## **Prepared For: Alberta Electric System Operator**

## Rider E Calibration Factor Calculation for the Second Quarter of 2016

Prepared by:

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## **CURRENT YEAR MONTHLY DETAIL**

2016 Second Quarter Calibration Factor % =  $\frac{\text{Carryforward}_{\text{Dec 31, 2015}} + [(\text{Cost of Losses} - \text{Loss Revenues}) - \text{Rider E Revenues}]_{\text{Jan 1 - Dec 31, 2016}}}{[\text{Hourly Loss Factor Customer Volumes} \times \text{Hourly Pool Price}]_{\text{April 1 - Dec 31, 2016}}}$ 

The following table provides a summary of the AESO's projected year-end losses account balance for Rider E for January to December 2016.

			Calibration Factor Calculation Inputs						Other Information		
		Numerator Values					Denominator Value	Other Information			
Period	Data Source	Cost of Losses	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	
Carryforward Dec 31, 2015		\$ millions	\$ millions	\$ millions	\$ millions	\$ millions <b>5.4</b>	\$ millions	\$/MWh	millions MWh	millions MWh	
January 2016	Actual	5.1	4.7	0.4	(0.1)	0.3	NA	22.25	5.63	0.22	
ebruary 2016	Forecast	3.5	3.4	0.2	(0.1)	0.1	NA	17.22	5.17	0.20	
larch 2016	Forecast	9.7	9.4	0.2	(0.2)	0.1	NA	45.12	5.29	0.21	
pril 2016	Forecast	3.6	3.5	0.1	0.0	0.1	95.57	19.15	4.90	0.19	
/lay 2016	Forecast	3.6	3.5	0.1	0.0	0.1	96.78	19.35	4.90	0.18	
une 2016	Forecast	6.1	5.9	0.2	0.0	0.2	167.53	32.07	4.97	0.18	
uly 2016	Forecast	16.6	16.3	0.2	0.0	0.2	438.22	79.45	5.22	0.20	
ugust 2016	Forecast	15.1	15.0	0.1	0.0	0.1	391.97	72.61	5.15	0.20	
September 2016	Forecast	7.3	7.2	0.1	0.0	0.1	188.62	35.41	5.15	0.20	
October 2016	Forecast	8.4	8.2	0.2	0.0	0.2	214.44	38.88	5.44	0.21	
lovember 2016	Forecast	5.8	5.3	0.5	0.0	0.5	139.85	26.01	5.31	0.22	
December 2016	Forecast	11.5	10.9	0.6	0.0	0.6	287.77	50.01	5.67	0.23	
nnual 2016		96.4	93.3	3.0	(0.3)	2.7	2020.76	38.13	62.81	2.43	
otal Balance						8.1	2,020.76				
Calibration Factor Calculation Outputs: Rider E Calibration Factor Q2 2016							0.40%	(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 2016, 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.
- 9. The 2016 Q2 Calibration Factor reflects a charge of \$3.23 million arising from a system level metering adjustment related from December 2008 to May 2015. The allocation of the charge will occur over April to December of 2016, consistent with the existing methodology which allocates outstanding variance amounts over the remaining months in the calendar year.

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The following table provides a summary of the AESO's losses account balance for Rider E for the period 2006 to 2015.

		Calibration Factor Calculation Inputs						1 ago 2 oi 2			
			Numerator Values				Denominator Value	Other Information			
Period Annual 2006 to 2012	Data Source	Cost of Losses \$ millions 1,227.61	Revenues Collected Loss Factors \$ millions 1,289.67	Costs Less Revenue (Over Collected) / Under Collected \$ millions (62.1)	Rider E Refunded/ (Collected) \$ millions 67.0	Outstanding Variance (Over Collected) / Under Collected \$ millions 4.98	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 18.13	
	Actual		·					58.02			
January 2013 February 2013 March 2013 April 2013 May 2013 June 2013 July 2013 August 2013 September 2013	Actual Actual Actual Actual Actual Actual Actual Actual Actual	11.9 5.0 19.6 24.7 23.4 17.4 10.8 15.8 22.8	12.2 5.6 20.3 24.9 22.9 17.6 11.0 16.4 21.2	(0.4) (0.6) (0.7) (0.2) 0.4 (0.2) (0.3) (0.6)	0.1 0.1 0.2 (1.1) (1.0) (0.8) (0.9) (1.3) (1.8)	(0.2) (0.6) (0.4) (1.3) (0.6) (1.0) (1.2) (1.9) (0.2)	NA NA NA NA NA NA NA	28.71 105.63 137.66 127.66 104.77 56.14 83.64 111.98	5.36 4.75 5.04 4.81 4.69 4.44 4.89 4.85 4.72	0.21 0.20 0.19 0.19 0.18 0.16 0.19 0.17 0.18	
October 2013 November 2013 December 2013 Annual 2013	Actual Actual Actual	12.8 6.8 12.0 182.8	12.6 6.1 11.8 182.8	0.2 0.6 0.2 0.1	1.3 0.6 1.2 (3.4)	1.5 1.2 1.4 (3.4)	NA NA NA NA	64.56 28.34 52.26 79.95	4.99 5.23 5.67 59.43	0.21 0.24 0.23 2.33	
January 2014 February 2014 March 2014 April 2014 May 2014 June 2014 July 2014 August 2014 September 2014 October 2014 November 2014 December 2014 Annual 2014	Actual	9.7 16.6 9.5 6.2 10.0 7.7 23.5 9.0 5.6 6.4 8.5 6.9	9.1 17.0 8.8 5.8 9.4 7.3 22.5 8.7 4.6 5.4 7.5 5.8	0.5 (0.4) 0.6 0.4 0.6 0.4 1.0 0.3 0.9 1.0 1.0 1.1	0.3 0.6 0.3 0.2 0.4 0.3 (1.0) (0.4) (0.2) (1.0) (1.4) (1.0) (2.9)	0.8 0.2 0.9 0.6 1.0 0.7 (0.1) (0.0) 0.8 0.1 (0.4) 0.0 4.7	NA N	45.23 96.33 43.68 30.67 54.05 42.18 122.54 45.20 23.98 27.04 37.70 26.90 49.63	5.60 5.14 5.50 4.94 4.78 4.67 5.16 5.19 4.92 5.27 5.41 5.71 62.29	0.22 0.18 0.22 0.20 0.18 0.19 0.20 0.22 0.23 0.22 0.24 2.47	
January 2015 February 2015 March 2015 April 2015 May 2015 June 2015 July 2015 August 2015 September 2015 October 2015 November 2015 December 2015 Annual 2015	Actual	7.4 6.4 4.1 3.8 8.3 16.9 4.7 6.5 4.3 4.6 4.4 5.2	7.5 6.2 4.1 3.7 9.2 17.7 4.6 6.8 4.2 4.5 4.3 4.5	(0.1) 0.1 0.0 0.0 (1.0) (0.8) 0.1 (0.3) 0.1 0.2 0.1 0.7 (0.8)	0.0 0.0 0.0 0.1 0.1 (0.2) (0.3) (0.2) 0.1 0.1 0.1 (0.1)	(0.1) 0.2 0.0 0.1 (0.9) (0.7) (0.1) (0.6) (0.0) 0.3 0.3 0.8 (0.9)	NA N	33.95 32.83 20.65 20.52 53.93 97.31 23.15 34.11 20.85 21.47 21.17 20.93	5.66 4.97 5.26 4.87 4.86 4.95 5.20 5.13 5.13 5.42 5.28 5.60	0.21 0.19 0.20 0.18 0.16 0.18 0.20 0.18 0.20 0.21 0.20 0.21 0.20 0.24	