018-2019	Nov	$ 15.45	$ 15.56	$ 15.45	$ 15.45	$ 15.45	$ 15.56	$ 15.56	$ 15.56	$ 15.56	$ 15.47
Low Growth & High Price	2018-2019	Dec	$ 15.55	$ 15.68	$ 15.55	$ 15.55	$ 15.55	$ 15.68	$ 15.66	$ 15.68	$ 15.67	$ 15.58
Low Growth & High Price	2018-2019	Jan	$ 15.72	$ 15.71	$ 15.71	$ 15.71	$ 15.71	$ 15.71	$ 15.70	$ 15.71	$ 15.71	$ 15.71
Low Growth & High Price	2018-2019	Feb	$ 15.50	$ 15.56	$ 15.50	$ 15.50	$ 15.50	$ 15.56	$ 15.75	$ 15.56	$ 15.62	$ 15.51
Low Growth & High Price	2018-2019	Mar	$ 14.95	$ 14.99	$ 14.95	$ 14.95	$ 14.95	$ 14.99	$ 15.24	$ 14.99	$ 15.07	$ 14.95
Low Growth & High Price	2018-2019	Apr	$ 14.47	$ 14.74	$ 14.47	$ 14.47	$ 14.47	$ 14.67	$ 14.67	$ 14.74	$ 14.69	$ 14.52
Low Growth & High Price	2018-2019	May	$ 14.56	$ 14.74	$ 14.56	$ 14.56	$ 14.56	$ 14.74	$ 14.75	$ 14.74	$ 14.74	$ 14.59
Low Growth & High Price	2018-2019	Jun	$ 14.63	$ 14.74	$ 14.63	$ 14.63	$ 14.63	$ 14.74	$ 14.82	$ 14.74	$ 14.77	$ 14.65
Low Growth & High Price	2018-2019	Jul	$ 14.71	$ 14.74	$ 14.71	$ 14.71	$ 14.71	$ 14.74	$ 14.91	$ 14.74	$ 14.80	$ 14.71
Low Growth & High Price	2018-2019	Aug	$ 14.74	$ 14.75	$ 14.74	$ 14.74	$ 14.74	$ 14.75	$ 14.94	$ 14.75	$ 14.82	$ 14.74
Low Growth & High Price	2018-2019	Sep	$ 14.69	$ 14.75	$ 14.69	$ 14.69	$ 14.69	$ 14.75	$ 14.88	$ 14.75	$ 14.79	$ 14.70
Low Growth & High Price	2018-2019	Oct	$ 14.80	$ 14.80	$ 14.80	$ 14.80	$ 14.80	$ 14.80	$ 14.95	$ 14.80	$ 14.85	$ 14.80
Low Growth & High Price	2019-2020	Nov	$ 15.78	$ 15.76	$ 15.78	$ 15.78	$ 15.78	$ 15.76	$ 15.76	$ 15.76	$ 15.76	$ 15.77
Low Growth & High Price	2019-2020	Dec	$ 15.90	$ 15.90	$ 15.90	$ 15.90	$ 15.90	$ 15.90	$ 15.88	$ 15.90	$ 15.89	$ 15.90
Low Growth & High Price	2019-2020	Jan	$ 15.61	$ 15.91	$ 15.61	$ 15.61	$ 15.61	$ 15.91	$ 15.90	$ 15.91	$ 15.91	$ 15.67
Low Growth & High Price	2019-2020	Feb	$ 15.71	$ 15.78	$ 15.71	$ 15.71	$ 15.71	$ 15.77	$ 15.98	$ 15.77	$ 15.84	$ 15.73
Low Growth & High Price	2019-2020	Mar	$ 15.32	$ 15.29	$ 15.32	$ 15.32	$ 15.32	$ 15.29	$ 15.54	$ 15.29	$ 15.38	$ 15.31
Low Growth & High Price	2019-2020	Apr	$ 14.61	$ 15.08	$ 14.61	$ 14.61	$ 14.61	$ 14.85	$ 14.85	$ 15.08	$ 14.93	$ 14.70
Low Growth & High Price	2019-2020	May	$ 14.71	$ 15.08	$ 14.71	$ 14.71	$ 14.71	$ 14.95	$ 14.95	$ 15.08	$ 15.00	$ 14.78
Low Growth & High Price	2019-2020	Jun	$ 14.81	$ 15.09	$ 14.81	$ 14.81	$ 14.81	$ 15.04	$ 15.04	$ 15.09	$ 15.06	$ 14.86
Low Growth & High Price	2019-2020	Jul	$ 14.98	$ 15.09	$ 14.98	$ 14.98	$ 14.98	$ 15.09	$ 15.19	$ 15.09	$ 15.12	$ 15.00
Low Growth & High Price	2019-2020	Aug	$ 15.00	$ 15.16	$ 15.00	$ 15.00	$ 15.00	$ 15.16	$ 15.21	$ 15.16	$ 15.18	$ 15.03
Low Growth & High Price	2019-2020	Sep	$ 15.01	$ 15.11	$ 15.01	$ 15.01	$ 15.01	$ 15.11	$ 15.20	$ 15.11	$ 15.14	$ 15.03
Low Growth & High Price	2019-2020	Oct	$ 15.13	$ 15.14	$ 15.13	$ 15.13	$ 15.13	$ 15.14	$ 15.27	$ 15.14	$ 15.18	$ 15.13
Low Growth & High Price	2020-2021	Nov	$ 16.13	$ 16.09	$ 16.13	$ 16.13	$ 16.13	$ 16.09	$ 16.09	$ 16.09	$ 16.09	$ 16.12
Low Growth & High Price	2020-2021	Dec	$ 16.22	$ 16.21	$ 16.21	$ 16.21	$ 16.21	$ 16.21	$ 16.19	$ 16.21	$ 16.20	$ 16.21
Low Growth & High Price	2020-2021	Jan	$ 16.22	$ 16.21	$ 16.22	$ 16.22	$ 16.22	$ 16.21	$ 16.20	$ 16.21	$ 16.20	$ 16.22
Low Growth & High Price	2020-2021	Feb	$ 16.29	$ 16.18	$ 16.29	$ 16.29	$ 16.29	$ 16.18	$ 16.27	$ 16.18	$ 16.21	$ 16.27
Low Growth & High Price	2020-2021	Mar	$ 15.61	$ 15.55	$ 15.60	$ 15.60	$ 15.60	$ 15.55	$ 15.61	$ 15.55	$ 15.57	$ 15.59
Low Growth & High Price	2020-2021	Apr	$ 14.83	$ 15.27	$ 14.83	$ 14.83	$ 14.83	$ 15.05	$ 15.05	$ 15.27	$ 15.13	$ 14.92
Low Growth & High Price	2020-2021	May	$ 14.87	$ 15.27	$ 14.87	$ 14.87	$ 14.87	$ 15.13	$ 15.13	$ 15.27	$ 15.18	$ 14.95
Low Growth & High Price	2020-2021	Jun	$ 14.95	$ 15.28	$ 14.95	$ 14.95	$ 14.95	$ 15.21	$ 15.21	$ 15.28	$ 15.23	$ 15.01
Low Growth & High Price	2020-2021	Jul	$ 15.06	$ 15.30	$ 15.06	$ 15.06	$ 15.06	$ 15.30	$ 15.34	$ 15.30	$ 15.31	$ 15.11
Low Growth & High Price	2020-2021	Aug	$ 15.02	$ 15.31	$ 15.02	$ 15.02	$ 15.02	$ 15.31	$ 15.31	$ 15.31	$ 15.31	$ 15.08
Low Growth & High Price	2020-2021	Sep	$ 15.00	$ 15.28	$ 15.00	$ 15.00	$ 15.00	$ 15.24	$ 15.24	$ 15.28	$ 15.26	$ 15.05
Low Growth & High Price	2020-2021	Oct	$ 14.99	$ 15.31	$ 14.99	$ 14.99	$ 14.99	$ 15.24	$ 15.24	$ 15.31	$ 15.27	$ 15.05
Low Growth & High Price	2021-2022	Nov	$ 16.01	$ 16.08	$ 16.01	$ 16.01	$ 16.01	$ 16.06	$ 16.06	$ 16.08	$ 16.07	$ 16.02
Low Growth & High Price	2021-2022	Dec	$ 16.19	$ 16.27	$ 16.20	$ 16.20	$ 16.20	$ 16.23	$ 16.20	$ 16.27	$ 16.23	$ 16.21
Low Growth & High Price	2021-2022	Jan	$ 16.04	$ 16.29	$ 16.04	$ 16.04	$ 16.04	$ 16.22	$ 16.13	$ 16.29	$ 16.21	$ 16.09
Low Growth & High Price	2021-2022	Feb	$ 16.12	$ 16.24	$ 16.12	$ 16.12	$ 16.12	$ 16.22	$ 16.22	$ 16.22	$ 16.22	$ 16.15
Low Growth & High Price	2021-2022	Mar	$ 15.57	$ 15.66	$ 15.57	$ 15.57	$ 15.57	$ 15.66	$ 15.66	$ 15.66	$ 15.66	$ 15.59
Low Growth & High Price	2021-2022	Apr	$ 14.78	$ 15.40	$ 14.78	$ 14.78	$ 14.78	$ 15.10	$ 15.10	$ 15.54	$ 15.25	$ 14.90
Low Growth & High Price	2021-2022	May	$ 14.86	$ 15.40	$ 14.86	$ 14.86	$ 14.86	$ 15.21	$ 15.21	$ 15.54	$ 15.32	$ 14.97
Low Growth & High Price	2021-2022	Jun	$ 14.94	$ 15.40	$ 14.94	$ 14.94	$ 14.94	$ 15.30	$ 15.30	$ 15.54	$ 15.38	$ 15.03
Low Growth & High Price	2021-2022	Jul	$ 15.07	$ 15.54	$ 15.07	$ 15.07	$ 15.07	$ 15.43	$ 15.43	$ 15.54	$ 15.47	$ 15.16
Low Growth & High Price	2021-2022	Aug	$ 15.13	$ 15.54	$ 15.13	$ 15.13	$ 15.13	$ 15.49	$ 15.49	$ 15.55	$ 15.51	$ 15.21
Low Growth & High Price	2021-2022	Sep	$ 15.12	$ 15.55	$ 15.12	$ 15.12	$ 15.12	$ 15.43	$ 15.43	$ 15.55	$ 15.47	$ 15.20
Low Growth & High Price	2021-2022	Oct	$ 15.18	$ 15.59	$ 15.18	$ 15.18	$ 15.18	$ 15.45	$ 15.45	$ 15.59	$ 15.49	$ 15.26
Low Growth & High Price	2022-2023	Nov	$ 16.24	$ 16.41	$ 16.24	$ 16.24	$ 16.24	$ 16.27	$ 16.27	$ 16.41	$ 16.32	$ 16.27
Low Growth & High Price	2022-2023	Dec	$ 16.38	$ 16.55	$ 16.39	$ 16.39	$ 16.39	$ 16.45	$ 16.36	$ 16.55	$ 16.45	$ 16.42
Low Growth & High Price	2022-2023	Jan	$ 16.22	$ 16.58	$ 16.22	$ 16.22	$ 16.22	$ 16.47	$ 16.35	$ 16.58	$ 16.47	$ 16.29
Low Growth & High Price	2022-2023	Feb	$ 16.31	$ 16.46	$ 16.32	$ 16.32	$ 16.32	$ 16.43	$ 16.42	$ 16.43	$ 16.42	$ 16.35
Low Growth & High Price	2022-2023	Mar	$ 15.81	$ 15.90	$ 15.81	$ 15.81	$ 15.81	$ 15.90	$ 15.90	$ 15.90	$ 15.90	$ 15.83
Low Growth & High Price	2022-2023	Apr	$ 14.93	$ 15.69	$ 14.93	$ 14.93	$ 14.93	$ 15.30	$ 15.30	$ 15.82	$ 15.48	$ 15.08
Low Growth & High Price	2022-2023	May	$ 15.04	$ 15.70	$ 15.04	$ 15.04	$ 15.04	$ 15.43	$ 15.43	$ 15.82	$ 15.56	$ 15.17
Low Growth & High Price	2022-2023	Jun	$ 15.13	$ 15.70	$ 15.13	$ 15.13	$ 15.13	$ 15.53	$ 15.53	$ 15.82	$ 15.63	$ 15.24
Low Growth & High Price	2022-2023	Jul	$ 15.28	$ 15.83	$ 15.28	$ 15.28	$ 15.28	$ 15.66	$ 15.66	$ 15.83	$ 15.71	$ 15.39
Low Growth & High Price	2022-2023	Aug	$ 15.32	$ 15.83	$ 15.32	$ 15.32	$ 15.32	$ 15.70	$ 15.70	$ 15.83	$ 15.74	$ 15.42
Low Growth & High Price	2022-2023	Sep	$ 15.38	$ 15.83	$ 15.38	$ 15.38	$ 15.38	$ 15.66	$ 15.66	$ 15.83	$ 15.72	$ 15.47
Low Growth & High Price	2022-2023	Oct	$ 15.42	$ 15.90	$ 15.42	$ 15.42	$ 15.42	$ 15.69	$ 15.69	$ 15.90	$ 15.76	$ 15.51
Low Growth & High Price	2023-2024	Nov	$ 16.53	$ 16.77	$ 16.53	$ 16.53	$ 16.53	$ 16.53	$ 16.53	$ 16.77	$ 16.61	$ 16.58
Low Growth & High Price	2023-2024	Dec	$ 16.69	$ 16.90	$ 16.71	$ 16.71	$ 16.71	$ 16.76	$ 16.64	$ 16.90	$ 16.77	$ 16.74
Low Growth & High Price	2023-2024	Jan	$ 16.64	$ 16.95	$ 16.64	$ 16.64	$ 16.64	$ 16.85	$ 16.71	$ 16.96	$ 16.84	$ 16.70
Low Growth & High Price	2023-2024	Feb	$ 16.67	$ 16.79	$ 16.68	$ 16.68	$ 16.68	$ 16.75	$ 16.75	$ 16.75	$ 16.75	$ 16.70
Low Growth & High Price	2023-2024	Mar	$ 16.12	$ 16.21	$ 16.12	$ 16.12	$ 16.12	$ 16.21	$ 16.21	$ 16.21	$ 16.21	$ 16.14
Low Growth & High Price	2023-2024	Apr	$ 15.23	$ 16.02	$ 15.23	$ 15.23	$ 15.23	$ 15.61	$ 15.61	$ 16.12	$ 15.78	$ 15.38
Low Growth & High Price	2023-2024	May	$ 15.33	$ 16.02	$ 15.33	$ 15.33	$ 15.33	$ 15.72	$ 15.72	$ 16.12	$ 15.85	$ 15.47
Low Growth & High Price	2023-2024	Jun	$ 15.45	$ 16.04	$ 15.45	$ 15.45	$ 15.45	$ 15.83	$ 15.83	$ 16.13	$ 15.93	$ 15.57
Low Growth & High Price	2023-2024	Jul	$ 15.56	$ 16.13	$ 15.56	$ 15.56	$ 15.56	$ 15.94	$ 15.94	$ 16.13	$ 16.00	$ 15.67
Low Growth & High Price	2023-2024	Aug	$ 15.63	$ 16.13	$ 15.63	$ 15.63	$ 15.63	$ 16.00	$ 16.00	$ 16.13	$ 16.05	$ 15.73
Low Growth & High Price	2023-2024	Sep	$ 15.66	$ 16.13	$ 15.66	$ 15.66	$ 15.66	$ 15.97	$ 15.97	$ 16.13	$ 16.03	$ 15.75
Low Growth & High Price	2023-2024	Oct	$ 15.78	$ 16.24	$ 15.78	$ 15.78	$ 15.78	$ 16.01	$ 16.01	$ 16.24	$ 16.09	$ 15.87
Low Growth & High Price	2024-2025	Nov	$ 16.91	$ 17.07	$ 16.91	$ 16.91	$ 16.91	$ 16.83	$ 16.83	$ 17.07	$ 16.91	$ 16.94
Low Growth & High Price	2024-2025	Dec	$ 17.06	$ 17.23	$ 17.07	$ 17.07	$ 17.07	$ 17.09	$ 16.97	$ 17.23	$ 17.10	$ 17.10
Low Growth & High Price	2024-2025	Jan	$ 16.95	$ 17.26	$ 16.95	$ 16.95	$ 16.95	$ 17.15	$ 17.02	$ 17.26	$ 17.14	$ 17.01
Low Growth & High Price	2024-2025	Feb	$ 16.99	$ 17.10	$ 17.00	$ 17.00	$ 17.00	$ 17.06	$ 17.06	$ 17.06	$ 17.06	$ 17.02
Low Growth & High Price	2024-2025	Mar	$ 16.36	$ 16.46	$ 16.36	$ 16.36	$ 16.36	$ 16.46	$ 16.46	$ 16.46	$ 16.46	$ 16.38
Low Growth & High Price	2024-2025	Apr	$ 15.48	$ 16.29	$ 15.48	$ 15.48	$ 15.48	$ 15.88	$ 15.88	$ 16.37	$ 16.05	$ 15.64
Low Growth & High Price	2024-2025	May	$ 15.59	$ 16.29	$ 15.59	$ 15.59	$ 15.59	$ 15.99	$ 15.99	$ 16.38	$ 16.12	$ 15.73
Low Growth & High Price	2024-2025	Jun	$ 15.70	$ 16.31	$ 15.70	$ 15.70	$ 15.70	$ 16.10	$ 16.10	$ 16.38	$ 16.20	$ 15.82

Appendix 6.4 - Monthly Avoided Cost Detail 1/

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Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Low Growth & High Price	2024-2025	Jul	$ 15.81	$ 16.38	$ 15.81	$ 15.81	$ 15.81	$ 16.23	$ 16.23	$ 16.38	$ 16.28	$ 15.92
Low Growth & High Price	2024-2025	Aug	$ 15.90	$ 16.38	$ 15.90	$ 15.90	$ 15.90	$ 16.29	$ 16.29	$ 16.38	$ 16.32	$ 15.99
Low Growth & High Price	2024-2025	Sep	$ 15.93	$ 16.38	$ 15.93	$ 15.93	$ 15.93	$ 16.24	$ 16.24	$ 16.38	$ 16.29	$ 16.02
Low Growth & High Price	2024-2025	Oct	$ 16.03	$ 16.53	$ 16.03	$ 16.03	$ 16.03	$ 16.28	$ 16.28	$ 16.53	$ 16.36	$ 16.13
Low Growth & High Price	2025-2026	Nov	$ 17.28	$ 17.40	$ 17.28	$ 17.28	$ 17.28	$ 17.16	$ 17.16	$ 17.40	$ 17.24	$ 17.30
Low Growth & High Price	2025-2026	Dec	$ 17.27	$ 17.52	$ 17.33	$ 17.33	$ 17.33	$ 17.40	$ 17.20	$ 17.52	$ 17.37	$ 17.35
Low Growth & High Price	2025-2026	Jan	$ 17.56	$ 17.87	$ 17.56	$ 17.56	$ 17.56	$ 17.76	$ 17.62	$ 17.87	$ 17.75	$ 17.62
Low Growth & High Price	2025-2026	Feb	$ 17.59	$ 17.71	$ 17.59	$ 17.59	$ 17.59	$ 17.67	$ 17.66	$ 17.67	$ 17.67	$ 17.61
Low Growth & High Price	2025-2026	Mar	$ 17.02	$ 17.09	$ 17.02	$ 17.02	$ 17.02	$ 17.09	$ 17.09	$ 17.09	$ 17.09	$ 17.03
Low Growth & High Price	2025-2026	Apr	$ 16.06	$ 16.89	$ 16.06	$ 16.06	$ 16.06	$ 16.49	$ 16.49	$ 17.00	$ 16.66	$ 16.22
Low Growth & High Price	2025-2026	May	$ 16.17	$ 16.89	$ 16.17	$ 16.17	$ 16.17	$ 16.60	$ 16.60	$ 17.00	$ 16.73	$ 16.31
Low Growth & High Price	2025-2026	Jun	$ 16.28	$ 16.92	$ 16.28	$ 16.28	$ 16.28	$ 16.71	$ 16.71	$ 17.00	$ 16.81	$ 16.41
Low Growth & High Price	2025-2026	Jul	$ 16.39	$ 17.00	$ 16.39	$ 16.39	$ 16.39	$ 16.83	$ 16.83	$ 17.00	$ 16.89	$ 16.51
Low Growth & High Price	2025-2026	Aug	$ 16.46	$ 17.01	$ 16.46	$ 16.46	$ 16.46	$ 16.88	$ 16.88	$ 17.01	$ 16.92	$ 16.57
Low Growth & High Price	2025-2026	Sep	$ 16.49	$ 17.01	$ 16.49	$ 16.49	$ 16.49	$ 16.83	$ 16.83	$ 17.01	$ 16.89	$ 16.59
Low Growth & High Price	2025-2026	Oct	$ 16.62	$ 17.07	$ 16.62	$ 16.62	$ 16.62	$ 16.87	$ 16.87	$ 17.07	$ 16.94	$ 16.71
Low Growth & High Price	2026-2027	Nov	$ 17.76	$ 17.94	$ 17.76	$ 17.76	$ 17.76	$ 17.68	$ 17.68	$ 17.94	$ 17.77	$ 17.79
Low Growth & High Price	2026-2027	Dec	$ 17.85	$ 18.15	$ 17.91	$ 17.91	$ 17.91	$ 17.97	$ 17.78	$ 18.15	$ 17.97	$ 17.94
Low Growth & High Price	2026-2027	Jan	$ 18.16	$ 18.48	$ 18.16	$ 18.16	$ 18.16	$ 18.36	$ 18.22	$ 18.48	$ 18.36	$ 18.22
Low Growth & High Price	2026-2027	Feb	$ 18.26	$ 18.36	$ 18.26	$ 18.26	$ 18.26	$ 18.33	$ 18.32	$ 18.33	$ 18.33	$ 18.28
Low Growth & High Price	2026-2027	Mar	$ 17.70	$ 17.72	$ 17.70	$ 17.70	$ 17.70	$ 17.72	$ 17.72	$ 17.72	$ 17.72	$ 17.70
Low Growth & High Price	2026-2027	Apr	$ 16.73	$ 17.59	$ 16.73	$ 16.73	$ 16.73	$ 17.14	$ 17.14	$ 17.63	$ 17.30	$ 16.90
Low Growth & High Price	2026-2027	May	$ 16.84	$ 17.59	$ 16.84	$ 16.84	$ 16.84	$ 17.25	$ 17.25	$ 17.63	$ 17.38	$ 16.99
Low Growth & High Price	2026-2027	Jun	$ 16.94	$ 17.62	$ 16.94	$ 16.94	$ 16.94	$ 17.35	$ 17.35	$ 17.64	$ 17.44	$ 17.07
Low Growth & High Price	2026-2027	Jul	$ 17.05	$ 17.64	$ 17.05	$ 17.05	$ 17.05	$ 17.46	$ 17.46	$ 17.64	$ 17.52	$ 17.17
Low Growth & High Price	2026-2027	Aug	$ 17.16	$ 17.64	$ 17.16	$ 17.16	$ 17.16	$ 17.56	$ 17.56	$ 17.64	$ 17.59	$ 17.25
Low Growth & High Price	2026-2027	Sep	$ 17.14	$ 17.64	$ 17.14	$ 17.14	$ 17.14	$ 17.46	$ 17.46	$ 17.64	$ 17.52	$ 17.24
Low Growth & High Price	2026-2027	Oct	$ 17.25	$ 17.79	$ 17.25	$ 17.25	$ 17.25	$ 17.49	$ 17.49	$ 17.79	$ 17.59	$ 17.36
Low Growth & High Price	2027-2028	Nov	$ 18.39	$ 18.57	$ 18.39	$ 18.39	$ 18.39	$ 18.31	$ 18.31	$ 18.57	$ 18.40	$ 18.43
Low Growth & High Price	2027-2028	Dec	$ 18.48	$ 18.80	$ 18.54	$ 18.54	$ 18.54	$ 18.61	$ 18.42	$ 18.81	$ 18.61	$ 18.58
Low Growth & High Price	2027-2028	Jan	$ 18.81	$ 19.14	$ 18.81	$ 18.81	$ 18.81	$ 19.02	$ 18.88	$ 19.14	$ 19.01	$ 18.88
Low Growth & High Price	2027-2028	Feb	$ 18.91	$ 19.03	$ 18.91	$ 18.91	$ 18.91	$ 18.98	$ 18.99	$ 18.98	$ 18.99	$ 18.94
Low Growth & High Price	2027-2028	Mar	$ 18.33	$ 18.37	$ 18.33	$ 18.33	$ 18.33	$ 18.37	$ 18.37	$ 18.37	$ 18.37	$ 18.34
Low Growth & High Price	2027-2028	Apr	$ 17.37	$ 18.23	$ 17.37	$ 17.37	$ 17.37	$ 17.77	$ 17.77	$ 18.28	$ 17.94	$ 17.54
Low Growth & High Price	2027-2028	May	$ 17.48	$ 18.23	$ 17.48	$ 17.48	$ 17.48	$ 17.90	$ 17.90	$ 18.28	$ 18.02	$ 17.63
Low Growth & High Price	2027-2028	Jun	$ 17.58	$ 18.27	$ 17.58	$ 17.58	$ 17.58	$ 18.00	$ 18.00	$ 18.28	$ 18.09	$ 17.72
Low Growth & High Price	2027-2028	Jul	$ 17.70	$ 18.28	$ 17.70	$ 17.70	$ 17.70	$ 18.12	$ 18.12	$ 18.28	$ 18.17	$ 17.82
Low Growth & High Price	2027-2028	Aug	$ 17.81	$ 18.29	$ 17.81	$ 17.81	$ 17.81	$ 18.22	$ 18.22	$ 18.29	$ 18.24	$ 17.90
Low Growth & High Price	2027-2028	Sep	$ 17.79	$ 18.29	$ 17.79	$ 17.79	$ 17.79	$ 18.12	$ 18.12	$ 18.29	$ 18.17	$ 17.89
Low Growth & High Price	2027-2028	Oct	$ 17.89	$ 18.44	$ 17.89	$ 17.89	$ 17.89	$ 18.14	$ 18.14	$ 18.44	$ 18.24	$ 18.00
Low Growth & High Price	2028-2029	Nov	$ 19.05	$ 19.25	$ 19.05	$ 19.05	$ 19.05	$ 18.98	$ 18.98	$ 19.25	$ 19.07	$ 19.09
Low Growth & High Price	2028-2029	Dec	$ 19.15	$ 19.48	$ 19.23	$ 19.23	$ 19.23	$ 19.29	$ 19.10	$ 19.48	$ 19.29	$ 19.26
Low Growth & High Price	2028-2029	Jan	$ 19.49	$ 19.84	$ 19.49	$ 19.49	$ 19.49	$ 19.72	$ 19.58	$ 19.84	$ 19.71	$ 19.56
Low Growth & High Price	2028-2029	Feb	$ 19.61	$ 19.72	$ 19.61	$ 19.61	$ 19.61	$ 19.69	$ 19.68	$ 19.69	$ 19.68	$ 19.63
Low Growth & High Price	2028-2029	Mar	$ 18.99	$ 19.04	$ 18.99	$ 18.99	$ 18.99	$ 19.04	$ 19.04	$ 19.04	$ 19.04	$ 19.00
Low Growth & High Price	2028-2029	Apr	$ 18.03	$ 18.90	$ 18.03	$ 18.03	$ 18.03	$ 18.44	$ 18.44	$ 18.95	$ 18.61	$ 18.20
Low Growth & High Price	2028-2029	May	$ 18.15	$ 18.90	$ 18.15	$ 18.15	$ 18.15	$ 18.57	$ 18.57	$ 18.95	$ 18.70	$ 18.30
Low Growth & High Price	2028-2029	Jun	$ 18.26	$ 18.95	$ 18.26	$ 18.26	$ 18.26	$ 18.69	$ 18.69	$ 18.95	$ 18.77	$ 18.40
Low Growth & High Price	2028-2029	Jul	$ 18.37	$ 18.95	$ 18.37	$ 18.37	$ 18.37	$ 18.81	$ 18.81	$ 18.95	$ 18.86	$ 18.49
Low Growth & High Price	2028-2029	Aug	$ 18.49	$ 18.97	$ 18.49	$ 18.49	$ 18.49	$ 18.91	$ 18.91	$ 18.97	$ 18.93	$ 18.59
Low Growth & High Price	2028-2029	Sep	$ 18.46	$ 18.96	$ 18.46	$ 18.46	$ 18.46	$ 18.80	$ 18.80	$ 18.96	$ 18.85	$ 18.56
Low Growth & High Price	2028-2029	Oct	$ 18.57	$ 19.12	$ 18.57	$ 18.57	$ 18.57	$ 18.82	$ 18.82	$ 19.12	$ 18.92	$ 18.68

1/ Avoided costs shown before Environmental Externalities adder.

Appendix 6.4 - Monthly Avoided Cost Detail 1/
2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Expected	2009-2010	Nov	$ 4.03	$ 4.03	$ 4.03	$ 4.03	$ 4.03	$ 3.96	$ 3.96	$ 4.03	$ 3.98	$ 4.03
Expected	2009-2010	Dec	$ 4.60	$ 4.58	$ 9.58	$ 9.58	$ 9.58	$ 4.52	$ 4.52	$ 4.58	$ 4.54	$ 7.58
Expected	2009-2010	Jan	$ 4.71	$ 4.68	$ 4.70	$ 4.70	$ 4.70	$ 4.65	$ 4.65	$ 4.66	$ 4.65	$ 4.70
Expected	2009-2010	Feb	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.63	$ 4.63	$ 4.63	$ 4.63	$ 4.70
Expected	2009-2010	Mar	$ 4.63	$ 4.57	$ 4.60	$ 4.60	$ 4.60	$ 4.57	$ 4.58	$ 4.57	$ 4.57	$ 4.60
Expected	2009-2010	Apr	$ 4.46	$ 4.41	$ 4.41	$ 4.41	$ 4.41	$ 4.38	$ 4.38	$ 4.41	$ 4.39	$ 4.42
Expected	2009-2010	May	$ 4.36	$ 4.33	$ 4.33	$ 4.33	$ 4.33	$ 4.28	$ 4.28	$ 4.41	$ 4.33	$ 4.34
Expected	2009-2010	Jun	$ 4.46	$ 4.41	$ 4.41	$ 4.41	$ 4.41	$ 4.39	$ 4.39	$ 4.41	$ 4.40	$ 4.42
Expected	2009-2010	Jul	$ 4.46	$ 4.41	$ 4.41	$ 4.41	$ 4.41	$ 4.40	$ 4.40	$ 4.41	$ 4.41	$ 4.42
Expected	2009-2010	Aug	$ 4.47	$ 4.42	$ 4.42	$ 4.42	$ 4.42	$ 4.42	$ 4.47	$ 4.42	$ 4.44	$ 4.43
Expected	2009-2010	Sep	$ 4.52	$ 4.47	$ 4.47	$ 4.47	$ 4.47	$ 4.47	$ 4.47	$ 4.47	$ 4.47	$ 4.48
Expected	2009-2010	Oct	$ 4.72	$ 4.68	$ 4.68	$ 4.68	$ 4.68	$ 4.64	$ 4.64	$ 4.68	$ 4.65	$ 4.69
Expected	2010-2011	Nov	$ 4.95	$ 4.98	$ 4.95	$ 4.95	$ 4.95	$ 4.86	$ 4.86	$ 4.98	$ 4.90	$ 4.95
Expected	2010-2011	Dec	$ 5.20	$ 5.21	$ 10.17	$ 10.17	$ 10.17	$ 5.13	$ 5.13	$ 5.21	$ 5.16	$ 8.18
Expected	2010-2011	Jan	$ 5.34	$ 5.34	$ 5.34	$ 5.34	$ 5.34	$ 5.27	$ 5.27	$ 5.28	$ 5.27	$ 5.34
Expected	2010-2011	Feb	$ 5.35	$ 5.36	$ 5.36	$ 5.36	$ 5.36	$ 5.27	$ 5.28	$ 5.27	$ 5.27	$ 5.36
Expected	2010-2011	Mar	$ 5.12	$ 5.07	$ 5.10	$ 5.10	$ 5.10	$ 5.03	$ 5.03	$ 5.06	$ 5.04	$ 5.10
Expected	2010-2011	Apr	$ 4.88	$ 4.91	$ 4.88	$ 4.88	$ 4.88	$ 4.79	$ 4.79	$ 4.91	$ 4.83	$ 4.88
Expected	2010-2011	May	$ 4.89	$ 4.91	$ 4.89	$ 4.89	$ 4.89	$ 4.80	$ 4.80	$ 4.91	$ 4.84	$ 4.89
Expected	2010-2011	Jun	$ 4.95	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.86	$ 4.86	$ 4.91	$ 4.88	$ 4.92
Expected	2010-2011	Jul	$ 4.97	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.88	$ 4.88	$ 4.91	$ 4.89	$ 4.92
Expected	2010-2011	Aug	$ 4.97	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.93	$ 4.91	$ 4.92	$ 4.92
Expected	2010-2011	Sep	$ 4.97	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.89	$ 4.89	$ 4.91	$ 4.90	$ 4.92
Expected	2010-2011	Oct	$ 5.12	$ 5.06	$ 5.06	$ 5.06	$ 5.06	$ 5.03	$ 5.03	$ 5.06	$ 5.04	$ 5.07
Expected	2011-2012	Nov	$ 5.25	$ 5.26	$ 5.25	$ 5.25	$ 5.25	$ 5.15	$ 5.15	$ 5.26	$ 5.19	$ 5.25
Expected	2011-2012	Dec	$ 5.41	$ 5.38	$ 10.38	$ 10.38	$ 10.38	$ 5.33	$ 5.33	$ 5.38	$ 5.35	$ 8.39
Expected	2011-2012	Jan	$ 5.48	$ 5.45	$ 5.47	$ 5.47	$ 5.47	$ 5.40	$ 5.40	$ 5.42	$ 5.41	$ 5.47
Expected	2011-2012	Feb	$ 5.48	$ 5.47	$ 5.47	$ 5.47	$ 5.47	$ 5.36	$ 5.39	$ 5.36	$ 5.37	$ 5.47
Expected	2011-2012	Mar	$ 5.32	$ 5.26	$ 5.28	$ 5.28	$ 5.28	$ 5.25	$ 5.25	$ 5.26	$ 5.25	$ 5.29
Expected	2011-2012	Apr	$ 5.08	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 4.99	$ 4.99	$ 5.05	$ 5.01	$ 5.06
Expected	2011-2012	May	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 4.96	$ 4.96	$ 5.05	$ 4.99	$ 5.05
Expected	2011-2012	Jun	$ 5.10	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.01	$ 5.01	$ 5.05	$ 5.02	$ 5.06
Expected	2011-2012	Jul	$ 5.09	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.00	$ 5.00	$ 5.05	$ 5.02	$ 5.06
Expected	2011-2012	Aug	$ 5.11	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.03	$ 5.03	$ 5.05	$ 5.04	$ 5.06
Expected	2011-2012	Sep	$ 5.11	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.05	$ 5.07	$ 5.05	$ 5.06	$ 5.06
Expected	2011-2012	Oct	$ 5.27	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.20	$ 5.20	$ 5.21	$ 5.21	$ 5.22
Expected	2012-2013	Nov	$ 5.42	$ 5.35	$ 5.39	$ 5.39	$ 5.39	$ 5.33	$ 5.33	$ 5.35	$ 5.34	$ 5.39
Expected	2012-2013	Dec	$ 5.53	$ 5.46	$ 11.02	$ 11.02	$ 11.02	$ 5.46	$ 5.46	$ 5.46	$ 5.46	$ 8.81
Expected	2012-2013	Jan	$ 5.59	$ 5.51	$ 5.57	$ 5.57	$ 5.57	$ 5.51	$ 5.51	$ 5.51	$ 5.51	$ 5.56
Expected	2012-2013	Feb	$ 5.58	$ 5.51	$ 5.56	$ 5.56	$ 5.56	$ 5.49	$ 5.53	$ 5.49	$ 5.50	$ 5.55
Expected	2012-2013	Mar	$ 5.39	$ 5.33	$ 5.35	$ 5.35	$ 5.35	$ 5.33	$ 5.36	$ 5.33	$ 5.34	$ 5.35
Expected	2012-2013	Apr	$ 5.22	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.12	$ 5.12	$ 5.17	$ 5.14	$ 5.18
Expected	2012-2013	May	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.08	$ 5.08	$ 5.17	$ 5.11	$ 5.17
Expected	2012-2013	Jun	$ 5.22	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.12	$ 5.12	$ 5.17	$ 5.14	$ 5.18
Expected	2012-2013	Jul	$ 5.20	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.10	$ 5.10	$ 5.17	$ 5.13	$ 5.18
Expected	2012-2013	Aug	$ 5.24	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.14	$ 5.14	$ 5.17	$ 5.15	$ 5.19
Expected	2012-2013	Sep	$ 5.24	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.17	$ 5.19
Expected	2012-2013	Oct	$ 5.36	$ 5.30	$ 5.30	$ 5.30	$ 5.30	$ 5.30	$ 5.30	$ 5.30	$ 5.30	$ 5.31
Expected	2013-2014	Nov	$ 4.76	$ 4.70	$ 4.75	$ 4.75	$ 4.75	$ 4.68	$ 4.68	$ 4.70	$ 4.69	$ 4.74
Expected	2013-2014	Dec	$ 4.84	$ 4.80	$ 10.92	$ 10.92	$ 10.92	$ 4.77	$ 4.77	$ 4.80	$ 4.78	$ 8.48
Expected	2013-2014	Jan	$ 4.98	$ 4.91	$ 4.96	$ 4.96	$ 4.96	$ 4.91	$ 4.91	$ 4.91	$ 4.91	$ 4.95
Expected	2013-2014	Feb	$ 4.91	$ 4.85	$ 4.89	$ 4.89	$ 4.89	$ 4.85	$ 4.94	$ 4.85	$ 4.88	$ 4.89
Expected	2013-2014	Mar	$ 4.77	$ 4.71	$ 4.73	$ 4.73	$ 4.73	$ 4.71	$ 4.72	$ 4.71	$ 4.71	$ 4.74
Expected	2013-2014	Apr	$ 4.69	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.61	$ 4.61	$ 4.66	$ 4.62	$ 4.66
Expected	2013-2014	May	$ 4.69	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.61	$ 4.61	$ 4.66	$ 4.62	$ 4.66
Expected	2013-2014	Jun	$ 4.70	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.62	$ 4.62	$ 4.66	$ 4.63	$ 4.66
Expected	2013-2014	Jul	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.58	$ 4.58	$ 4.66	$ 4.60	$ 4.66
Expected	2013-2014	Aug	$ 4.68	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.60	$ 4.60	$ 4.66	$ 4.62	$ 4.66
Expected	2013-2014	Sep	$ 4.71	$ 4.66	$ 4.66	$ 4.66	$ 4.66	$ 4.63	$ 4.63	$ 4.66	$ 4.64	$ 4.67
Expected	2013-2014	Oct	$ 4.80	$ 4.74	$ 4.74	$ 4.74	$ 4.74	$ 4.74	$ 4.74	$ 4.74	$ 4.74	$ 4.75
Expected	2014-2015	Nov	$ 5.73	$ 5.66	$ 5.72	$ 5.72	$ 5.72	$ 5.63	$ 5.63	$ 5.66	$ 5.64	$ 5.71
Expected	2014-2015	Dec	$ 5.81	$ 5.91	$ 12.52	$ 12.52	$ 12.52	$ 5.84	$ 5.84	$ 5.93	$ 5.87	$ 9.86
Expected	2014-2015	Jan	$ 6.75	$ 6.65	$ 6.72	$ 6.72	$ 6.72	$ 6.65	$ 6.65	$ 6.65	$ 6.65	$ 6.71
Expected	2014-2015	Feb	$ 6.66	$ 6.58	$ 6.64	$ 6.64	$ 6.64	$ 6.58	$ 6.69	$ 6.58	$ 6.61	$ 6.63
Expected	2014-2015	Mar	$ 6.51	$ 6.43	$ 6.46	$ 6.46	$ 6.46	$ 6.43	$ 6.45	$ 6.43	$ 6.44	$ 6.46
Expected	2014-2015	Apr	$ 6.42	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.33	$ 6.33	$ 6.38	$ 6.34	$ 6.39
Expected	2014-2015	May	$ 6.43	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.34	$ 6.34	$ 6.38	$ 6.35	$ 6.39
Expected	2014-2015	Jun	$ 6.44	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.35	$ 6.35	$ 6.38	$ 6.36	$ 6.39
Expected	2014-2015	Jul	$ 6.43	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.33	$ 6.33	$ 6.38	$ 6.34	$ 6.39
Expected	2014-2015	Aug	$ 6.45	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.35	$ 6.35	$ 6.38	$ 6.36	$ 6.39
Expected	2014-2015	Sep	$ 6.45	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.38	$ 6.39
Expected	2014-2015	Oct	$ 6.58	$ 6.50	$ 6.50	$ 6.50	$ 6.50	$ 6.50	$ 6.50	$ 6.50	$ 6.50	$ 6.52
Expected	2015-2016	Nov	$ 6.95	$ 6.87	$ 6.91	$ 6.91	$ 6.91	$ 6.83	$ 6.83	$ 6.87	$ 6.84	$ 6.91
Expected	2015-2016	Dec	$ 7.01	$ 6.93	$ 14.41	$ 14.41	$ 14.41	$ 6.93	$ 6.93	$ 6.93	$ 6.93	$ 11.44
Expected	2015-2016	Jan	$ 7.02	$ 6.93	$ 7.00	$ 7.00	$ 7.00	$ 6.93	$ 6.93	$ 6.93	$ 6.93	$ 6.99
Expected	2015-2016	Feb	$ 6.98	$ 6.87	$ 6.96	$ 6.96	$ 6.96	$ 6.87	$ 6.95	$ 6.87	$ 6.90	$ 6.95
Expected	2015-2016	Mar	$ 6.81	$ 6.75	$ 6.79	$ 6.79	$ 6.79	$ 6.75	$ 6.77	$ 6.75	$ 6.76	$ 6.79
Expected	2015-2016	Apr	$ 6.72	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.63	$ 6.63	$ 6.69	$ 6.65	$ 6.70
Expected	2015-2016	May	$ 6.72	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.63	$ 6.63	$ 6.69	$ 6.65	$ 6.70
Expected	2015-2016	Jun	$ 6.74	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.66	$ 6.66	$ 6.69	$ 6.67	$ 6.70
Expected	2015-2016	Jul	$ 6.73	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.63	$ 6.63	$ 6.69	$ 6.65	$ 6.70
Expected	2015-2016	Aug	$ 6.76	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.66	$ 6.66	$ 6.69	$ 6.67	$ 6.71
Expected	2015-2016	Sep	$ 6.77	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.69	$ 6.71
Expected	2015-2016	Oct	$ 6.89	$ 6.81	$ 6.81	$ 6.81	$ 6.81	$ 6.81	$ 6.81	$ 6.81	$ 6.81	$ 6.83
Expected	2016-2017	Nov	$ 7.25	$ 7.17	$ 7.22	$ 7.22	$ 7.22	$ 7.14	$ 7.14	$ 7.17	$ 7.15	$ 7.21
Expected	2016-2017	Dec	$ 7.32	$ 7.24	$ 15.50	$ 15.50	$ 15.50	$ 7.24	$ 7.24	$ 7.24	$ 7.24	$ 12.21
Expected	2016-2017	Jan	$ 7.35	$ 7.26	$ 7.33	$ 7.33	$ 7.33	$ 7.26	$ 7.26	$ 7.26	$ 7.26	$ 7.32

Appendix 6.4 - Monthly Avoided Cost Detail 1/
2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Expected	2016-2017	Feb	$ 7.33	$ 7.05	$ 7.34	$ 7.34	$ 7.34	$ 7.05	$ 7.29	$ 7.05	$ 7.13	$ 7.28
Expected	2016-2017	Mar	$ 6.85	$ 6.78	$ 6.83	$ 6.83	$ 6.83	$ 6.78	$ 6.78	$ 6.78	$ 6.78	$ 6.82
Expected	2016-2017	Apr	$ 6.76	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.66	$ 6.66	$ 6.75	$ 6.69	$ 6.76
Expected	2016-2017	May	$ 6.76	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.66	$ 6.66	$ 6.75	$ 6.69	$ 6.76
Expected	2016-2017	Jun	$ 6.78	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.68	$ 6.68	$ 6.75	$ 6.71	$ 6.76
Expected	2016-2017	Jul	$ 6.76	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.65	$ 6.65	$ 6.75	$ 6.69	$ 6.76
Expected	2016-2017	Aug	$ 6.79	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.67	$ 6.67	$ 6.75	$ 6.70	$ 6.76
Expected	2016-2017	Sep	$ 6.83	$ 6.75	$ 6.75	$ 6.75	$ 6.75	$ 6.71	$ 6.71	$ 6.75	$ 6.73	$ 6.77
Expected	2016-2017	Oct	$ 6.91	$ 6.83	$ 6.83	$ 6.83	$ 6.83	$ 6.83	$ 6.83	$ 6.83	$ 6.83	$ 6.85
Expected	2017-2018	Nov	$ 7.27	$ 7.19	$ 7.24	$ 7.24	$ 7.24	$ 7.16	$ 7.16	$ 7.19	$ 7.17	$ 7.23
Expected	2017-2018	Dec	$ 7.34	$ 7.27	$ 16.32	$ 16.32	$ 16.32	$ 7.27	$ 7.27	$ 7.27	$ 7.27	$ 12.71
Expected	2017-2018	Jan	$ 7.37	$ 7.28	$ 7.35	$ 7.35	$ 7.35	$ 7.28	$ 7.28	$ 7.28	$ 7.28	$ 7.34
Expected	2017-2018	Feb	$ 7.36	$ 7.04	$ 7.36	$ 7.36	$ 7.36	$ 7.03	$ 7.31	$ 7.03	$ 7.13	$ 7.30
Expected	2017-2018	Mar	$ 6.79	$ 6.72	$ 6.77	$ 6.77	$ 6.77	$ 6.72	$ 6.73	$ 6.72	$ 6.73	$ 6.76
Expected	2017-2018	Apr	$ 6.68	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.59	$ 6.59	$ 6.67	$ 6.62	$ 6.67
Expected	2017-2018	May	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.56	$ 6.56	$ 6.67	$ 6.60	$ 6.67
Expected	2017-2018	Jun	$ 6.69	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.59	$ 6.59	$ 6.67	$ 6.62	$ 6.67
Expected	2017-2018	Jul	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.56	$ 6.56	$ 6.67	$ 6.60	$ 6.67
Expected	2017-2018	Aug	$ 6.71	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.60	$ 6.60	$ 6.67	$ 6.62	$ 6.68
Expected	2017-2018	Sep	$ 6.75	$ 6.67	$ 6.67	$ 6.67	$ 6.67	$ 6.63	$ 6.63	$ 6.67	$ 6.64	$ 6.68
Expected	2017-2018	Oct	$ 6.84	$ 6.76	$ 6.76	$ 6.76	$ 6.76	$ 6.76	$ 6.76	$ 6.76	$ 6.76	$ 6.78
Expected	2018-2019	Nov	$ 7.20	$ 7.12	$ 7.19	$ 7.19	$ 7.19	$ 7.09	$ 7.09	$ 7.12	$ 7.10	$ 7.18
Expected	2018-2019	Dec	$ 7.27	$ 7.18	$ 17.13	$ 17.13	$ 17.13	$ 7.18	$ 7.18	$ 7.18	$ 7.18	$ 13.17
Expected	2018-2019	Jan	$ 7.23	$ 7.16	$ 7.22	$ 7.22	$ 7.22	$ 7.16	$ 7.16	$ 7.16	$ 7.16	$ 7.21
Expected	2018-2019	Feb	$ 7.22	$ 7.07	$ 7.22	$ 7.22	$ 7.22	$ 7.07	$ 7.19	$ 7.07	$ 7.11	$ 7.19
Expected	2018-2019	Mar	$ 6.97	$ 6.90	$ 6.94	$ 6.94	$ 6.94	$ 6.90	$ 6.91	$ 6.90	$ 6.90	$ 6.94
Expected	2018-2019	Apr	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.75	$ 6.75	$ 6.84	$ 6.78	$ 6.84
Expected	2018-2019	May	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.74	$ 6.74	$ 6.84	$ 6.77	$ 6.84
Expected	2018-2019	Jun	$ 6.85	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.76	$ 6.76	$ 6.84	$ 6.79	$ 6.84
Expected	2018-2019	Jul	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.73	$ 6.73	$ 6.84	$ 6.77	$ 6.84
Expected	2018-2019	Aug	$ 6.87	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.76	$ 6.76	$ 6.84	$ 6.79	$ 6.85
Expected	2018-2019	Sep	$ 6.91	$ 6.84	$ 6.84	$ 6.84	$ 6.84	$ 6.79	$ 6.79	$ 6.84	$ 6.81	$ 6.85
Expected	2018-2019	Oct	$ 7.02	$ 6.93	$ 6.94	$ 6.94	$ 6.94	$ 6.93	$ 6.93	$ 6.93	$ 6.93	$ 6.95
Expected	2019-2020	Nov	$ 7.37	$ 7.29	$ 7.36	$ 7.36	$ 7.36	$ 7.25	$ 7.25	$ 7.29	$ 7.26	$ 7.35
Expected	2019-2020	Dec	$ 7.45	$ 7.36	$ 18.27	$ 18.27	$ 18.27	$ 7.36	$ 7.36	$ 7.36	$ 7.36	$ 13.92
Expected	2019-2020	Jan	$ 7.44	$ 7.36	$ 7.43	$ 7.43	$ 7.43	$ 7.36	$ 7.36	$ 7.36	$ 7.36	$ 7.42
Expected	2019-2020	Feb	$ 7.40	$ 7.27	$ 7.41	$ 7.41	$ 7.41	$ 7.27	$ 7.38	$ 7.27	$ 7.31	$ 7.38
Expected	2019-2020	Mar	$ 7.19	$ 7.12	$ 7.16	$ 7.16	$ 7.16	$ 7.12	$ 7.13	$ 7.12	$ 7.12	$ 7.16
Expected	2019-2020	Apr	$ 7.06	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 6.98	$ 6.98	$ 7.05	$ 7.00	$ 7.05
Expected	2019-2020	May	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 6.95	$ 6.95	$ 7.05	$ 6.99	$ 7.05
Expected	2019-2020	Jun	$ 7.07	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 6.98	$ 6.98	$ 7.05	$ 7.00	$ 7.06
Expected	2019-2020	Jul	$ 7.06	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 6.94	$ 6.94	$ 7.05	$ 6.98	$ 7.05
Expected	2019-2020	Aug	$ 7.08	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 6.97	$ 6.97	$ 7.05	$ 6.99	$ 7.06
Expected	2019-2020	Sep	$ 7.13	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.01	$ 7.01	$ 7.05	$ 7.02	$ 7.07
Expected	2019-2020	Oct	$ 7.21	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.14
Expected	2020-2021	Nov	$ 7.56	$ 7.50	$ 7.56	$ 7.56	$ 7.56	$ 7.45	$ 7.45	$ 7.50	$ 7.47	$ 7.55
Expected	2020-2021	Dec	$ 7.65	$ 7.58	$ 19.54	$ 19.54	$ 19.54	$ 7.56	$ 7.56	$ 7.58	$ 7.56	$ 14.77
Expected	2020-2021	Jan	$ 7.66	$ 7.59	$ 7.65	$ 7.65	$ 7.65	$ 7.59	$ 7.59	$ 7.59	$ 7.59	$ 7.64
Expected	2020-2021	Feb	$ 7.66	$ 7.57	$ 7.65	$ 7.65	$ 7.65	$ 7.57	$ 7.63	$ 7.57	$ 7.59	$ 7.64
Expected	2020-2021	Mar	$ 7.51	$ 7.43	$ 7.48	$ 7.48	$ 7.48	$ 7.43	$ 7.45	$ 7.43	$ 7.44	$ 7.47
Expected	2020-2021	Apr	$ 7.34	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.25	$ 7.25	$ 7.33	$ 7.28	$ 7.34
Expected	2020-2021	May	$ 7.35	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.25	$ 7.25	$ 7.33	$ 7.28	$ 7.34
Expected	2020-2021	Jun	$ 7.36	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.27	$ 7.27	$ 7.33	$ 7.29	$ 7.34
Expected	2020-2021	Jul	$ 7.35	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.24	$ 7.24	$ 7.33	$ 7.27	$ 7.34
Expected	2020-2021	Aug	$ 7.38	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.26	$ 7.26	$ 7.33	$ 7.28	$ 7.34
Expected	2020-2021	Sep	$ 7.42	$ 7.33	$ 7.34	$ 7.34	$ 7.34	$ 7.30	$ 7.30	$ 7.33	$ 7.31	$ 7.35
Expected	2020-2021	Oct	$ 7.50	$ 7.41	$ 7.41	$ 7.41	$ 7.41	$ 7.41	$ 7.41	$ 7.41	$ 7.41	$ 7.43
Expected	2021-2022	Nov	$ 7.87	$ 7.80	$ 7.86	$ 7.86	$ 7.86	$ 7.75	$ 7.75	$ 7.80	$ 7.77	$ 7.85
Expected	2021-2022	Dec	$ 7.95	$ 7.89	$ 19.30	$ 19.30	$ 19.30	$ 7.87	$ 7.87	$ 7.89	$ 7.88	$ 14.75
Expected	2021-2022	Jan	$ 8.01	$ 7.96	$ 8.01	$ 8.01	$ 8.01	$ 7.96	$ 7.96	$ 7.96	$ 7.96	$ 8.00
Expected	2021-2022	Feb	$ 8.02	$ 9.50	$ 9.92	$ 9.92	$ 9.92	$ 9.50	$ 9.88	$ 9.50	$ 9.63	$ 9.46
Expected	2021-2022	Mar	$ 7.36	$ 7.30	$ 7.34	$ 7.34	$ 7.34	$ 7.30	$ 7.32	$ 7.30	$ 7.31	$ 7.34
Expected	2021-2022	Apr	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.12	$ 7.12	$ 7.20	$ 7.15	$ 7.20
Expected	2021-2022	May	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.11	$ 7.11	$ 7.20	$ 7.14	$ 7.20
Expected	2021-2022	Jun	$ 7.22	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.14	$ 7.14	$ 7.20	$ 7.16	$ 7.21
Expected	2021-2022	Jul	$ 7.21	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.11	$ 7.11	$ 7.20	$ 7.14	$ 7.21
Expected	2021-2022	Aug	$ 7.24	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.14	$ 7.14	$ 7.20	$ 7.16	$ 7.21
Expected	2021-2022	Sep	$ 7.29	$ 7.20	$ 7.20	$ 7.20	$ 7.20	$ 7.18	$ 7.18	$ 7.20	$ 7.19	$ 7.22
Expected	2021-2022	Oct	$ 7.37	$ 7.29	$ 7.29	$ 7.29	$ 7.29	$ 7.29	$ 7.29	$ 7.29	$ 7.29	$ 7.31
Expected	2022-2023	Nov	$ 7.76	$ 7.68	$ 7.75	$ 7.75	$ 7.75	$ 7.65	$ 7.65	$ 7.68	$ 7.66	$ 7.74
Expected	2022-2023	Dec	$ 7.84	$ 7.76	$ 19.59	$ 19.59	$ 19.59	$ 7.76	$ 7.76	$ 7.76	$ 7.76	$ 14.87
Expected	2022-2023	Jan	$ 7.75	$ 7.71	$ 7.75	$ 7.75	$ 7.75	$ 7.71	$ 7.71	$ 7.71	$ 7.71	$ 7.74
Expected	2022-2023	Feb	$ 7.77	$ 10.78	$ 10.69	$ 10.69	$ 10.69	$ 10.78	$ 10.96	$ 10.78	$ 10.84	$ 10.12
Expected	2022-2023	Mar	$ 7.41	$ 7.36	$ 7.39	$ 7.39	$ 7.39	$ 7.36	$ 7.37	$ 7.36	$ 7.36	$ 7.39
Expected	2022-2023	Apr	$ 7.23	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.17	$ 7.17	$ 7.19	$ 7.18	$ 7.20
Expected	2022-2023	May	$ 7.21	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.14	$ 7.14	$ 7.19	$ 7.16	$ 7.20
Expected	2022-2023	Jun	$ 7.22	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.16	$ 7.16	$ 7.19	$ 7.17	$ 7.20
Expected	2022-2023	Jul	$ 7.21	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.13	$ 7.13	$ 7.19	$ 7.15	$ 7.20
Expected	2022-2023	Aug	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.19	$ 7.08	$ 7.08	$ 7.19	$ 7.12	$ 7.19
Expected	2022-2023	Sep	$ 7.15	$ 7.15	$ 7.15	$ 7.15	$ 7.15	$ 7.03	$ 7.03	$ 7.19	$ 7.08	$ 7.15
Expected	2022-2023	Oct	$ 7.13	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.05	$ 7.06
Expected	2023-2024	Nov	$ 7.33	$ 7.27	$ 7.32	$ 7.32	$ 7.32	$ 7.20	$ 7.20	$ 7.27	$ 7.22	$ 7.31
Expected	2023-2024	Dec	$ 7.40	$ 7.42	$ 20.55	$ 20.55	$ 20.55	$ 7.32	$ 7.32	$ 7.42	$ 7.36	$ 15.29
Expected	2023-2024	Jan	$ 7.71	$ 7.59	$ 7.70	$ 7.70	$ 7.70	$ 7.59	$ 7.59	$ 7.59	$ 7.59	$ 7.68
Expected	2023-2024	Feb	$ 7.62	$ 10.84	$ 10.50	$ 10.50	$ 10.50	$ 10.72	$ 10.97	$ 10.72	$ 10.80	$ 9.99
Expected	2023-2024	Mar	$ 6.59	$ 6.51	$ 6.58	$ 6.58	$ 6.58	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.57
Expected	2023-2024	Apr	$ 6.52	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.41	$ 6.41	$ 6.51	$ 6.44	$ 6.51

Appendix 6.4 - Monthly Avoided Cost Detail 1/
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Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
Expected	2023-2024	May	$ 6.52	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.41	$ 6.41	$ 6.51	$ 6.44	$ 6.51
Expected	2023-2024	Jun	$ 6.55	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.44	$ 6.44	$ 6.51	$ 6.46	$ 6.52
Expected	2023-2024	Jul	$ 6.55	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.44	$ 6.44	$ 6.51	$ 6.46	$ 6.52
Expected	2023-2024	Aug	$ 6.58	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.47	$ 6.47	$ 6.51	$ 6.48	$ 6.52
Expected	2023-2024	Sep	$ 6.59	$ 6.51	$ 6.51	$ 6.51	$ 6.51	$ 6.50	$ 6.50	$ 6.51	$ 6.50	$ 6.52
Expected	2023-2024	Oct	$ 6.69	$ 6.61	$ 6.61	$ 6.61	$ 6.61	$ 6.61	$ 6.61	$ 6.61	$ 6.61	$ 6.63
Expected	2024-2025	Nov	$ 7.05	$ 6.97	$ 7.04	$ 7.04	$ 7.04	$ 6.92	$ 6.92	$ 6.97	$ 6.94	$ 7.03
Expected	2024-2025	Dec	$ 7.13	$ 7.02	$ 20.26	$ 20.26	$ 20.26	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 14.98
Expected	2024-2025	Jan	$ 7.09	$ 7.01	$ 7.09	$ 7.09	$ 7.09	$ 6.99	$ 6.99	$ 7.01	$ 7.00	$ 7.07
Expected	2024-2025	Feb	$ 7.10	$ 10.88	$ 11.88	$ 11.88	$ 11.88	$ 10.88	$ 10.93	$ 10.88	$ 10.90	$ 10.72
Expected	2024-2025	Mar	$ 6.83	$ 6.74	$ 6.82	$ 6.82	$ 6.82	$ 6.74	$ 6.74	$ 6.74	$ 6.74	$ 6.81
Expected	2024-2025	Apr	$ 6.74	$ 6.73	$ 6.74	$ 6.74	$ 6.74	$ 6.62	$ 6.62	$ 6.73	$ 6.66	$ 6.74
Expected	2024-2025	May	$ 6.75	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.63	$ 6.63	$ 6.73	$ 6.67	$ 6.74
Expected	2024-2025	Jun	$ 6.77	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.65	$ 6.65	$ 6.73	$ 6.68	$ 6.74
Expected	2024-2025	Jul	$ 6.76	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.64	$ 6.64	$ 6.73	$ 6.67	$ 6.74
Expected	2024-2025	Aug	$ 6.79	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.67	$ 6.67	$ 6.73	$ 6.69	$ 6.75
Expected	2024-2025	Sep	$ 6.81	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.71	$ 6.71	$ 6.73	$ 6.72	$ 6.75
Expected	2024-2025	Oct	$ 6.90	$ 6.82	$ 6.82	$ 6.82	$ 6.82	$ 6.82	$ 6.82	$ 6.82	$ 6.82	$ 6.84
Expected	2025-2026	Nov	$ 7.27	$ 7.20	$ 7.27	$ 7.27	$ 7.27	$ 7.15	$ 7.15	$ 7.20	$ 7.16	$ 7.25
Expected	2025-2026	Dec	$ 7.36	$ 7.25	$ 20.51	$ 20.51	$ 20.51	$ 7.25	$ 7.25	$ 7.25	$ 7.25	$ 15.23
Expected	2025-2026	Jan	$ 7.30	$ 7.22	$ 7.30	$ 7.30	$ 7.30	$ 7.19	$ 7.19	$ 7.22	$ 7.20	$ 7.29
Expected	2025-2026	Feb	$ 7.32	$ 11.50	$ 14.02	$ 14.02	$ 14.02	$ 11.50	$ 11.54	$ 11.50	$ 11.51	$ 12.18
Expected	2025-2026	Mar	$ 7.05	$ 6.95	$ 7.05	$ 7.05	$ 7.05	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.03
Expected	2025-2026	Apr	$ 6.95	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.83	$ 6.83	$ 6.94	$ 6.87	$ 6.95
Expected	2025-2026	May	$ 6.95	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.83	$ 6.83	$ 6.94	$ 6.87	$ 6.95
Expected	2025-2026	Jun	$ 6.98	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.85	$ 6.85	$ 6.94	$ 6.88	$ 6.95
Expected	2025-2026	Jul	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.82	$ 6.82	$ 6.94	$ 6.86	$ 6.94
Expected	2025-2026	Aug	$ 6.98	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.85	$ 6.85	$ 6.94	$ 6.88	$ 6.95
Expected	2025-2026	Sep	$ 7.01	$ 6.94	$ 6.94	$ 6.94	$ 6.94	$ 6.88	$ 6.88	$ 6.94	$ 6.90	$ 6.96
Expected	2025-2026	Oct	$ 7.08	$ 7.00	$ 7.00	$ 7.00	$ 7.00	$ 7.00	$ 7.00	$ 7.00	$ 7.00	$ 7.01
Expected	2026-2027	Nov	$ 7.43	$ 7.37	$ 7.42	$ 7.42	$ 7.42	$ 7.30	$ 7.30	$ 7.37	$ 7.32	$ 7.41
Expected	2026-2027	Dec	$ 7.53	$ 7.50	$ 20.69	$ 20.69	$ 20.69	$ 7.43	$ 7.43	$ 7.50	$ 7.46	$ 15.42
Expected	2026-2027	Jan	$ 7.76	$ 7.64	$ 7.76	$ 7.76	$ 7.76	$ 7.64	$ 7.64	$ 7.64	$ 7.64	$ 7.73
Expected	2026-2027	Feb	$ 7.75	$ 12.32	$ 16.59	$ 16.59	$ 16.59	$ 12.32	$ 12.44	$ 12.32	$ 12.36	$ 13.97
Expected	2026-2027	Mar	$ 7.15	$ 7.06	$ 7.14	$ 7.14	$ 7.14	$ 7.06	$ 7.06	$ 7.06	$ 7.06	$ 7.12
Expected	2026-2027	Apr	$ 7.06	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 6.93	$ 6.93	$ 7.02	$ 6.96	$ 7.02
Expected	2026-2027	May	$ 7.08	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 6.95	$ 6.95	$ 7.02	$ 6.98	$ 7.03
Expected	2026-2027	Jun	$ 7.10	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 6.99	$ 6.99	$ 7.02	$ 7.00	$ 7.03
Expected	2026-2027	Jul	$ 7.08	$ 7.01	$ 7.01	$ 7.01	$ 7.01	$ 6.95	$ 6.95	$ 7.02	$ 6.98	$ 7.02
Expected	2026-2027	Aug	$ 7.09	$ 7.01	$ 7.01	$ 7.01	$ 7.01	$ 6.99	$ 6.99	$ 7.02	$ 7.00	$ 7.03
Expected	2026-2027	Sep	$ 7.10	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 7.02	$ 7.03
Expected	2026-2027	Oct	$ 7.21	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.14
Expected	2027-2028	Nov	$ 7.58	$ 7.50	$ 7.57	$ 7.57	$ 7.57	$ 7.45	$ 7.45	$ 7.50	$ 7.47	$ 7.56
Expected	2027-2028	Dec	$ 7.67	$ 7.55	$ 20.83	$ 20.83	$ 20.83	$ 7.55	$ 7.55	$ 7.55	$ 7.55	$ 15.54
Expected	2027-2028	Jan	$ 7.60	$ 7.52	$ 7.60	$ 7.60	$ 7.60	$ 7.48	$ 7.48	$ 7.52	$ 7.50	$ 7.58
Expected	2027-2028	Feb	$ 7.61	$ 14.77	$ 18.49	$ 18.49	$ 18.49	$ 14.77	$ 14.85	$ 14.77	$ 14.80	$ 15.57
Expected	2027-2028	Mar	$ 7.24	$ 7.14	$ 7.24	$ 7.24	$ 7.24	$ 7.14	$ 7.14	$ 7.14	$ 7.14	$ 7.22
Expected	2027-2028	Apr	$ 7.17	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.05	$ 7.05	$ 7.13	$ 7.07	$ 7.14
Expected	2027-2028	May	$ 7.17	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.05	$ 7.05	$ 7.13	$ 7.07	$ 7.14
Expected	2027-2028	Jun	$ 7.21	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.09	$ 7.09	$ 7.13	$ 7.10	$ 7.14
Expected	2027-2028	Jul	$ 7.18	$ 7.12	$ 7.12	$ 7.12	$ 7.12	$ 7.06	$ 7.06	$ 7.13	$ 7.08	$ 7.13
Expected	2027-2028	Aug	$ 7.21	$ 7.12	$ 7.12	$ 7.12	$ 7.12	$ 7.09	$ 7.09	$ 7.13	$ 7.10	$ 7.14
Expected	2027-2028	Sep	$ 7.21	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.14
Expected	2027-2028	Oct	$ 7.31	$ 7.23	$ 7.23	$ 7.23	$ 7.23	$ 7.23	$ 7.23	$ 7.23	$ 7.23	$ 7.25
Expected	2028-2029	Nov	$ 7.70	$ 7.61	$ 7.69	$ 7.69	$ 7.69	$ 7.56	$ 7.56	$ 7.61	$ 7.58	$ 7.67
Expected	2028-2029	Dec	$ 7.78	$ 7.66	$ 20.96	$ 20.96	$ 20.96	$ 7.66	$ 7.66	$ 7.66	$ 7.66	$ 15.66
Expected	2028-2029	Jan	$ 7.69	$ 7.62	$ 9.76	$ 9.76	$ 9.76	$ 7.58	$ 7.58	$ 7.62	$ 7.59	$ 8.92
Expected	2028-2029	Feb	$ 7.71	$ 16.07	$ 19.39	$ 19.39	$ 19.39	$ 15.17	$ 15.21	$ 15.17	$ 15.18	$ 16.39
Expected	2028-2029	Mar	$ 7.42	$ 7.31	$ 7.41	$ 7.41	$ 7.41	$ 7.31	$ 7.31	$ 7.31	$ 7.31	$ 7.39
Expected	2028-2029	Apr	$ 7.29	$ 7.26	$ 7.26	$ 7.26	$ 7.26	$ 7.17	$ 7.17	$ 7.26	$ 7.20	$ 7.27
Expected	2028-2029	May	$ 7.31	$ 7.26	$ 7.26	$ 7.26	$ 7.26	$ 7.19	$ 7.19	$ 7.26	$ 7.21	$ 7.27
Expected	2028-2029	Jun	$ 7.35	$ 7.26	$ 7.26	$ 7.26	$ 7.26	$ 7.22	$ 7.22	$ 7.26	$ 7.23	$ 7.28
Expected	2028-2029	Jul	$ 7.25	$ 7.17	$ 7.17	$ 7.17	$ 7.17	$ 7.13	$ 7.13	$ 7.26	$ 7.17	$ 7.19
Expected	2028-2029	Aug	$ 7.25	$ 7.17	$ 7.17	$ 7.17	$ 7.17	$ 7.13	$ 7.13	$ 7.26	$ 7.17	$ 7.19
Expected	2028-2029	Sep	$ 7.35	$ 7.26	$ 7.26	$ 7.26	$ 7.26	$ 7.24	$ 7.24	$ 7.26	$ 7.25	$ 7.28
Expected	2028-2029	Oct	$ 7.41	$ 7.32	$ 7.32	$ 7.32	$ 7.32	$ 7.32	$ 7.32	$ 7.32	$ 7.32	$ 7.34

1/ Avoided costs shown before Environmental Externalities adder.

Appendix 6.4 - Monthly Avoided Cost Detail 1/

2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
High Growth & Low Price	2009-2010	Nov	$ 5.57	$ 5.51	$ 5.54	$ 5.54	$ 5.54	$ 5.51	$ 5.51	$ 5.51	$ 5.51	$ 5.54
High Growth & Low Price	2009-2010	Dec	$ 5.93	$ 5.88	$ 5.87	$ 5.87	$ 5.87	$ 5.88	$ 5.88	$ 5.88	$ 5.88	$ 5.89
High Growth & Low Price	2009-2010	Jan	$ 5.59	$ 5.63	$ 5.59	$ 5.59	$ 5.59	$ 5.62	$ 5.62	$ 5.63	$ 5.63	$ 5.60
High Growth & Low Price	2009-2010	Feb	$ 5.64	$ 5.60	$ 5.62	$ 5.62	$ 5.62	$ 5.60	$ 5.61	$ 5.60	$ 5.60	$ 5.62
High Growth & Low Price	2009-2010	Mar	$ 5.50	$ 5.43	$ 5.46	$ 5.46	$ 5.46	$ 5.43	$ 5.51	$ 5.43	$ 5.46	$ 5.46
High Growth & Low Price	2009-2010	Apr	$ 4.86	$ 4.85	$ 4.85	$ 4.85	$ 4.85	$ 4.85	$ 4.85	$ 4.85	$ 4.85	$ 4.85
High Growth & Low Price	2009-2010	May	$ 4.90	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.90	$ 4.84	$ 4.86	$ 4.86
High Growth & Low Price	2009-2010	Jun	$ 4.90	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.98	$ 4.84	$ 4.89	$ 4.86
High Growth & Low Price	2009-2010	Jul	$ 4.90	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 5.05	$ 4.84	$ 4.91	$ 4.86
High Growth & Low Price	2009-2010	Aug	$ 4.90	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 5.13	$ 4.84	$ 4.94	$ 4.86
High Growth & Low Price	2009-2010	Sep	$ 4.90	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 4.84	$ 5.14	$ 4.84	$ 4.94	$ 4.86
High Growth & Low Price	2009-2010	Oct	$ 5.21	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.19	$ 5.20
High Growth & Low Price	2010-2011	Nov	$ 5.96	$ 5.90	$ 5.93	$ 5.93	$ 5.93	$ 5.90	$ 5.90	$ 5.90	$ 5.90	$ 5.93
High Growth & Low Price	2010-2011	Dec	$ 6.14	$ 6.09	$ 6.13	$ 6.13	$ 6.13	$ 6.09	$ 6.09	$ 6.09	$ 6.09	$ 6.13
High Growth & Low Price	2010-2011	Jan	$ 6.05	$ 6.05	$ 6.05	$ 6.05	$ 6.05	$ 6.04	$ 6.04	$ 6.05	$ 6.04	$ 6.05
High Growth & Low Price	2010-2011	Feb	$ 6.06	$ 6.02	$ 6.05	$ 6.05	$ 6.05	$ 6.02	$ 6.03	$ 6.02	$ 6.03	$ 6.05
High Growth & Low Price	2010-2011	Mar	$ 5.88	$ 5.81	$ 5.85	$ 5.85	$ 5.85	$ 5.81	$ 5.89	$ 5.81	$ 5.84	$ 5.85
High Growth & Low Price	2010-2011	Apr	$ 5.14	$ 5.21	$ 5.14	$ 5.14	$ 5.14	$ 5.14	$ 5.14	$ 5.21	$ 5.17	$ 5.16
High Growth & Low Price	2010-2011	May	$ 5.14	$ 5.21	$ 5.14	$ 5.14	$ 5.14	$ 5.15	$ 5.15	$ 5.21	$ 5.17	$ 5.16
High Growth & Low Price	2010-2011	Jun	$ 5.20	$ 5.21	$ 5.20	$ 5.20	$ 5.20	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.20
High Growth & Low Price	2010-2011	Jul	$ 5.27	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.27	$ 5.21	$ 5.23	$ 5.23
High Growth & Low Price	2010-2011	Aug	$ 5.28	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.33	$ 5.21	$ 5.25	$ 5.23
High Growth & Low Price	2010-2011	Sep	$ 5.28	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.21	$ 5.36	$ 5.21	$ 5.26	$ 5.23
High Growth & Low Price	2010-2011	Oct	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42	$ 5.42
High Growth & Low Price	2011-2012	Nov	$ 5.86	$ 5.91	$ 5.86	$ 5.86	$ 5.86	$ 5.83	$ 5.83	$ 5.91	$ 5.86	$ 5.87
High Growth & Low Price	2011-2012	Dec	$ 5.99	$ 6.06	$ 6.01	$ 6.01	$ 6.01	$ 5.99	$ 5.99	$ 6.06	$ 6.01	$ 6.02
High Growth & Low Price	2011-2012	Jan	$ 5.86	$ 5.94	$ 5.86	$ 5.86	$ 5.86	$ 5.89	$ 5.89	$ 5.94	$ 5.91	$ 5.88
High Growth & Low Price	2011-2012	Feb	$ 5.88	$ 5.89	$ 5.88	$ 5.88	$ 5.88	$ 5.85	$ 5.86	$ 5.85	$ 5.85	$ 5.88
High Growth & Low Price	2011-2012	Mar	$ 5.62	$ 5.68	$ 5.62	$ 5.62	$ 5.62	$ 5.68	$ 5.70	$ 5.68	$ 5.69	$ 5.64
High Growth & Low Price	2011-2012	Apr	$ 4.97	$ 5.06	$ 4.97	$ 4.97	$ 4.97	$ 4.98	$ 4.98	$ 5.15	$ 5.04	$ 4.99
High Growth & Low Price	2011-2012	May	$ 4.94	$ 5.06	$ 4.94	$ 4.94	$ 4.94	$ 4.97	$ 4.97	$ 5.15	$ 5.03	$ 4.97
High Growth & Low Price	2011-2012	Jun	$ 5.01	$ 5.06	$ 5.01	$ 5.01	$ 5.01	$ 5.04	$ 5.04	$ 5.15	$ 5.08	$ 5.02
High Growth & Low Price	2011-2012	Jul	$ 5.08	$ 5.12	$ 5.08	$ 5.08	$ 5.08	$ 5.10	$ 5.10	$ 5.15	$ 5.12	$ 5.09
High Growth & Low Price	2011-2012	Aug	$ 5.14	$ 5.15	$ 5.14	$ 5.14	$ 5.14	$ 5.15	$ 5.15	$ 5.15	$ 5.15	$ 5.14
High Growth & Low Price	2011-2012	Sep	$ 5.18	$ 5.15	$ 5.15	$ 5.15	$ 5.15	$ 5.15	$ 5.19	$ 5.15	$ 5.17	$ 5.16
High Growth & Low Price	2011-2012	Oct	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23	$ 5.23
High Growth & Low Price	2012-2013	Nov	$ 5.80	$ 5.76	$ 5.78	$ 5.78	$ 5.78	$ 5.75	$ 5.75	$ 5.76	$ 5.75	$ 5.78
High Growth & Low Price	2012-2013	Dec	$ 5.91	$ 5.99	$ 5.97	$ 5.97	$ 5.97	$ 5.96	$ 5.96	$ 5.99	$ 5.97	$ 5.96
High Growth & Low Price	2012-2013	Jan	$ 6.18	$ 6.25	$ 6.18	$ 6.18	$ 6.18	$ 6.25	$ 6.25	$ 6.25	$ 6.25	$ 6.20
High Growth & Low Price	2012-2013	Feb	$ 6.18	$ 6.23	$ 6.18	$ 6.18	$ 6.18	$ 6.23	$ 6.24	$ 6.23	$ 6.23	$ 6.19
High Growth & Low Price	2012-2013	Mar	$ 5.89	$ 5.86	$ 5.87	$ 5.87	$ 5.87	$ 5.86	$ 6.06	$ 5.86	$ 5.93	$ 5.88
High Growth & Low Price	2012-2013	Apr	$ 5.29	$ 5.39	$ 5.29	$ 5.29	$ 5.29	$ 5.33	$ 5.33	$ 5.39	$ 5.35	$ 5.31
High Growth & Low Price	2012-2013	May	$ 5.30	$ 5.39	$ 5.30	$ 5.30	$ 5.30	$ 5.35	$ 5.35	$ 5.39	$ 5.36	$ 5.32
High Growth & Low Price	2012-2013	Jun	$ 5.37	$ 5.39	$ 5.37	$ 5.37	$ 5.37	$ 5.39	$ 5.42	$ 5.39	$ 5.40	$ 5.38
High Growth & Low Price	2012-2013	Jul	$ 5.40	$ 5.39	$ 5.39	$ 5.39	$ 5.39	$ 5.39	$ 5.44	$ 5.39	$ 5.41	$ 5.39
High Growth & Low Price	2012-2013	Aug	$ 5.45	$ 5.39	$ 5.39	$ 5.39	$ 5.39	$ 5.39	$ 5.48	$ 5.39	$ 5.42	$ 5.40
High Growth & Low Price	2012-2013	Sep	$ 5.46	$ 5.40	$ 5.40	$ 5.40	$ 5.40	$ 5.40	$ 5.50	$ 5.40	$ 5.43	$ 5.41
High Growth & Low Price	2012-2013	Oct	$ 5.58	$ 5.58	$ 5.58	$ 5.58	$ 5.58	$ 5.58	$ 5.60	$ 5.58	$ 5.59	$ 5.58
High Growth & Low Price	2013-2014	Nov	$ 5.43	$ 5.36	$ 5.38	$ 5.38	$ 5.38	$ 5.32	$ 5.37	$ 5.36	$ 5.35	$ 5.39
High Growth & Low Price	2013-2014	Dec	$ 5.45	$ 5.40	$ 5.43	$ 5.43	$ 5.43	$ 5.35	$ 5.39	$ 5.40	$ 5.38	$ 5.43
High Growth & Low Price	2013-2014	Jan	$ 5.02	$ 5.12	$ 5.02	$ 5.02	$ 5.02	$ 5.12	$ 5.15	$ 5.18	$ 5.15	$ 5.04
High Growth & Low Price	2013-2014	Feb	$ 5.05	$ 5.13	$ 5.05	$ 5.05	$ 5.05	$ 5.13	$ 5.18	$ 5.13	$ 5.15	$ 5.06
High Growth & Low Price	2013-2014	Mar	$ 4.79	$ 4.69	$ 4.79	$ 4.79	$ 4.79	$ 4.69	$ 5.04	$ 4.69	$ 4.81	$ 4.77
High Growth & Low Price	2013-2014	Apr	$ 4.38	$ 4.44	$ 4.38	$ 4.38	$ 4.38	$ 4.41	$ 4.44	$ 4.44	$ 4.43	$ 4.39
High Growth & Low Price	2013-2014	May	$ 4.34	$ 4.44	$ 4.34	$ 4.34	$ 4.34	$ 4.40	$ 4.43	$ 4.44	$ 4.42	$ 4.36
High Growth & Low Price	2013-2014	Jun	$ 4.46	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.50	$ 4.44	$ 4.46	$ 4.44
High Growth & Low Price	2013-2014	Jul	$ 4.49	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.53	$ 4.44	$ 4.47	$ 4.45
High Growth & Low Price	2013-2014	Aug	$ 4.49	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.55	$ 4.44	$ 4.48	$ 4.45
High Growth & Low Price	2013-2014	Sep	$ 4.49	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.44	$ 4.56	$ 4.44	$ 4.48	$ 4.45
High Growth & Low Price	2013-2014	Oct	$ 4.58	$ 4.55	$ 4.55	$ 4.55	$ 4.55	$ 4.55	$ 4.59	$ 4.55	$ 4.56	$ 4.56
High Growth & Low Price	2014-2015	Nov	$ 5.83	$ 5.79	$ 5.83	$ 5.83	$ 5.83	$ 5.73	$ 5.77	$ 5.79	$ 5.76	$ 5.82
High Growth & Low Price	2014-2015	Dec	$ 5.91	$ 6.05	$ 5.91	$ 5.91	$ 5.91	$ 5.81	$ 5.84	$ 6.12	$ 5.92	$ 5.94
High Growth & Low Price	2014-2015	Jan	$ 6.70	$ 6.85	$ 6.70	$ 6.70	$ 6.70	$ 6.85	$ 6.90	$ 6.85	$ 6.87	$ 6.73
High Growth & Low Price	2014-2015	Feb	$ 6.76	$ 6.88	$ 6.76	$ 6.76	$ 6.76	$ 6.88	$ 6.94	$ 6.88	$ 6.90	$ 6.78
High Growth & Low Price	2014-2015	Mar	$ 6.50	$ 6.46	$ 6.50	$ 6.50	$ 6.50	$ 6.46	$ 6.85	$ 6.46	$ 6.59	$ 6.49
High Growth & Low Price	2014-2015	Apr	$ 6.04	$ 6.21	$ 6.04	$ 6.04	$ 6.04	$ 6.16	$ 6.21	$ 6.21	$ 6.19	$ 6.08
High Growth & Low Price	2014-2015	May	$ 6.06	$ 6.21	$ 6.06	$ 6.06	$ 6.06	$ 6.17	$ 6.22	$ 6.21	$ 6.20	$ 6.09
High Growth & Low Price	2014-2015	Jun	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.26	$ 6.21	$ 6.22	$ 6.21
High Growth & Low Price	2014-2015	Jul	$ 6.28	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.33	$ 6.21	$ 6.25	$ 6.22
High Growth & Low Price	2014-2015	Aug	$ 6.28	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.33	$ 6.21	$ 6.25	$ 6.22
High Growth & Low Price	2014-2015	Sep	$ 6.28	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.21	$ 6.34	$ 6.21	$ 6.25	$ 6.22
High Growth & Low Price	2014-2015	Oct	$ 6.37	$ 6.33	$ 6.33	$ 6.33	$ 6.33	$ 6.33	$ 6.38	$ 6.33	$ 6.34	$ 6.34
High Growth & Low Price	2015-2016	Nov	$ 7.06	$ 7.02	$ 7.06	$ 7.06	$ 7.06	$ 6.95	$ 7.01	$ 7.02	$ 6.99	$ 7.05
High Growth & Low Price	2015-2016	Dec	$ 7.17	$ 7.15	$ 7.17	$ 7.17	$ 7.17	$ 7.11	$ 7.16	$ 7.16	$ 7.14	$ 7.17
High Growth & Low Price	2015-2016	Jan	$ 7.04	$ 7.21	$ 7.04	$ 7.04	$ 7.04	$ 7.21	$ 7.26	$ 7.21	$ 7.22	$ 7.07
High Growth & Low Price	2015-2016	Feb	$ 7.38	$ 7.24	$ 7.36	$ 7.36	$ 7.36	$ 7.24	$ 7.31	$ 7.24	$ 7.26	$ 7.34
High Growth & Low Price	2015-2016	Mar	$ 6.71	$ 6.72	$ 6.71	$ 6.71	$ 6.71	$ 6.72	$ 7.21	$ 6.72	$ 6.88	$ 6.71
High Growth & Low Price	2015-2016	Apr	$ 6.27	$ 6.47	$ 6.27	$ 6.27	$ 6.27	$ 6.47	$ 6.52	$ 6.47	$ 6.49	$ 6.31
High Growth & Low Price	2015-2016	May	$ 6.27	$ 6.47	$ 6.27	$ 6.27	$ 6.27	$ 6.47	$ 6.52	$ 6.47	$ 6.49	$ 6.31
High Growth & Low Price	2015-2016	Jun	$ 6.45	$ 6.47	$ 6.45	$ 6.45	$ 6.45	$ 6.45	$ 6.50	$ 6.47	$ 6.47	$ 6.46
High Growth & Low Price	2015-2016	Jul	$ 6.55	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.61	$ 6.47	$ 6.52	$ 6.48
High Growth & Low Price	2015-2016	Aug	$ 6.55	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.59	$ 6.47	$ 6.51	$ 6.48
High Growth & Low Price	2015-2016	Sep	$ 6.55	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.47	$ 6.64	$ 6.47	$ 6.53	$ 6.48
High Growth & Low Price	2015-2016	Oct	$ 6.72	$ 6.66	$ 6.66	$ 6.66	$ 6.66	$ 6.66	$ 6.71	$ 6.66	$ 6.68	$ 6.67
High Growth & Low Price	2016-2017	Nov	$ 7.41	$ 7.38	$ 7.41	$ 7.41	$ 7.41	$ 7.29	$ 7.35	$ 7.38	$ 7.34	$ 7.40
High Growth & Low Price	2016-2017	Dec	$ 7.52	$ 7.42	$ 7.51	$ 7.51	$ 7.51	$ 7.37	$ 7.41	$ 7.42	$ 7.40	$ 7.49
High Growth & Low Price	2016-2017	Jan	$ 7.18	$ 7.33	$ 7.18	$ 7.18	$ 7.18	$ 7.31	$ 7.35	$ 7.35	$ 7.34	$ 7.21
High Growth & Low Price	2016-2017	Feb	$ 7.12	$ 7.31	$ 7.12	$ 7.12	$ 7.12	$ 7.31	$ 7.38	$ 7.31	$ 7.33	$ 7.15
High Growth & Low Price	2016-2017	Mar	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 6.73	$ 7.15	$ 6.73	$ 6.87	$ 6.73
High Growth & Low Price	2016-2017	Apr	$ 6.23	$ 6.42	$ 6.23	$ 6.23	$ 6.23	$ 6.42	$ 6.47	$ 6.42	$ 6.44	$ 6.27
High Growth & Low Price	2016-2017	May	$ 6.31	$ 6.42	$ 6.31	$ 6.31	$ 6.31	$ 6.42	$ 6.51	$ 6.42	$ 6.45	$ 6.34
High Growth & Low Price	2016-2017	Jun	$ 6.28	$ 6.42	$ 6.28	$ 6.28	$ 6.28	$ 6.42	$ 6.49	$ 6.42	$ 6.45	$ 6.31
High Growth & Low Price	2016-2017	Jul	$ 6.41	$ 6.42	$ 6.41	$ 6.41	$ 6.41	$ 6.42	$ 6.50	$ 6.42	$ 6.45	$ 6.42
High Growth & Low Price	2016-2017	Aug	$ 6.42	$ 6.42	$ 6.42	$ 6.42	$ 6.42	$ 6.42	$ 6.50	$ 6.42	$ 6.45	$ 6.42

Appendix 6.4 - Monthly Avoided Cost Detail 1/

2009$

Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
High Growth & Low Price	2016-2017	Sep	$ 6.46	$ 6.42	$ 6.42	$ 6.42	$ 6.42	$ 6.42	$ 6.52	$ 6.42	$ 6.46	$ 6.43
High Growth & Low Price	2016-2017	Oct	$ 6.54	$ 6.53	$ 6.53	$ 6.53	$ 6.53	$ 6.53	$ 6.58	$ 6.53	$ 6.55	$ 6.53
High Growth & Low Price	2017-2018	Nov	$ 7.17	$ 7.17	$ 7.17	$ 7.17	$ 7.17	$ 7.16	$ 7.22	$ 7.17	$ 7.18	$ 7.17
High Growth & Low Price	2017-2018	Dec	$ 7.25	$ 7.25	$ 7.25	$ 7.25	$ 7.25	$ 7.20	$ 7.25	$ 7.37	$ 7.27	$ 7.25
High Growth & Low Price	2017-2018	Jan	$ 7.52	$ 7.77	$ 7.52	$ 7.52	$ 7.52	$ 7.77	$ 7.83	$ 7.77	$ 7.79	$ 7.57
High Growth & Low Price	2017-2018	Feb	$ 7.61	$ 7.78	$ 7.61	$ 7.61	$ 7.61	$ 7.78	$ 7.86	$ 7.78	$ 7.81	$ 7.64
High Growth & Low Price	2017-2018	Mar	$ 7.29	$ 7.34	$ 7.29	$ 7.29	$ 7.29	$ 7.34	$ 7.69	$ 7.34	$ 7.46	$ 7.30
High Growth & Low Price	2017-2018	Apr	$ 6.90	$ 7.07	$ 6.90	$ 6.90	$ 6.90	$ 7.04	$ 7.10	$ 7.07	$ 7.07	$ 6.94
High Growth & Low Price	2017-2018	May	$ 6.94	$ 7.07	$ 6.94	$ 6.94	$ 6.94	$ 7.07	$ 7.13	$ 7.07	$ 7.09	$ 6.97
High Growth & Low Price	2017-2018	Jun	$ 6.94	$ 7.07	$ 6.94	$ 6.94	$ 6.94	$ 7.07	$ 7.14	$ 7.07	$ 7.09	$ 6.97
High Growth & Low Price	2017-2018	Jul	$ 7.08	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.18	$ 7.07	$ 7.11	$ 7.07
High Growth & Low Price	2017-2018	Aug	$ 7.09	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.18	$ 7.07	$ 7.11	$ 7.08
High Growth & Low Price	2017-2018	Sep	$ 7.08	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.17	$ 7.07	$ 7.10	$ 7.07
High Growth & Low Price	2017-2018	Oct	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.13	$ 7.20	$ 7.13	$ 7.15	$ 7.13
High Growth & Low Price	2018-2019	Nov	$ 7.83	$ 7.83	$ 7.83	$ 7.83	$ 7.83	$ 7.79	$ 7.86	$ 7.83	$ 7.83	$ 7.83
High Growth & Low Price	2018-2019	Dec	$ 7.85	$ 7.84	$ 7.85	$ 7.85	$ 7.85	$ 7.83	$ 7.88	$ 7.86	$ 7.86	$ 7.85
High Growth & Low Price	2018-2019	Jan	$ 7.87	$ 7.86	$ 7.87	$ 7.87	$ 7.87	$ 7.75	$ 7.78	$ 7.86	$ 7.80	$ 7.87
High Growth & Low Price	2018-2019	Feb	$ 7.67	$ 7.71	$ 7.67	$ 7.67	$ 7.67	$ 7.71	$ 7.77	$ 7.71	$ 7.73	$ 7.67
High Growth & Low Price	2018-2019	Mar	$ 7.41	$ 7.33	$ 7.41	$ 7.41	$ 7.41	$ 7.33	$ 7.62	$ 7.33	$ 7.43	$ 7.40
High Growth & Low Price	2018-2019	Apr	$ 6.92	$ 6.98	$ 6.92	$ 6.92	$ 6.92	$ 6.98	$ 7.04	$ 6.98	$ 7.00	$ 6.93
High Growth & Low Price	2018-2019	May	$ 6.93	$ 6.98	$ 6.93	$ 6.93	$ 6.93	$ 6.98	$ 7.05	$ 6.98	$ 7.00	$ 6.94
High Growth & Low Price	2018-2019	Jun	$ 6.95	$ 6.98	$ 6.95	$ 6.95	$ 6.95	$ 6.98	$ 7.07	$ 6.98	$ 7.01	$ 6.96
High Growth & Low Price	2018-2019	Jul	$ 6.96	$ 6.98	$ 6.96	$ 6.96	$ 6.96	$ 6.98	$ 7.08	$ 6.98	$ 7.01	$ 6.97
High Growth & Low Price	2018-2019	Aug	$ 6.93	$ 6.98	$ 6.93	$ 6.93	$ 6.93	$ 6.98	$ 7.06	$ 6.98	$ 7.01	$ 6.94
High Growth & Low Price	2018-2019	Sep	$ 6.97	$ 6.98	$ 6.97	$ 6.97	$ 6.97	$ 6.98	$ 7.08	$ 6.98	$ 7.01	$ 6.97
High Growth & Low Price	2018-2019	Oct	$ 7.09	$ 7.11	$ 7.11	$ 7.11	$ 7.11	$ 7.11	$ 7.17	$ 7.11	$ 7.13	$ 7.11
High Growth & Low Price	2019-2020	Nov	$ 7.87	$ 7.80	$ 7.86	$ 7.86	$ 7.86	$ 7.72	$ 7.78	$ 7.80	$ 7.77	$ 7.85
High Growth & Low Price	2019-2020	Dec	$ 7.90	$ 7.82	$ 7.90	$ 7.90	$ 7.90	$ 7.78	$ 7.83	$ 7.82	$ 7.81	$ 7.88
High Growth & Low Price	2019-2020	Jan	$ 7.67	$ 7.70	$ 7.67	$ 7.67	$ 7.67	$ 7.66	$ 7.69	$ 7.74	$ 7.70	$ 7.68
High Growth & Low Price	2019-2020	Feb	$ 7.61	$ 7.65	$ 7.61	$ 7.61	$ 7.61	$ 7.65	$ 7.72	$ 7.65	$ 7.67	$ 7.62
High Growth & Low Price	2019-2020	Mar	$ 7.52	$ 7.44	$ 7.52	$ 7.52	$ 7.52	$ 7.44	$ 7.64	$ 7.44	$ 7.51	$ 7.51
High Growth & Low Price	2019-2020	Apr	$ 6.80	$ 6.95	$ 6.80	$ 6.80	$ 6.80	$ 6.90	$ 6.95	$ 6.95	$ 6.94	$ 6.83
High Growth & Low Price	2019-2020	May	$ 6.81	$ 6.95	$ 6.81	$ 6.81	$ 6.81	$ 6.92	$ 6.98	$ 6.95	$ 6.95	$ 6.84
High Growth & Low Price	2019-2020	Jun	$ 6.86	$ 6.95	$ 6.86	$ 6.86	$ 6.86	$ 6.95	$ 7.01	$ 6.95	$ 6.97	$ 6.88
High Growth & Low Price	2019-2020	Jul	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 6.95	$ 7.07	$ 6.95	$ 6.99	$ 6.95
High Growth & Low Price	2019-2020	Aug	$ 6.91	$ 6.95	$ 6.91	$ 6.91	$ 6.91	$ 6.95	$ 7.05	$ 6.95	$ 6.98	$ 6.92
High Growth & Low Price	2019-2020	Sep	$ 7.01	$ 6.98	$ 6.98	$ 6.98	$ 6.98	$ 6.98	$ 7.12	$ 6.98	$ 7.02	$ 6.99
High Growth & Low Price	2019-2020	Oct	$ 7.14	$ 7.15	$ 7.15	$ 7.15	$ 7.15	$ 7.15	$ 7.21	$ 7.15	$ 7.17	$ 7.15
High Growth & Low Price	2020-2021	Nov	$ 7.94	$ 7.92	$ 7.93	$ 7.93	$ 7.93	$ 7.78	$ 7.84	$ 7.92	$ 7.84	$ 7.93
High Growth & Low Price	2020-2021	Dec	$ 7.93	$ 7.93	$ 7.93	$ 7.93	$ 7.93	$ 7.80	$ 7.84	$ 7.93	$ 7.86	$ 7.93
High Growth & Low Price	2020-2021	Jan	$ 7.99	$ 7.94	$ 7.99	$ 7.99	$ 7.99	$ 7.87	$ 7.90	$ 7.94	$ 7.90	$ 7.98
High Growth & Low Price	2020-2021	Feb	$ 8.01	$ 7.86	$ 8.01	$ 8.01	$ 8.01	$ 7.86	$ 7.92	$ 7.86	$ 7.88	$ 7.98
High Growth & Low Price	2020-2021	Mar	$ 7.65	$ 7.53	$ 7.65	$ 7.65	$ 7.65	$ 7.53	$ 7.63	$ 7.53	$ 7.57	$ 7.63
High Growth & Low Price	2020-2021	Apr	$ 6.92	$ 7.04	$ 6.92	$ 6.92	$ 6.92	$ 7.01	$ 7.07	$ 7.04	$ 7.04	$ 6.94
High Growth & Low Price	2020-2021	May	$ 6.89	$ 7.04	$ 6.89	$ 6.89	$ 6.89	$ 7.01	$ 7.07	$ 7.04	$ 7.04	$ 6.92
High Growth & Low Price	2020-2021	Jun	$ 6.91	$ 7.04	$ 6.91	$ 6.91	$ 6.91	$ 7.03	$ 7.09	$ 7.04	$ 7.05	$ 6.94
High Growth & Low Price	2020-2021	Jul	$ 6.94	$ 7.04	$ 6.94	$ 6.94	$ 6.94	$ 7.04	$ 7.12	$ 7.04	$ 7.07	$ 6.96
High Growth & Low Price	2020-2021	Aug	$ 6.84	$ 7.04	$ 6.84	$ 6.84	$ 6.84	$ 7.00	$ 7.06	$ 7.04	$ 7.03	$ 6.88
High Growth & Low Price	2020-2021	Sep	$ 6.91	$ 7.04	$ 6.91	$ 6.91	$ 6.91	$ 7.01	$ 7.07	$ 7.04	$ 7.04	$ 6.94
High Growth & Low Price	2020-2021	Oct	$ 6.91	$ 7.11	$ 7.11	$ 7.11	$ 7.11	$ 7.03	$ 7.09	$ 7.11	$ 7.08	$ 7.07
High Growth & Low Price	2021-2022	Nov	$ 7.73	$ 7.72	$ 7.73	$ 7.73	$ 7.73	$ 7.65	$ 7.70	$ 7.72	$ 7.69	$ 7.73
High Growth & Low Price	2021-2022	Dec	$ 8.34	$ 7.81	$ 7.81	$ 7.81	$ 7.81	$ 7.71	$ 7.74	$ 7.82	$ 7.76	$ 7.92
High Growth & Low Price	2021-2022	Jan	$ 7.73	$ 7.82	$ 7.73	$ 7.73	$ 7.73	$ 7.72	$ 7.74	$ 7.82	$ 7.76	$ 7.75
High Growth & Low Price	2021-2022	Feb	$ 7.75	$ 7.77	$ 7.75	$ 7.75	$ 7.75	$ 7.72	$ 7.77	$ 7.72	$ 7.74	$ 7.75
High Growth & Low Price	2021-2022	Mar	$ 7.58	$ 7.58	$ 7.58	$ 7.58	$ 7.58	$ 7.52	$ 7.58	$ 7.52	$ 7.54	$ 7.58
High Growth & Low Price	2021-2022	Apr	$ 6.78	$ 7.20	$ 6.78	$ 6.78	$ 6.78	$ 6.97	$ 7.03	$ 7.20	$ 7.07	$ 6.86
High Growth & Low Price	2021-2022	May	$ 6.79	$ 7.20	$ 6.79	$ 6.79	$ 6.79	$ 7.00	$ 7.06	$ 7.20	$ 7.09	$ 6.87
High Growth & Low Price	2021-2022	Jun	$ 6.81	$ 7.20	$ 6.81	$ 6.81	$ 6.81	$ 7.03	$ 7.09	$ 7.20	$ 7.11	$ 6.89
High Growth & Low Price	2021-2022	Jul	$ 6.85	$ 7.20	$ 6.85	$ 6.85	$ 6.85	$ 7.06	$ 7.12	$ 7.20	$ 7.13	$ 6.92
High Growth & Low Price	2021-2022	Aug	$ 6.86	$ 7.20	$ 6.86	$ 6.86	$ 6.86	$ 7.07	$ 7.13	$ 7.20	$ 7.13	$ 6.93
High Growth & Low Price	2021-2022	Sep	$ 6.94	$ 7.20	$ 6.94	$ 6.94	$ 6.94	$ 7.11	$ 7.17	$ 7.20	$ 7.16	$ 6.99
High Growth & Low Price	2021-2022	Oct	$ 7.01	$ 7.28	$ 7.28	$ 7.28	$ 7.28	$ 7.15	$ 7.21	$ 7.28	$ 7.22	$ 7.23
High Growth & Low Price	2022-2023	Nov	$ 7.86	$ 7.92	$ 7.86	$ 7.86	$ 7.86	$ 7.77	$ 7.83	$ 7.92	$ 7.84	$ 7.87
High Growth & Low Price	2022-2023	Dec	$ 8.43	$ 7.95	$ 7.89	$ 7.89	$ 7.89	$ 7.78	$ 7.82	$ 7.99	$ 7.86	$ 8.01
High Growth & Low Price	2022-2023	Jan	$ 7.81	$ 8.02	$ 7.81	$ 7.81	$ 7.81	$ 7.82	$ 7.85	$ 8.02	$ 7.89	$ 7.85
High Growth & Low Price	2022-2023	Feb	$ 7.83	$ 7.86	$ 7.83	$ 7.83	$ 7.83	$ 7.83	$ 7.88	$ 7.83	$ 7.85	$ 7.83
High Growth & Low Price	2022-2023	Mar	$ 7.71	$ 7.71	$ 7.71	$ 7.71	$ 7.71	$ 7.68	$ 7.73	$ 7.68	$ 7.70	$ 7.71
High Growth & Low Price	2022-2023	Apr	$ 6.84	$ 7.37	$ 6.84	$ 6.84	$ 6.84	$ 7.07	$ 7.13	$ 7.40	$ 7.20	$ 6.95
High Growth & Low Price	2022-2023	May	$ 6.87	$ 7.37	$ 6.87	$ 6.87	$ 6.87	$ 7.11	$ 7.17	$ 7.40	$ 7.23	$ 6.97
High Growth & Low Price	2022-2023	Jun	$ 6.90	$ 7.37	$ 6.90	$ 6.90	$ 6.90	$ 7.15	$ 7.21	$ 7.40	$ 7.25	$ 6.99
High Growth & Low Price	2022-2023	Jul	$ 6.96	$ 7.37	$ 6.96	$ 6.96	$ 6.96	$ 7.19	$ 7.25	$ 7.40	$ 7.28	$ 7.04
High Growth & Low Price	2022-2023	Aug	$ 6.95	$ 7.40	$ 6.95	$ 6.95	$ 6.95	$ 7.18	$ 7.24	$ 7.40	$ 7.27	$ 7.04
High Growth & Low Price	2022-2023	Sep	$ 7.08	$ 7.40	$ 7.08	$ 7.08	$ 7.08	$ 7.23	$ 7.29	$ 7.40	$ 7.31	$ 7.15
High Growth & Low Price	2022-2023	Oct	$ 7.15	$ 7.50	$ 7.50	$ 7.50	$ 7.50	$ 7.29	$ 7.35	$ 7.50	$ 7.38	$ 7.43
High Growth & Low Price	2023-2024	Nov	$ 8.05	$ 8.16	$ 8.05	$ 8.05	$ 8.05	$ 7.92	$ 7.98	$ 8.16	$ 8.02	$ 8.07
High Growth & Low Price	2023-2024	Dec	$ 8.64	$ 8.19	$ 8.09	$ 8.09	$ 8.09	$ 7.96	$ 8.00	$ 8.25	$ 8.07	$ 8.22
High Growth & Low Price	2023-2024	Jan	$ 8.12	$ 8.29	$ 8.12	$ 8.12	$ 8.12	$ 8.09	$ 8.12	$ 8.29	$ 8.17	$ 8.16
High Growth & Low Price	2023-2024	Feb	$ 8.09	$ 8.13	$ 8.09	$ 8.09	$ 8.09	$ 8.07	$ 8.10	$ 8.08	$ 8.09	$ 8.10
High Growth & Low Price	2023-2024	Mar	$ 7.92	$ 7.92	$ 7.92	$ 7.92	$ 7.92	$ 7.88	$ 7.94	$ 7.88	$ 7.90	$ 7.92
High Growth & Low Price	2023-2024	Apr	$ 7.03	$ 7.60	$ 7.03	$ 7.03	$ 7.03	$ 7.27	$ 7.33	$ 7.61	$ 7.40	$ 7.15
High Growth & Low Price	2023-2024	May	$ 7.06	$ 7.60	$ 7.06	$ 7.06	$ 7.06	$ 7.31	$ 7.36	$ 7.61	$ 7.43	$ 7.17
High Growth & Low Price	2023-2024	Jun	$ 7.12	$ 7.60	$ 7.12	$ 7.12	$ 7.12	$ 7.36	$ 7.41	$ 7.61	$ 7.46	$ 7.22
High Growth & Low Price	2023-2024	Jul	$ 7.14	$ 7.60	$ 7.14	$ 7.14	$ 7.14	$ 7.38	$ 7.43	$ 7.61	$ 7.47	$ 7.23
High Growth & Low Price	2023-2024	Aug	$ 7.15	$ 7.61	$ 7.15	$ 7.15	$ 7.15	$ 7.39	$ 7.44	$ 7.61	$ 7.48	$ 7.24
High Growth & Low Price	2023-2024	Sep	$ 7.27	$ 7.61	$ 7.27	$ 7.27	$ 7.27	$ 7.45	$ 7.50	$ 7.61	$ 7.52	$ 7.34
High Growth & Low Price	2023-2024	Oct	$ 7.39	$ 7.73	$ 7.73	$ 7.73	$ 7.73	$ 7.51	$ 7.56	$ 7.73	$ 7.60	$ 7.66
High Growth & Low Price	2024-2025	Nov	$ 8.30	$ 8.34	$ 8.30	$ 8.30	$ 8.30	$ 8.11	$ 8.17	$ 8.35	$ 8.21	$ 8.31
High Growth & Low Price	2024-2025	Dec	$ 8.92	$ 8.40	$ 8.36	$ 8.36	$ 8.36	$ 8.19	$ 8.22	$ 8.46	$ 8.29	$ 8.48
High Growth & Low Price	2024-2025	Jan	$ 8.32	$ 8.49	$ 8.32	$ 8.32	$ 8.32	$ 8.27	$ 8.30	$ 8.49	$ 8.35	$ 8.35
High Growth & Low Price	2024-2025	Feb	$ 8.30	$ 8.33	$ 8.30	$ 8.30	$ 8.30	$ 8.28	$ 8.31	$ 8.29	$ 8.29	$ 8.30
High Growth & Low Price	2024-2025	Mar	$ 8.05	$ 8.05	$ 8.05	$ 8.05	$ 8.05	$ 8.02	$ 8.08	$ 8.02	$ 8.04	$ 8.05
High Growth & Low Price	2024-2025	Apr	$ 7.17	$ 7.76	$ 7.17	$ 7.17	$ 7.17	$ 7.45	$ 7.50	$ 7.79	$ 7.58	$ 7.29
High Growth & Low Price	2024-2025	May	$ 7.21	$ 7.76	$ 7.21	$ 7.21	$ 7.21	$ 7.48	$ 7.53	$ 7.79	$ 7.60	$ 7.32
High Growth & Low Price	2024-2025	Jun	$ 7.26	$ 7.76	$ 7.26	$ 7.26	$ 7.26	$ 7.52	$ 7.57	$ 7.79	$ 7.63	$ 7.36

Appendix 6.4 - Monthly Avoided Cost Detail 1/

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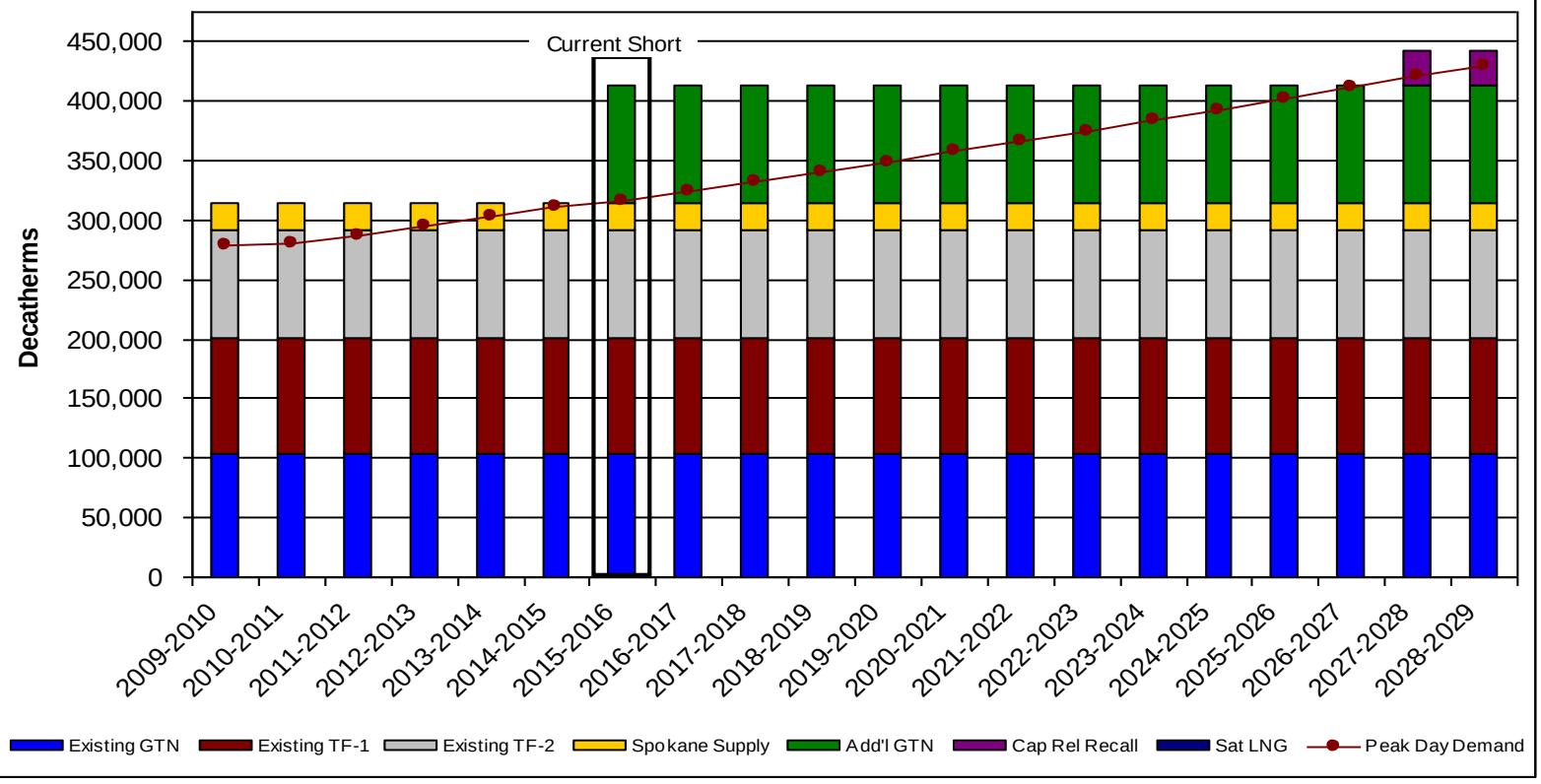
Scenario	Gas Year	Month	Klam Falls	La Grande	Medford GTN	Medford NWP	Roseburg	Wa/Id Both	Wa/Id GTN	Wa/Id NWP	WA/ID Annual	OR Annual
High Growth & Low Price	2024-2025	Jul	$ 7.27	$ 7.76	$ 7.27	$ 7.27	$ 7.27	$ 7.55	$ 7.60	$ 7.79	$ 7.65	$ 7.37
High Growth & Low Price	2024-2025	Aug	$ 7.32	$ 7.79	$ 7.32	$ 7.32	$ 7.32	$ 7.56	$ 7.61	$ 7.79	$ 7.65	$ 7.41
High Growth & Low Price	2024-2025	Sep	$ 7.42	$ 7.83	$ 7.42	$ 7.42	$ 7.42	$ 7.60	$ 7.65	$ 7.83	$ 7.69	$ 7.50
High Growth & Low Price	2024-2025	Oct	$ 7.52	$ 7.91	$ 7.91	$ 7.91	$ 7.91	$ 7.66	$ 7.71	$ 7.91	$ 7.76	$ 7.83
High Growth & Low Price	2025-2026	Nov	$ 8.53	$ 8.57	$ 8.53	$ 8.53	$ 8.53	$ 8.32	$ 8.38	$ 8.58	$ 8.43	$ 8.54
High Growth & Low Price	2025-2026	Dec	$ 9.02	$ 8.53	$ 8.45	$ 8.45	$ 8.45	$ 8.30	$ 8.33	$ 8.63	$ 8.42	$ 8.58
High Growth & Low Price	2025-2026	Jan	$ 8.50	$ 8.66	$ 8.50	$ 8.50	$ 8.50	$ 8.43	$ 8.46	$ 8.68	$ 8.53	$ 8.53
High Growth & Low Price	2025-2026	Feb	$ 8.47	$ 8.51	$ 8.47	$ 8.47	$ 8.47	$ 8.44	$ 8.47	$ 8.46	$ 8.46	$ 8.48
High Growth & Low Price	2025-2026	Mar	$ 8.30	$ 8.30	$ 8.30	$ 8.30	$ 8.30	$ 8.23	$ 8.29	$ 8.23	$ 8.25	$ 8.30
High Growth & Low Price	2025-2026	Apr	$ 7.35	$ 7.94	$ 7.35	$ 7.35	$ 7.35	$ 7.63	$ 7.68	$ 7.94	$ 7.75	$ 7.46
High Growth & Low Price	2025-2026	May	$ 7.37	$ 7.94	$ 7.37	$ 7.37	$ 7.37	$ 7.66	$ 7.71	$ 7.94	$ 7.77	$ 7.49
High Growth & Low Price	2025-2026	Jun	$ 7.42	$ 7.94	$ 7.42	$ 7.42	$ 7.42	$ 7.70	$ 7.75	$ 7.94	$ 7.80	$ 7.52
High Growth & Low Price	2025-2026	Jul	$ 7.43	$ 7.94	$ 7.43	$ 7.43	$ 7.43	$ 7.72	$ 7.77	$ 7.94	$ 7.81	$ 7.53
High Growth & Low Price	2025-2026	Aug	$ 7.44	$ 7.94	$ 7.44	$ 7.44	$ 7.44	$ 7.72	$ 7.77	$ 7.94	$ 7.81	$ 7.54
High Growth & Low Price	2025-2026	Sep	$ 7.56	$ 7.97	$ 7.56	$ 7.56	$ 7.56	$ 7.77	$ 7.83	$ 7.97	$ 7.85	$ 7.64
High Growth & Low Price	2025-2026	Oct	$ 7.68	$ 8.01	$ 8.01	$ 8.01	$ 8.01	$ 7.83	$ 7.89	$ 8.01	$ 7.91	$ 7.94
High Growth & Low Price	2026-2027	Nov	$ 8.59	$ 8.66	$ 8.59	$ 8.59	$ 8.59	$ 8.40	$ 8.46	$ 8.68	$ 8.51	$ 8.60
High Growth & Low Price	2026-2027	Dec	$ 9.17	$ 8.72	$ 8.59	$ 8.59	$ 8.59	$ 8.46	$ 8.49	$ 8.79	$ 8.58	$ 8.73
High Growth & Low Price	2026-2027	Jan	$ 8.65	$ 8.82	$ 8.65	$ 8.65	$ 8.65	$ 8.60	$ 8.62	$ 8.83	$ 8.68	$ 8.68
High Growth & Low Price	2026-2027	Feb	$ 8.69	$ 8.73	$ 8.69	$ 8.69	$ 8.69	$ 8.67	$ 8.70	$ 8.69	$ 8.68	$ 8.70
High Growth & Low Price	2026-2027	Mar	$ 8.56	$ 8.56	$ 8.56	$ 8.56	$ 8.56	$ 8.45	$ 8.51	$ 8.45	$ 8.47	$ 8.56
High Growth & Low Price	2026-2027	Apr	$ 7.60	$ 8.17	$ 7.60	$ 7.60	$ 7.60	$ 7.86	$ 7.92	$ 8.21	$ 8.00	$ 7.71
High Growth & Low Price	2026-2027	May	$ 7.61	$ 8.17	$ 7.61	$ 7.61	$ 7.61	$ 7.88	$ 7.94	$ 8.21	$ 8.01	$ 7.72
High Growth & Low Price	2026-2027	Jun	$ 7.64	$ 8.17	$ 7.64	$ 7.64	$ 7.64	$ 7.91	$ 7.97	$ 8.21	$ 8.03	$ 7.75
High Growth & Low Price	2026-2027	Jul	$ 7.64	$ 8.17	$ 7.64	$ 7.64	$ 7.64	$ 7.92	$ 7.98	$ 8.21	$ 8.04	$ 7.75
High Growth & Low Price	2026-2027	Aug	$ 7.69	$ 8.21	$ 7.69	$ 7.69	$ 7.69	$ 7.96	$ 8.02	$ 8.21	$ 8.06	$ 7.79
High Growth & Low Price	2026-2027	Sep	$ 7.75	$ 8.24	$ 7.75	$ 7.75	$ 7.75	$ 7.96	$ 8.02	$ 8.24	$ 8.07	$ 7.85
High Growth & Low Price	2026-2027	Oct	$ 7.85	$ 8.30	$ 8.30	$ 8.30	$ 8.30	$ 8.01	$ 8.07	$ 8.30	$ 8.13	$ 8.21
High Growth & Low Price	2027-2028	Nov	$ 8.78	$ 8.85	$ 8.78	$ 8.78	$ 8.78	$ 8.59	$ 8.66	$ 8.87	$ 8.71	$ 8.80
High Growth & Low Price	2027-2028	Dec	$ 9.37	$ 8.92	$ 8.80	$ 8.80	$ 8.80	$ 8.65	$ 8.68	$ 9.00	$ 8.78	$ 8.94
High Growth & Low Price	2027-2028	Jan	$ 8.84	$ 9.02	$ 8.84	$ 8.84	$ 8.84	$ 8.79	$ 8.82	$ 9.02	$ 8.88	$ 8.88
High Growth & Low Price	2027-2028	Feb	$ 8.89	$ 8.92	$ 8.89	$ 8.89	$ 8.89	$ 8.86	$ 8.89	$ 8.88	$ 8.88	$ 8.89
High Growth & Low Price	2027-2028	Mar	$ 8.76	$ 8.76	$ 8.76	$ 8.76	$ 8.76	$ 8.64	$ 8.71	$ 8.64	$ 8.66	$ 8.76
High Growth & Low Price	2027-2028	Apr	$ 7.79	$ 8.36	$ 7.79	$ 7.79	$ 7.79	$ 8.05	$ 8.11	$ 8.41	$ 8.19	$ 7.91
High Growth & Low Price	2027-2028	May	$ 7.79	$ 8.36	$ 7.79	$ 7.79	$ 7.79	$ 8.06	$ 8.12	$ 8.41	$ 8.19	$ 7.91
High Growth & Low Price	2027-2028	Jun	$ 7.83	$ 8.36	$ 7.83	$ 7.83	$ 7.83	$ 8.10	$ 8.16	$ 8.41	$ 8.22	$ 7.94
High Growth & Low Price	2027-2028	Jul	$ 7.83	$ 8.36	$ 7.83	$ 7.83	$ 7.83	$ 8.11	$ 8.17	$ 8.41	$ 8.23	$ 7.94
High Growth & Low Price	2027-2028	Aug	$ 7.88	$ 8.40	$ 7.88	$ 7.88	$ 7.88	$ 8.15	$ 8.21	$ 8.41	$ 8.26	$ 7.99
High Growth & Low Price	2027-2028	Sep	$ 7.94	$ 8.44	$ 7.94	$ 7.94	$ 7.94	$ 8.15	$ 8.21	$ 8.44	$ 8.27	$ 8.04
High Growth & Low Price	2027-2028	Oct	$ 8.04	$ 8.50	$ 8.50	$ 8.50	$ 8.50	$ 8.20	$ 8.26	$ 8.50	$ 8.32	$ 8.41
High Growth & Low Price	2028-2029	Nov	$ 8.98	$ 9.05	$ 8.98	$ 8.98	$ 8.98	$ 8.78	$ 8.85	$ 9.07	$ 8.90	$ 8.99
High Growth & Low Price	2028-2029	Dec	$ 9.58	$ 9.13	$ 9.01	$ 9.01	$ 9.01	$ 8.86	$ 8.88	$ 9.39	$ 9.05	$ 9.15
High Growth & Low Price	2028-2029	Jan	$ 9.05	$ 9.22	$ 9.05	$ 9.05	$ 9.05	$ 8.99	$ 9.02	$ 9.35	$ 9.12	$ 9.08
High Growth & Low Price	2028-2029	Feb	$ 9.09	$ 9.13	$ 9.09	$ 9.09	$ 9.09	$ 9.07	$ 9.10	$ 9.09	$ 9.09	$ 9.10
High Growth & Low Price	2028-2029	Mar	$ 8.96	$ 8.96	$ 8.96	$ 8.96	$ 8.96	$ 8.83	$ 8.90	$ 8.83	$ 8.86	$ 8.96
High Growth & Low Price	2028-2029	Apr	$ 7.99	$ 8.53	$ 7.99	$ 7.99	$ 7.99	$ 8.24	$ 8.30	$ 8.53	$ 8.36	$ 8.10
High Growth & Low Price	2028-2029	May	$ 8.01	$ 8.53	$ 8.01	$ 8.01	$ 8.01	$ 8.26	$ 8.32	$ 8.53	$ 8.37	$ 8.12
High Growth & Low Price	2028-2029	Jun	$ 8.03	$ 8.56	$ 8.03	$ 8.03	$ 8.03	$ 8.29	$ 8.35	$ 8.56	$ 8.40	$ 8.14
High Growth & Low Price	2028-2029	Jul	$ 8.02	$ 8.53	$ 8.02	$ 8.02	$ 8.02	$ 8.30	$ 8.36	$ 8.53	$ 8.40	$ 8.12
High Growth & Low Price	2028-2029	Aug	$ 8.07	$ 8.53	$ 8.07	$ 8.07	$ 8.07	$ 8.34	$ 8.40	$ 8.53	$ 8.42	$ 8.16
High Growth & Low Price	2028-2029	Sep	$ 8.14	$ 8.63	$ 8.14	$ 8.14	$ 8.14	$ 8.35	$ 8.41	$ 8.63	$ 8.46	$ 8.24
High Growth & Low Price	2028-2029	Oct	$ 8.25	$ 8.69	$ 8.69	$ 8.69	$ 8.69	$ 8.39	$ 8.45	$ 8.69	$ 8.51	$ 8.60

1/ Avoided costs shown before Environmental Externalities adder.

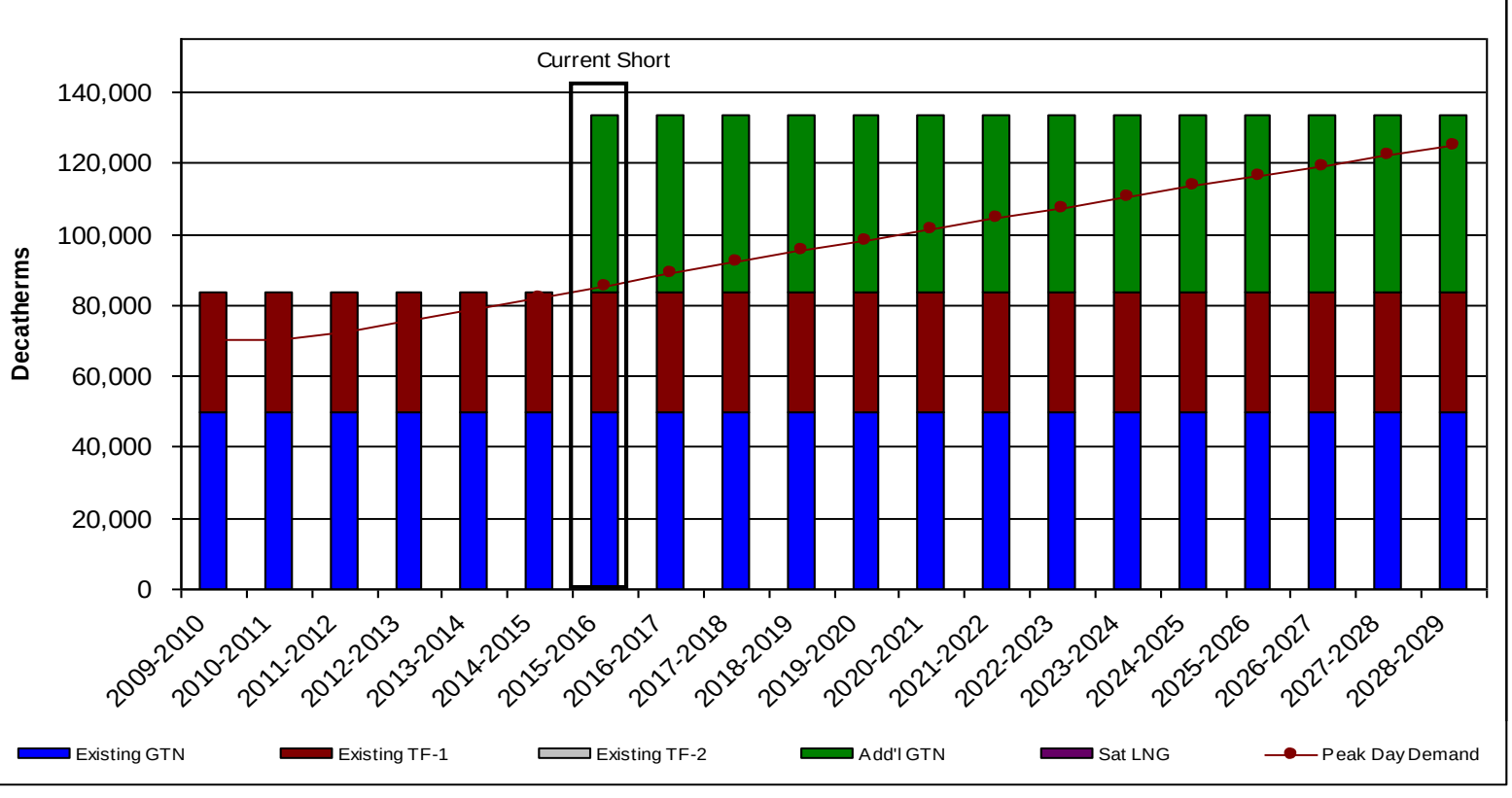
APPENDIX 6.5

DEMAND AND EXPECTED RESOURCE GRAPHS

Appendix 6.5 - WA/ID Selected Resources vs. Peak Day Demand
(Net of DSM Savings) High Growth & Low Price Case - November to October

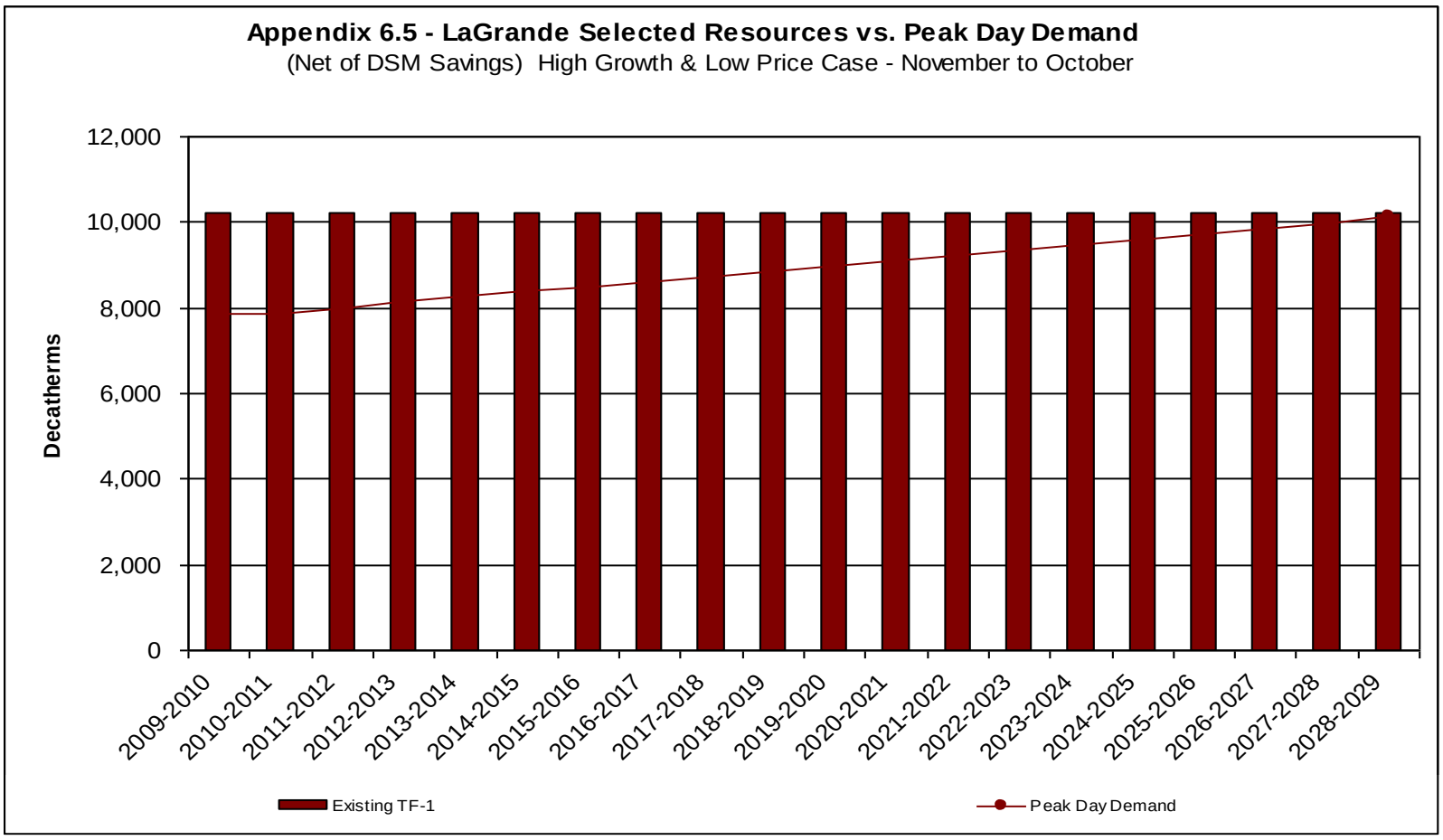


Appendix 6.5 - Medford/Roseburg Selected Resources vs. Peak Day Demand
(Net of DSM Savings) High Growth & Low Price Case - November to October



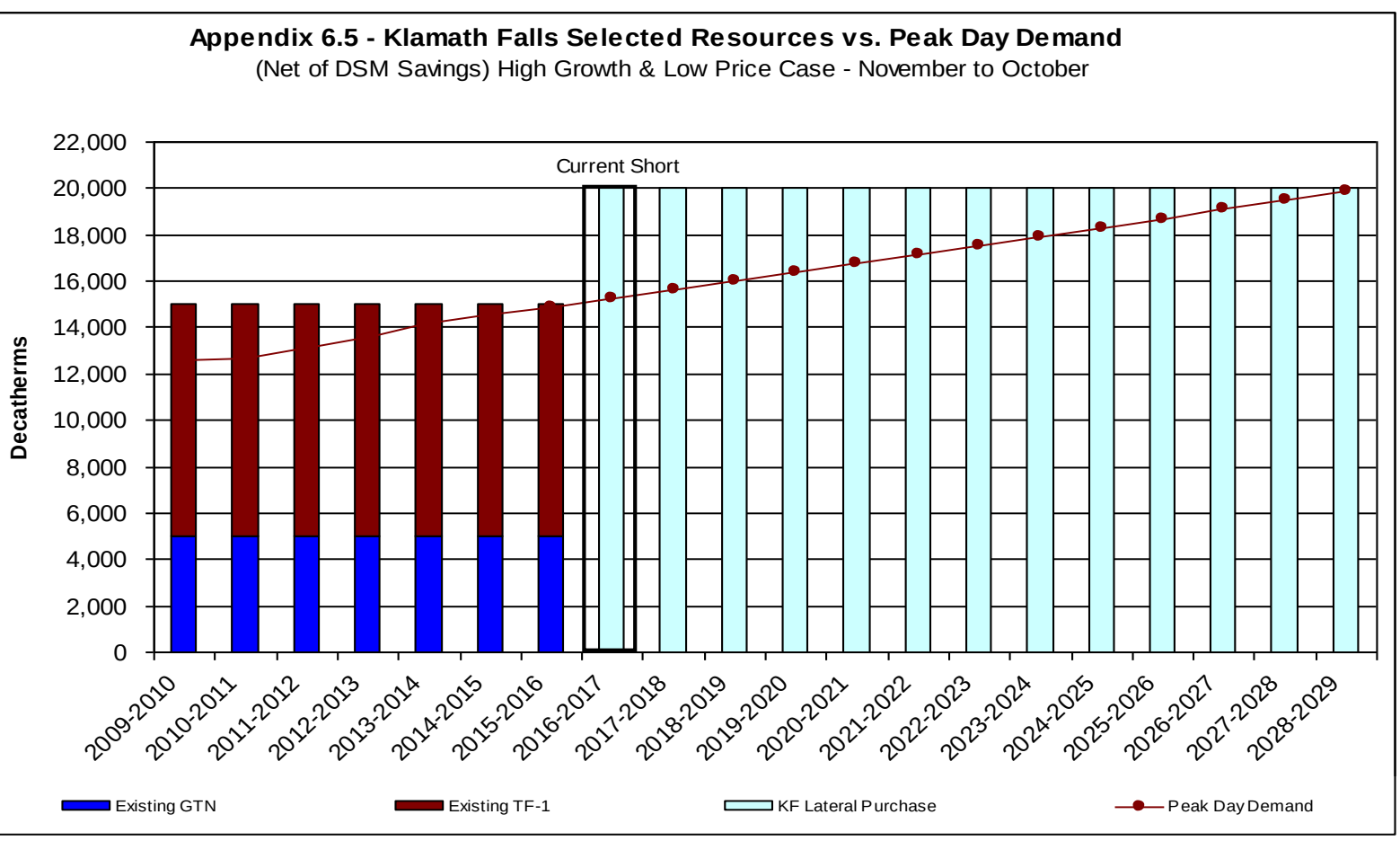
Appendix 6.5 - LaGrande Selected Resources vs. Peak Day Demand

(Net of DSM Savings) High Growth & Low Price Case - November to October

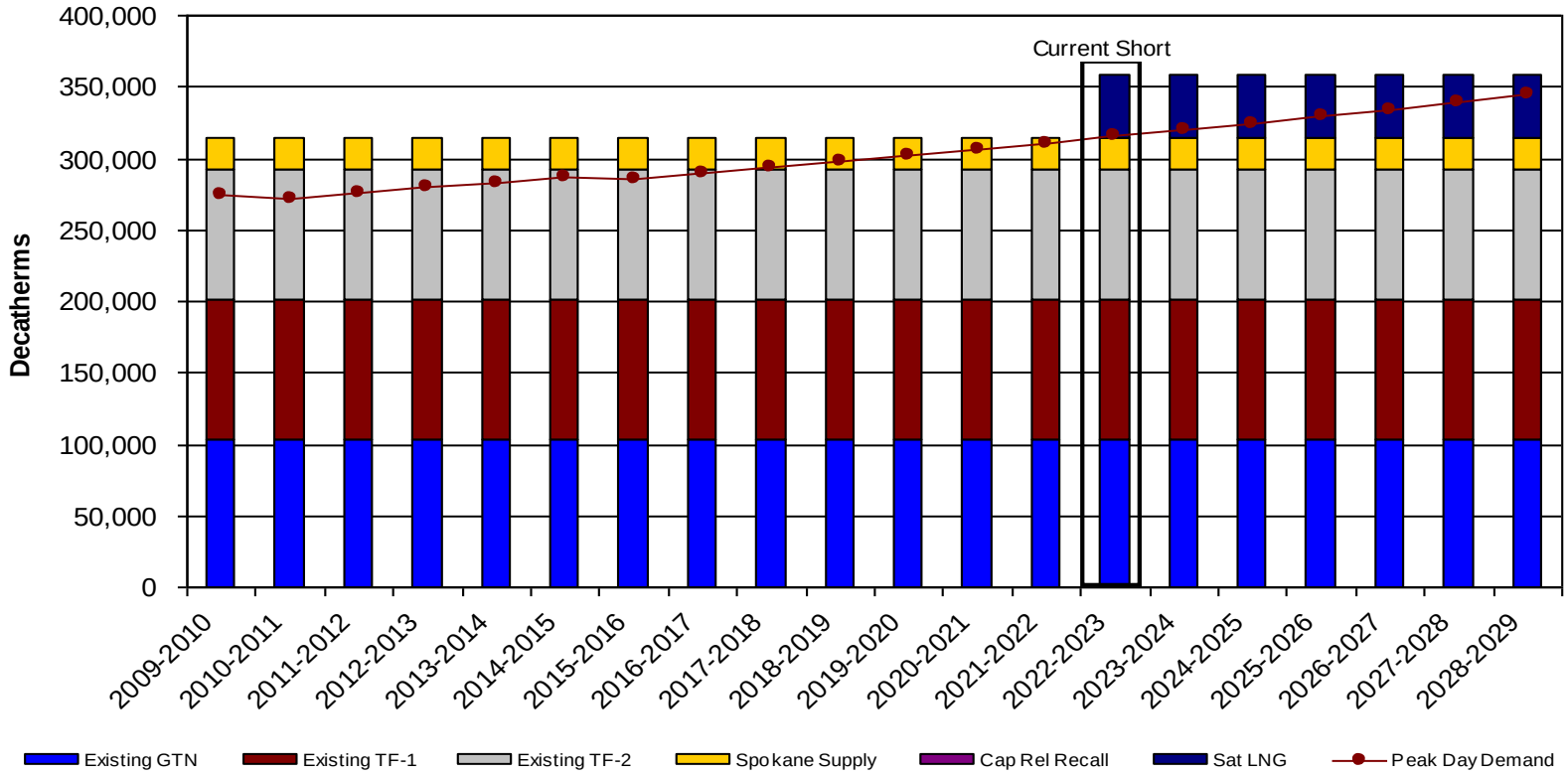


Appendix 6.5 - Klamath Falls Selected Resources vs. Peak Day Demand

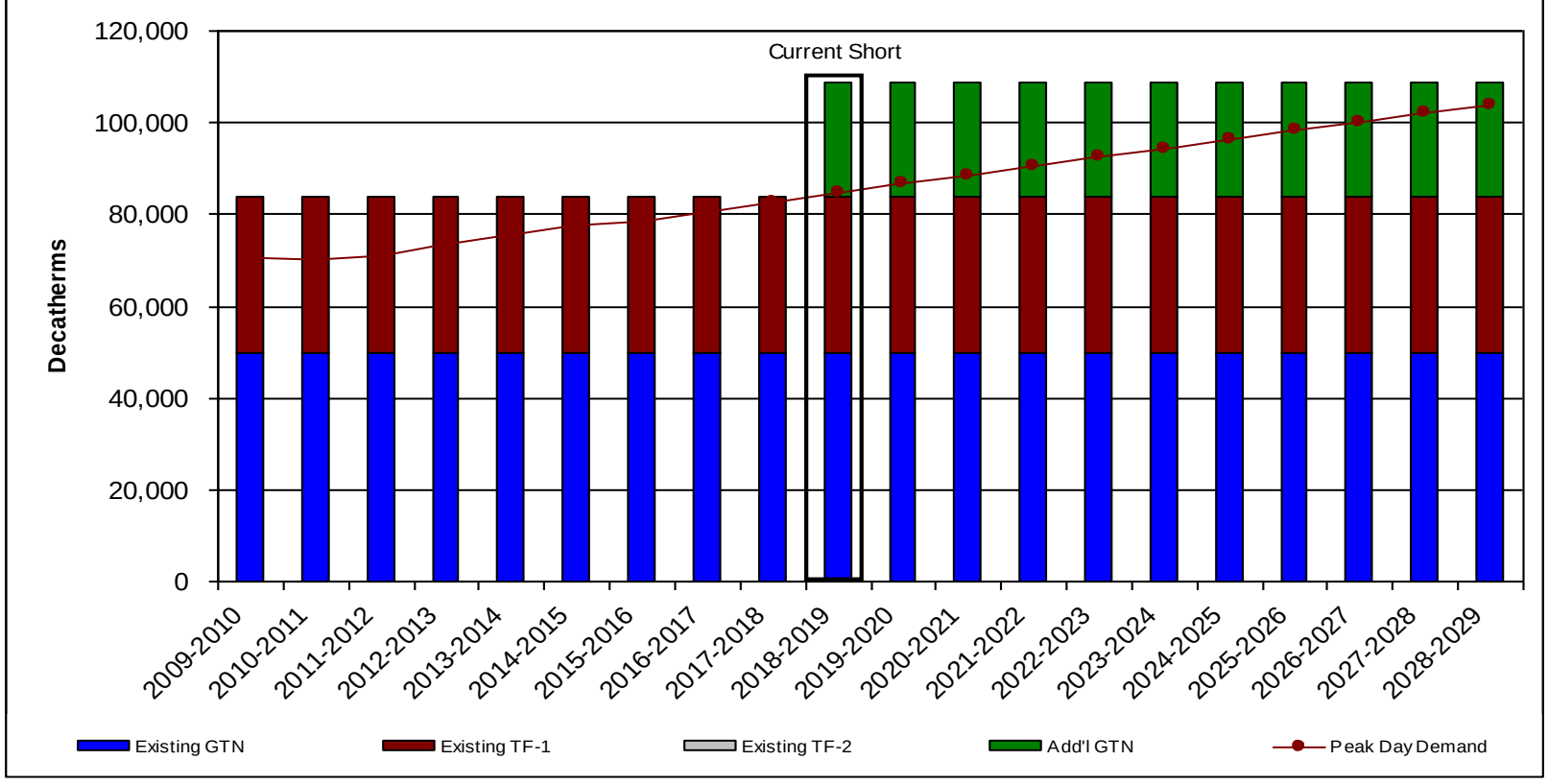
(Net of DSM Savings) High Growth & Low Price Case - November to October



Appendix 6.5 - WA/ID Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Rate Double - November to October

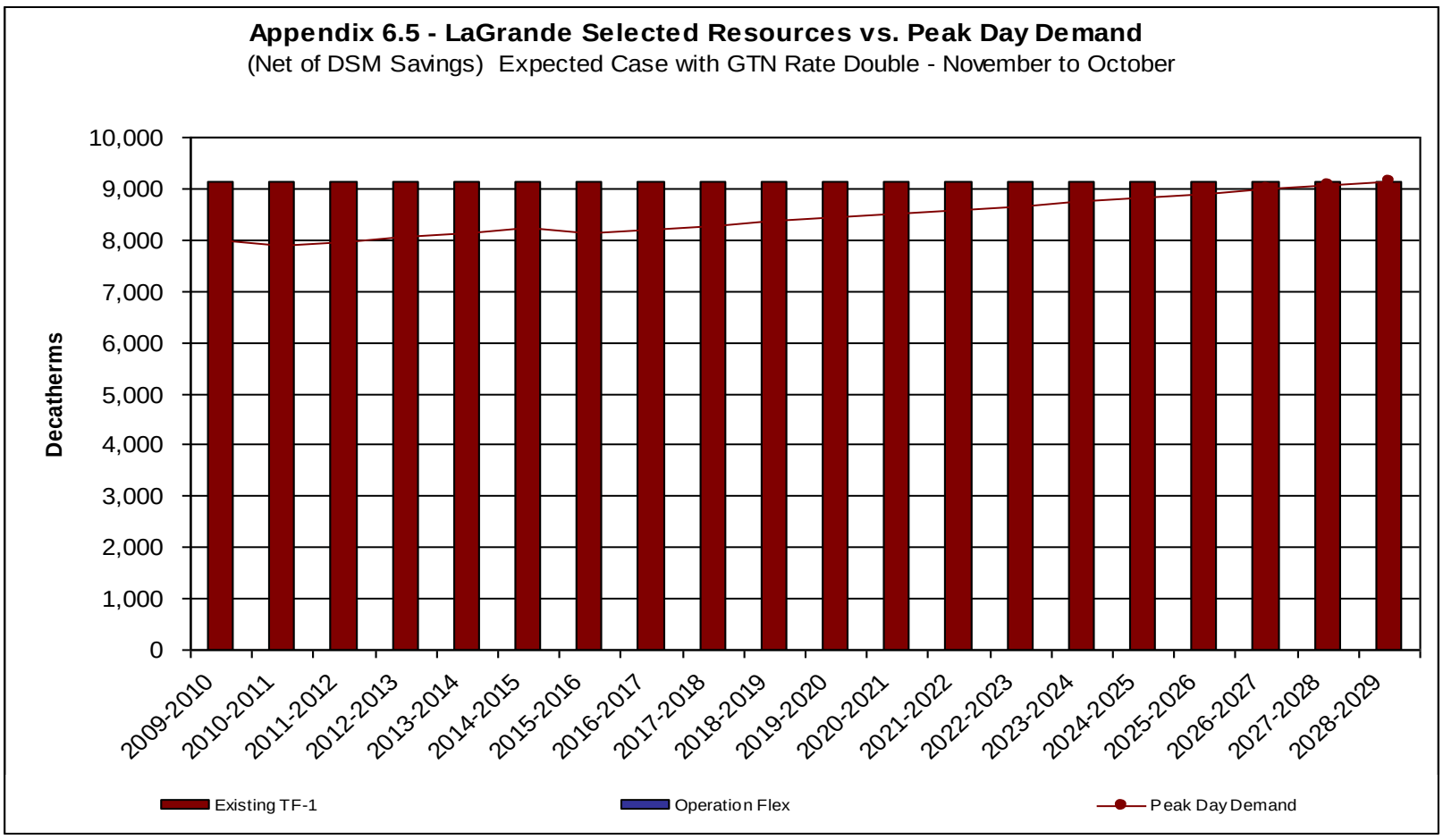


Appendix 6.5 - Medford/Roseburg Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Rate Double - November to October



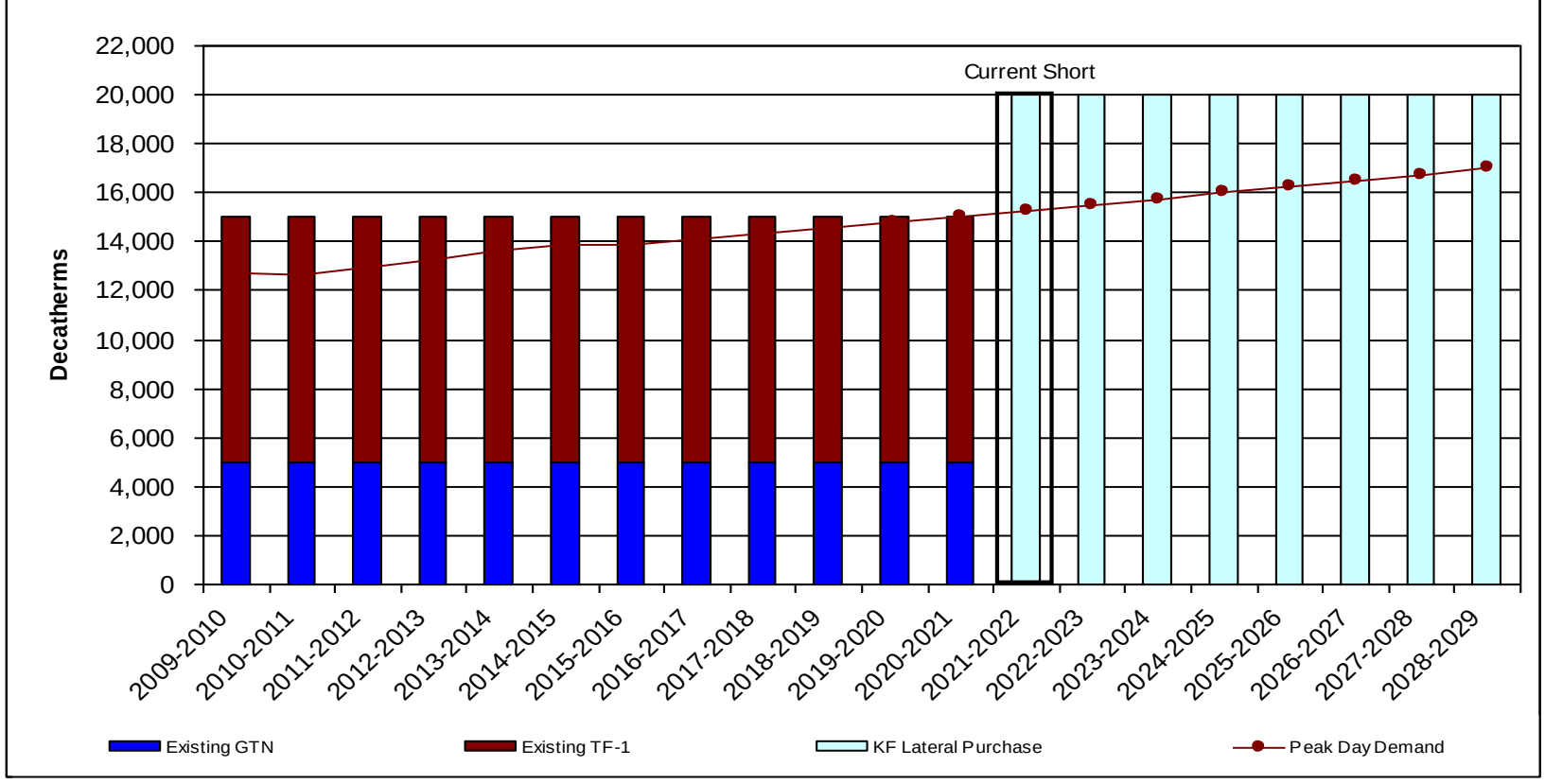
Appendix 6.5 - LaGrande Selected Resources vs. Peak Day Demand

(Net of DSM Savings) Expected Case with GTN Rate Double - November to October

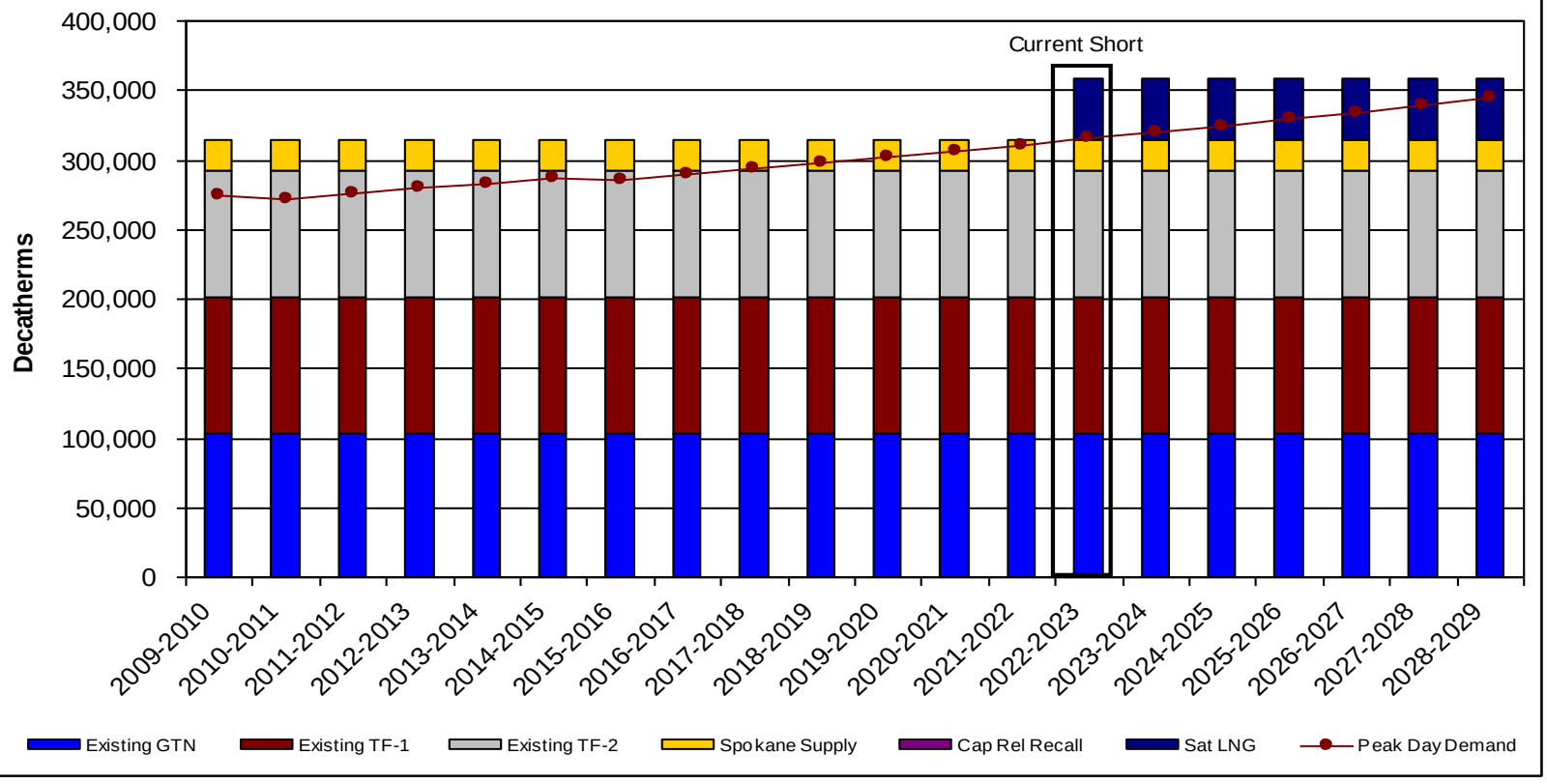


Appendix 6.5 - Klamath Falls Selected Resources vs. Peak Day Demand

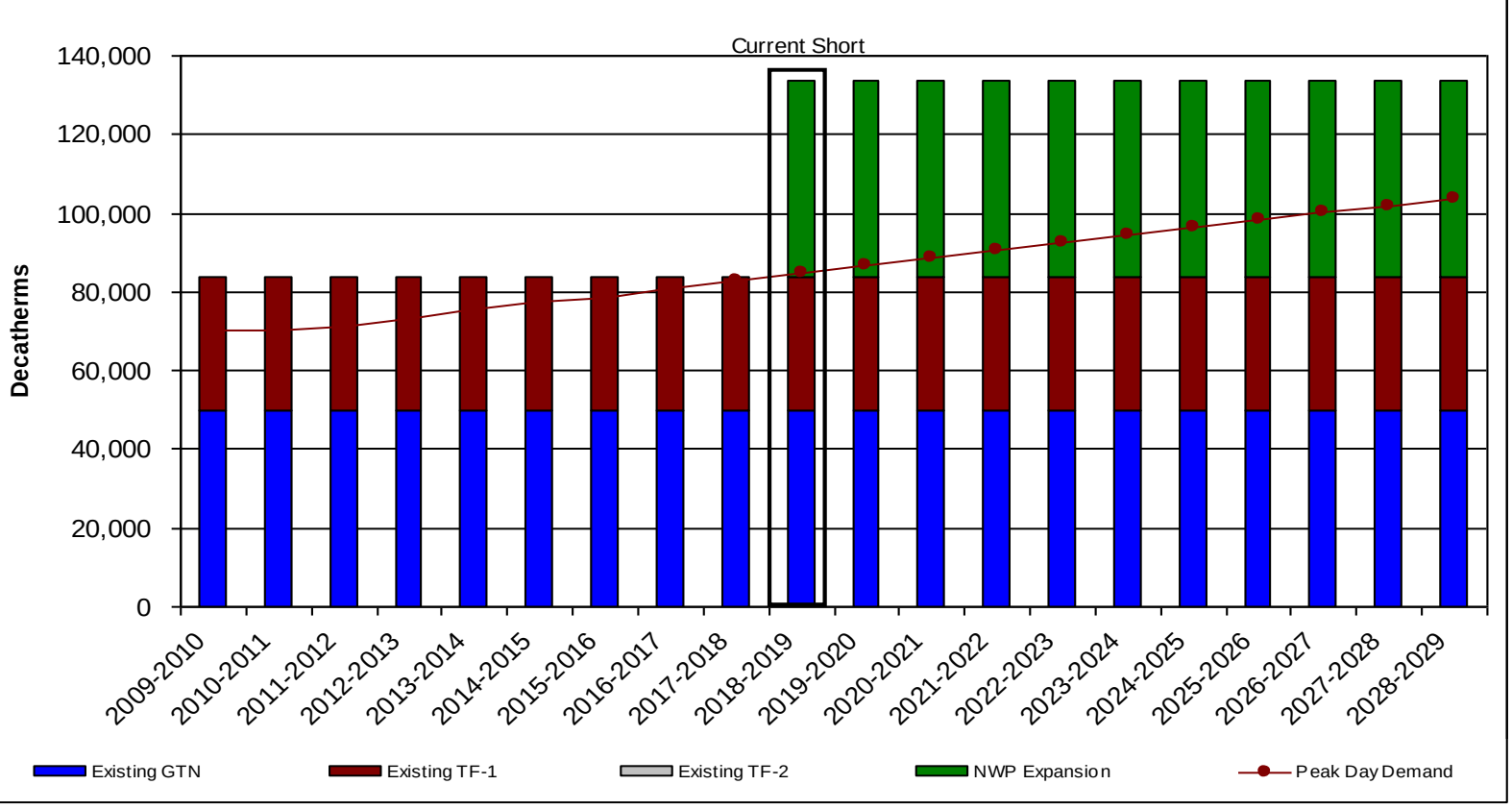
(Net of DSM Savings) Expected Case with GTN Rate Double - November to October



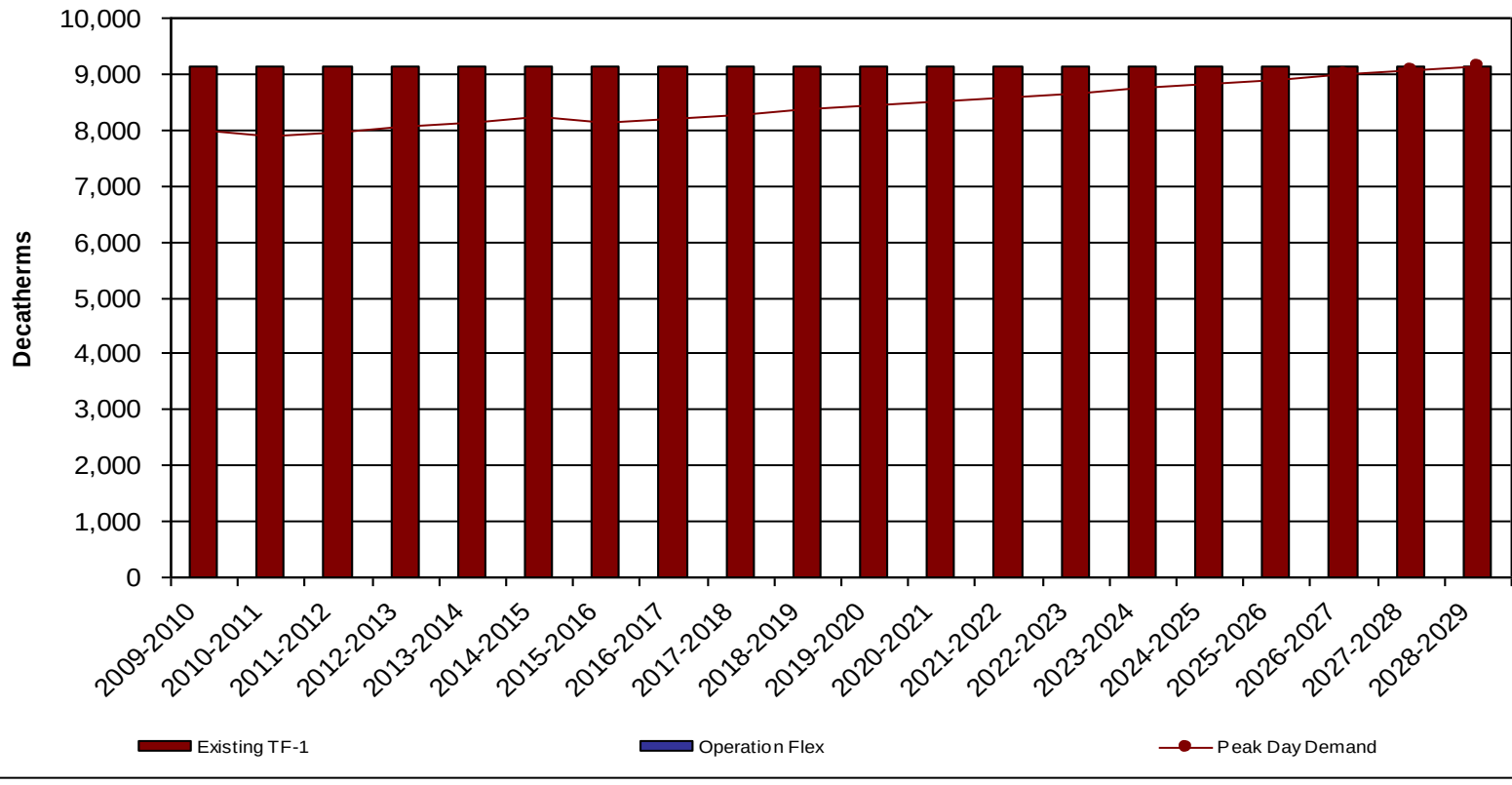
Appendix 6.5 - WA/ID Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Unavailable - November to October



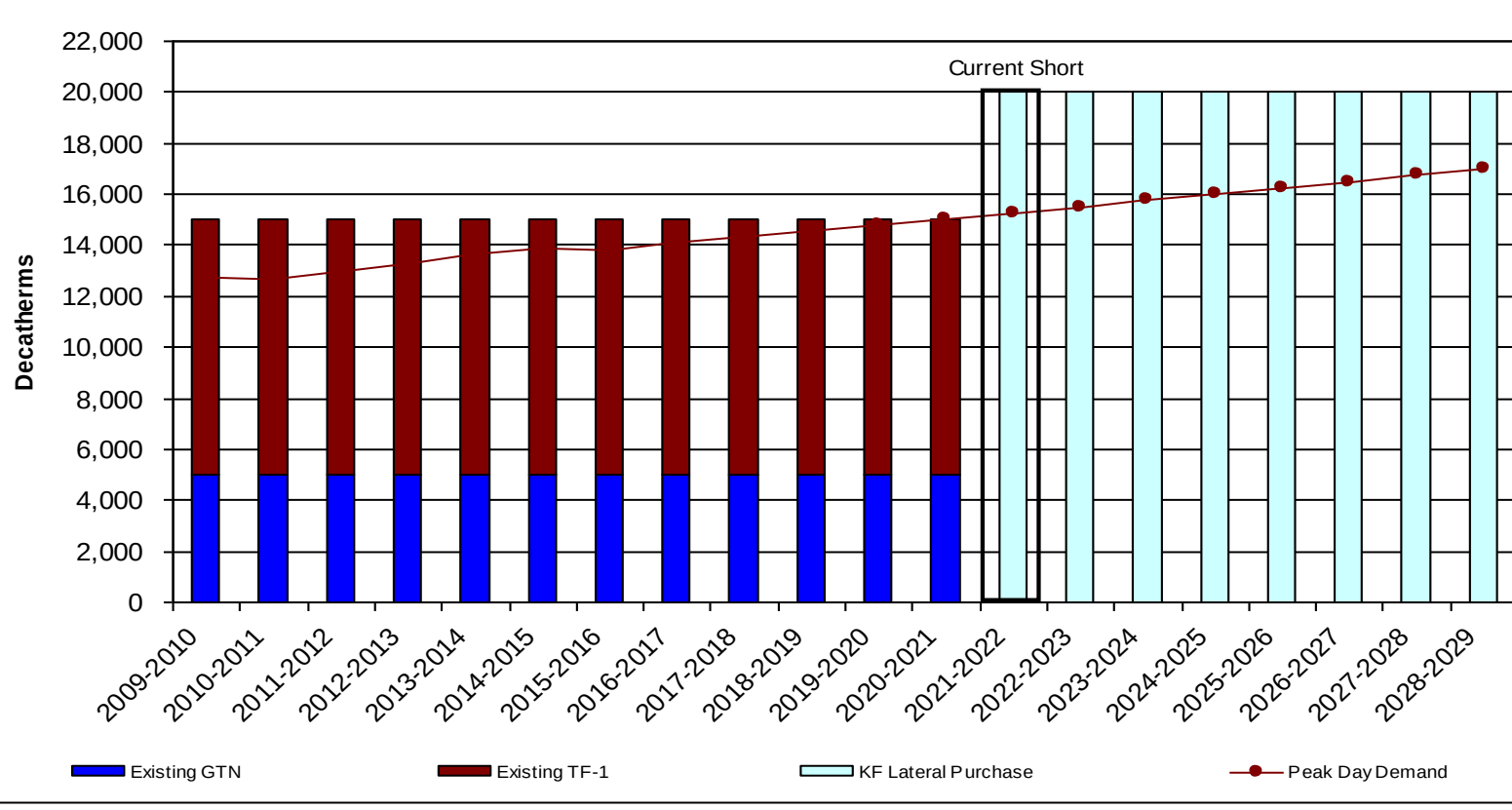
Appendix 6.5 - Medford/Roseburg Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Unavailable - November to October



Appendix 6.5 - LaGrande Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Rate Double - November to October



Appendix 6.5 - Klamath Falls Selected Resources vs. Peak Day Demand
(Net of DSM Savings) Expected Case with GTN Unavailable - November to October



APPENDIX 6.6

PEAK DAY DEMAND SERVED AND UNSERVED TABLES

Appendix 6.6 - Peak Day Demand - Served and Unserved (MDth/d)

Before Resource Additions & Net of DSM Savings

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
High	2009-2010	7.88	-	7.88	279.38		279.38
High	2010-2011	7.84	-	7.84	279.90		279.90
High	2011-2012	7.99	-	7.99	287.30		287.30
High	2012-2013	8.13	-	8.13	294.96		294.96
High	2013-2014	8.26	-	8.26	302.75		302.75
High	2014-2015	8.38	-	8.38	310.54		310.54
High	2015-2016	8.48	-	8.48	314.67	2.17	316.84
High	2016-2017	8.60	-	8.60	314.54	10.01	324.56
High	2017-2018	8.73	-	8.73	314.42	18.13	332.55
High	2018-2019	8.85	-	8.85	314.30	26.26	340.56
High	2019-2020	8.97	-	8.97	314.17	34.79	348.96
High	2020-2021	9.09	-	9.09	314.05	43.54	357.58
High	2021-2022	9.14	0.08	9.22	314.04	52.27	366.31
High	2022-2023	9.14	0.21	9.35	314.04	61.13	375.17
High	2023-2024	9.14	0.33	9.47	314.04	69.98	384.02
High	2024-2025	9.14	0.46	9.60	314.04	79.04	393.08
High	2025-2026	9.14	0.59	9.73	314.04	88.09	402.13
High	2026-2027	9.14	0.72	9.86	314.04	97.03	411.07
High	2027-2028	9.14	0.85	9.99	314.04	106.68	420.72
High	2028-2029	9.14	0.99	10.13	314.04	116.04	430.08

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/ Roseburg Served	Medford/ Roseburg Unserved	Medford/ Roseburg Total
High	2009-2010	12.58	-	12.58	70.11	-	70.11
High	2010-2011	12.67	-	12.67	70.34	-	70.34
High	2011-2012	13.10	-	13.10	72.20	-	72.20
High	2012-2013	13.61	-	13.61	75.56	-	75.56
High	2013-2014	14.16	-	14.16	78.80	-	78.80
High	2014-2015	14.54	-	14.54	82.16	-	82.16
High	2015-2016	14.85	-	14.85	84.09	1.32	85.40
High	2016-2017	15.03	0.20	15.23	84.09	4.76	88.84
High	2017-2018	15.03	0.58	15.61	84.09	8.06	92.14
High	2018-2019	15.03	0.96	15.99	84.08	11.19	95.27
High	2019-2020	15.03	1.34	16.37	84.09	14.18	98.26
High	2020-2021	15.03	1.72	16.75	84.08	17.22	101.30
High	2021-2022	15.03	2.10	17.13	69.30	35.02	104.32
High	2022-2023	15.03	2.48	17.51	69.30	38.05	107.35
High	2023-2024	15.03	2.88	17.91	69.30	41.11	110.41
High	2024-2025	15.03	3.27	18.30	69.30	44.20	113.50
High	2025-2026	15.03	3.66	18.69	69.30	47.13	116.43
High	2026-2027	15.03	4.05	19.08	69.30	49.96	119.25
High	2027-2028	15.03	4.44	19.47	69.30	52.77	122.07
High	2028-2029	15.03	4.84	19.87	69.30	55.59	124.89

Appendix 6.6 - Peak Day Demand - Served and Unserved (MDth/d)

Before Resource Additions & Net of DSM Savings

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
Low	2009-2010	7.86	-	7.86	274.71	-	274.71
Low	2010-2011	7.87	-	7.87	274.09	-	274.09
Low	2011-2012	7.57	-	7.57	262.54	-	262.54
Low	2012-2013	7.24	-	7.24	249.61	-	249.61
Low	2013-2014	7.23	-	7.23	248.40	-	248.40
Low	2014-2015	7.25	-	7.25	248.48	-	248.48
Low	2015-2016	7.20	-	7.20	245.56	-	245.56
Low	2016-2017	7.21	-	7.21	244.96	-	244.96
Low	2017-2018	7.23	-	7.23	244.81	-	244.81
Low	2018-2019	7.23	-	7.23	244.16	-	244.16
Low	2019-2020	7.25	-	7.25	244.15	-	244.15
Low	2020-2021	7.26	-	7.26	244.22	-	244.22
Low	2021-2022	7.28	-	7.28	244.38	-	244.38
Low	2022-2023	7.30	-	7.30	244.68	-	244.68
Low	2023-2024	7.32	-	7.32	244.86	-	244.86
Low	2024-2025	7.35	-	7.35	245.06	-	245.06
Low	2025-2026	7.37	-	7.37	245.29	-	245.29
Low	2026-2027	7.39	-	7.39	245.23	-	245.23
Low	2027-2028	7.40	-	7.40	245.85	-	245.85
Low	2028-2029	7.42	-	7.42	246.38	-	246.38

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/ Roseburg Served	Medford/ Roseburg Unserved	Medford/ Roseburg Total
Low	2009-2010	12.58	-	12.58	70.10	-	70.10
Low	2010-2011	12.64	-	12.64	70.38	-	70.38
Low	2011-2012	12.22	-	12.22	67.93	-	67.93
Low	2012-2013	11.78	-	11.78	65.62	-	65.62
Low	2013-2014	11.70	-	11.70	65.29	-	65.29
Low	2014-2015	11.78	-	11.78	66.17	-	66.17
Low	2015-2016	11.73	-	11.73	66.53	-	66.53
Low	2016-2017	11.78	-	11.78	67.31	-	67.31
Low	2017-2018	11.85	-	11.85	68.13	-	68.13
Low	2018-2019	11.90	-	11.90	68.79	-	68.79
Low	2019-2020	11.97	-	11.97	69.51	-	69.51
Low	2020-2021	12.05	-	12.05	70.24	-	70.24
Low	2021-2022	12.12	-	12.12	70.98	-	70.98
Low	2022-2023	12.20	-	12.20	71.75	-	71.75
Low	2023-2024	12.29	-	12.29	72.53	-	72.53
Low	2024-2025	12.37	-	12.37	73.30	-	73.30
Low	2025-2026	12.45	-	12.45	74.04	-	74.04
Low	2026-2027	12.53	-	12.53	74.70	-	74.70
Low	2027-2028	12.60	-	12.60	75.34	-	75.34
Low	2028-2029	12.67	-	12.67	75.98	-	75.98

Appendix 6.6 - Peak Day Demand - Served and Unserved (MDth/d)

Before Resource Additions & Net of DSM Savings

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
Coldest in 20	2009-2010	7.98	-	7.98	252.68	-	252.68
Coldest in 20	2010-2011	7.86	-	7.86	249.43	-	249.43
Coldest in 20	2011-2012	7.95	-	7.95	252.87	-	252.87
Coldest in 20	2012-2013	8.05	-	8.05	256.46	-	256.46
Coldest in 20	2013-2014	8.12	-	8.12	260.13	-	260.13
Coldest in 20	2014-2015	8.20	-	8.20	263.80	-	263.80
Coldest in 20	2015-2016	8.12	-	8.12	262.17	-	262.17
Coldest in 20	2016-2017	8.19	-	8.19	265.71	-	265.71
Coldest in 20	2017-2018	8.26	-	8.26	269.41	-	269.41
Coldest in 20	2018-2019	8.34	-	8.34	273.12	-	273.12
Coldest in 20	2019-2020	8.41	-	8.41	277.06	-	277.06
Coldest in 20	2020-2021	8.48	-	8.48	281.15	-	281.15
Coldest in 20	2021-2022	8.56	-	8.56	285.32	-	285.32
Coldest in 20	2022-2023	8.63	-	8.63	289.56	-	289.56
Coldest in 20	2023-2024	8.71	-	8.71	293.79	-	293.79
Coldest in 20	2024-2025	8.79	-	8.79	298.16	-	298.16
Coldest in 20	2025-2026	8.87	-	8.87	302.52	-	302.52
Coldest in 20	2026-2027	8.95	-	8.95	306.82	-	306.82
Coldest in 20	2027-2028	9.03	-	9.03	311.77	-	311.77
Coldest in 20	2028-2029	9.11	-	9.11	313.86	2.69	316.55

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/ Roseburg Served	Medford/ Roseburg Unserved	Medford/ Roseburg Total
Coldest in 20	2009-2010	12.71	-	12.71	67.86	-	67.86
Coldest in 20	2010-2011	12.63	-	12.63	67.27	-	67.27
Coldest in 20	2011-2012	12.90	-	12.90	68.40	-	68.40
Coldest in 20	2012-2013	13.23	-	13.23	70.51	-	70.51
Coldest in 20	2013-2014	13.58	-	13.58	72.53	-	72.53
Coldest in 20	2014-2015	13.82	-	13.82	74.64	-	74.64
Coldest in 20	2015-2016	13.80	-	13.80	75.43	-	75.43
Coldest in 20	2016-2017	14.04	-	14.04	77.55	-	77.55
Coldest in 20	2017-2018	14.27	-	14.27	79.58	-	79.58
Coldest in 20	2018-2019	14.51	-	14.51	81.51	-	81.51
Coldest in 20	2019-2020	14.75	-	14.75	83.35	-	83.35
Coldest in 20	2020-2021	14.98	-	14.98	84.09	1.13	85.22
Coldest in 20	2021-2022	15.03	0.19	15.22	84.09	2.99	87.07
Coldest in 20	2022-2023	15.03	0.43	15.46	84.08	4.86	88.94
Coldest in 20	2023-2024	15.03	0.68	15.71	84.09	6.75	90.84
Coldest in 20	2024-2025	15.03	0.92	15.95	84.09	8.67	92.76
Coldest in 20	2025-2026	15.03	1.17	16.20	84.09	10.49	94.57
Coldest in 20	2026-2027	15.03	1.42	16.45	84.09	12.23	96.32
Coldest in 20	2027-2028	15.03	1.67	16.70	84.09	13.98	98.06
Coldest in 20	2028-2029	15.03	1.92	16.95	84.09	15.72	99.81

Appendix 6.6 - Peak Day Demand - Served and Unserved (MDth/d)

Before Resource Additions & Net of DSM Savings

Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
Green Future	2009-2010	7.98	-	7.98	274.58	-	274.58
Green Future	2010-2011	7.61	-	7.61	262.02	-	262.02
Green Future	2011-2012	7.63	-	7.63	263.10	-	263.10
Green Future	2012-2013	7.65	-	7.65	264.29	-	264.29
Green Future	2013-2014	7.68	-	7.68	266.50	-	266.50
Green Future	2014-2015	7.75	-	7.75	270.09	-	270.09
Green Future	2015-2016	7.20	-	7.20	250.52	-	250.52
Green Future	2016-2017	7.17	-	7.17	250.10	-	250.10
Green Future	2017-2018	7.16	-	7.16	250.66	-	250.66
Green Future	2018-2019	7.16	-	7.16	251.45	-	251.45
Green Future	2019-2020	7.17	-	7.17	252.68	-	252.68
Green Future	2020-2021	7.21	-	7.21	255.03	-	255.03
Green Future	2021-2022	7.25	-	7.25	257.70	-	257.70
Green Future	2022-2023	7.29	-	7.29	260.38	-	260.38
Green Future	2023-2024	7.33	-	7.33	262.62	-	262.62
Green Future	2024-2025	7.39	-	7.39	265.80	-	265.80
Green Future	2025-2026	7.43	-	7.43	268.16	-	268.16
Green Future	2026-2027	7.46	-	7.46	270.28	-	270.28
Green Future	2027-2028	7.49	-	7.49	272.85	-	272.85
Green Future	2028-2029	7.52	-	7.52	275.44	-	275.44

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/ Roseburg Served	Medford/ Roseburg Unserved	Medford/ Roseburg Total
Green Future	2009-2010	12.71	-	12.71	70.44	-	70.44
Green Future	2010-2011	12.23	-	12.23	67.58	-	67.58
Green Future	2011-2012	12.38	-	12.38	68.10	-	68.10
Green Future	2012-2013	12.58	-	12.58	69.59	-	69.59
Green Future	2013-2014	12.85	-	12.85	71.22	-	71.22
Green Future	2014-2015	13.08	-	13.08	73.27	-	73.27
Green Future	2015-2016	12.26	-	12.26	69.54	-	69.54
Green Future	2016-2017	12.32	-	12.32	70.59	-	70.59
Green Future	2017-2018	12.40	-	12.40	71.75	-	71.75
Green Future	2018-2019	12.50	-	12.50	72.88	-	72.88
Green Future	2019-2020	12.61	-	12.61	73.98	-	73.98
Green Future	2020-2021	12.77	-	12.77	75.36	-	75.36
Green Future	2021-2022	12.93	-	12.93	76.79	-	76.79
Green Future	2022-2023	13.10	-	13.10	78.22	-	78.22
Green Future	2023-2024	13.25	-	13.25	79.57	-	79.57
Green Future	2024-2025	13.45	-	13.45	81.14	-	81.14
Green Future	2025-2026	13.60	-	13.60	82.42	-	82.42
Green Future	2026-2027	13.75	-	13.75	83.59	-	83.59
Green Future	2027-2028	13.89	-	13.89	84.09	0.61	84.69
Green Future	2028-2029	14.04	-	14.04	84.08	1.75	85.84

Appendix 6.6 - Peak Day Demand - Served and Unserved (MDth/d)

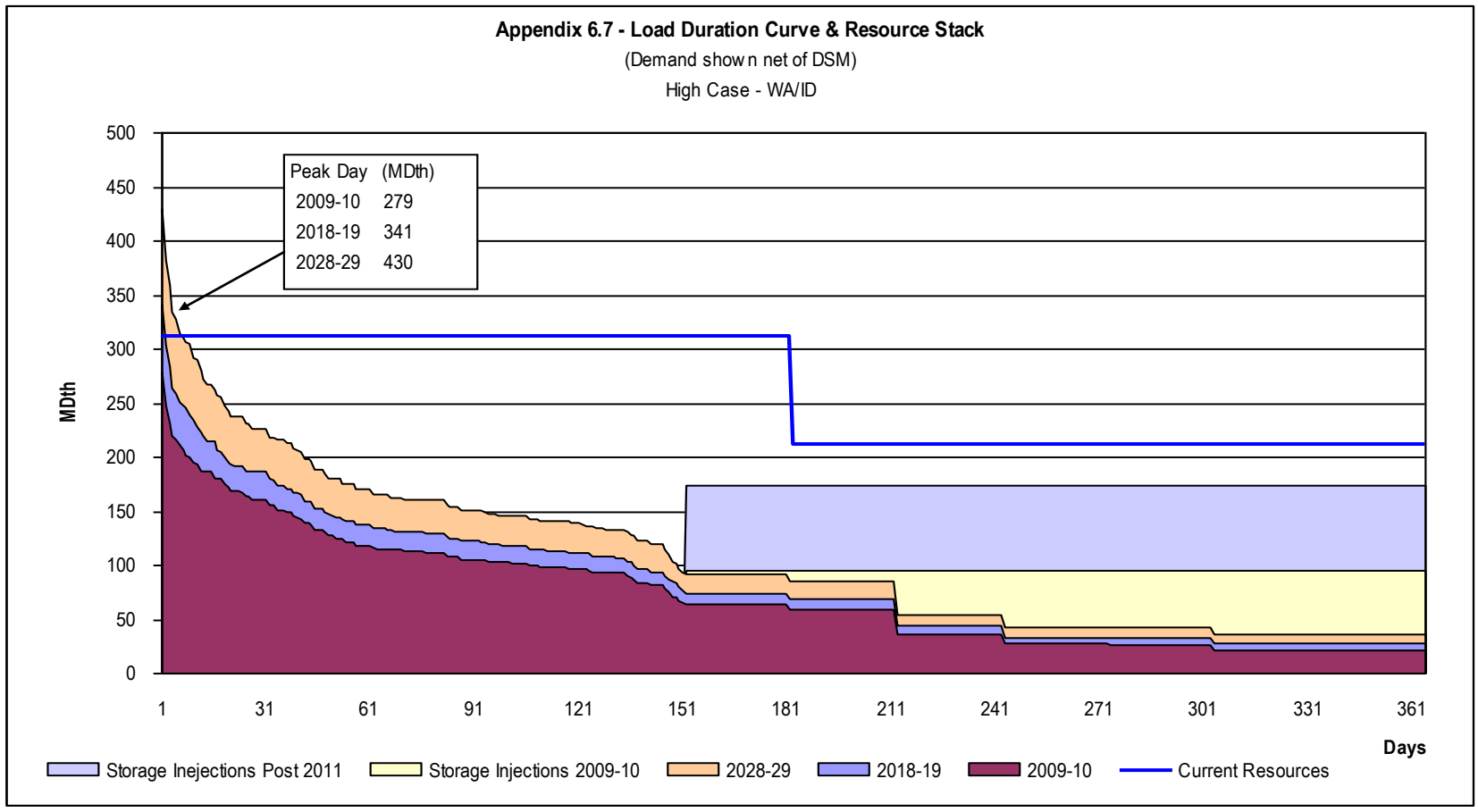
Before Resource Additions & Net of DSM Savings

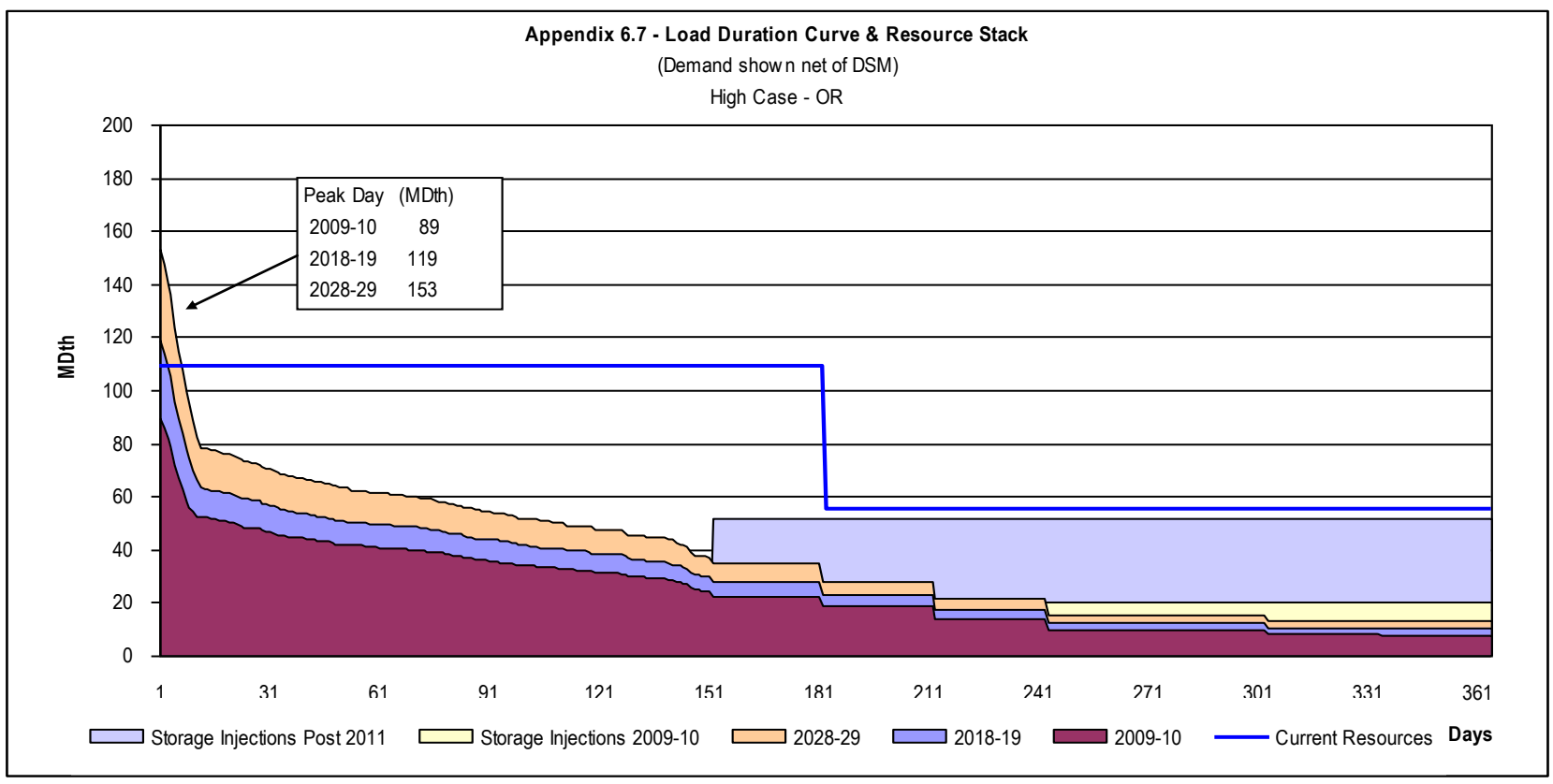
Case	Gas Year	La Grande Served	La Grande Unserved	La Grande Total	WA/ID Served	WA/ID Unserved	WA/ID Total
Supply Constrained	2009-2010	7.98	-	7.98	274.58	-	274.58
Supply Constrained	2010-2011	7.27	-	7.27	249.94	-	249.94
Supply Constrained	2011-2012	7.23	-	7.23	249.06	-	249.06
Supply Constrained	2012-2013	7.22	-	7.22	249.09	-	249.09
Supply Constrained	2013-2014	7.20	-	7.20	249.29	-	249.29
Supply Constrained	2014-2015	7.27	-	7.27	252.45	-	252.45
Supply Constrained	2015-2016	7.11	-	7.11	247.26	-	247.26
Supply Constrained	2016-2017	7.12	-	7.12	248.16	-	248.16
Supply Constrained	2017-2018	7.14	-	7.14	249.64	-	249.64
Supply Constrained	2018-2019	7.13	-	7.13	250.06	-	250.06
Supply Constrained	2019-2020	7.16	-	7.16	252.10	-	252.10
Supply Constrained	2020-2021	7.19	-	7.19	254.37	-	254.37
Supply Constrained	2021-2022	7.22	-	7.22	256.44	-	256.44
Supply Constrained	2022-2023	7.25	-	7.25	258.73	-	258.73
Supply Constrained	2023-2024	7.30	-	7.30	261.18	-	261.18
Supply Constrained	2024-2025	7.35	-	7.35	264.25	-	264.25
Supply Constrained	2025-2026	7.39	-	7.39	266.74	-	266.74
Supply Constrained	2026-2027	7.42	-	7.42	268.46	-	268.46
Supply Constrained	2027-2028	7.44	-	7.44	270.80	-	270.80
Supply Constrained	2028-2029	7.46	-	7.46	272.93	-	272.93

Case	Gas Year	Klamath Falls Served	Klamath Falls Unserved	Klamath Falls Total	Medford/ Roseburg Served	Medford/ Roseburg Unserved	Medford/ Roseburg Total
Supply Constrained	2009-2010	12.71	-	12.71	70.44	-	70.44
Supply Constrained	2010-2011	11.68	-	11.68	64.58	-	64.58
Supply Constrained	2011-2012	11.75	-	11.75	64.63	-	64.63
Supply Constrained	2012-2013	11.90	-	11.90	65.80	-	65.80
Supply Constrained	2013-2014	12.07	-	12.07	66.90	-	66.90
Supply Constrained	2014-2015	12.28	-	12.28	68.82	-	68.82
Supply Constrained	2015-2016	12.12	-	12.12	68.71	-	68.71
Supply Constrained	2016-2017	12.23	-	12.23	70.09	-	70.09
Supply Constrained	2017-2018	12.36	-	12.36	71.49	-	71.49
Supply Constrained	2018-2019	12.44	-	12.44	72.52	-	72.52
Supply Constrained	2019-2020	12.59	-	12.59	73.83	-	73.83
Supply Constrained	2020-2021	12.74	-	12.74	75.18	-	75.18
Supply Constrained	2021-2022	12.88	-	12.88	76.47	-	76.47
Supply Constrained	2022-2023	13.03	-	13.03	77.79	-	77.79
Supply Constrained	2023-2024	13.19	-	13.19	79.19	-	79.19
Supply Constrained	2024-2025	13.38	-	13.38	80.74	-	80.74
Supply Constrained	2025-2026	13.54	-	13.54	82.05	-	82.05
Supply Constrained	2026-2027	13.67	-	13.67	83.12	-	83.12
Supply Constrained	2027-2028	13.80	-	13.80	84.09	0.08	84.16
Supply Constrained	2028-2029	13.93	-	13.93	84.09	1.11	85.19

APPENDIX 6.7

LOAD DURATION CURVE GRAPHS (HIGH AND LOW GROWTH CASES)

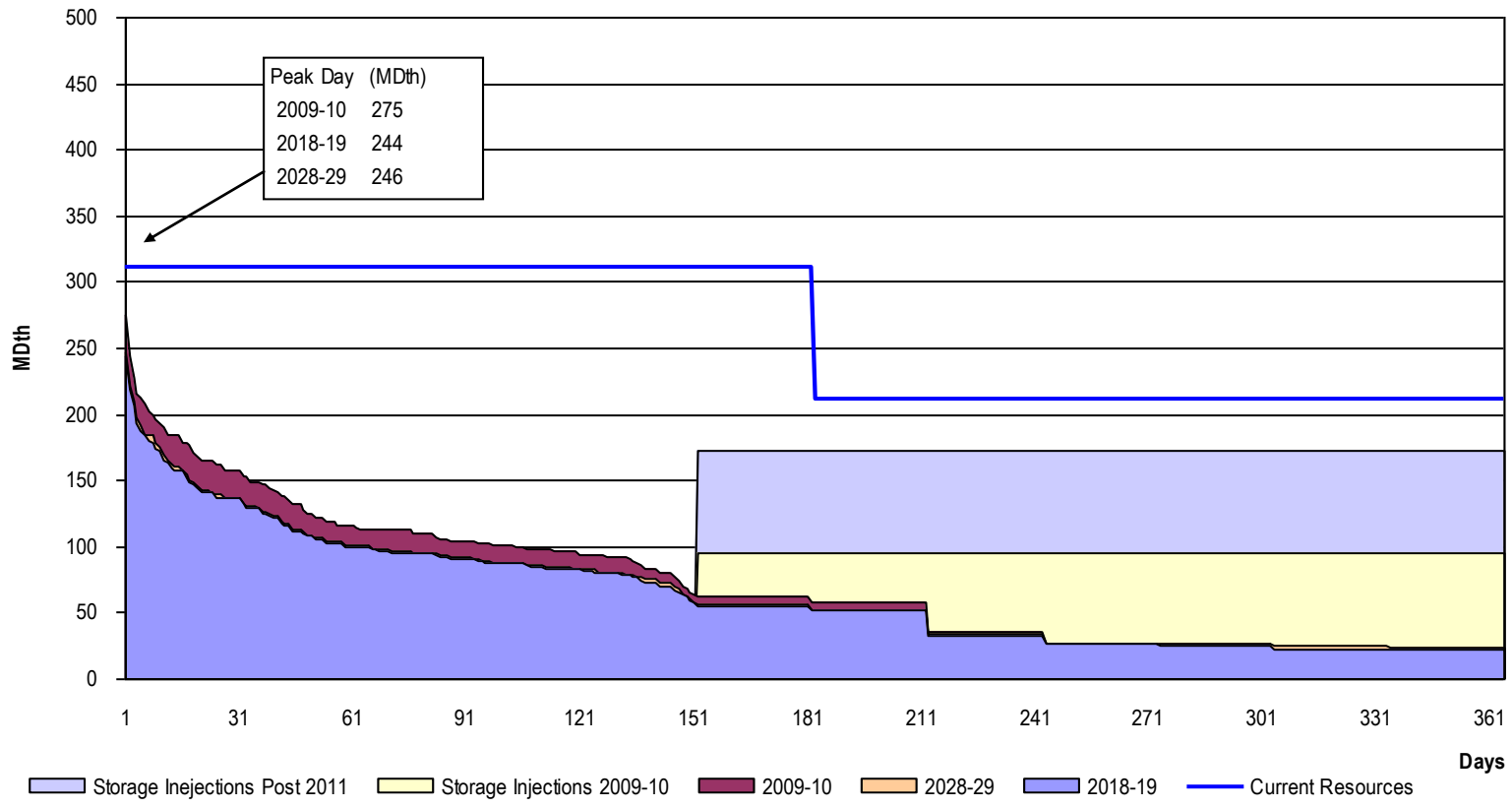

Appendix 6.7 - Load Duration Curve & Resource Stack
(Demand shown net of DSM)
High Case - WA/ID
Peak Day (MDth)
2009-10 279
2018-19 341
2028-29 430
MDth
500
450
400
350
300
250
200
150
100
50
0
1
31
61
91
121
151
181
211
241
271
301
331
361
Days
Storage Inejections Post 2011
Storage Injections 2009-10
2028-29
2018-19
2009-10
Current Resources


Appendix 6.7 - Load Duration Curve & Resource Stack
(Demand shown net of DSM)
High Case - OR
Peak Day (MDth)
2009-10 89
2018-19 119
2028-29 153
MDth
200
180
160
140
120
100
80
60
40
20
0
1
31
61
91
121
151
181
211
241
271
301
331
361
Days
Storage Injections Post 2011
Storage Injections 2009-10
2028-29
2018-19
2009-10
Current Resources

Appendix 6.7- Load Duration Curve & Resource Stack

(Demand shown net of DSM)

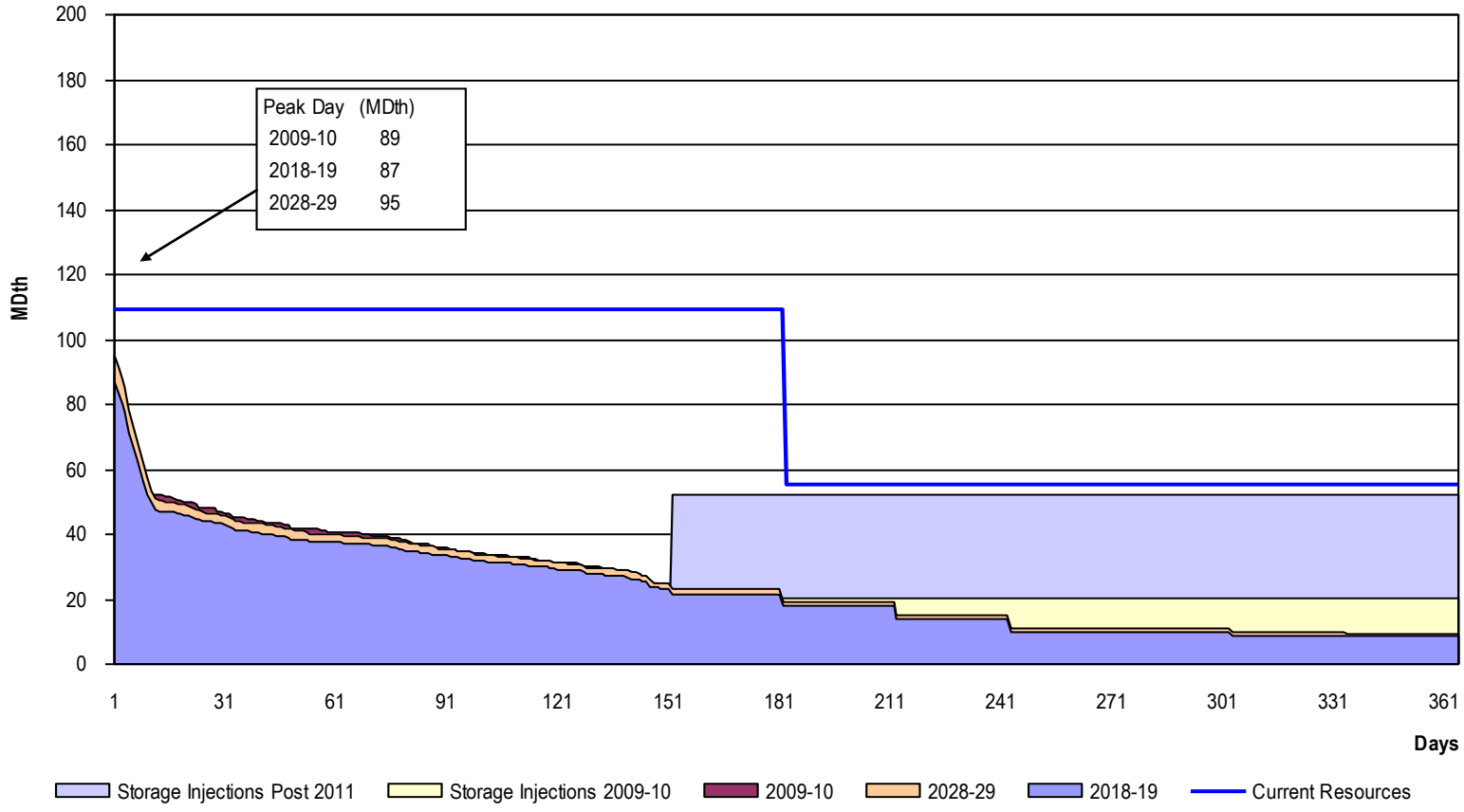
Low Case - WA/ID



Appendix 6.7 - Load Duration Curve & Resource Stack

(Demand shown net of DSM)

Low Case - OR



APPENDIX 6.8

SENSITIVIES, SCNEARIOS, SIMULATIONS, AND PORTFOLIOS LIST

Appendix 6.8 - Avista 2009 IRP Sensitivies, Scenarios, Simulations, and Portfolios

SENDOUT® #	Sensitivity, Portfolio, or Simulation	Case Name	Demand Scenario	Supply Scenario	Major Assumptions
1111	Portfolio	Expected Case	Expected Case	Existing Resources	Coldest day on record, expected customer growth rates, expected price curve, low elasticity, carbon adder $5-$67/ton
1113	Portfolio		Expected Case	Existing plus Expected Available	Includes current transporation network, recalls of capacity releases, unsubscribed transport on existing pipelines, capacity expansions, capacity releases, backhauls, sattelite & liquifaction LNG.
1120	Portfolio		Expected Case	GTN Rate Escalation	Expected case demand assumptions plus existing supply resources and expected available resources. However, the GTN rates are doubled in response to significant turnback of capacity on their system.
1121	Portfolio		Expected Case	GTN Fully Subscribed	Expected case demand assumptions plus existing supply resources and expected available resources. However, there is no more available capacity on GTN's system.
1110	Portfolio	Coldest in 20 Years	Coldest in 20 Years	Existing Resources	Coldest day in the last 20 years, expected customer growth rates, expected price curve, medium elasticity, carbon adder $5-$67/ton
1114	Portfolio	Supply Constrained	Supply Constrained	Existing Resources	Coldest day on record, expected customer growth rates, high price curve, medium elasticity, carbon adder $5-$67/ton, $.30 drilling constraints adder, and $.20 to $3.00 Canadian drilling declines.
1109	Portfolio	Green Future	Green Future	Existing Resources	Coldest day on record, expected customer growth rates, high elasticity, epxected price curve, carbon adder $37-$140/ton, drilling constraints adder $.30.
1108	Portfolio	High Growth & Low Prices	High Growth & Low Prices	Existing Resources	Coldest day on record, 50% increase in customer growth rates, low price curve, low elasticity, carbon adder $5-$67/ton
1115	Portfolio		High Growth & Low Prices	Existing plus Expected Available	Includes existing transporation network, recalls of capacity releases, unsubscribed transport on existing pipelines, capacity expansions, capacity releases, backhauls, sattelite & liquifaction LNG.
1107	Portfolio	Low Growth & High Prices	Low Growth & High Prices	Existing Resources	Coldest day on record, 50% decrease in customer growth rates, high price curve, high elasticity, carbon adder $5-$67/ton, drilling constrains adder $.30.
1117	Portfolio	Expected with Medium Elasticity	Expected Case	Existing Resources	Expected case demand assumptions updated with medium price elasticity and price curve plus current supply resources.
	Portfolio		Expected Case	Existing plus Expected Available	Expected case demand assumptions updated with medium price elasticity and price curve plus existing supply resource and expected available supply resources.
1118	Portfolio	Expected with High Elasticity	Updated Expected with High Elasticity	Existing Resources	Expected case demand assumptions updated with high price elasticity and price curve plus existing supply resources.
1022	Sensitivity	Reference Case		Existing Resources	Coldest day on record, expected customer growth rates, flat use per customer, no elasticity, expected price curve, no carbon adders or drilling constraints
1011	Sensitivity	Low Elasticity		Existing Resources	Reference case assumptions plus low elasticity
1009	Sensitivity	High Elasticity		Existing Resources	Reference case assumptions plus high elasticity
1006	Sensitivity	Peak Day -1		Existing Resources	Reference case assumptions with peak HDD's less 1
1018	Sensitivity	Low Growth		Existing Resources	Reference case assumptions with low customer growth rates
1017	Sensitivity	High Growth		Existing Resources	Reference case assumptions with high customer growth rates
1021	Sensitivity	Coldest in 20 Years		Existing Resources	Reference case with coldest day in 20 years as the planning standard
1015	Sensitivity	Canada Decline 1		Existing Resources	Reference case assumptions with $.50 adder for competition for Canadian gas
1007	Sensitivity	Peak Day -2		Existing Resources	Reference case assumptions with peak day HDD's less 2
1014	Sensitivity	CNG Vehicles		Existing Resources	Reference case assumptions with increasing demand due to CNG vehicle penetration.
1013	Sensitivity	Carbon Mitigation 2		Existing Resources	Reference case with $5-$67/ton carbon adder
1012	Sensitivity	Carbon Mitigation 1		Existing Resources	Reference case with $37-$140/ton adder
1019	Sensitivity	High Price		Existing Resources	Reference case assumptions with high price curve

Appendix 6.8 - Avista 2009 IRP Sensitivies, Scenarios, Simulations, and Portfolios

SENDOUT® #	Sensitivity, Portfolio, or Simulation	Case Name	Demand Scenario	Supply Scenario	Major Assumptions
1020	Sensitivity	Low Price		Existing Resources	Reference case assumptions with low price curve
1010	Sensitivity	Medium Elasticity		Existing Resources	Reference case assumptions plus medium elasticity
1016	Sensitivity	Drilling Constraints		Existing Resources	Reference case with $.30 adder for drilling constraints
	Simulation	Weather Monte Carlo	Expected Case	Existing Resources	Expected case demand assumptions with 200 draws of weather, used to determine unserved impact and fequency of peak day.
1023	Simulation	Price Monte Carlo	Expected Case	Existing plus Expected Available	Expected case demand assumptiosn with 200 draws of price, used to assess the risk to customers of price variability.

APPENDIX 6.9

TOTAL COST BY PORTFOLIO

Appendix 6.9 - Total Cost by Portfolio

Portfolio		Total Cost (000's)
Expected Demand with Existing Resources	$	(6,514,895)
Expected Demand with Existing Resources plus Expected Available	$	(6,547,705)
Expected Demand with GTN Rate Escalation	$	(7,440,510)
Expected Demand with GTN Fully Subscribed	$	(6,593,845)
Expected Demand with Medium Elasticity and Existing Resources	$	(6,249,435)
Expected Demand with High Elasticity and Existing Resources	$	(5,856,847)
Coldest in 20 Demand with Existing Resources	$	(7,997,147)
High Growth & Low Price Demand with Existing Resources	$	(7,691,204)
High Growth & Low Price Demand with Existing Resource plus Expected Available	$	(10,704,833)
Low Growth & High Prices with Restricted Capacity	$	(10,814,967)
Green Future with Exisiting Resources	$	(9,277,241)
Supply Constrained with Existing Resources	$	(11,782,862)

Appendix 6.9 - Served Demand And Costs by Portfolio by Gas Year

Portfolio	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Expected Demand with Existing Resources											
Total Served w/o Enduser (MDth)	35,099	34,796	34,998	35,334	35,790	36,277	36,130	36,450	36,831	37,227	37,756
Total System Cost (000's)	$ (195,180)	$ (232,351)	$ (222,775)	$ (230,341)	$ (213,825)	$ (272,971)	$ (293,852)	$ (306,592)	$ (311,644)	$ (321,129)	$ (337,014)
Total Transport Fix Cost (000's)	$ (40,789)	$ (40,977)	$ (41,169)	$ (44,089)	$ (47,298)	$ (50,816)	$ (54,686)	$ (58,934)	$ (63,330)	$ (68,140)	$ (73,404)
Total Transport Var Cost (000's)	$ (589)	$ (640)	$ (651)	$ (736)	$ (759)	$ (754)	$ (708)	$ (720)	$ (732)	$ (718)	$ (723)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (153,076)	$ (190,277)	$ (180,474)	$ (185,030)	$ (165,286)	$ (220,899)	$ (237,932)	$ (246,405)	$ (247,044)	$ (251,725)	$ (262,329)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (94)	$ (118)	$ (119)	$ (110)	$ (127)	$ (144)	$ (147)	$ (147)	$ (149)	$ (153)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Expected Demand with Existing Resources plus Expected Available											
Total Served w/o Enduser (MDth)	35,099	34,796	34,998	35,334	35,790	36,277	36,130	36,450	36,831	37,227	37,756
Total System Cost (000's)	$ (195,795)	$ (233,059)	$ (223,372)	$ (230,968)	$ (214,440)	$ (273,579)	$ (294,467)	$ (307,232)	$ (312,274)	$ (321,802)	$ (337,719)
Total Transport Fix Cost (000's)	$ (42,194)	$ (42,541)	$ (42,631)	$ (45,581)	$ (48,820)	$ (52,367)	$ (56,267)	$ (60,543)	$ (64,969)	$ (69,810)	$ (75,106)
Total Transport Var Cost (000's)	$ (616)	$ (665)	$ (672)	$ (790)	$ (795)	$ (798)	$ (779)	$ (784)	$ (784)	$ (789)	$ (790)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (152,257)	$ (189,396)	$ (179,589)	$ (184,112)	$ (164,345)	$ (219,913)	$ (236,900)	$ (245,377)	$ (245,985)	$ (250,660)	$ (261,270)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (94)	$ (115)	$ (118)	$ (109)	$ (126)	$ (141)	$ (143)	$ (144)	$ (145)	$ (150)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Expected Demand with GTN Rate Escalation											
Total Served w/o Enduser (MDth)	35,099	34,796	34,998	35,334	35,790	36,277	36,130	36,450	36,831	37,227	37,756
Total System Cost (000's)	$ (214,803)	$ (252,096)	$ (242,437)	$ (251,905)	$ (237,444)	$ (298,861)	$ (322,263)	$ (337,801)	$ (345,708)	$ (358,380)	$ (377,747)
Total Transport Fix Cost (000's)	$ (61,203)	$ (61,577)	$ (61,697)	$ (66,518)	$ (71,823)	$ (77,648)	$ (84,062)	$ (91,111)	$ (98,403)	$ (106,388)	$ (115,134)
Total Transport Var Cost (000's)	$ (616)	$ (665)	$ (672)	$ (790)	$ (795)	$ (798)	$ (779)	$ (784)	$ (784)	$ (789)	$ (790)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (152,257)	$ (189,396)	$ (179,589)	$ (184,112)	$ (164,345)	$ (219,913)	$ (236,900)	$ (245,377)	$ (245,985)	$ (250,660)	$ (261,270)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (94)	$ (115)	$ (118)	$ (109)	$ (126)	$ (141)	$ (143)	$ (144)	$ (145)	$ (150)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Expected Demand with GTN Fully Subscribed											
Total Served w/o Enduser (MDth)	35,099	34,796	34,998	35,334	35,790	36,277	36,130	36,450	36,831	37,227	37,756
Total System Cost (000's)	$ (195,795)	$ (233,059)	$ (223,372)	$ (230,968)	$ (214,440)	$ (273,604)	$ (294,468)	$ (307,233)	$ (312,275)	$ (321,967)	$ (338,339)
Total Transport Fix Cost (000's)	$ (42,194)	$ (42,541)	$ (42,631)	$ (45,581)	$ (48,820)	$ (52,367)	$ (56,267)	$ (60,543)	$ (64,969)	$ (69,810)	$ (75,106)
Total Transport Var Cost (000's)	$ (616)	$ (665)	$ (672)	$ (790)	$ (795)	$ (799)	$ (780)	$ (785)	$ (785)	$ (791)	$ (791)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (163)	$ (610)
Total Supply Variable Costs by Supply (000's)	$ (152,257)	$ (189,396)	$ (179,589)	$ (184,112)	$ (164,345)	$ (219,937)	$ (236,900)	$ (245,377)	$ (245,985)	$ (250,661)	$ (261,278)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (94)	$ (115)	$ (118)	$ (109)	$ (126)	$ (141)	$ (143)	$ (144)	$ (145)	$ (150)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Expected Demand with Medium Elasticity and Existing Resources											
Total Served w/o Enduser (MDth)	35,099	34,251	34,092	34,324	34,760	35,226	34,486	34,608	34,889	35,256	35,693
Total System Cost (000's)	$ (195,167)	$ (229,524)	$ (217,925)	$ (224,798)	$ (208,810)	$ (266,222)	$ (282,394)	$ (293,366)	$ (297,709)	$ (306,975)	$ (321,789)
Total Transport Fix Cost (000's)	$ (40,789)	$ (40,977)	$ (41,169)	$ (44,089)	$ (47,298)	$ (50,816)	$ (54,686)	$ (58,934)	$ (63,330)	$ (68,140)	$ (73,404)
Total Transport Var Cost (000's)	$ (589)	$ (635)	$ (639)	$ (727)	$ (751)	$ (746)	$ (693)	$ (709)	$ (716)	$ (700)	$ (705)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (153,063)	$ (187,454)	$ (175,635)	$ (179,497)	$ (160,280)	$ (214,156)	$ (226,489)	$ (233,191)	$ (233,124)	$ (237,587)	$ (247,120)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (94)	$ (119)	$ (119)	$ (110)	$ (128)	$ (145)	$ (147)	$ (147)	$ (150)	$ (155)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Expected Demand with High Elasticity and Existing Resources											
Total Served w/o Enduser (MDth)	35,099	32,928	32,595	32,763	33,169	33,603	31,545	31,564	31,775	32,094	32,452
Total System Cost (000's)	$ (195,265)	$ (222,820)	$ (210,031)	$ (216,358)	$ (201,196)	$ (256,090)	$ (262,188)	$ (271,821)	$ (275,704)	$ (284,633)	$ (298,248)
Total Transport Fix Cost (000's)	$ (40,789)	$ (40,977)	$ (41,169)	$ (44,089)	$ (47,298)	$ (50,816)	$ (54,686)	$ (58,934)	$ (63,330)	$ (68,140)	$ (73,404)
Total Transport Var Cost (000's)	$ (620)	$ (632)	$ (637)	$ (716)	$ (735)	$ (729)	$ (668)	$ (693)	$ (692)	$ (674)	$ (677)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (153,131)	$ (180,753)	$ (167,742)	$ (171,066)	$ (152,682)	$ (204,040)	$ (206,304)	$ (211,661)	$ (211,142)	$ (215,268)	$ (223,604)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (59)	$ (94)	$ (120)	$ (119)	$ (111)	$ (129)	$ (149)	$ (147)	$ (148)	$ (153)	$ (158)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)

Appendix 6.9 - Served Demand And Costs by Portfolio by Gas Year

Portfolio	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Coldest in 20 Demand with Existing Resources											
Total Served w/o Enduser (MDth)	34,975	34,599	34,799	35,132	35,584	36,067	35,921	36,237	36,614	37,008	37,533
Total System Cost (000's)	$ (197,016)	$ (234,592)	$ (225,092)	$ (245,996)	$ (230,474)	$ (298,908)	$ (334,173)	$ (357,326)	$ (387,400)	$ (409,963)	$ (432,415)
Total Transport Fix Cost (000's)	$ (42,294)	$ (42,512)	$ (42,735)	$ (45,686)	$ (48,928)	$ (52,477)	$ (56,379)	$ (60,657)	$ (65,085)	$ (69,928)	$ (75,227)
Total Transport Var Cost (000's)	$ (522)	$ (584)	$ (538)	$ (669)	$ (760)	$ (758)	$ (763)	$ (759)	$ (765)	$ (768)	$ (774)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (153,460)	$ (191,024)	$ (181,322)	$ (199,129)	$ (180,272)	$ (245,138)	$ (276,465)	$ (295,322)	$ (320,938)	$ (338,631)	$ (355,766)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (73)	$ (109)	$ (134)	$ (146)	$ (144)	$ (159)	$ (186)	$ (202)	$ (220)	$ (237)	$ (245)
DSM Implementation Cost (000's)	$ (319)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
High Growth & Low Price Demand with Existing Resources											
Total Served w/o Enduser (MDth)	35,508	35,593	36,231	37,036	37,961	38,921	39,762	40,520	41,341	42,171	43,150
Total System Cost (000's)	$ (195,619)	$ (229,414)	$ (241,622)	$ (255,266)	$ (231,315)	$ (294,111)	$ (324,970)	$ (336,505)	$ (364,019)	$ (380,408)	$ (391,690)
Total Transport Fix Cost (000's)	$ (42,294)	$ (42,512)	$ (42,735)	$ (45,686)	$ (48,928)	$ (52,477)	$ (56,379)	$ (60,657)	$ (65,085)	$ (69,928)	$ (75,227)
Total Transport Var Cost (000's)	$ (738)	$ (749)	$ (590)	$ (741)	$ (777)	$ (768)	$ (771)	$ (779)	$ (767)	$ (798)	$ (794)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (151,871)	$ (185,722)	$ (197,821)	$ (208,335)	$ (181,110)	$ (240,346)	$ (267,279)	$ (274,519)	$ (297,599)	$ (309,102)	$ (315,073)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (46)	$ (68)	$ (113)	$ (137)	$ (130)	$ (144)	$ (161)	$ (163)	$ (176)	$ (181)	$ (191)
DSM Implementation Cost (000's)	$ (322)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)
High Growth & Low Price Demand with Existing Resource plus Expected Available											
Total Served w/o Enduser (MDth)	35,449	35,521	36,150	36,938	37,847	38,785	39,786	40,561	41,399	42,251	43,255
Total System Cost (000's)	$ (191,492)	$ (225,178)	$ (237,400)	$ (249,797)	$ (256,337)	$ (319,762)	$ (430,384)	$ (452,595)	$ (491,499)	$ (520,573)	$ (545,603)
Total Transport Fix Cost (000's)	$ (38,449)	$ (38,674)	$ (38,903)	$ (41,425)	$ (74,131)	$ (79,492)	$ (162,237)	$ (177,081)	$ (192,879)	$ (210,204)	$ (229,207)
Total Transport Var Cost (000's)	$ (744)	$ (753)	$ (619)	$ (743)	$ (778)	$ (777)	$ (768)	$ (778)	$ (754)	$ (794)	$ (808)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (151,576)	$ (185,320)	$ (197,401)	$ (207,126)	$ (180,927)	$ (238,972)	$ (266,834)	$ (274,184)	$ (297,291)	$ (308,995)	$ (314,992)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (47)	$ (68)	$ (113)	$ (135)	$ (129)	$ (144)	$ (164)	$ (166)	$ (183)	$ (182)	$ (192)
DSM Implementation Cost (000's)	$ (328)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)
Low Growth & High Prices with Restricted Capacity											
Total Served w/o Enduser (MDth)	35,059	34,903	33,553	32,195	32,028	32,039	31,966	31,851	31,795	31,756	31,829
Total System Cost (000's)	$ (262,308)	$ (330,813)	$ (365,539)	$ (393,186)	$ (389,637)	$ (465,035)	$ (494,181)	$ (507,451)	$ (533,170)	$ (550,229)	$ (564,470)
Total Transport Fix Cost (000's)	$ (42,294)	$ (42,512)	$ (42,735)	$ (45,686)	$ (48,928)	$ (52,477)	$ (56,379)	$ (60,657)	$ (65,085)	$ (69,928)	$ (75,227)
Total Transport Var Cost (000's)	$ (735)	$ (747)	$ (542)	$ (644)	$ (683)	$ (624)	$ (648)	$ (616)	$ (585)	$ (612)	$ (589)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (218,542)	$ (287,072)	$ (321,684)	$ (346,213)	$ (339,368)	$ (411,228)	$ (436,410)	$ (445,414)	$ (466,699)	$ (478,875)	$ (487,806)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (60)	$ (119)	$ (214)	$ (275)	$ (286)	$ (330)	$ (365)	$ (377)	$ (408)	$ (415)	$ (444)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)
Green Future with Exisiting Resources											
Total Served w/o Enduser (MDth)	35,098	33,855	33,819	33,910	34,207	34,662	32,893	32,851	32,947	33,079	33,351
Total System Cost (000's)	$ (212,850)	$ (244,520)	$ (237,759)	$ (252,961)	$ (235,644)	$ (349,600)	$ (385,287)	$ (414,353)	$ (444,546)	$ (474,253)	$ (495,874)
Total Transport Fix Cost (000's)	$ (42,294)	$ (42,512)	$ (42,735)	$ (45,686)	$ (48,928)	$ (52,477)	$ (56,379)	$ (60,657)	$ (65,085)	$ (69,928)	$ (75,227)
Total Transport Var Cost (000's)	$ (546)	$ (603)	$ (541)	$ (661)	$ (758)	$ (758)	$ (748)	$ (749)	$ (753)	$ (741)	$ (744)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (169,263)	$ (200,927)	$ (193,977)	$ (206,091)	$ (185,429)	$ (295,800)	$ (327,541)	$ (352,291)	$ (378,024)	$ (402,866)	$ (419,178)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (77)	$ (115)	$ (143)	$ (155)	$ (158)	$ (188)	$ (239)	$ (271)	$ (293)	$ (320)	$ (320)
DSM Implementation Cost (000's)	$ (322)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)
Supply Constrained with Existing Resources											
Total Served w/o Enduser (MDth)	35,097	32,690	32,486	32,481	32,597	33,020	32,592	32,673	32,854	32,955	33,299
Total System Cost (000's)	$ (292,218)	$ (340,956)	$ (338,468)	$ (371,515)	$ (371,164)	$ (456,869)	$ (486,335)	$ (512,956)	$ (552,310)	$ (579,609)	$ (605,036)
Total Transport Fix Cost (000's)	$ (42,294)	$ (42,512)	$ (42,735)	$ (45,686)	$ (48,928)	$ (52,477)	$ (56,379)	$ (60,657)	$ (65,085)	$ (69,928)	$ (75,227)
Total Transport Var Cost (000's)	$ (546)	$ (574)	$ (503)	$ (545)	$ (652)	$ (715)	$ (720)	$ (719)	$ (712)	$ (689)	$ (683)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (248,606)	$ (297,328)	$ (294,624)	$ (324,645)	$ (320,924)	$ (402,991)	$ (428,511)	$ (450,819)	$ (485,715)	$ (508,171)	$ (528,276)
Total Storage Fix Cost (000's)	$ (348)	$ (35)	$ (35)	$ (38)	$ (42)	$ (47)	$ (51)	$ (57)	$ (62)	$ (69)	$ (75)
Total Storage Var Cost (000's)	$ (95)	$ (179)	$ (243)	$ (271)	$ (288)	$ (310)	$ (345)	$ (375)	$ (405)	$ (423)	$ (445)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)

Portfolio	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total
Expected Demand with Existing Resources										
Total Served w/o Enduser (MDth)	38,274	38,809	39,384	40,005	40,538	41,147	41,708	42,370	42,944	761,869
Total System Cost (000's)	$ (354,042)	$ (365,279)	$ (373,004)	$ (370,477)	$ (381,929)	$ (403,330)	$ (424,301)	$ (441,877)	$ (462,982)	$ (6,514,895)
Total Transport Fix Cost (000's)	$ (79,167)	$ (85,489)	$ (92,623)	$ (100,459)	$ (109,066)	$ (118,523)	$ (128,915)	$ (140,722)	$ (153,754)	$ (1,592,348)
Total Transport Var Cost (000's)	$ (719)	$ (722)	$ (737)	$ (785)	$ (784)	$ (803)	$ (807)	$ (811)	$ (821)	$ (14,719)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (80)	$ (573)	$ (653)
Total Supply Variable Costs by Supply (000's)	$ (273,586)	$ (278,491)	$ (279,070)	$ (268,634)	$ (271,477)	$ (283,393)	$ (293,948)	$ (299,700)	$ (307,748)	$ (4,896,525)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (158)	$ (157)	$ (144)	$ (159)	$ (151)	$ (148)	$ (155)	$ (152)	$ (150)	$ (2,741)
DSM Implementation Cost (000's)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,579)
Expected Demand with Existing Resources plus Expecte										
Total Served w/o Enduser (MDth)	38,274	38,809	39,384	40,005	40,538	41,147	41,708	42,370	42,944	761,869
Total System Cost (000's)	$ (354,803)	$ (366,102)	$ (373,946)	$ (371,981)	$ (384,151)	$ (406,381)	$ (428,291)	$ (447,174)	$ (470,168)	$ (6,547,705)
Total Transport Fix Cost (000's)	$ (80,901)	$ (87,258)	$ (94,514)	$ (102,867)	$ (112,106)	$ (122,308)	$ (133,568)	$ (146,510)	$ (160,842)	$ (1,641,703)
Total Transport Var Cost (000's)	$ (789)	$ (786)	$ (804)	$ (839)	$ (829)	$ (830)	$ (855)	$ (851)	$ (852)	$ (15,696)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (80)	$ (573)	$ (653)
Total Supply Variable Costs by Supply (000's)	$ (272,545)	$ (277,484)	$ (278,054)	$ (267,685)	$ (270,622)	$ (282,635)	$ (293,240)	$ (299,093)	$ (307,244)	$ (4,878,406)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (155)	$ (155)	$ (145)	$ (151)	$ (144)	$ (144)	$ (152)	$ (148)	$ (148)	$ (2,687)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,576)
Expected Demand with GTN Rate Escalation										
Total Served w/o Enduser (MDth)	38,274	38,809	39,384	40,005	40,538	41,147	41,708	42,370	42,944	761,869
Total System Cost (000's)	$ (398,614)	$ (414,068)	$ (426,699)	$ (430,389)	$ (448,763)	$ (477,589)	$ (506,588)	$ (533,400)	$ (564,955)	$ (7,440,510)
Total Transport Fix Cost (000's)	$ (124,713)	$ (135,224)	$ (147,267)	$ (161,276)	$ (174,477)	$ (190,236)	$ (207,560)	$ (227,256)	$ (248,998)	$ (2,512,573)
Total Transport Var Cost (000's)	$ (789)	$ (786)	$ (804)	$ (839)	$ (831)	$ (837)	$ (855)	$ (859)	$ (861)	$ (15,722)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ (2,189)	$ (3,199)	$ (4,193)	$ (5,418)	$ (7,027)	$ (22,026)
Total Supply Variable Costs by Supply (000's)	$ (272,545)	$ (277,484)	$ (278,054)	$ (267,685)	$ (270,671)	$ (282,710)	$ (293,351)	$ (299,226)	$ (307,411)	$ (4,878,941)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (155)	$ (155)	$ (145)	$ (151)	$ (144)	$ (144)	$ (152)	$ (148)	$ (149)	$ (2,687)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,576)
Expected Demand with GTN Fully Subscribed										
Total Served w/o Enduser (MDth)	38,274	38,809	39,384	40,005	40,538	41,147	41,708	42,370	42,944	761,869
Total System Cost (000's)	$ (355,891)	$ (367,661)	$ (376,084)	$ (375,244)	$ (388,215)	$ (411,249)	$ (435,424)	$ (458,093)	$ (480,464)	$ (6,593,845)
Total Transport Fix Cost (000's)	$ (80,901)	$ (87,258)	$ (94,428)	$ (102,299)	$ (110,943)	$ (120,438)	$ (132,748)	$ (148,383)	$ (161,421)	$ (1,639,648)
Total Transport Var Cost (000's)	$ (792)	$ (787)	$ (806)	$ (839)	$ (831)	$ (837)	$ (858)	$ (863)	$ (865)	$ (15,748)
Total Supply Fixed Costs by Supply (000's)	$ (1,065)	$ (1,517)	$ (2,167)	$ (3,728)	$ (5,087)	$ (6,540)	$ (7,713)	$ (8,858)	$ (9,984)	$ (47,430)
Total Supply Variable Costs by Supply (000's)	$ (272,566)	$ (277,524)	$ (278,109)	$ (267,788)	$ (270,758)	$ (282,827)	$ (293,477)	$ (299,348)	$ (307,537)	$ (4,879,773)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (154)	$ (155)	$ (145)	$ (151)	$ (144)	$ (144)	$ (152)	$ (148)	$ (149)	$ (2,686)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,576)
Expected Demand with Medium Elasticity and Existing R										
Total Served w/o Enduser (MDth)	36,072	36,411	36,939	37,512	37,997	38,529	38,940	39,459	39,958	724,501
Total System Cost (000's)	$ (337,259)	$ (346,639)	$ (354,317)	$ (352,494)	$ (364,255)	$ (384,635)	$ (403,933)	$ (420,475)	$ (440,750)	$ (6,249,435)
Total Transport Fix Cost (000's)	$ (79,167)	$ (85,489)	$ (92,623)	$ (100,459)	$ (109,066)	$ (118,523)	$ (128,915)	$ (140,722)	$ (153,754)	$ (1,592,348)
Total Transport Var Cost (000's)	$ (699)	$ (701)	$ (720)	$ (764)	$ (763)	$ (772)	$ (792)	$ (784)	$ (793)	$ (14,398)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (256,822)	$ (259,871)	$ (260,399)	$ (250,671)	$ (253,824)	$ (264,728)	$ (273,595)	$ (278,326)	$ (285,545)	$ (4,631,377)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (159)	$ (158)	$ (146)	$ (160)	$ (151)	$ (149)	$ (155)	$ (152)	$ (149)	$ (2,751)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,576)
Expected Demand with High Elasticity and Existing Reso										
Total Served w/o Enduser (MDth)	32,734	32,957	33,420	33,928	34,354	34,813	35,129	35,556	35,991	668,471
Total System Cost (000's)	$ (312,189)	$ (320,168)	$ (327,754)	$ (326,936)	$ (339,022)	$ (358,101)	$ (375,820)	$ (391,590)	$ (410,915)	$ (5,856,847)
Total Transport Fix Cost (000's)	$ (79,167)	$ (85,489)	$ (92,623)	$ (100,459)	$ (109,066)	$ (118,523)	$ (128,915)	$ (140,722)	$ (153,754)	$ (1,592,348)
Total Transport Var Cost (000's)	$ (676)	$ (674)	$ (697)	$ (731)	$ (736)	$ (736)	$ (768)	$ (756)	$ (760)	$ (14,007)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (231,771)	$ (233,424)	$ (233,856)	$ (225,145)	$ (228,618)	$ (238,227)	$ (245,506)	$ (249,466)	$ (255,739)	$ (4,239,144)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (163)	$ (162)	$ (149)	$ (162)	$ (152)	$ (152)	$ (154)	$ (154)	$ (153)	$ (2,787)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,576)

Portfolio	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	Total
Coldest in 20 Demand with Existing Resources										
Total Served w/o Enduser (MDth)	38,045	38,574	39,143	39,759	40,285	40,888	41,441	42,092	42,651	757,347
Total System Cost (000's)	$ (455,141)	$ (471,250)	$ (486,598)	$ (478,182)	$ (491,727)	$ (525,036)	$ (550,119)	$ (577,070)	$ (608,670)	$ (7,997,147)
Total Transport Fix Cost (000's)	$ (81,024)	$ (87,383)	$ (94,555)	$ (102,430)	$ (111,077)	$ (120,574)	$ (131,006)	$ (142,855)	$ (155,932)	$ (1,628,745)
Total Transport Var Cost (000's)	$ (771)	$ (777)	$ (781)	$ (772)	$ (780)	$ (776)	$ (787)	$ (786)	$ (788)	$ (14,676)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (372,673)	$ (382,405)	$ (390,582)	$ (374,280)	$ (379,161)	$ (402,962)	$ (417,580)	$ (432,663)	$ (451,160)	$ (6,340,933)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (260)	$ (263)	$ (250)	$ (260)	$ (258)	$ (261)	$ (269)	$ (274)	$ (281)	$ (4,230)
DSM Implementation Cost (000's)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,579)
High Growth & Low Price Demand with Existing Resourc										
Total Served w/o Enduser (MDth)	44,114	45,025	45,940	46,887	47,720	48,633	49,460	50,402	51,212	857,587
Total System Cost (000's)	$ (410,141)	$ (423,014)	$ (443,146)	$ (468,605)	$ (492,550)	$ (517,678)	$ (544,457)	$ (573,948)	$ (572,727)	$ (7,691,204)
Total Transport Fix Cost (000's)	$ (81,024)	$ (87,383)	$ (94,555)	$ (102,430)	$ (111,077)	$ (120,574)	$ (131,006)	$ (142,855)	$ (155,932)	$ (1,628,745)
Total Transport Var Cost (000's)	$ (809)	$ (631)	$ (629)	$ (639)	$ (641)	$ (655)	$ (658)	$ (668)	$ (567)	$ (14,168)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (327,720)	$ (334,378)	$ (347,329)	$ (364,888)	$ (380,169)	$ (395,771)	$ (412,090)	$ (429,702)	$ (415,526)	$ (6,036,350)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (174)	$ (200)	$ (203)	$ (208)	$ (213)	$ (215)	$ (226)	$ (231)	$ (192)	$ (3,371)
DSM Implementation Cost (000's)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,586)
High Growth & Low Price Demand with Existing Resourc										
Total Served w/o Enduser (MDth)	44,248	45,259	46,318	47,430	48,435	49,529	50,559	51,696	52,726	864,144
Total System Cost (000's)	$ (579,111)	$ (609,025)	$ (648,913)	$ (696,324)	$ (744,437)	$ (796,100)	$ (852,189)	$ (916,538)	$ (941,575)	$(10,704,833)
Total Transport Fix Cost (000's)	$ (250,049)	$ (272,925)	$ (298,805)	$ (327,276)	$ (358,600)	$ (393,063)	$ (430,983)	$ (474,143)	$ (521,802)	$ (4,610,328)
Total Transport Var Cost (000's)	$ (780)	$ (665)	$ (675)	$ (696)	$ (717)	$ (751)	$ (778)	$ (810)	$ (690)	$ (14,882)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (327,674)	$ (334,816)	$ (348,800)	$ (367,703)	$ (384,456)	$ (401,605)	$ (419,726)	$ (439,332)	$ (415,133)	$ (6,062,864)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (197)	$ (199)	$ (203)	$ (209)	$ (213)	$ (218)	$ (226)	$ (232)	$ (168)	$ (3,388)
DSM Implementation Cost (000's)	$ (329)	$ (329)	$ (329)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	
Low Growth & High Prices with Restricted Capacity										
Total Served w/o Enduser (MDth)	31,888	31,965	32,074	32,223	32,300	32,443	32,553	32,755	32,890	650,063
Total System Cost (000's)	$ (579,523)	$ (589,842)	$ (606,222)	$ (626,952)	$ (646,322)	$ (675,050)	$ (707,914)	$ (744,590)	$ (782,532)	$(10,814,967)
Total Transport Fix Cost (000's)	$ (81,024)	$ (87,383)	$ (94,555)	$ (102,430)	$ (111,077)	$ (120,574)	$ (131,006)	$ (142,855)	$ (155,932)	$ (1,628,745)
Total Transport Var Cost (000's)	$ (558)	$ (421)	$ (418)	$ (414)	$ (415)	$ (413)	$ (412)	$ (412)	$ (397)	$ (10,887)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (497,088)	$ (501,156)	$ (510,350)	$ (523,188)	$ (533,891)	$ (553,094)	$ (575,493)	$ (600,285)	$ (625,117)	$ (9,158,973)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (441)	$ (461)	$ (468)	$ (480)	$ (489)	$ (506)	$ (526)	$ (545)	$ (576)	$ (7,785)
DSM Implementation Cost (000's)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,593)
Green Future with Exisiting Resources										
Total Served w/o Enduser (MDth)	33,696	34,085	34,504	34,929	35,343	35,755	36,114	36,549	36,913	688,561
Total System Cost (000's)	$ (509,205)	$ (527,692)	$ (555,101)	$ (576,973)	$ (604,689)	$ (635,671)	$ (670,459)	$ (705,752)	$ (744,051)	$ (9,277,241)
Total Transport Fix Cost (000's)	$ (81,024)	$ (87,383)	$ (94,555)	$ (102,430)	$ (111,077)	$ (120,574)	$ (131,006)	$ (142,855)	$ (155,932)	$ (1,628,745)
Total Transport Var Cost (000's)	$ (744)	$ (747)	$ (753)	$ (739)	$ (741)	$ (741)	$ (740)	$ (744)	$ (753)	$ (14,306)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (426,692)	$ (438,793)	$ (459,024)	$ (472,989)	$ (492,037)	$ (513,496)	$ (537,821)	$ (561,223)	$ (586,416)	$ (7,619,876)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (331)	$ (349)	$ (339)	$ (375)	$ (383)	$ (397)	$ (415)	$ (438)	$ (441)	$ (5,746)
DSM Implementation Cost (000's)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,585)
Supply Constrained with Existing Resources										
Total Served w/o Enduser (MDth)	33,636	33,972	34,357	34,801	35,206	35,630	35,955	36,370	36,696	679,368
Total System Cost (000's)	$ (631,509)	$ (659,118)	$ (688,262)	$ (714,342)	$ (745,031)	$ (787,581)	$ (832,734)	$ (882,437)	$ (934,412)	$(11,782,862)
Total Transport Fix Cost (000's)	$ (81,024)	$ (87,383)	$ (94,555)	$ (102,430)	$ (111,077)	$ (120,574)	$ (131,006)	$ (142,855)	$ (155,932)	$ (1,628,745)
Total Transport Var Cost (000's)	$ (694)	$ (694)	$ (706)	$ (681)	$ (686)	$ (690)	$ (705)	$ (707)	$ (692)	$ (13,311)
Total Supply Fixed Costs by Supply (000's)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Supply Variable Costs by Supply (000's)	$ (548,921)	$ (570,148)	$ (592,095)	$ (610,263)	$ (632,276)	$ (665,297)	$ (699,974)	$ (737,791)	$ (776,666)	$(10,124,043)
Total Storage Fix Cost (000's)	$ (83)	$ (91)	$ (100)	$ (110)	$ (121)	$ (133)	$ (147)	$ (162)	$ (179)	$ (1,984)
Total Storage Var Cost (000's)	$ (457)	$ (472)	$ (476)	$ (528)	$ (542)	$ (557)	$ (572)	$ (591)	$ (613)	$ (8,186)
DSM Implementation Cost (000's)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (330)	$ (6,593)

APPENDIX 7.1

DISTRIBUTION MODELING

APPENDIX 7.1 – DISTRIBUTION SYSTEM MODELING

OVERVIEW

The primary goal of distribution system planning is to design for present needs and to plan for future expansion to serve demand growth. This allows the company to satisfy current demand-serving requirements while taking steps toward meeting future needs. Distribution system planning identifies potential problems and areas of the distribution system that require reinforcement. By knowing when and where pressure problems may occur, the necessary reinforcements can be incorporated into normal maintenance. Thus, more costly "reactive" and emergency solutions can be avoided.

COMPUTER MODELING

When designing new main extensions, computer modeling can help determine the optimum size facilities for present and future needs. Undersized facilities are costly to replace, and oversized facilities incur unnecessary expenses to the company and its customers.

THEORY AND APPLICATION OF STUDY

Natural gas network load studies have evolved in the last decade to become a highly technical and useful means of analyzing the operation of a distribution system. Using a pipeline fluid flow formula, a specified parameter of each pipe element can be simultaneously solved. A variety of pipeline equations exist, each tailored to a specific flow behavior. Through years of research, these equations have been refined to the point where solutions obtained closely represent actual system behavior.

Avista conducts network load studies using Advantica's SynerGEE® 4.3.0 software. This computer-based modeling tool runs on a Windows operating system and allows users to analyze and interpret solutions graphically.

CREATING A MODEL

To properly study the distribution system, all natural gas main information is entered (length, pipe roughness and ID) into the model. "Main" refers to all pipelines supplying services.

Nodes (points where natural gas enters or leaves the system) are placed at all pipe intersections, beginnings and ends of mains, changes in pipe diameter/material and to identify all large customers. A model element connects two nodes together. Therefore, a "to node" and a "from node" will represent an element between those two nodes. Almost all of the elements in a model are pipes.

Regulators are treated like adjustable valves in which the downstream pressure is set to a known value. Although specific regulator types can be entered for realistic behavior, the expected flow passing through the actual regulator is determined and the modeled regulator is forced to accommodate such flows.

FLUID MECHANICS OF THE MODEL

Pipe flow equations are used to determine the relationships between flow, pressure drop, diameter and pipe length. For all models, the Fundamental Flow equation (FM) is used due to its demonstrated reliability.

Efficiency factors are used to account for the equivalent resistance of valves, fittings and angle changes within the distribution system. Starting with a 95 percent factor, the efficiency can be changed to fine tune the model to match field results.

Pipe roughness along with flow conditions creates a friction factor for all pipes within a system. Thus, each pipe may have a unique friction factor, minimizing computational errors associated with generalized friction values.

LOAD DATA

All studies are considered steady state; all natural gas entering the distribution system must equal the natural gas exiting the distribution system at any given time.

Customer loads are obtained from Avista's customer billing system and converted to an algebraic format so loads can be generated for various conditions.

In the event of a peak day or an extremely cold weather condition, it is assumed that all curtailable loads are interrupted. Therefore, the models will be conducted with only core loads.

DETERMINING NATURAL GAS CUSTOMERS' MAXIMUM HOURLY USAGE

Determining a Base Load

Base loads are not temperature dependent; they remain relatively constant regardless of temperature. A reasonable base load can be calculated from customer billing information. The billing month, which has the lowest amount of heating degree days is usually August. Usage during this month will reflect nearly all natural gas loads exclusive of space heating.

By determining the amount of days in the billing period and applying a peaking factor, the peak hourly base load of each customer can be estimated as shown in Table 1:

Table 1 - Determining Base Load

$$\text{Customer Usage Summer Billing Period} \times \frac{1}{\text{Days in Billing Period}} \times 0.0625^{*} = \text{Peak Hourly Base Load}$$

The average residential customer's peak usage was found to be 6.25 percent of the total daily load. This peaking factor was estimated by studying the ratio of the peak hourly flow and the total daily flow at the pipeline gate stations (result = 6.25 percent of total daily load) in past years. The peaking

factor is periodically discussed with other utilities and has been consistent with other utilities of similar size.

Determining Heat Load

A heat load will be proportional to heating degree-days (HDDs); at 0 HDD, the load will be zero. A heat load can be reasonably calculated from customer billing information. The billing month with the greatest consumption is usually January. This month reflects maximum space heating as well as non-space heating loads.

Customers' usage for January (winter) billing, minus usage for August (summer) billing, leaves a reasonable estimate for heat load. This load can be divided by the amount of HDDs that occurred in January, leaving usage per HDD. Customer needs can be calculated by applying the peaking factor, resulting in a peak hourly heat load per HDD. This is shown in Table 2:

Table 2 - Determining Heat Load

{ Customer Usage Winter Billing Period	–	Customer Usage Summer Billing Period }	X	$\frac{1}{\text{Winter Billing Period Degree Days}}$	X	Peak HDDs	X	0.0625*	=	Peak Hourly Heat Load

Determining Design Peak Hourly Load

The design peak hourly load for a customer is estimated by adding the hourly base load and the hourly heat load for a design temperature. This estimate reflects highest system hourly demands, as shown in Table 3:

Table 3 - Determining Peak Hourly Load

Peak Hourly Base Load	+	Peak Hourly Heat Load	=	Peak Hourly Load

This method differs from the approach that we use for IRP peak day load planning. The primary reason for this difference is due to the importance of responding to hourly peaking in the distribution system, while IRP resource planning focuses on peak day requirements to the city gate.

APPLYING LOADS

Having estimated the peak loads for all customers in a particular service area, the model can be loaded. The first step is to assign each load to the respective node or element.

GENERATING LOADS

Temperature-based and non-temperature-based loads are established for each node or element, thus loads can be varied based on any temperature (HDD). Such a tool is necessary to evaluate the difference in flow and pressure due to different weather conditions.

GEOGRAPHIC INFORMATION SYSTEM (GIS)

We have recently converted our natural gas facility maps to GIS. While a GIS can provide a variety of map products, its power lies in its analytical capability. A GIS consists of three components: spatial operations, data association and map representation.

A GIS allows analysts to conduct spatial operations (relating a feature or facility to another geographically). A spatial operation is possible if a facility displayed on a map maintains a relationship to other facilities. Spatial relationships allow analysts to perform a multitude of queries, including:

- identify electric customers adjacent to natural gas mains who are not currently using natural gas;
- display the ratio of customers to length of pipe in Emergency Operating Procedure zones (geographical areas defined by the number of customers and their safety in the event of an emergency); and
- classify high-pressure pipeline proximity criteria.

The second component of a GIS is data association. This allows analysts to model relationships between facilities displayed on a map to tabular information in a database. Databases store facility information such as pipe size, pipe material, pressure rating, or related information (e.g., customer databases, equipment databases and work management systems). Data association allows interactive queries within a map-like environment.

Finally, a GIS provides a means to create maps of existing facilities in different scales, projections and displays. In addition, the results of a comparative or spatial analysis can be presented pictorially. This allows users to present abstract analyses in a more intuitive context.

BUILDING SynerGEE® MODELS FROM A GIS

A GIS can provide additional benefits through the ease of creation and maintenance of load studies. Avista can create load studies from a GIS based on tabular data (attributes) installed during the mapping process.

MAINTENANCE USING A GIS

A GIS helps maintain the existing distribution facility by allowing a design to be initiated on a GIS. Currently, design jobs for the company's natural gas system are managed through Avista's Facility Management (AFM) tool. This system is being integrated with GIS, allowing jobs to be designed directly within a GIS. Once completed, the as-built information is submitted to GIS and the facility is immediately updated. This eliminates the need to convert physical maps to a GIS at a later date. Because the facility is updated on GIS, load studies can remain current by refreshing the analysis.

DEVELOPING A PRESENT CASE LOAD STUDY

In order for any model to have accuracy, a present case model has to be developed that reflects what the system was doing when downstream pressures and flows are known. To establish the present case, pressure charts located throughout the distribution system are used.

Pressure charts plot pressure (some include temperature) versus time over several days. Various locations recording simultaneously are used to validate the model. Customer loads on SynerGEE® are generated to correspond with actual temperatures recorded on the pressure charts. An accurate model's downstream pressures will match the corresponding location's field pressure chart. Efficiency factors are fine-tuned to further refine the model's pressures.

Since telemetry at the gate stations record hourly flow, temperature and pressure, these values are used to validate the model. All loads are representative of the average daily temperature and are defined as hourly flows. If the load generating method is truly accurate, all natural gas entering the actual system (physical) equals total natural gas demand solved by the simulated system (model).

DEVELOPING A PEAK CASE LOAD STUDY

Using the calculated peak loads, a model can be analyzed to identify the behavior during a peak day. The efficiency factors established in the present case are used throughout subsequent models.

ANALYZING RESULTS

After a model has been balanced, several features within the SynerGEE® model are used to translate results. Color plots are generated to depict flow direction, pressure, pipe diameter and gradient with specific break points. Reinforcements can be indentified by visual inspection. When user edits are completed and the model is re-balanced, pressure changes can be visually displayed, helping identify optimum reinforcements.

An optimum reinforcement will have the largest pressure increase per unit length. Reinforcements can also be deferred and occasionally eliminated through load mitigation of DSM efforts.

PLANNING CRITERIA

In most instances, models resulting in node pressures below 15 psig indicate a likelihood of distribution low pressure and therefore necessitate reinforcements. For most Avista distribution systems, a minimum of 15 psig will ensure deliverability as natural gas exits the distribution mains and travels through service pipelines to a customer's meter. Some Avista distribution areas operate at lower pressures and are assigned a minimum pressure of 5 psig for model results. Given a lower operating pressure, service pipelines in such areas are sized accordingly to maintain reliability.

DETERMINING MAXIMUM CAPACITY FOR A SYSTEM

Using a peak day model, loads can be prorated at intervals until area pressures drop to 15 psig. At that point, the total amount of natural gas entering the system equals the maximum capacity before

new construction is necessary. The difference between natural gas entering the system in this scenario and a peak day model is the maximum additional capacity that can be added to the system.

Since the approximate natural gas usage for the average customer is known, it can be determined how many new customers can be added to the distribution system before necessitating system reinforcements. The above models and procedures are utilized with new construction proposals or pipe reinforcements to determine a potential increase in facilities.

FIVE-YEAR FORECASTING

The intent of our load study forecasting is to predict the system's behavior and reinforcements necessary within the next five years. Various Avista personnel provide information to determine where and why certain areas may experience growth.

By combining information from Avista's demand forecast, IRP planning efforts, regional growth plans and area developments, proposals for pipeline reinforcements and expansions can be evaluated with SynerGEE®.