

PWU-1

Reference (a)

Exhibit 2, Tab 1, Schedule 1, Page 1 of 4

The M-factor also enhances regulatory efficiency since it avoids multiple and annual rate application proceedings to address Alectra Utilities' incremental capital needs. This outcome is consistent with OEB policy and recent provincial government legislation. For example, the OEB's Renewed Regulatory Framework ("RRF") states at page 8 that the rate regime must support efficient regulation and section 4.3(11) of the recently enacted Fixing the Hydro Mess Act, 2019 requires that the chief commissioner "ensure the efficiency, timeliness and dependability of the hearing and determination of matters over which the Board has jurisdiction."

- a) Has Alectra assessed the relative differences between the M-factor application and annual IRM applications, both in terms of costs and required commitment of internal resources?
- b) Does the uncertainty of future capital funding impact Alectra's operations or planning process? Please explain.

Response:

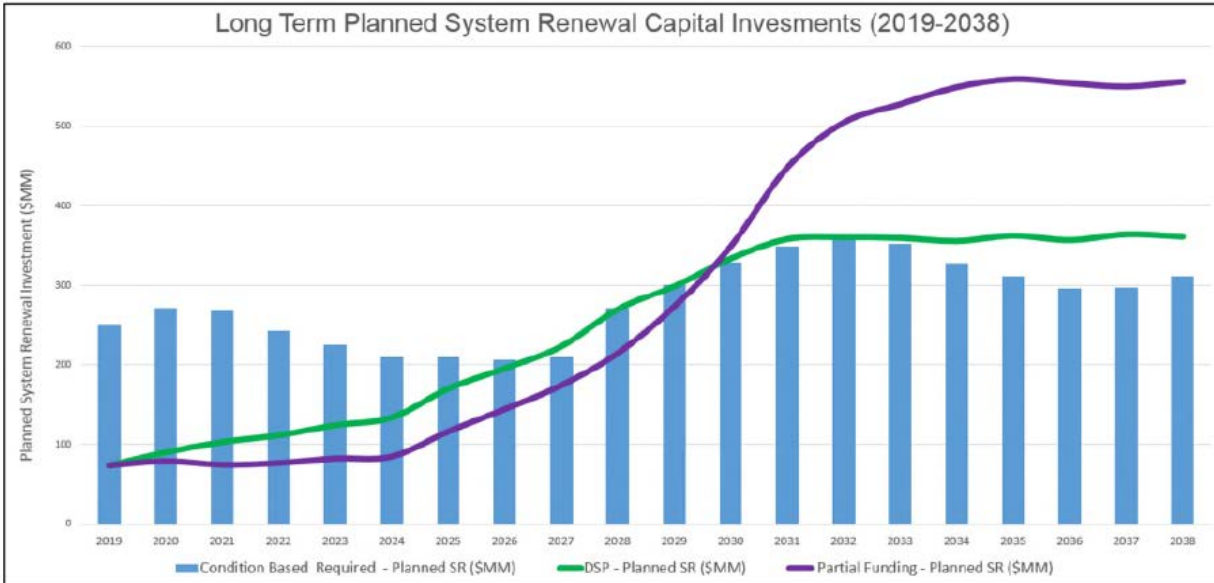
- 1 a) Please see Alectra Utilities' discussion on Regulatory- and Cost-Efficiency in Exhibit 2, Tab
- 2 1, Schedule 3, page 9.
- 3
- 4 b) Please see Alectra Utilities' response to G-Staff-16 d).

PWU-2

Reference (a)

Exhibit 1, Tab 3, Schedule 1, Page 5 of 7

Figure 2: Long-Term System Renewal Trends



- Please provide a table detailing the values of planned system renewal investment by year that are reflected in the referenced chart.
- Does Alectra anticipate DSP-planned and Partial Funding-Planned investments (green and purple lines) to continue to remain relatively flat beyond 2038?
- Does the Partial Funding-Planned line consider any incremental corrective maintenance or similar costs Alectra may incur if it does not recover incremental amounts related to the M-Factor?
- Has Alectra done an assessment of the reliability impacts of deferring M-Factor related investment?

Response:

- a) Table 1 provides the values of planned system renewal corresponding to Figure 2 from Exhibit 1, Tab 3, Schedule 1, page 5 of 7.

Table 1 – Planned System Renewal Investment (2019-2038)

Year	Condition Based		
	Required - Planned System Renewal (\$MM)	DSP - Planned System Renewal (\$MM)	Partial Funding - Planned System Renewal (\$MM)
2019	250	74	74
2020	271	90	79
2021	268	103	75
2022	242	111	77
2023	225	124	82
2024	210	134	85
2025	209	170	116
2026	207	195	144
2027	210	223	174
2028	271	270	214
2029	301	299	273
2030	329	334	349
2031	349	359	448
2032	358	361	504
2033	352	360	527
2034	329	356	549
2035	311	363	559
2036	296	357	554
2037	298	365	549
2038	311	362	556

- b) Alectra Utilities cannot speculate on the planned renewal investment levels beyond 2038.

- 1 c) The Partial Funding – Planned System Renewal scenario as provided in Figure 2 of Exhibit
2 1, Tab 3, Schedule 1, Page 5 does not incorporate any reactive capital or incremental
3 maintenance or repair costs that Alectra Utilities may incur.
4
- 5 d) Alectra Utilities cannot speculate on which required and proposed capital investments would
6 be deferred without the full context of the OEB's decision in this application. However, as
7 described in Exhibit 1, Tab 3, Schedule 1, pages 4-5, under-investing relative to the plans
8 set out in the DSP will generally result in a growing population of deteriorated assets,
9 declining reliability, and a "snowplow" of capital costs for future customers. It will also lead to
10 more expensive reactive capital investments when asset failures occur. As explained in the
11 DSP (Exhibit 4, Tab 1, Schedule 1, Page 13), under the partial funding scenario reflected in
12 the referenced Figure 5.0, Alectra Utilities would experience a projected worsening of
13 reliability by 50% over the next five years, a further deterioration of 112% over the next ten
14 years, relative to the most recent five-year outage duration average.

PWU-3

Reference (a)

Exhibit 4, Tab 1, schedule 1, 5.2.1 DSP, Page 41 of 438

The overall impact of the adjustments based on customer preferences from the second round of customer engagement on the 2020-2024 Capital Investment Plan, as well as other adjustments, was a net reduction of \$17.5MM.

- a) Please confirm that Alectra expects it will include the deferred or reduced investments in its next DSP.**
- b) What is the forecast cost of the six deferred or reduced investments Alectra will incur in the next DSP period?**

Response:

- 1 a) Alectra Utilities has not engaged customers nor developed capital investment plans beyond
- 2 2024. Hence, the company cannot confirm if the deferred or reduced investment will be
- 3 included in the future DSPs.
- 4
- 5 b) Since Alectra Utilities has not developed detailed capital investment plans beyond 2024,
- 6 Alectra Utilities cannot provide a forecast of the cost of the six deferred projects

PWU-4

Reference (a)

Exhibit 4, Appendix C01, Appendix 1.0, Page 79

Following Alectra Utilities planners' recommended approach would result in an average additional [PIPE-RID1] cents per month annually for the typical customer in your rate class.

At the end of the 5-year plan, the typical customer in your rate class would see the distribution portion of their electricity bill increase by [PIPE-RID2] above the current projected rate of [PIPE-TOT] in 2024.

Rate Zone Breakdown	ERZ	BRZ	HRZ	PRZ	GRZ
[PIPE-RID1]	\$0.23	\$0.23	\$0.25	\$0.39	\$0.14
[PIPE-RID2]	\$1.16	\$1.13	\$1.27	\$1.95	\$0.72
[PIPE-TOT]	\$26.71	\$26.33	\$28.74	\$30.67	\$31.14

Reference (b)

Exhibit 2, Tab 1, Schedule 3, Pages 20/21 of 21

Tables 12 to 16 – Bill Impact Tables

Please confirm that the average and total bill increases presented to residential customers is higher than the bill impacts of the capital funding requested in this application for each of the five rate zones.

Response:

- 1 Alectra Utilities confirms that the M-factor bill impacts presented in the Application are lower
- 2 than the bill impacts presented during the customer engagement process. Alectra Utilities
- 3 incorporated customer preferences into the DSP by adjusting the pace of investments and
- 4 deferring certain projects. The overall impact of the adjustment based on customer preferences
- 5 from the second round of customer engagement on the 2020-2024 Capital Investment Plan, as
- 6 well as other adjustments, was a net reduction of \$17.5MM. This also resulted in a reduction to
- 7 the proposed M-factor capital projects.

PWU-5

Reference (a)

Exhibit 4, Tab 1, Schedule 1, Section 5.4.3, Page 395 of 438

Table 5.4.3 - 4: System Access Investments (2020-2024)

System Access	Planned Expenditures (\$MM)				
	2020	2021	2022	2023	2024
Network Metering	\$14.8	\$14.3	\$10.2	\$11.6	\$12.2
Customer Connections	\$31.4	\$33.1	\$34.8	\$36.3	\$37.7
Road Authority and Transit Projects	\$19.7	\$17.3	\$18.2	\$19.2	\$20.3
Transmitter Related Upgrades	\$0.6	\$2.2	\$0.0	\$0.0	\$0.0
Total	\$66.5	\$66.9	\$63.2	\$67.1	\$70.2

- a) Please provide actual figures for 2018 and forecast/budget figures for 2019.
- b) Please provide total system access investments last approved for each rate zone.
- c) To the extent possible, please provide the annual growth rate of system access investments since the start of the deferred rebasing period.

Response:

- a) Please see Table 1, below.

Table 1 - 2018 System Access Investments Actual and 2019 Forecasted / 2019 Plan

System Access (\$MM)	2018 Actual	2019 Forecasted	2019 Plan	Planned Expenditures				
				2020	2021	2022	2023	2024
Network Metering	\$10.8	\$13.4	\$14.3	\$14.8	\$14.3	\$10.2	\$11.6	\$12.2
Customer Connections	\$25.2	\$45.8	\$34.7	\$31.4	\$33.1	\$34.8	\$36.3	\$37.7
Road Authority and Transit Projects	\$31.0	\$22.1	\$27.9	\$19.7	\$17.3	\$18.2	\$19.2	\$20.3
Transmitter Related	-	\$0.5	\$0.5	\$0.6	\$2.2	-	-	-
Total	\$67.0	\$81.8	\$77.4	\$66.5	\$66.9	\$63.2	\$67.1	\$70.2

- b) Please see Table 2, below.

Table 2 - System Access Investment Plans based on Legacy DSPs (\$MM)

Rate Zone (\$MM)	2015	2016	2017	2018	2019	2020	2021	2022
Powerstream	24.1	30.6	32.0	32.2	30.5	33.7		
Horizon	8.1	8.0	7.5	7.7	7.8			
Enersource	7.2	10.3	8.1	11.7	13.8	13.8	12.7	10.8
Brampton	11.1	11.3	10.5	10.2	10.0			
Guelph	2.8	2.2	2.3	2.3	2.4	2.4		
Total	53.3	62.4	60.4	64.1	64.5			

c) Please see Table 3, below.

Table 3 - Annual Growth Rate of System Access Investments (\$MM)

	Actual Exp. (\$MM)		Planned Expenditures (\$MM)					
Annual Growth Rate	2017	2018	2019	2020	2021	2022	2023	2024
System Access	\$62.6	\$67.0	\$77.4	\$66.5	\$66.9	\$63.2	\$67.1	\$70.2
Growth Rate	-	+7.0%	+15.5%	-14.1%	+0.6%	-5.5%	+6.2%	+4.6%

PWU-6

Reference (a)

Exhibit 4, Tab 1, Schedule 1, Section 5.3.3, Page 231 of 438

Table 5.3.3 - 1: Health Index by Asset Class with Average Age

Asset Class	Unit measure	HI %					Average Age
		VP	P	F	G	VG	
Distribution UG Primary EPR Cables	km	0.00	0.00	0.00	0.00	100.00	4
Distribution UG Primary PILC Cables	km	2.68	1.46	0.97	2.19	92.70	36
Distribution UG Primary XLPE Cables	km	11.07	3.51	4.41	6.70	74.30	22
Distribution Concrete Poles	unit	1.80	3.30	5.43	37.95	51.52	23
Distribution Wood Poles	unit	4.63	3.47	16.62	38.13	37.15	28
Distribution Overhead Conductors	km	1.36	0.96	0.48	0.40	96.81	25
Distribution Overhead Switches	unit	6.56	1.93	1.62	2.39	87.50	19
Distribution Pad-mounted Switchgears	unit	8.35	8.94	5.05	9.06	68.60	44
Distribution Vault Transformers	unit	1.35	0.77	21.63	2.78	73.47	27
Distribution Pole-mounted Transformers	unit	1.57	1.59	5.93	34.64	56.27	20
Distribution Pad-mounted Transformers	unit	2.12	0.01	13.53	18.54	65.80	17
Stations Switchgear	unit	0.00	10.11	22.75	53.37	13.76	21
Stations Circuit Breakers	unit	4.03	28.02	1.03	19.34	47.59	20
Stations Power Transformers	unit	0.00	11.53	0.68	17.97	69.83	25

- a) Has Alectra forecasted the health indices for these assets at the end of the DSP period?
- b) If so, please provide two versions of this table for:
- i. If M-Factor related investments are made
 - ii. If only investments funded with existing rates are made

Response:

- 1 a) Please see 4.0-VECC-13.
- 2
- 3 b) i) Please see 4.0-VECC-13.
- 4
- 5 ii) Alectra Utilities cannot speculate on which required and proposed capital investment
- 6 would be deferred without the full context of the OEB's decision in this application. Hence,
- 7 Alectra Utilities is unable to provide a projection of health indices at the end of the DSP
- 8 period.

PWU-7

Reference (a)

Exhibit 4, Tab 1, Schedule 1, Section 5.3.3, Page 302 of 438

Table 5.3.3 - 5: Health Index Categories

Category	Criteria	Range
Very Good	Asset is in excellent condition.	$HI \geq 85\%$
Good	Asset is still relatively in excellent condition.	$70\% \leq HI < 85\%$
Fair	Asset is functional but showing signs of deterioration.	$50\% \leq HI < 70\%$
Poor	Asset is exhibiting degraded condition.	$25\% \leq HI < 50\%$
Very Poor	Asset is showing major degradation / imminent failure.	$HI < 25\%$

- a) Please explain what is meant by “imminent failure”.
- b) Are assets in Poor condition also at risk of failure? Please explain.

Response:

- 1 a) Alectra Utilities applies the term imminent failure to categorize assets in very poor condition
- 2 based on inspections and testing of asset elements prone to failure. Based on the Asset
- 3 Condition Assessment methodology explained in Appendix D of the DSP (Exhibit 4, Tab 1,
- 4 Schedule 1, Appendix D), Alectra Utilities prioritizes assets that indicate imminent failure for
- 5 renewal.
- 6
- 7 b) Assets assessed in the Poor Health Index category are also at a high risk of failure. Assets
- 8 in this category indicate degradation. Alectra Utilities considers assets in Very Poor
- 9 condition as a top priority for renewal followed by assets in poor condition.

PWU-8

Reference (a)

Exhibit 4, Tab 1, Schedule 1, Section 5.2.1, Page 51 of 438

C Job Costing Analysis

Alectra Utilities has adopted leading practice of job costing analysis previously implemented at the predecessor Enersource to break down the cost of activities, analyse the job costing information, make informed business decisions resulting in increased productivity, and achieve more cost-effective outsourcing. This level of detail will enable Alectra Utilities to improve job estimating and planning that yield productivity savings and reduced contractor services for a total productivity savings of \$1.5MM to \$3MM annually.

a) Please provide additional detail on Alectra's Job costing analysis. In particular, how are internal project costs calculated?

Response:

- 1 Alectra Utilities' job costing analysis is performed through the accurate and granular reporting
- 2 and analysis of data from the field, the Enterprise Resource Planning ("ERP") system and other
- 3 inputs such as the Primavera P6 system. The components of cost and associated costs that
- 4 are captured include labour, equipment, material, and outside service provider costs.
- 5
- 6 Internal projects costs are calculated by accurately assigning labour cost, equipment costs,
- 7 material cost, outside service provider costs and other associated costs to the project at a task
- 8 level within the project.
- 9
- 10 Each capital project or maintenance task is broken down into smaller task and sub-tasks which
- 11 can be measured and analyzed at a greater level of detail. This analysis at the granular level
- 12 provides Alectra Utilities a greater level of detailed feedback on the task being performed on a
- 13 larger project and allows the opportunity for those managing the work to adjust work
- 14 approaches, material uses and other inputs on the project to gain efficiency, productivity and
- 15 lower overall project cost.

- 1 With greater insight to costs and other factors that impact productivity and work, Alectra Utilities
- 2 is better able to plan and schedule work, more accurately budget and cost estimate projects,
- 3 and reduce the reliance on contractors to complete the work.