Prepared For: Alberta Electric System Operator

Rider E Calibration Factor Calculation for the Second Quarter of 2017

Prepared by:

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2017 March 29

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Date 29 March 20

The Association of Professional Engineers, Geologists and Geophysicists of Alberta





CURRENT YEAR MONTHLY DETAIL

2017 Second Quarter Calibration Factor % =
Carryforward Dec 31, 2016 + [(Cost of Losses – Loss Revenues) - Rider E Revenues] Jan 1 - Dec 31, 2017

[Hourly Loss Factor Customer Volumes × Hourly Pool Price] April 1 - Dec 31, 2017

The following table provides a summary of the AESO's projected year-end losses account balance for Rider E for January to December 2017.

				Calibra		Other Information					
			Numerator Values					Other Information			
Period	Data Source	Cost of	Revenues Collected Loss Factors	Costs Less Revenue (Over Collected) / Under Collected	Rider E Refunded/ (Collected)	Outstanding Variance (Over Collected) / Under Collected	Monthly Loss Factor Customer Volumes × Pool Price	Average Monthly Pool Price	Monthly Loss Factor Customer Volumes	Monthly Loss Volumes	
Pellou	Source	Losses \$ millions	\$ millions	\$ millions	\$ millions	\$ millions	\$ millions	\$/MWh	millions MWh	millions MWh	
Carryforward Dec 31, 2	2016					(0.8)					
January 2017	Actual	5.2	5.1	0.1	0.1	0.2	NA	23.96	5.83	0.21	
February 2017	Forecast	4.0	4.1	(0.0)	0.1	0.1	NA	22.18	4.87	0.18	
March 2017	Forecast	4.7	4.4	0.3	0.1	0.4	NA	24.25	5.13	0.19	
April 2017	Forecast	5.0	5.0	0.1	0.0	0.1	137.06	28.90	4.66	0.17	
May 2017	Forecast	5.2	5.2	0.0	0.0	0.0	147.61	30.67	4.72	0.17	
June 2017	Forecast	4.8	5.1	(0.3)	0.0	(0.3)	136.67	27.80	4.80	0.17	
July 2017	Forecast	5.7	6.1	(0.3)	0.0	(0.3)	161.84	30.62	5.24	0.18	
August 2017	Forecast	10.0	10.7	(0.7)	0.0	(0.7)	289.98	51.14	5.45	0.18	
September 2017	Forecast	7.3	7.5	(0.2)	0.0	(0.2)	203.45	38.44	5.17	0.18	
October 2017	Forecast	4.6	4.6	0.0	0.0	0.0	121.63	22.88	5.26	0.20	
November 2017	Forecast	6.5	6.6	(0.0)	0.0	(0.0)	170.64	31.34	5.27	0.21	
December 2017	Forecast	6.8	6.9	(0.1)	0.0	(0.1)	185.58	31.01	5.90	0.22	
Annual 2017		69.9	71.1	(1.2)	0.3	(0.9)	1554.47	30.27	62.31	2.27	
Total Balance						(1.7)	1,554.47				
Calibration Factor Calculation Outputs: Rider E Calibration Factor Q2 2017							(0.11%)	(Refund)/Charge			

Notes:

- 1. The Rider E Calibration Factor will apply to all loss factor customers receiving service under Rates STS, DOS, XOS, and IOS as provided on the Rider E rate sheet.
- 2. If the Rider E Calibration Factor for Q2 remained in place during Q2, Q3, Q4, it would collect the variance between cost of losses and revenues by the end of 2017, as currently forecasted.
- 3. Forecast amounts in the above table and calculation reflect the AESO's best estimates at the time of preparation. The values represent forecasts and estimates only, and final values will differ.
- 4. Actual amounts in the above table are subject to revision in future periods due to interim and final settlement and to other adjustments.
- 5. The calibration factor calculation itself is based on summing hourly costs, revenues, and loss factor customer volumes x pool price, and the same result will not be obtained by using the monthly values presented.
- 6. Numbers may not add due to rounding.
- 7. "NA" means "not applicable".
- 8. The revenue, cost and Rider E amounts are shown on a production month basis.

PRIOR YEARS MONTHLY DETAIL

The following table provides a summary of the AESO's losses account balance for Rider E for the period 2006 to 2016.

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	Data Source			Calibra						
			Numerator V	Other Information						
Period Annual 2006 to 2013		Cost of Losses \$ millions 1,410.4	Revenues Collected Loss Factors \$ millions 1,472.4	Costs Less Revenue (Over Collected) / Under Collected \$ millions (62.0)	Rider E Refunded/ (Collected) \$ millions 63.6	Outstanding Variance (Over Collected) / Under Collected \$ millions 1.6	Monthly Loss Factor Customer Volumes × Pool Price \$ millions NA	Average Monthly Pool Price \$/MWh 68.12	Monthly Loss Factor Customer Volumes millions MWh 402.07	Monthly Loss Volumes millions MWh 18.12
January 2014	Actual	9.7	9.1	0.5	0.3	0.8	NA	45.23	5.60	0.21
February 2014	Actual	16.6	17.0	(0.4)	0.6	0.2	NA	96.33	5.14	0.18
March 2014	Actual	9.5	8.8	0.6	0.3	0.9	NA	43.68	5.50	0.22
April 2014	Actual	6.2	5.8	0.4	0.2	0.6	NA	30.67	4.94	0.20
May 2014	Actual	10.0	9.4	0.6	0.4	1.0	NA	54.05	4.78	0.18
June 2014	Actual	7.7	7.3	0.4	0.3	0.7	NA	42.18	4.66	0.18
July 2014	Actual	23.5	22.5	1.0	(1.0)	(0.1)	NA	122.54	5.16	0.19
August 2014	Actual	9.0	8.7	0.3	(0.4)	(0.0)	NA	45.20	5.19	0.20
September 2014	Actual	5.6	4.6	0.9	(0.2)	0.8	NA	23.98	4.92	0.22
October 2014	Actual	6.4	5.4	1.0	(1.0)	0.1	NA	27.04	5.27	0.23
November 2014	Actual	8.5	7.5	1.0	(1.4)	(0.4)	NA	37.70	5.41	0.22
December 2014	Actual	6.9	5.8	1.1	(1.0)	0.0	NA NA	26.90	5.71	0.24
Annual 2014		119.5	111.9	7.6	(2.9)	4.7	NA	49.63	62.28	2.46
January 2015	Actual	7.5	7.5	(0.1)	0.0	(0.1)	NA	33.95	5.67	0.21
February 2015	Actual	6.4	6.2	0.1	0.0	0.2	NA	32.83	4.97	0.19
March 2015	Actual	4.1	4.1	0.0	0.0	0.0	NA	20.65	5.26	0.20
April 2015	Actual	3.7	3.7	0.0	0.0	0.0	NA	20.52	4.87	0.18
May 2015	Actual	8.1	9.2	(1.1)	0.1	(1.0)	NA	53.93	4.86	0.16
June 2015	Actual	16.6	17.7	(1.2)	0.1	(1.1)	NA NA	97.31	4.95	0.18
July 2015	Actual	4.6	4.6	0.0	(0.2)	(0.2)	NA NA	23.15	5.20	0.20
August 2015	Actual	6.5	6.8	(0.3)	(0.3)	(0.6)	NA NA	34.11	5.13	0.18
September 2015	Actual	4.3	4.2	0.1	(0.2)	(0.0)	NA NA	20.85	5.13	0.20
October 2015	Actual	4.6	4.5 4.3	0.2	0.1	0.3 0.3	NA NA	21.47 21.17	5.42	0.21 0.20
November 2015 December 2015	Actual	4.4 5.0	4.5 4.5	0.1 0.5	0.1 0.1	0.6	NA NA	20.93	5.93 6.20	0.20
Annual 2015	Actual	75.8	77.4	(1.6)	(0.1)	(1.6)	NA NA	33.41	63.61	2.36
Allitual 2015				(1.0)	(0.1)	· ·			03.01	
January 2016	Actual	5.0	4.7	0.3	(0.1)	0.2	NA	22.25	5.63	0.21
February 2016	Actual	3.2	3.3	(0.1)	(0.1)	(0.1)	NA	17.22	5.03	0.18
March 2016	Actual	2.6	2.7	(0.1)	(0.1)	(0.1)	NA	14.79	5.11	0.17
April 2016	Actual	2.3	2.3	(0.1)	(0.3)	(0.3)	NA	13.63	4.65	0.16
May 2016	Actual	2.7	2.7	(0.0)	(0.3)	(0.4)	NA	15.89	4.70	0.16
June 2016	Actual	2.7	2.8	(0.1)	(0.3)	(0.4)	NA	15.44	4.80	0.17
July 2016	Actual	3.4	3.6	(0.2)	(0.5)	(0.7)	NA	18.21	5.24	0.18
August 2016	Actual	3.4	3.6	(0.2)	(0.5)	(0.8)	NA NA	17.90	5.45	0.18
September 2016	Actual	3.3	3.4	(0.2)	(0.5)	(0.7)	NA NA	17.70	5.17	0.17
October 2016	Actual	4.6	5.0	(0.4)	(0.4)	(0.8)	NA NA	25.37	5.26	0.16
November 2016	Actual	3.2	3.4	(0.2)	(0.2)	(0.4)	NA NA	16.32	5.27	0.19
December 2016 Annual 2016	Actual	<u>4.8</u> 41.1	5.3 42.8	(0.5)	(0.4)	(0.9)	NA NA	24.33 18.26	5.90 62.21	0.20
Allitual 2016		41.1	42.ŏ	(1.8)	(3.7)	(5.4)	INA	18.26	02.21	2.13