
TO: Board of Directors
FROM: Donald Blue, Vice-President and Chief Actuary
DATE: August 17, 2017
CLUSTER: Finance
SUBJECT: Rate Setting for 2018
SUBMISSION: Information


Issue

The preliminary 2018 average rate requirement prepared by the Chief Actuary is submitted for Board of Directors review and discussion.

Background:

We have completed detailed analysis of preliminary 2018 rate requirements, reflecting the WSIB's updated financial position as at December 31, 2016 and incorporating the revised method of determining actuarial liabilities implemented as at December 31, 2016. The analysis tests projected Sufficiency Ratios under various scenarios, combining rate increases, differing new claims costs, rates of investment return and patterns of economic development.

The preliminary recommendation also takes account of Chronic Mental Stress (CMS) legislation that will take effect on January 1, 2018. We have not yet determined our preferred adjudication approach to CMS claims.



The current funding trajectory suggests that achievement of 100% funding is possible much earlier than had previously been expected. This led us to consider a longer-term pricing strategy, which is summarized in the analysis. Note that this longer term strategy does not affect the preliminary 2018 rate recommendation, but has implications for future rate decisions.

Relevant Factors:

Appended to this memorandum for your review is a presentation setting out the results of our projections, summarizing other relevant information and presenting a preliminary assessment of the required rate.

Recommendation:

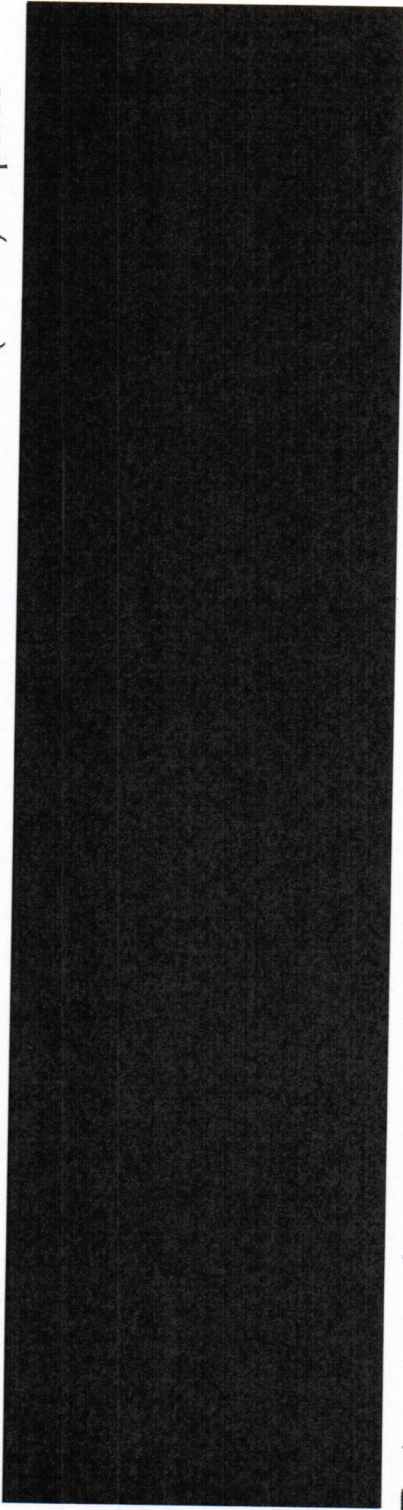
Provided for information purposes.

"SEE" BOS Minute #4, August 17, 2017, Page 7529⁵

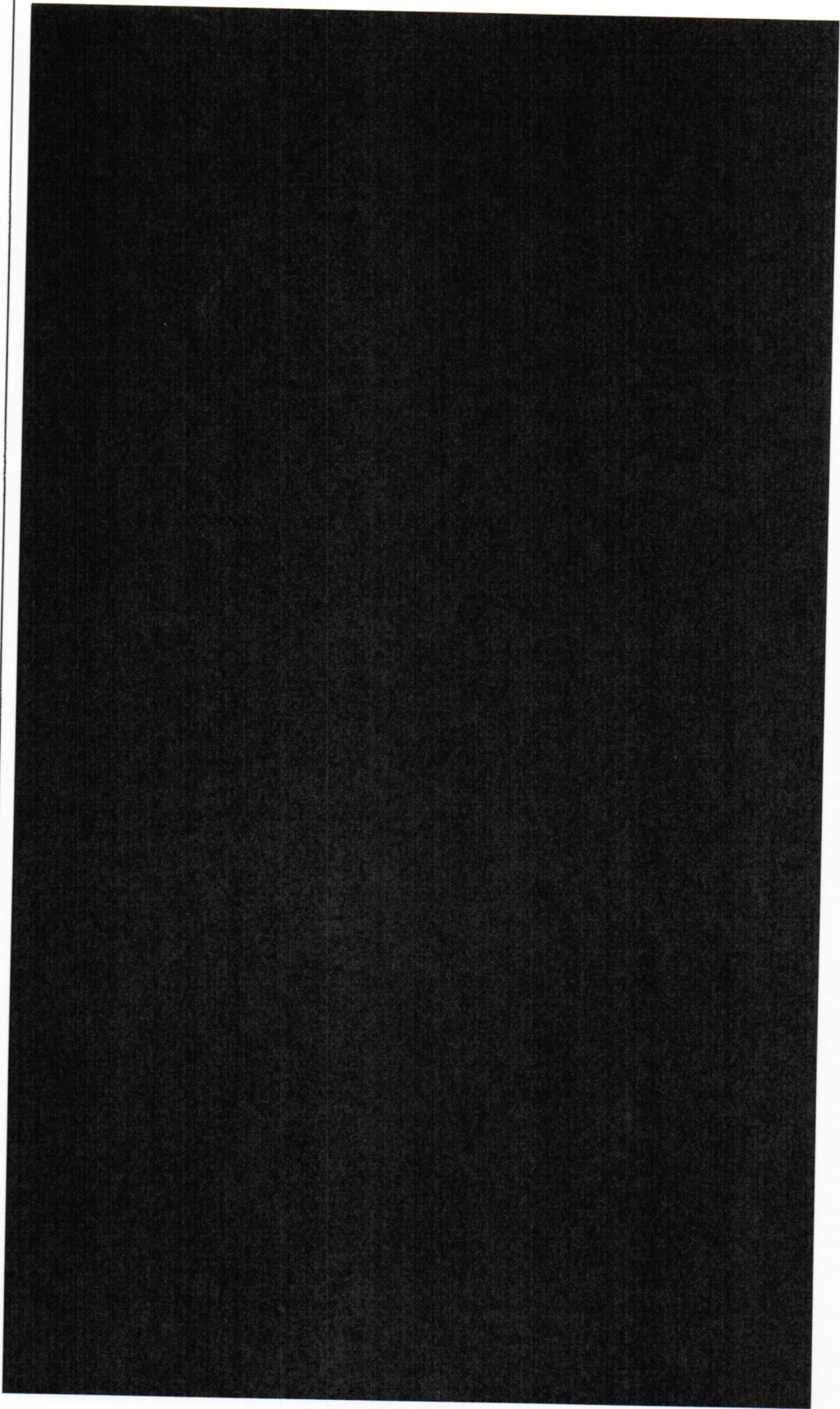
Board of Directors August 17, 2017

Preliminary Recommended 2018 Rate Strategy and Premium Rate

Preliminary Recommended 2018 Premium Rate Action

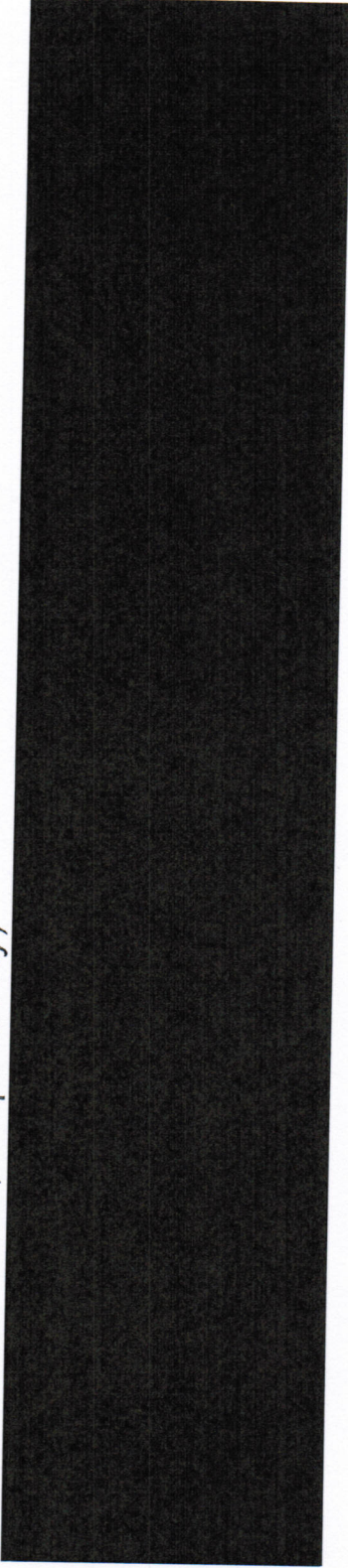
- We recommend an average Schedule 1 premium rate reduction of 3% i.e. from \$2.43 per \$100 of Insurable Earnings to \$2.36 per \$100 of Insurable Earnings
 - This reduction includes the expected Chronic Mental Stress (CMS) impact 
- No Rate group increases allowed unless CMS costs require such increase

Preliminary Recommended 2018 Premium Rate Action



2017 Funding Projection Scenarios

- Various Funding Scenarios are prepared reflecting the latest set of assumptions:
 - Base case (assumes 6.2%, 3.0%, 0% premium rate reductions for 2017, 2018 and 2019, respectively)



See slide #6 for summary results

- Adverse scenarios are also prepared to assess the potential risk exposure
- The different scenarios enable us to consider the rate setting strategy before the Rate Framework is implemented

Comparison of Assumptions

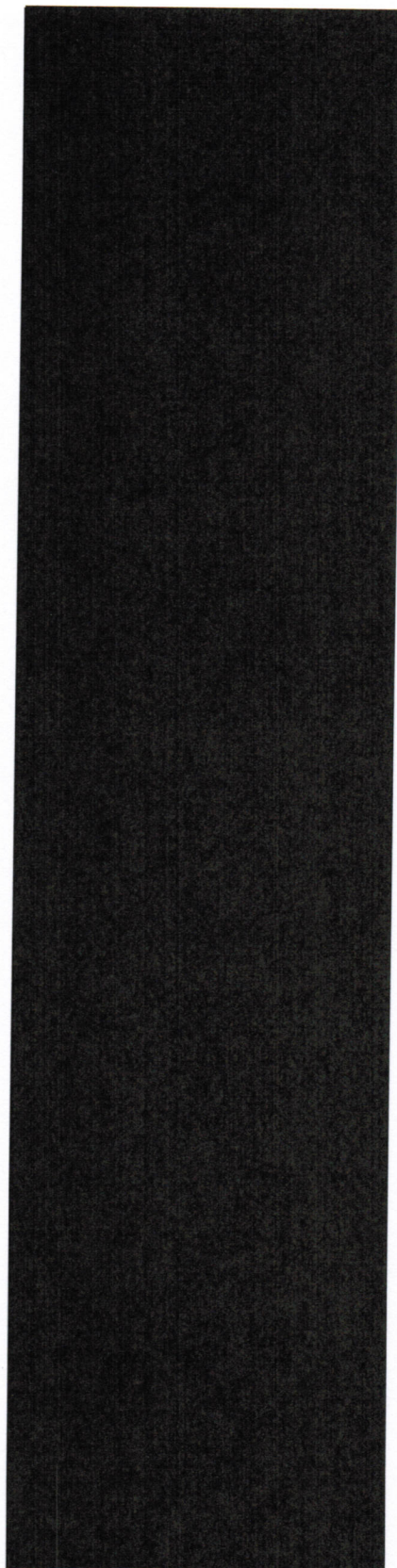


Key Assumptions	2016 Funding Base Assumptions (for 2017 rate setting)	2016 Economic Statement Assumptions	2017 Funding Base Assumptions (for 2018 rate setting)
Long Term Target Investment Rate	5.25%	5.25%	4.75%
Investment Returns	2016-2019 : 3.5% 2020+ : 5.25% Level equivalent rate of about 4.6%	2016-2019 : 3.5% 2020+ : 5.25% Level equivalent rate of about 4.6%	2017-2019 : 3.0% 2020+ : 4.75% Level equivalent rate of about 4.2%
Discount Rate	4.75%	4.75%	4.50%
Insurable Earnings Growth	2016-2017: 2.5% 2018+: 2.0%	2016-2017: 2.5% 2018+: 2.0%	2017: 2.5% 2018+: 2.0%
NCC	\$0.85 (2016), \$0.93 (2017+) Base NCC: \$0.75 PTSD: \$0.01 Indexation: \$0.01 Firefighters Presumptive: \$0.01 Margin: \$0.15 (breakdown for NCC = \$0.93)	\$0.85 (2016), \$0.93 (2017+) Base NCC: \$0.75 PTSD: \$0.01 Indexation: \$0.01 Firefighters Presumptive: \$0.01 Margin: \$0.15 (breakdown for NCC = \$0.93)	\$0.93 Base NCC: \$0.69 CMS: \$0.075 PTSD: \$0.01 Margin: \$0.155
Chronic Mental Stress (CMS)	none	none	\$0.075 included in NCC

Note: Level Equivalent Rate for Investment Returns determined by solving for the equivalent rate to achieve the same sufficiency ratio at 2027.
2017 Funding NCC was determined based on the NCC for the current 2016 Injury Year, \$0.075 for proposed Chronic Mental Stress legislation, \$0.01 for post traumatic stress disorder with a 20% margin applied to each of these components.

Premium Rate Reductions

- Premium rate reductions for 2018 and 2019 lowered to 3.0% and 0% from 5.0% (in 2016 Funding) for the following reasons:
 - Ensure solid financial position at Rate Framework implementation in 2020
 - Uncertainty about cost of CMS
 - Enables potential larger decrease in the year of introduction of RFM to smooth transition
 - Provided greater than a 5.0% decrease in 2017 premium rates



2017 Base Scenario Funding Projections

Basis	NCC/\$100 IE Benefit	Indexation		Investment Returns		Discount Rate		Insurable Earnings Growth		Prudency Formula
		Full	Partial	2016-2017	2018+	2016-2017	2018+	2015-2017	2018+	
2016 Funding - Base	\$0.85(2016), \$0.93(2017+)	2.0%	0.5% (2016), 1.0%(2017), 2.0%(2018+)	3.5%	3.5%(2018-2019), 5.25%	4.75%	4.75%	2.5%(2016- 2017)	2.0%	8.5% of Rev Prem
2017 Funding - Base	\$0.93	2.0%	1.0%(2017), 2.0%(2018+)	3.0%	3.0%(2018-2019), 4.75%	4.50%	4.50%	2.5%(2017)	2.0%	8.5% of Rev Prem

Note: The indexation assumptions prior to 2018 assume indexation is applied to gross earnings. Indexation assumptions for 2018 and later assume indexation is applied to the benefit rate.

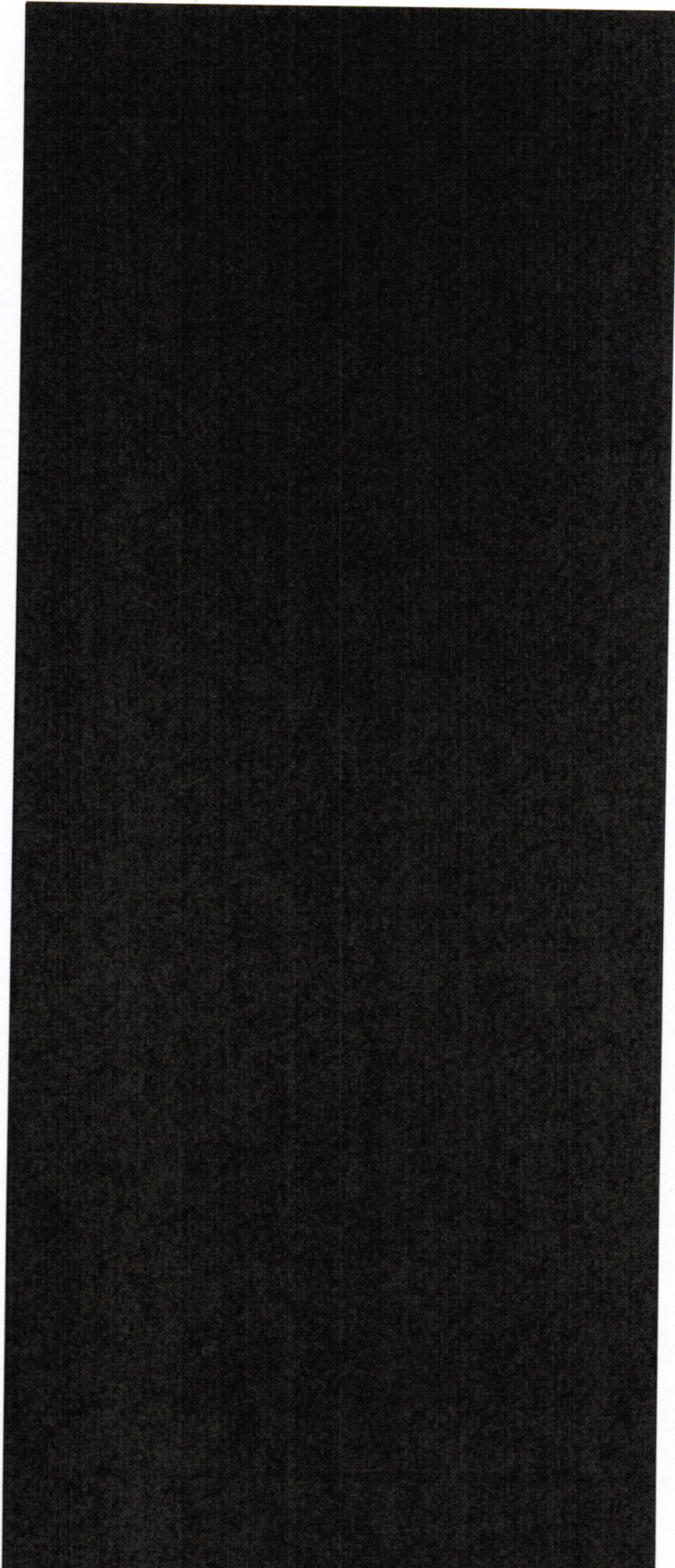
Basis	Premium Rate						Sufficiency Ratio						100% SR			
	2016	2017	2018	2019	2020	2021	2022+	2016	2017	2018	2019	2020	2021	2022	2027	Achieved
2016 Funding - Base (6.2%, 5%, 5% premium rate reductions for 2017-2019)	\$2.57	\$2.42	\$2.30	\$2.11	\$2.12	\$2.12	\$2.12	84.4%	89.4%	93.1%	95.3%	97.5%	103.3%	103.4%	123.4%	2021
2017 Funding - Base (6.2%, 3%, 0% premium rate reductions for 2017-2019)	\$2.59	\$2.43	\$2.36	\$2.36	\$2.28	\$2.28	\$2.29	87.4%	92.8%	96.8%	100.2%	104.0%	111.1%	135.7%	135.7%	2019

2017 Funding Projections – Adverse Scenarios

Scenario	Industry Sector	Insurable Earnings	Sensitivity Applied (Years)	NCC	Investment Rate of Return	Premium Decrease
Adverse 1	All	1.5%(2017-2019), normal growth thereafter	3	No change	Investment loss of 1% in 2017 followed by a 15% loss in 2018 (2017 to 2019)	6.2%, 3%, 0% for (2017 to 2019)

Basis	Premium Rate										Sufficiency Ratio				100% SR
	2016	2017	2018	2019	2020	2021	2022+	2016	2017	2018	2019	2020	2022	2027	Achieved
2017 Funding - Base (6.2%, 3%, 0% premium rate reduction for 2017-2019)	\$2.59	\$2.43	\$2.36	\$2.36	\$2.28	\$2.28	\$2.29	87.4%	92.8%	96.8%	100.2%	104.0%	111.1%	135.7%	2019
2016 Funding - Adverse 1, (6.2%, 3%, 0% premium rate reduction for 2017-2019)	\$2.59	\$2.43	\$2.36	\$2.36	\$2.28	\$2.28	\$2.28	87.4%	92.4%	94.0%	93.0%	92.8%	92.8%	115.2%	2024

Discussion - Employer's Rate Setting Options



Analysis Based on CMS Costs of \$0.075

**Summary of 2017 Published Rates to [REDACTED] by [REDACTED]
 Class (CMS = \$0.075 analysis – [REDACTED])**

While the average rate adjustment for each Class differs, overall, Schedule 1 employers' average premiums will be reduced by 3%, from \$2.43 to \$2.36.

Summary of Class Rates:

Class Description	2017 Published Rates (added)			
	New Claims Cost Rate	Overhead Rate	Past Claims Cost Rate	Premium Rate
Forest Products	2.872	1.156	1.436	5.46
Mining and Related Industries	2.307	1.163	2.776	6.25
Other Primary Industries	2.136	0.864	1.151	4.15
Manufacturing	1.033	0.545	0.927	2.51
Transportation and Storage	2.164	0.830	2.049	5.04
Retail and Wholesale Trades	0.602	0.385	0.716	1.70
Construction	2.136	0.897	2.755	5.79
Government and Related Services	0.508	0.316	0.543	1.37
Other Services	0.384	0.264	0.546	1.19
Schedule 1	0.930	0.479	1.019	2.43

Summary of 2017 Published Rates to [REDACTED] by [REDACTED] Class (CMS = \$0.075 analysis - [REDACTED])

Premium rates and premium rate components under 2017 Published Rates, [REDACTED]

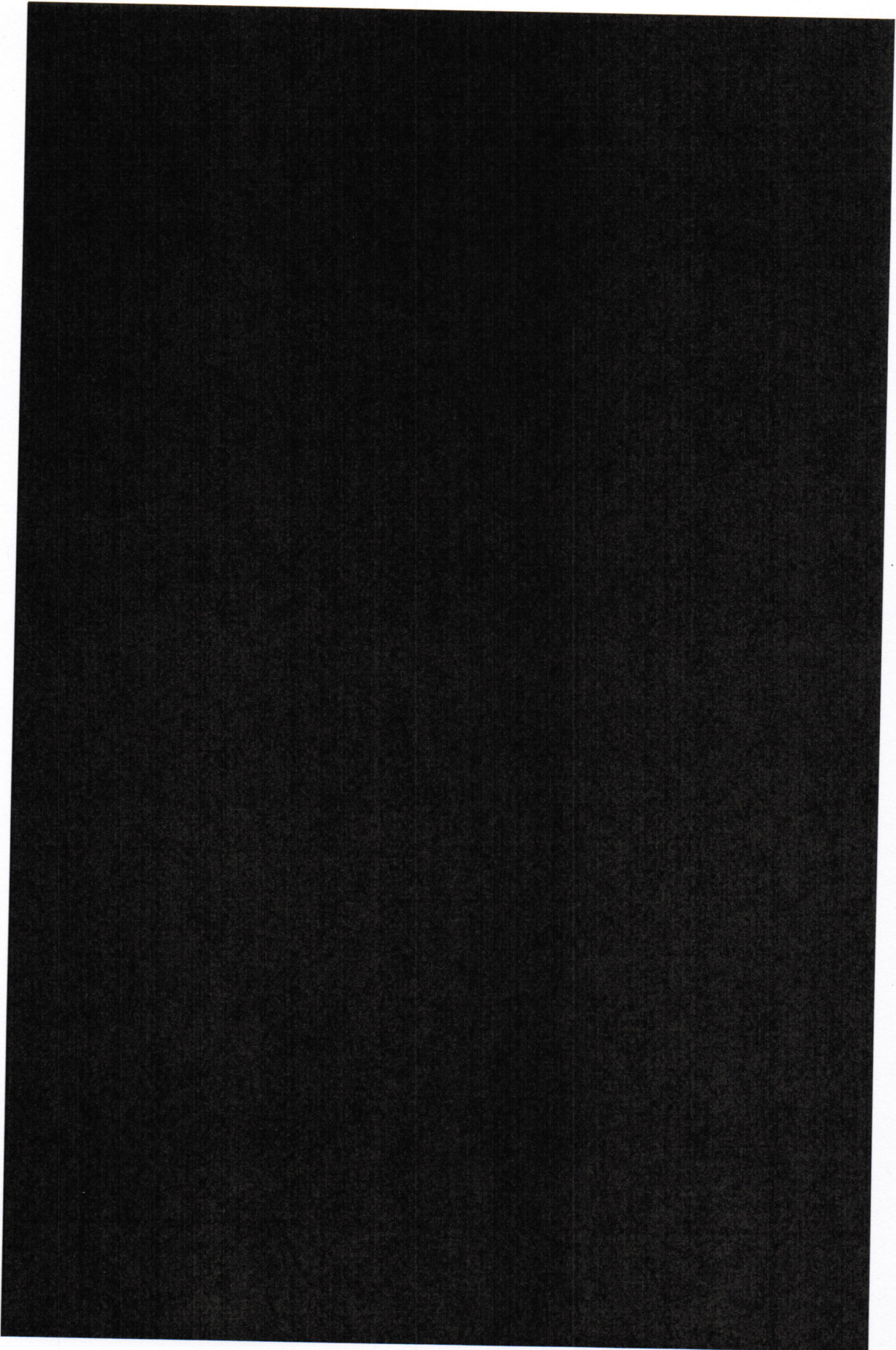
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Rate Setting Considerations (Cont'd) – Rate Decrease Approach (CMS = \$0.075 analysis –

Up to a 7.6% rate premium reduction has been recommended for the best performing rate groups.

Summary of Rate Group Changes, By Class:

Class	Class Description	RG Count	Firm Count	Decreases in the RG Basis			Increase in the RG Basis			No change in the RG Basis		
				# RG	# Firms	% Firms	# RG	# Firms	% Firms	# RG	# Firms	% Firms
A	Forest Products	5	1,413	3	504	36%	2	909	64%	-	-	0%
B	Mining and Related Industries	4	929	3	859	92%	1	70	8%	-	-	0%
C	Other Primary Industries	6	16,421	2	3,604	22%	4	12817	78%	-	-	0%
D	Manufacturing	73	25,701	30	9,472	37%	42	16,138	63%	1	91	0%
E	Transportation and Storage	8	16,868	2	946	6%	6	15922	94%	-	-	0%
F	Retail and Wholesale Trades	16	56,122	8	35,270	63%	8	20,852	37%	-	-	0%
G	Construction	13	111,919	13	111,919	100%	-	-	0%	-	-	0%
H	Government and Related Services	14	11,009	4	2,436	22%	10	8,573	78%	-	-	0%
I	Other Services	16	75,953	11	64,594	85%	5	11,359	15%	-	-	0%
Schedule 1		155	316,335	76	229,604	73%	78	86,640	27%	1	91	0%



Analysis Based on



Summary of 2017 Published Rates to [REDACTED] by Class

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Summary of Class Rates:

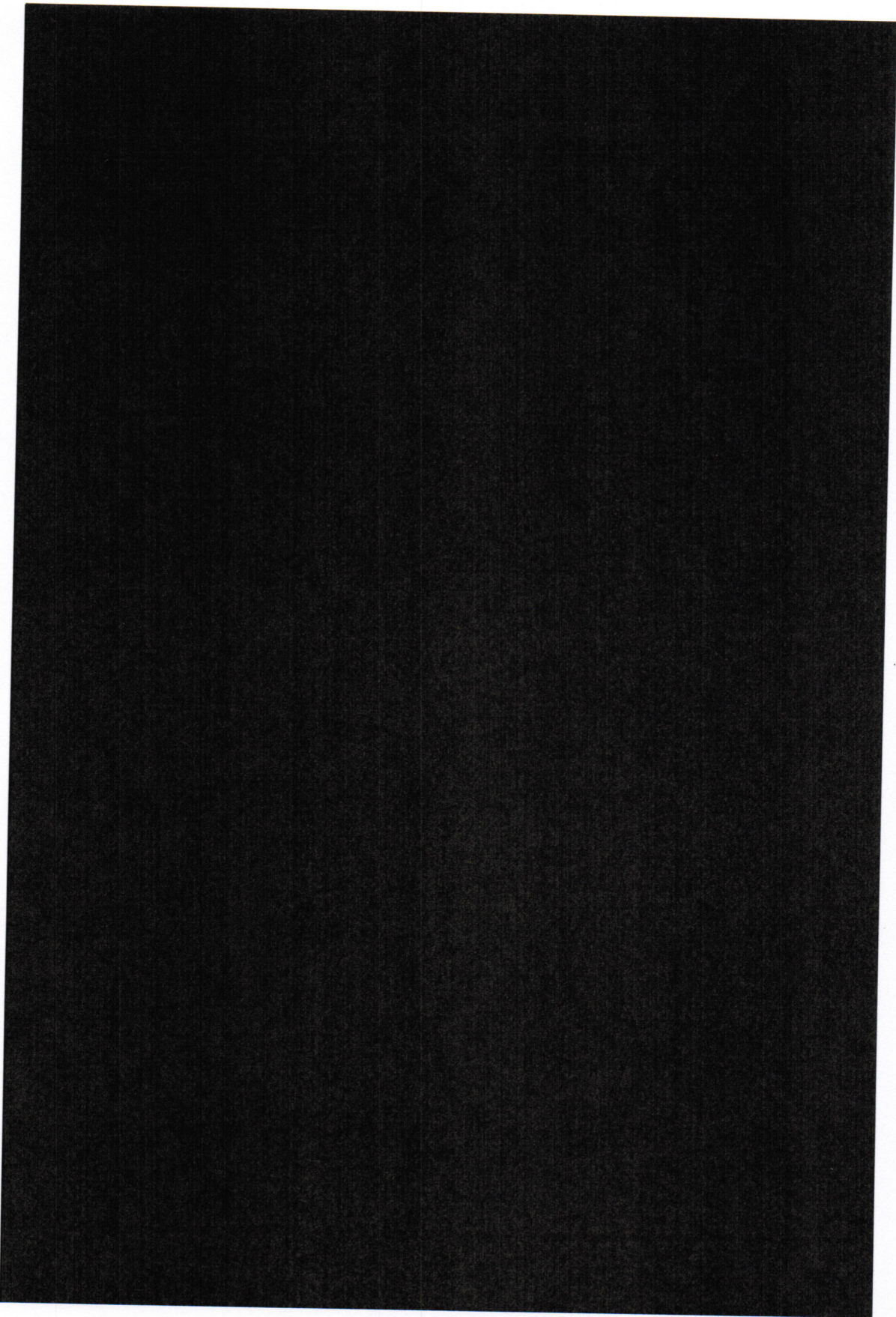
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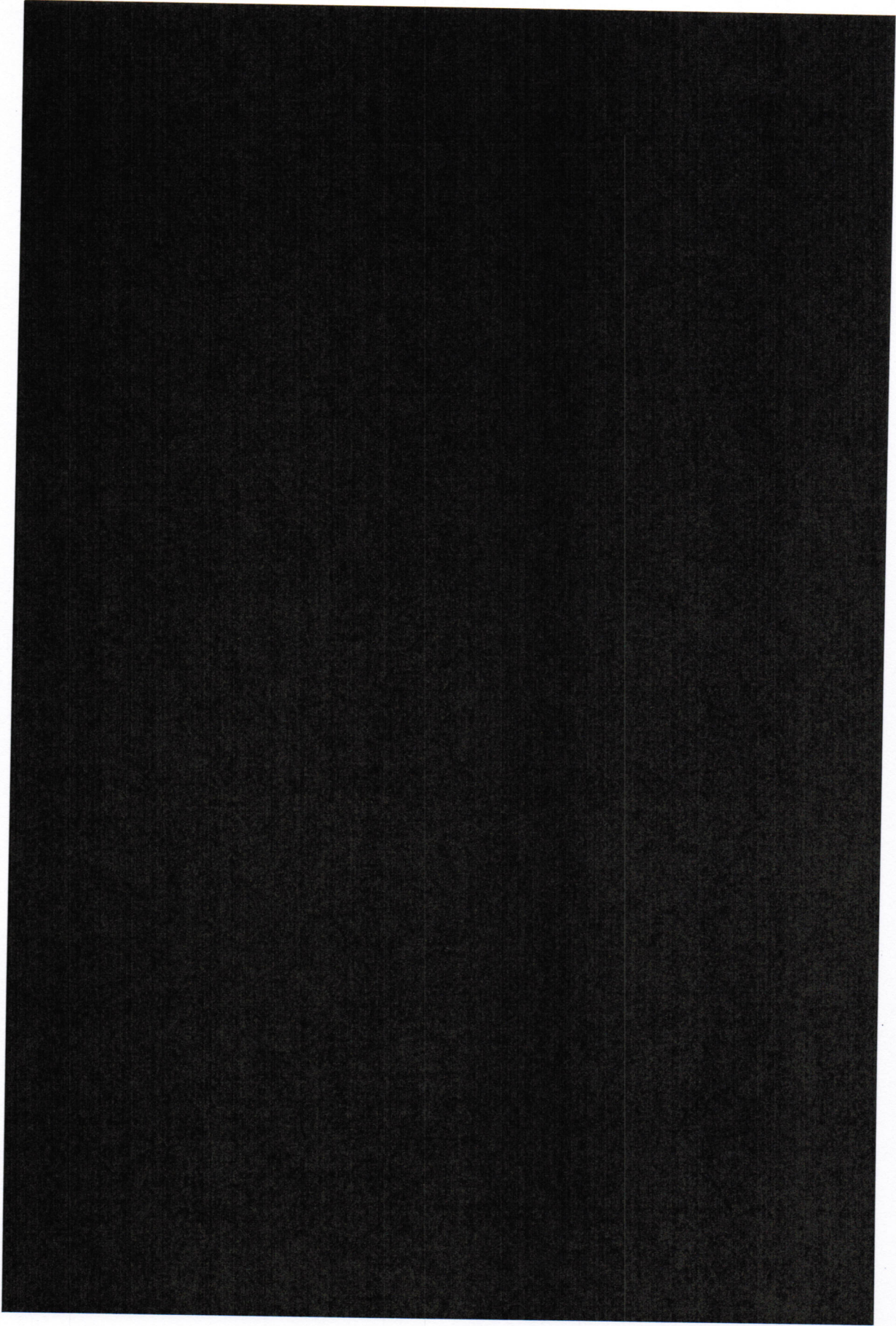
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Communication Plan – 2018 Premium Rates

- Communication products to prepare include the following:
 - House note, press release, web message, letters and Q&A
 - Rate group specific information sheets
- Activities after 2018 rates are approved:
 - Briefing with MOL/Minister's Office
 - Distribution of internal materials (CONNEX message and Staff Q&As)
 - Public Notice of 2018 Rates (Press release and web message issued) and Economic Statement to be released as part of AGM, planned to be on September 20, 2017
 - Up to three Technical Rate sessions live plus webinar – November

Appendix

1. Rate Groups where NCC plus Admin exceeds the Total Rate
2. Rate Groups with further decreases due to 2017 Target change from \$2.59 to \$2.46

N.B. The analyses in this appendix are based on CMS costs of \$0.075

Rate Groups with Insufficient Rates

- For RGs with insufficient rates, where NCC plus Admin exceeds the current Total Rate, the NCC is adjusted as follows:
 - PCC was set to close to 5% on each RG's overall rate
 - Means that NCC and Admin for RG are insufficient

2017 Rates	Proposed 2018 Rates -
[REDACTED]	[REDACTED]

4 Insufficient Rate Groups

- 39 - Pulp, Newsprint And Specialty Papers
- 389 - Metal Closures And Containers
- 507 - Petroleum And Coal Products
- 512 - Resins, Paint, Ink And Adhesives

6 Insufficient Rate Groups

- 39 - Pulp, Newsprint And Specialty Papers
- 222 - Confectionery
- 358 - Foundries
- 389 - Metal Closures And Containers
- 507 - Petroleum And Coal Products
- 512 - Resins, Paint, Ink And Adhesives

2018 Rate Impact: Rate Groups Benefiting from 2017 Misstatement

- There were 34 Rate Groups whose 2017 rate based on an average rate of \$2.46 exceeded the initially published rate. All were charged the initially published rate.
- Some viewed this as “unfairly benefiting” these Rate Groups
- All see a decrease prior to the 2018 CMS
 - After CMS some need to be increased; most are still eligible for a decrease
- The following 5 Rate Groups see an increase in their 2018 rate (\$2.36)

Rate Group	Rate Group Description	2017 \$2.46 \$2.59 Starting Point	2017 \$2.43 "Final" Rate
689	Waste Materials Recycling	5.65	5.65
830	Power And Telecommunication Lines	3.83	3.83
852	Homes For Residential Care	2.84	2.84
905	Apartment And Condominium Services	2.70	2.70
921	Hotels, Motels And Camping	2.69	2.69

2018 Rate Impact: Rate Groups Benefiting from 2017 Misstatement

Rate Group	Rate Group Description	2017 \$2.43 "Final" Rate
110	Gold Mines	7.01
214	Fruit And Vegetable Products	2.44
220	Other Bakery Products	3.54
231	Soft Drinks	3.08
301	Clothing, Fibre And Yarn	2.19
323	Metal Furniture	2.14
428	Motor Vehicle Fabric Accessories	4.00
442	Railroad Rolling Stock	2.36
517	Soap And Toiletries	1.45
533	Signs And Displays	2.75
560	Warehousing	2.95
607	Specialty Food Stores	3.21
608	Beer Stores	3.59
636	Other Sales	1.32
641	Clothing Stores	1.37

Rate Group	Rate Group Description	2017 \$2.43 "Final" Rate
668	Computer, Electronic And Electrical Equipment, Sales	0.45
681	Lumber And Builders Supply	2.72
719	Inside Finishing	6.65
748	Form Work And Demolition	15.75
751	Siding And Outside Finishing	8.82
764	Homebuilding	7.83
838	Natural Gas Distribution	0.62
908	Other Real Estate Services	1.13
919	Restaurants And Catering	1.58
923	Janitorial Services	3.21
929	Supply Of Non-Clerical Labour	4.35
944	Personal Services	2.81
975	Linen And Laundry Services	3.55
983	Communications Industries	0.32