



**YUKON ENERGY  
CORPORATION**  
P.O. Box 5920  
WHITEHORSE  
YUKON Y1A 6S7  
(867) 393-5300

July 20, 2018

Robert Laking, Chair  
Yukon Utilities Board  
Box 31728  
Whitehorse, YT Y1A 6L3

Dear Mr. Laking:

**Re: Yukon Energy Corporation 2017/18 General Rate Application - Undertakings**

On July 3, 2018 Yukon Energy provided responses to two undertakings, and sought additional time to complete the remaining 26 undertakings, as staff required to do this work had planned vacation time during the week of July 2-6.

Yukon Energy completed 24 of the 26 outstanding undertakings on July 13, 2018. At that time it was noted that two remaining undertakings, Undertaking #35 and Undertaking #36 to provide 2017 and 2018 updates related to actual results, have taken more work than initially anticipated.

These remaining undertakings have now been completed and are attached to this correspondence.

If you have any questions, please contact the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read 'Ed Mollard'.

Ed Mollard  
Chief Financial Officer

Attachments



**Undertaking # 35 at Page 551, line 3 to Page 553, line 5**

Mr. Mollard provided an undertaking to update Tab 7 of the GRA with 2017 actual results; and to provide separate updates using the LTA forecast and the ST forecast.

**Yukon Energy Response:**

Please see Attachment 1, which provides an update to Tab 7 of the GRA with 2017 actual results.

For each schedule, YEC has included the following for 2017:

1. GRA forecast as filed (per Ex. B-1) including existing and proposed forecasts where provided earlier;
2. Actual 2017 - a column reflecting the LTA approach to determining thermal generation (as per Ex. B-1, Table 3.4-1); and
3. Actual 2017 ST - a column that uses short term hydro forecasts for determining thermal impacts based on the approach and assumptions used in the preparation of the December 6 2017 ERA Part 2 filing, Appendix 2.2 (Ex. B-14), including the assumed 60/40 LNG/diesel split.

YEC has previously reported 2017 actual sales in response to CW-YEC-2-1 Revised and UCG-YEC-2-18 Revised (reported at the time under Preliminary Actual 2017) and these figures have been carried forward to this analysis. In addition, the approach to measuring sales revenue in Schedule 9 of the attached updated Tab 7 is comparable to the Exhibit B-1 forecast, i.e., it assumes:

- Retention of existing rates at the time of the GRA filing;
- Exclusion of interim Rider J revenues related to this proceeding (these were included in year-end financial reports); and
- Exclusion of accrual for additional revenues assuming approval of the GRA rate increase as filed.

For each of the 2017 columns presented in the attached Tab 7 (Actual 2017, Actual 2017 ST, and Proposed 2017), the analysis assumes the proposed ROE of 8.82% (see Schedule 4B of updated Tab 7).

Schedule 10 of the updated Tab 7 provides actual fuel costs for LTA average hydro (per the Application) and ST hydro forecasts.<sup>1</sup>

Actual 2017 operating and maintenance costs excluding fuel and purchased power as provided in Schedule 10 of the updated Tab 7 are \$418k higher than the Exhibit B-1 original forecast. This increase reflects higher production costs related mainly to the mobile diesel lease, higher transmission and distribution costs, higher general cost, and lower administration and general costs reflecting mainly lower labour costs due to unfilled positions.

Mid-year net rate base as provided in Schedule 1 of the updated Tab 7 is within 0.2% of the GRA forecast. Working capital adjustments reflect variances for the LTA versus ST hydro forecasts.

The updated Tables 4.1 and 4.2 below provide the updated revenue requirement shortfall and rate increase requirement for 2017 to reflect actuals (including actual AEY sales revenues as reported for 2017).

Updated Table 4.1 shows the 2017 revenue requirement shortfall increasing from \$5.3 million to \$5.6 million with actual versus forecast loads and costs, assuming LTA hydro generation and the DCF. As reviewed earlier in Exhibit B-14, the ST Alternative Forecast with actuals has a much lower 2017 revenue requirement shortfall due to the much lower fuel expense forecast for 2017 under that approach.<sup>2</sup>

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<sup>1</sup> Exhibit B-14 provides 2017 ST thermal generation forecast of 1,130 MW.h, with 2017 fuel cost of \$0.320 million (including maintenance at \$0.102 million).

<sup>2</sup> Exhibit B-14 and YUB-YEC-2-25 showed 2017 ST Alternative Forecast revenue shortfall of \$3.3 million for 2017 based on GRA forecast. Updated Table 4.1 shows this to be reduced by \$1.0 million.

**Updated Table 4.1: YEC 2017/18 GRA**  
**Yukon Energy Revenue Required from Rates (\$000s)**  
**Revised to reflect Actuals for 2017**

	<u>Actual 2017</u>	<u>Actual 2017 ST</u>	<u>Proposed 2017</u>
Revenue Requirement	\$52,083	\$48,767	\$48,544
Less: Other Revenues	\$ 319	\$ 319	\$ 253
Less: Secondary Sales	\$ 470	\$ 470	\$ 642
Revenue Required from Firm Rates	\$51,295	\$47,979	\$47,649
Less: Revenues from Firm Sales at Existing Rates [includes Rider J]	<u>\$ 45,679</u>	<u>\$ 45,679</u>	<u>\$ 42,301</u>
Additional Firm Rate Revenues Required	\$5,616	\$2,300	\$5,348

Updated Table 4.2 shows that the Rider J increase required with Actual 2017 is 8.917 percentage points<sup>3</sup> taking into account the larger volumes of retail and industrial sales available in the actuals versus the initial 2017 forecasts. Similarly, the Rider J increase with Actual 2017 ST is 3.102 percentage points, reflecting the lower revenue shortfall under this approach for this year (i.e., the first year in a two-year GRA) as described in Table 4.1.

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<sup>3</sup> This can be compared with 9.04% in the original filing and 8.876% in the revised filing provided in YUB-YEC-1-3 to reflect the final approved wholesales for AEY

**Updated Table 4.2: Calculation of Required 2017 and 2018 Rate Increases (Rider J)**  
**Revised to reflect actuals for 2017**

Line #	Forecast		Actual 2017	Actual 2017 ST
1a	Consolidated Firm Retail Sales Revenues - Base Rates <sup>1</sup>	\$000	58,150	58,150
1b	Consolidated Firm Industrial Sales Revenues - Base Rates	\$000	4,829	4,829
2a	Consolidated Rider J Revenues <sup>2</sup>	\$000	6,952	6,952
2b	AEY Rider R Revenues <sup>3</sup>	\$000	5,349	5,349
3=1+2	<b>Total Consolidated Firm Sales Revenues at existing rates</b>	\$000	75,280	75,280
4=Table 1	Retail Revenue increase required in 2017	\$000	5,616	2,300
5=4/3	Required Rate Increase	%	7.46%	3.06%
6=3+4	<b>Total Consolidated Firm Sales Revenues with 2017 Increase</b>	\$000	80,896	77,580
<b>Rider J Required</b>				
7a=4/(1a+1b)	Rider J Increase Required	%	8.917%	3.652%
7b=9/(1a+1b)	Rider J Increase Required	%		
8	Existing Rider J - non-industrial	%	11.01%	11.01%
9	Existing Rider J - industrial	%	7.36%	7.36%
10=7+8	Total Rider J with increases - non-industrial	%	19.93%	14.66%
11=7+9	Total Rider J with increases - industrial	%	16.28%	11.01%
12	<b>Total Consolidated Firm Sales Revenues with increases</b>	\$000	\$80,896	\$77,580

## Notes:

- Total Consolidated Retail Revenues at existing Base Rates include revenues from YEC and AEY's residential, general service and streetlight sales.
- Consolidated Rider J revenues at existing rates include YEC's Rider J at 11.01% for firm YEC and AEY retail sales and at 7.36% for firm industrial sales.
- AEY revenues are from annual filing provided by AEY for 2017, Summary of Customers, Energy Sales and Revenue. The revenues exclude secondary and wholesale revenues. The report is available at [http://yukonutilitiesboard.yk.ca/pdf/Reports/2017\\_AEY\\_-\\_Key\\_Performance\\_Indicators.pdf](http://yukonutilitiesboard.yk.ca/pdf/Reports/2017_AEY_-_Key_Performance_Indicators.pdf).

**Yukon Energy Corporation**  
Undertaking #35 - Attachment 1 - July 2018

**Schedule Index**

1	Computation of Rate Base
2	Computation of Allowance for Working Capital
2A	Effect of GST on Working Capital
3	Continuity Schedule of Property, Plant and Equipment
4A	Cost of Capital Calculation - 2013 - 2015 Actuals
4B	Cost of Capital Calculation - 2016 Actual and 2017 Actual and Forecast
5	Utility Revenue Requirement
6	Statement of Earnings
7	Statement of Retained Earnings
8	Reconciliation of Utility Income to Net Earnings
9	Summary of Customers, Energy Sales and Revenues
10	Summary of Operating and Maintenance Expenses
11	Summary of Cost of Long - Term Debt

**Yukon Energy Corporation**  
**Computation of Rate Base**  
**(\$000s)**

Schedule 1  
Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
<b>1</b>	<b>Property, Plant and Equipment</b>										
2	Year end balance	S.3 L.5	520,651	520,406	555,552	577,888	589,387	598,756	598,756	603,879	603,879
	Deduct:										
3	Accumulated depreciation (note 1)	S.3 L.10	120,694	119,279	125,757	134,978	144,703	155,162	155,162	155,760	156,806
4	Construction-in-progress	S.3 L.11	19,798	24,137	53,893	13,362	18,467	4,776	4,776	9,277	4,358
5	Disallowed assets	S.3 L.12	691	691	691	691	691	691	691	691	691
6	Miscellaneous reserves	S.3 L.13	5,904	5,684	5,452	5,223	4,169	3,719	3,719	3,830	4,119
7	Total deductions		147,087	149,792	185,794	154,254	168,030	164,349	164,349	169,559	165,974
	Add:										
8	Deferred study costs (note 2)	S.3 L.15	27,891	24,106	24,615	21,957	27,212	30,301	30,301	32,031	29,346
9	Less: Studies in Progress	S.3 L.16	(14,742)	(13,618)	(16,773)	(19,070)	(24,728)	(14,964)	(14,964)	(33,625)	(16,167)
10	Other deferred costs	S.3 L.17	-	-	-	-	-	-	-	-	-
11	Accum. Disallowed depreciation	S.3 L.18	119	119	135	151	167	184	184	184	184
12	Total additions		13,267	10,607	7,977	3,038	2,651	15,520	15,520	(1,411)	13,363
	<b>Net plant in Service</b>										
13	Current year-end balance	S.3 L.20	386,831	381,221	377,735	426,672	424,009	449,928	449,928	432,910	451,268
14	Previous year-end balance		387,051	383,931	381,221	377,735	426,672	424,009	424,009	424,009	424,009
15	Total		773,882	765,152	758,956	804,407	850,681	873,936	873,936	856,918	875,276
16	Mid-year balance		386,941	382,576	379,478	402,204	425,340	436,968	436,968	428,459	437,638
18	Mid-year regulatory deferral		1,486	1,693	1,367	2,007	2,061	2,402	2,402	2,660	2,447
19	Working capital	S.2 L.8	4,280	4,520	4,495	4,791	4,928	5,456	5,207	5,138	5,200
20	<b>Gross Rate Base</b>		392,707	388,789	385,340	409,002	432,329	444,826	444,577	436,257	445,285
	Deduct:										
	<b>Contributions for extensions</b>										
21	Current year-end balance		191,243	180,582	181,163	200,167	200,500	200,832	200,832	200,900	200,900
22	Contributions in WIP		10,500	174	262	605	167	21	21	150	-
23	Current year-end balance in-service		180,743	180,408	180,901	199,561	200,332	200,811	200,811	200,750	200,900
24	Accumulated amortization of contributions		16,305	16,390	20,002	23,626	27,729	31,844	31,844	31,847	31,851
25	Net current year-end balance in-service		164,438	164,018	160,899	175,935	172,604	168,967	168,967	168,902	169,049
26	Previous year-end balance		167,607	167,445	164,018	160,899	175,935	172,604	172,604	172,604	172,604
27	Total		332,046	331,463	324,917	336,834	348,539	341,571	341,571	341,506	341,652
28	Mid-year balance		166,023	165,732	162,459	168,417	174,269	170,785	170,785	170,753	170,826
29	<b>Net Rate Base</b>	S.5 L.1	226,684	223,058	222,882	240,584	258,060	274,040	273,791	265,504	274,459

Note 1: Including Reserve for Future Removal and Site Restoration

Note 2: Planning and Study costs, Relicensing, Dam Safety costs and Vegetation Management. Net of contributions.



**Yukon Energy Corporation**  
**Computation of Allowance for Working Capital**  
**(\$000s)**

Schedule 2  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Operating and maintenance	S.5 L.5	20,844	22,786	21,052	21,723	21,812	25,893	22,525	22,212	23,363
2	Taxes other than income	S.5 L.6	326	331	331	473	686	693	693	696	696
3	Non-allowable expenses		(85)	(84)	(85)	(86)	(95)	(96)	(96)	(96)	(96)
4	Cash operating expenses		21,085	23,033	21,298	22,110	22,403	26,490	23,123	22,811	23,962
5	27/365		1,560	1,704	1,575	1,636	1,657	1,960	1,710	1,687	1,773
6	Inventory (three year average)		2,830	2,948	3,026	3,300	3,426	3,665	3,665	3,603	3,603
7	GST Impact on working capital	S.2A L.11	(110)	(131)	(106)	(145)	(155)	(169)	(169)	(153)	(176)
8	Working capital	S.1 L.19	4,280	4,520	4,495	4,791	4,928	5,456	5,207	5,138	5,200

**Yukon Energy Corporation**  
**Effect of GST on Working Capital**  
**(\$000s)**

Schedule 2A  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Expenses subject to GST		39,395	33,079	47,770	29,427	26,210	28,301	28,301	28,751	29,575
2	GST Rate		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
3	GST Recoverable		1,970	1,654	2,388	1,471	1,310	1,415	1,415	1,438	1,479
4	Day Factor		14	14	14	14	14	14	14	14	14
5	Recoverable portion of GST impact		76	63	92	56	50	54	54	55	57
6	Revenue subject to GST		42,263	40,492	41,245	41,855	42,686	46,467	46,467	43,425	48,544
7	GST blended rate (2009 GRA)		4.58%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
8	GST payable		1,935	2,025	2,062	2,093	2,134	2,323	2,323	2,171	2,427
9	Day factor		35	35	35	35	35	35	35	35	35
10	Payable portion of GST impact		186	194	198	201	205	223	223	208	233
11	Net impact of GST on working capital	S.2 L.7	(110)	(131)	(106)	(145)	(155)	(169)	(169)	(153)	(176)

**Yukon Energy Corporation**  
**Continuity Schedule of Property, Plant and Equipment**  
(\$000s)

Schedule 3  
Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Forecast	
									Actual 2017 ST	Existing 2017
<b>1</b>	<b>Property, Plant and Equipment</b>									
2	Balance at beginning of year		496,938	495,795	520,406	555,552	577,888	589,387	589,387	589,387
3	Net Increases to PPE (Table 5.1)		23,713	25,717	37,583	22,728	12,314	9,798	9,798	14,492
4	Retirements, disposals and adjustments		-	(1,106)	(2,437)	(392)	(815)	(429)	(429)	-
5	Balance at end of year	S.1 L.2	520,651	520,406	555,552	577,888	589,387	598,756	598,756	603,879
<b>6</b>	<b>Accumulated depreciation (including Future Removal Reserve)</b>									
7	Balance at beginning of year		111,706	111,476	119,279	125,757	134,978	144,703	144,703	144,703
8	Depreciation expense	S.6 L.7	8,989	8,854	8,906	9,524	10,607	12,268	12,268	11,059
9	Retirements, disposals and adjustments		-	(1,051)	(2,428)	(303)	(882)	(1,808)	(1,808)	(2)
10	Balance at end of year		120,694	119,279	125,757	134,978	144,703	155,162	155,162	155,760
	<b>Depreciation Property, Plant and Equipment</b>									
	Balance at beginning of year	S.3 L.10	106,995	106,765	114,608	121,086	130,611	140,344	140,344	140,344
	Depreciation expense	S.6 L.6	8,989	8,894	8,906	9,828	10,615	12,323	12,323	11,171
	Retirements, disposals and adjustments		-	(1,051)	(2,428)	(303)	(882)	(1,808)	(1,808)	(2)
	Balance at end of year	S.1 L.4	115,983	114,608	121,086	130,611	140,344	150,858	150,858	151,513
	<b>Reserve for Future Removal and Site Restoration</b>									
	Balance at beginning of year		4,711	4,711	4,671	4,671	4,367	4,359	4,359	4,359
	Site Restoration expense		-	(40)	-	(304)	(8)	(55)	(55)	(112)
	Retirements, disposals and adjustments		-	-	-	-	-	-	-	-
	Balance at end of year		4,711	4,671	4,671	4,367	4,359	4,303	4,303	4,247
			385,232	384,319	401,127	429,795	442,910	444,685	444,685	444,685
	Deduct:									
11	Construction-in-progress	S.1 L.4	19,798	24,137	53,893	13,362	18,467	4,776	4,776	9,277
12	Disallowed assets	S.1 L.5	691	691	691	691	691	691	691	691
13	Miscellaneous reserves (note 1)	S.1 L.6	5,904	5,684	5,452	5,223	4,169	3,719	3,719	3,830
14	Total		26,393	30,513	60,037	19,276	23,328	9,187	9,187	13,798
	Add:									
15	Deferred study costs (note 2)	S.1 L.8	27,891	24,106	24,615	21,957	27,212	30,301	30,301	32,031
16	Less: Studies in Progress	S.1 L.9	(14,742)	(13,618)	(16,773)	(19,070)	(24,728)	(14,964)	(14,964)	(33,625)
17	Other deferred costs	S.1 L.10	-	-	-	-	-	-	-	-
18	Accum. Disallowed depreciation	S.1 L.11	119	119	135	151	167	184	184	184
19	Total		13,267	10,607	7,977	3,038	2,651	15,520	15,520	(1,411)
20	Net Property, Plant and Equipment	S.1 L.13	386,831	381,221	377,735	426,672	424,009	449,928	449,928	432,910

Note 1: Includes Fire Insurance Reserve and the Reserve for Injuries and Damages

Note 2: Planning and Study costs, Relicencing, Dam Safety costs and Deferred Overhauls. Net of contributions.

**Yukon Energy Corporation**  
**Cost of Capital Calculation**  
**2013 Approved and 2013-2015 Actual**  
**(\$000s)**

Schedule 4A  
Undertaking #35 - Attachment 1 - July 2018

<u>Line No.</u>	<u>Description</u>	<u>Cross Ref.</u>	<u>Mid Year Balance</u>	<u>Ratio</u>	<u>Mid Year Rate Base</u>	<u>Mid Year Cost Rate</u>	<u>Return</u>
<b>2013 Approved</b>							
1	Long-Term debt	S.11 L.18	137,410	60.0%	136,010	3.58%	4,867
2	Common Stock	S.7 L. 8	<u>91,607</u>	<u>40.0%</u>	<u>90,674</u>	<u>8.25%</u>	<u>7,481</u>
3	Total	S.5 L.3	<u>229,017</u>	<u>100.0%</u>	<u>226,684</u>	<u>5.45%</u>	<u>12,348</u>
<b>2013 Actual</b>							
4	Long-Term debt	S.11 L.18	133,482	60.0%	133,925	3.38%	4,522
5	Common Stock	S.7 L. 8	<u>88,837</u>	<u>40.0%</u>	<u>89,132</u>	<u>7.42%</u>	<u>6,617</u>
6	Total	S.5 L.3	<u>222,319</u>	<u>100.0%</u>	<u>223,058</u>	<u>4.99%</u>	<u>11,138</u>
<b>2014 Actual</b>							
7	Long-Term debt	S.11 L.18	133,636	59.0%	131,486	3.22%	4,228
8	Common Stock	S.7 L. 8	<u>92,891</u>	<u>41.0%</u>	<u>91,396</u>	<u>8.44%</u>	<u>7,710</u>
9	Total	S.5 L.3	<u>226,527</u>	<u>100.0%</u>	<u>222,882</u>	<u>5.36%</u>	<u>11,938</u>
<b>2015 Actual</b>							
10	Long-Term debt	S.11 L.18	141,509	59.0%	141,951	2.00%	2,840
11	Common Stock	S.7 L. 8	<u>98,327</u>	<u>41.0%</u>	<u>98,634</u>	<u>8.10%</u>	<u>7,989</u>
12	Total	S.5 L.3	<u>239,837</u>	<u>100.0%</u>	<u>240,584</u>	<u>4.50%</u>	<u>10,829</u>

**Yukon Energy Corporation**  
**Cost of Capital Calculation**  
**2016 Actual and 2017 Actual and Forecast (Existing / GRA)**  
**(\$000s)**

Schedule 4B  
 Undertaking #35 - Attachment 1 - July 2018

<u>Line No.</u>	<u>Description</u>	<u>Cross Ref.</u>	<u>Mid Year Balance</u>	<u>Ratio</u>	<u>Mid Year Rate Base</u>	<u>Mid Year Cost Rate</u>	<u>Return</u>
<b>2016 Actual</b>							
1	Long-Term debt	S.11 L.18	152,363	59.8%	154,412	2.10%	3,239
2	Common Stock	S.7 L. 8	<u>102,272</u>	<u>40.2%</u>	<u>103,648</u>	<u>8.69%</u>	<u>9,002</u>
3	Total	S.5 L.3	<u>254,636</u>	<u>100.0%</u>	<u>258,060</u>	<u>4.74%</u>	<u>12,242</u>
<b>2017 Actual</b>							
4	Long-Term debt	S.11 L.18	152,833	58.9%	161,286	2.58%	4,156
5	Common Stock	S.7 L. 8	<u>106,845</u>	<u>41.1%</u>	<u>112,755</u>	<u>8.82%</u>	<u>9,945</u>
6	Total	S.5 L.3	<u>259,678</u>	<u>100.0%</u>	<u>274,040</u>	<u>5.15%</u>	<u>14,101</u>
<b>2017 Actual Short-Term</b>							
4	Long-Term debt	S.11 L.18	152,833	58.5%	160,101	2.58%	4,125
5	Common Stock	S.7 L. 8	<u>108,529</u>	<u>41.5%</u>	<u>113,690</u>	<u>8.82%</u>	<u>10,027</u>
6	Total	S.5 L.3	<u>261,362</u>	<u>100.0%</u>	<u>273,791</u>	<u>5.17%</u>	<u>14,153</u>
<b>Forecast for 2017 - Existing</b>							
7	Long-Term debt	S.11 L.18	159,392	59.9%	158,996	2.25%	3,577
8	Common Stock	S.7 L. 8	<u>106,774</u>	<u>40.1%</u>	<u>106,508</u>	<u>8.17%</u>	<u>8,704</u>
9	Total	S.5 L.3	<u>266,166</u>	<u>100.0%</u>	<u>265,504</u>	<u>4.63%</u>	<u>12,282</u>
<b>Proposed 2017 - GRA</b>							
10	Long-Term debt	S.11 L.18	164,747	59.9%	164,369	2.18%	3,578
11	Common Stock	S.7 L. 8	<u>110,343</u>	<u>40.1%</u>	<u>110,090</u>	<u>8.82%</u>	<u>9,711</u>
12	Total	S.5 L.3	<u>275,090</u>	<u>100.0%</u>	<u>274,459</u>	<u>4.84%</u>	<u>13,289</u>

**Yukon Energy Corporation**  
**Utility Revenue Requirement**  
**(\$000s)**

Schedule 5  
Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Net rate base	S.1 L.30	226,684	223,058	222,882	240,584	258,060	274,040	273,791	265,504	274,459
2	Average Rate of return on rate base		5.45%	4.99%	5.36%	4.50%	4.74%	5.15%	5.17%	4.63%	4.84%
3	Utility income	S.8 L.1	12,348	11,138	11,938	10,829	12,242	14,101	14,153	12,282	13,289
4	Utility expenses										
5	Operating and maintenance (note 1)	S.6 L.3	20,844	22,786	21,052	21,723	21,812	25,893	22,525	22,212	23,363
6	Taxes other than income	S.6 L.4	326	331	331	473	686	693	693	696	696
7	Amortization of deferred costs	S.6 L.5	3,462	4,561	2,846	2,764	1,581	4,507	4,507	2,152	3,883
8	Reserve for Injuries and Damages	S.6 L.6	226	226	226	226	226	479	479	190	479
9	Depreciation	S.6 L.7	8,989	8,894	8,906	9,828	10,615	12,323	12,323	11,171	12,217
10	Amortization of contributions and fire insurance recoveries	S.6 L.8	(3,831)	(3,939)	(3,953)	(3,886)	(4,364)	(5,801)	(5,801)	(5,164)	(5,269)
11	Disallowed depreciation		(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)	(16)
12	Donations		(85)	(84)	(85)	(86)	(95)	(96)	(96)	(96)	(96)
13	Total utility expenses		<u>29,915</u>	<u>32,759</u>	<u>29,307</u>	<u>31,026</u>	<u>30,445</u>	<u>37,982</u>	<u>34,615</u>	<u>31,144</u>	<u>35,255</u>
14	Revenue Requirement	S.6 L.1	<u>42,263</u>	<u>43,897</u>	<u>41,245</u>	<u>41,855</u>	<u>42,686</u>	<u>52,083</u>	<u>48,768</u>	<u>43,426</u>	<u>48,544</u>

Note 1: Includes fuel expenses and purchased power.

**Yukon Energy Corporation**  
**Statement of Earnings**  
(\$000s)

Schedule 6  
Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Revenues (note 1)	S.5 L.14	42,263	43,897	41,245	41,855	42,686	46,467	46,467	43,425	48,544
2	<b>Operating expenses</b>										
3	Operating and maintenance	S.10 L.15	20,844	22,786	21,052	21,723	21,812	25,893	22,525	22,212	23,363
4	Taxes other than income	S.5 L.6	326	331	331	473	686	693	693	696	696
5	Amortize deferred costs	S.5 L.7	3,462	4,561	2,846	2,764	1,581	4,507	4,507	2,152	3,883
6	Reserve for Injuries and Damages	S.5 L.8	226	226	226	226	226	479	479	190	479
7	Depreciation	S.3 L.8	8,989	8,894	8,906	9,828	10,615	12,323	12,323	11,171	12,217
8	Amortization of contributions and fire insurance recoveries	S.5 L.10	(3,831)	(3,939)	(3,953)	(3,886)	(4,364)	(5,801)	(5,801)	(5,164)	(5,269)
9	Total		<u>30,016</u>	<u>32,859</u>	<u>29,408</u>	<u>31,129</u>	<u>30,556</u>	<u>38,094</u>	<u>34,726</u>	<u>31,256</u>	<u>35,367</u>
10	<b>Operating income</b>		12,247	11,038	11,837	10,727	12,130	8,373	11,741	12,169	13,177
11	<b>Other income</b>										
12	Allowed for Funds Used	S.8 L.2	500	927	1,188	714	819	466	466	1,093	863
13	Miscellaneous (note 2)	S.8 L.3	(23)	(492)	(86)	(98)	(1,592)	(281)	(281)	(32)	(32)
14	Total		<u>477</u>	<u>435</u>	<u>1,102</u>	<u>616</u>	<u>(772)</u>	<u>184</u>	<u>184</u>	<u>1,061</u>	<u>831</u>
15	<b>Other expenses</b>										
16	Interest expense	S.8 L.4	4,917	4,128	5,225	3,662	3,356	3,893	3,893	3,961	3,945
17	Total		<u>4,917</u>	<u>4,128</u>	<u>5,225</u>	<u>3,662</u>	<u>3,356</u>	<u>3,893</u>	<u>3,893</u>	<u>3,961</u>	<u>3,945</u>
18	<b>Net earnings</b>	S.8 L.8	<u>7,807</u>	<u>7,345</u>	<u>7,713</u>	<u>7,681</u>	<u>8,001</u>	<u>4,665</u>	<u>8,032</u>	<u>9,269</u>	<u>10,063</u>

Note 1: Includes revenues from sales and other revenues.

Note 2: Miscellaneous primarily consistent of Regulatory gain/losses and other interest income/expenses.

**Yukon Energy Corporation**  
**Statement of Retained Earnings**  
**(\$000s)**

Schedule 7  
Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Balance at beginning of year		37,270	35,040	35,434	43,147	46,307	51,037	51,037	51,037	51,037
	Add:										
2	Net earnings	S.6 L.18	7,807	7,345	7,713	7,681	8,001	4,665	8,032	9,269	10,063
3	IFRS Comprehensive Income Adjustment		-	-	-	(4,521)	(430)	(249)	(249)	-	-
4	Balance at end of year before dividend		45,076	42,385	43,147	46,307	53,878	55,453	58,820	60,307	61,101
	Less:										
5	Common Dividends/(Injection) (note 1)		6,332	6,951	-	-	2,841	-	-	4,997	-
6	Balance at end of year		38,744	35,434	43,147	46,307	51,037	55,453	58,820	55,310	61,101
	<b>Shareholder's Equity</b>										
7	Common shares		53,600	53,600	53,600	53,600	53,600	53,600	53,600	53,600	54,948
8	Retained earnings		38,744	35,434	43,147	46,307	51,037	55,453	58,820	55,310	61,101
9	Total		92,344	89,034	96,747	99,907	104,637	109,053	112,420	108,910	116,049

Note:

1. YDC equity injection/divident estimates required in order to maintain 60/40 debt to equity ratio.



**Yukon Energy Corporation**  
**Reconciliation of Utility Income to Net Earnings**  
**(\$000s)**

Schedule 8  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	Utility Income (Return on Rate Base)	S.5 L.3	12,348	11,138	11,938	10,829	12,242	14,101	14,153	12,282	13,289
	Add:										
2	Allowance for funds used	S.6 L.12	500	927	1,188	714	819	466	466	1,093	863
3	Other income (expenses)	S.6 L.13	(23)	(492)	(86)	(98)	(1,592)	(281)	(281)	(32)	(32)
			<u>12,825</u>	<u>11,573</u>	<u>13,040</u>	<u>11,445</u>	<u>11,469</u>	<u>14,285</u>	<u>14,337</u>	<u>13,343</u>	<u>14,121</u>
	Less:										
4	Interest - long-term	S.6 L.17	4,917	4,128	5,225	3,662	3,356	3,893	3,893	3,961	3,945
5	Donations	S.5 L.12	85	84	85	86	95	96	96	96	96
6	Disallowed costs	S.5 L.13	-	-	-	-	-	-	-	-	-
7	Disallowed depreciation	S.5 L.11	16	16	16	16	16	16	16	16	16
			<u>5,019</u>	<u>4,229</u>	<u>5,327</u>	<u>3,765</u>	<u>3,468</u>	<u>4,005</u>	<u>4,005</u>	<u>4,073</u>	<u>4,057</u>
8	Net earnings	S.6 L.18	7,807	7,344	7,713	7,681	8,002	10,280	10,332	9,270	10,064

**Yukon Energy Corporation**  
**Summary of Customers, Energy Sales and Revenues**  
**(\$000s)**

Schedule 9  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Proposed 2017
1	<b>Residential</b>								
2	Customers	1,536	1,559	1,561	1,588	1,609	1,653	1,653	1,624
3	Sales in MWh	12,408	13,385	13,327	13,121	13,390	14,965	14,965	13,622
4	MWh sales per customer	8	8.6	8.5	8.3	8.3	9.1	9.1	8.4
5	Revenue (\$000s)	1,815	1,943	1,938	1,913	1,956	2,203	2,203	2,002
6	Cents per KWh	14.6	14.5	14.5	14.6	14.6	14.7	14.7	14.7
7	<b>General Service</b>								
8	Customers	467	470	475	480	488	499	499	490
9	Sales in MWh	22,620	22,283	23,616	24,551	24,994	26,132	26,132	25,318
10	MWh sales per customer	48	47.4	49.8	51.1	51.2	52.4	52.4	51.7
11	Revenue (\$000s)	3,735	3,621	3,894	4,048	4,180	4,350	4,350	4,036
12	Cents per KWh	16.5	16.3	16.5	16.5	16.7	16.6	16.6	15.9
13	<b>Industrial</b>								
14	Sales in MWh	40,592	40,513	36,302	37,186	41,169	43,419	43,419	38,219
15	Revenue (\$000s)	4,787	4,595	3,958	4,159	4,478	4,829	4,829	4,198
16	Cents per KWh	11.8	11.3	10.9	11.2	10.9	11.1	11.1	11.0
17	<b>Street lights</b>								
18	Sales in MWh	279	281	290	290	256	228	228	225
19	Revenue (\$000s)	88	89	92	92	88	88	88	58
20	Cents per KWh	31.6	31.6	31.6	31.6	34.5	38.6	38.6	26.0
21	<b>Space lights</b>								
22	Sales in MWh	15	14	14	14	14	12	12	12
23	Revenue (\$000s)	4	4	4	4	4	3	3	3
24	Cents per KWh	26.8	26.5	26.6	25.9	26.0	28.6	28.6	22.5
25	<b>Total Company - Firm Retail and Industrial</b>								
26	Customers	2,003	2,029	2,036	2,068	2,098	2,152	2,152	2,114
27	Sales in MWh	75,913	76,476	73,549	75,162	79,823	84,756	84,756	77,395
28	Revenue (\$000s)	10,429	10,252	9,886	10,214	10,705	11,474	11,474	10,297
29	Cents per KWh	13.7	13.4	13.4	13.6	13.4	13.5	13.5	13.3
30	<b>Wholesale sales</b>								
31	Sales in MWh	307,147	307,927	295,284	297,961	301,207	328,426	328,426	309,000
32	Revenue (\$000s)	25,487	25,546	24,503	24,725	24,994	27,253	27,253	25,641
33	Cents per KWh	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
34	<b>Total Company - Firm</b>								
35	Sales in MWh	383,061	384,403	368,833	373,122	381,030	413,182	413,182	386,395
36	Revenue (\$000s)	35,916	35,798	34,388	34,939	35,700	38,727	38,727	35,938
37	Cents per KWh	9.4	9.3	9.3	9.4	9.4	9.4	9.4	9.3
38	<b>Secondary</b>								
39	Sales in MWh	0	3,959	5,415	7,030	4,835	8,385	8,385	11,464
40	Revenue (\$000s)	0	275	410	544	371	470	470	642
41	Cents per KWh		6.9	7.6	7.7	7.7	5.6	5.6	5.6
42	<b>Total Company</b>								
43	Sales in MWh	383,061	388,363	374,248	380,152	385,865	421,567	421,567	397,859
44	Revenue (\$000s)	35,916	36,073	34,798	35,483	36,071	39,196	39,196	36,580
45	Cents per KWh	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.2
46	Rider J		6,288	6,167	6,172	6,342	6,952	6,952	6,363
47	Post-GRA Reconcil Req'd								
48	GRA Increase Req'd	6,163					5,616	2,300	5,348
49	<b>Total Sales of Power</b>	<b>42,079</b>	<b>42,360</b>	<b>40,966</b>	<b>41,655</b>	<b>42,413</b>	<b>51,764</b>	<b>48,449</b>	<b>48,291</b>
50	Other Revenues	184	1,537	280	200	273	319	319	253
51	<b>Total Revenues</b>	<b>42,263</b>	<b>43,897</b>	<b>41,246</b>	<b>41,855</b>	<b>42,686</b>	<b>52,083</b>	<b>48,767</b>	<b>48,544</b>

**Yukon Energy Corporation**  
**Summary of Operating and Maintenance Expenses**  
**(\$000s)**

Schedule 10  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
1	<b>Utility operations</b>										
2	Production		4,494	5,310	5,588	5,472	6,039	6,390	6,390	5,760	5,760
3	Transmission and distribution		2,112	2,960	2,565	2,530	2,450	3,535	3,535	2,368	3,352
4	General		1,405	1,485	1,735	1,749	1,522	1,772	1,772	1,633	1,633
5	Administration and general		8,654	8,080	8,495	8,101	8,509	8,575	8,575	9,110	9,110
6	Insurance		895	990	1,017	1,030	1,037	1,032	1,032	1,031	1,031
7	Sub-total		<u>17,559</u>	<u>18,824</u>	<u>19,400</u>	<u>18,881</u>	<u>19,557</u>	<u>21,304</u>	<u>21,304</u>	<u>19,901</u>	<u>20,886</u>
8	Donations		85	84	85	86	95	96	96	96	96
9	Sub-total		<u>85</u>	<u>84</u>	<u>85</u>	<u>86</u>	<u>95</u>	<u>96</u>	<u>96</u>	<u>96</u>	<u>96</u>
10	O&M not including fuel and										
11	purchased power		<u>17,644</u>	<u>18,908</u>	<u>19,485</u>	<u>18,967</u>	<u>19,653</u>	<u>21,400</u>	<u>21,400</u>	<u>19,997</u>	<u>20,982</u>
12	Fuel		3,160	3,848	1,528	2,720	2,114	4,444	1,076	2,175	2,342
13	Purchased power		40	30	41	36	45	49	49	39	39
14	Sub-total		<u>3,200</u>	<u>3,878</u>	<u>1,569</u>	<u>2,756</u>	<u>2,159</u>	<u>4,493</u>	<u>1,125</u>	<u>2,214</u>	<u>2,381</u>
15	Total operating and maintenance	S.6 L.3	<u>20,844</u>	<u>22,786</u>	<u>21,054</u>	<u>21,723</u>	<u>21,812</u>	<u>25,892</u>	<u>22,525</u>	<u>22,212</u>	<u>23,363</u>
	<b>Operating and Maintenance Expense Reported in Tab 3 excludes fuel and purchase power, but also includes the following:</b>										
16	Reserve for Injuries and Damages		226	226	226	226	226	479	479	190	479
17	Property Taxes		326	331	331	473	686	693	693	696	696
18	less: Donations		<u>(85)</u>	<u>(84)</u>	<u>(85)</u>	<u>(86)</u>	<u>(95)</u>	<u>(96)</u>	<u>(96)</u>	<u>(96)</u>	<u>(96)</u>
19	O&M per Table 3.3 (Tab 3)		<u>18,111</u>	<u>19,381</u>	<u>19,957</u>	<u>19,580</u>	<u>20,470</u>	<u>22,476</u>	<u>22,476</u>	<u>20,787</u>	<u>22,060</u>

**Yukon Energy Corporation**  
**Summary of Cost of Long - Term Debt**  
**(\$000s)**

Schedule 11  
 Undertaking #35 - Attachment 1 - July 2018

Line No.	Description	Cross Ref.	2013 Approved	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2017 ST	Forecast	
										Existing 2017	Proposed 2017
<b>General Purpose Long-Term Debt Balance</b>											
1	TD Canada Trust (4.02%)		2,945	2,946	1,912	837	0	0	0	0	0
2	YDC \$81.9M Loan (4.25%)		72,891	72,891	69,891	0	0	0	0	0	0
3	YDC Mayo B Flexible Term Debt		21,226	21,226	20,889	20,552	20,215	19,878	19,878	19,878	19,878
4	TD Bank Swap (2.69%)		15,900	10,687	10,366	10,036	9,697	9,348	9,348	9,348	9,348
5	YDC \$17.1M Debt (3.69%)		17,780	15,727	15,044	0	0	0	0	0	0
6	YDC \$2.1M Debt (3.97%)			2,053	2,053	0	0	0	0	0	0
7	YDC \$5.5M Debt (4.27%)		7,774	5,471	5,471	0	0	0	0	0	0
8	Minto Decommissioning Reserve			2,553	2,586	2,613	2,636	2,660	2,660	2,660	2,660
9	YDC \$5.5M Debt (2.40%)				5,505	5,505	5,505	5,505	5,505	5,505	5,505
10	YDC \$92.5M Debt (2.40%)				88,775	85,091	81,407	81,407	81,407	81,407	81,407
11	YDC \$21.0M Debt (2.21%)				20,984	20,145	19,306	19,306	19,306	19,306	19,306
12	YDC \$12.1M Debt (2.10%)						12,136	12,136	12,136	12,136	12,136
13	New 2017 Debt (2.15%)									13,118	23,828
14	New 2018 Debt										
15	Current year-end balance		138,516	133,555	133,717	149,302	155,425	150,240	150,240	163,359	174,068
16	Previous year-end balance		136,304	133,409	133,555	133,717	149,302	155,425	155,425	155,425	155,425
17	Mid Year		137,410	133,482	133,636	141,509	152,363	152,833	152,833	159,392	164,747
<b>Interest Costs</b>											
18	TD Canada Trust (4.02%)		140	140	99	57	14	0	0	0	0
19	YDC \$81.9M Loan (4.25%)		3,225	3,225	3,098	0	0	0	0	0	0
20	YDC Mayo B Flexible Term Debt		212	130	-112	128	167	780	780	432	432
21	TD Bank Swap (2.69%)		687	292	284	275	266	257	257	257	257
22	YDC \$17.1M Debt (3.69%)		653	606	580	0	0	0	0	0	0
23	YDC \$2.1M Debt (3.97%)			82	82	0	0	0	0	0	0
24	YDC \$5.5M Debt (4.27%)				234	0	0	0	0	0	0
25	Minto Decommissioning Reserve			31	33	26	23	27	27	24	24
26	YDC \$5.5M Debt (2.40%)				132	132	132	132	132	132	132
27	YDC \$92.5M Debt (2.40%)				2,213	2,131	2,042	2,042	2,042	2,042	2,042
28	YDC \$21.0M Debt (2.21%)						464	445	445	445	445
29	YDC \$12.1M Debt (2.10%)							255	255	255	255
30	New 2017 Debt (2.15%)										
31	New 2018 Debt										
32	<b>Total Cost of Interest</b>		4,917	4,507	4,297	2,831	3,196	3,938	3,938	3,586	3,586
33	Mid-Year Cost of Debt		3.58%	3.38%	3.22%	2.00%	2.10%	2.58%	2.58%	2.25%	2.18%

**Undertaking # 36 at Page 553, line 20 to Page 556, line 16**

Mr. Mollard provided an undertaking to provide a 2018 revenue requirement forecast that includes industrial and secondary sales load forecast updates per the Opening Statement using both short-term and long term average fuel requirements.

**Yukon Energy Response:**

Please see the attached table, which provides the following 2018 revenue requirement forecasts (two short-term forecasts are included to reflect the volatility of ST forecasts for second test year, depending on loads forecast for the first test year):

1. **Proposed 2018** – the forecast as filed in June 2017 (Exhibit B-1), with LTA hydro and thermal generation.
2. **Update 2018** – the Proposed (which assumes LTA hydro and thermal generation as per Table 3.4-1 of Exhibit B-1) adjusted for the following updated industrial load and secondary load forecasts per the Opening Statement:
  - a. Industrial – Updated industrial forecast sales load at 32,192 MW.h (versus GRA forecast of 38,219 MW.h), based on actual January-June of 22,361 MW.h and revised forecast for balance of year of 9,831 MW.h per Minto information.<sup>1</sup>
  - b. Secondary - Updated secondary forecast sales load at 2,059.48 MW.h (versus GRA forecast of 11,464 MW.h), based on six month actual of 18.48 MW.h and revised forecast for balance of year of 2,041 MW.h.
3. **Update 2018 ST#1** – The 2018 Update with the revised Industrial and Secondary load forecasts, using short-term fuel requirements<sup>2</sup> based on GRA forecast loads for 2016 and 2017 as originally filed.
4. **Update 2018 ST#2** - The 2018 Update with the revised Industrial and Secondary load forecasts, using short-term fuel requirements (as provided in the ST Alternative GRA Forecast, Exhibit B-14, Appendix 2.2, with assumed 60/40 LNG/diesel split) based on actual grid loads for 2016 and 2017, i.e., the scenario if actual loads for 2016 and 2017 had been forecast at the time of GRA filing.

The updated information is limited to the two specific load forecast items in the Opening Statement (Exhibit B-22), as noted above. LTA was assessed using the Exhibit B-1

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<sup>1</sup> Minto is the only industrial in 2018 forecasts.

<sup>2</sup> As provided in the ST Alternative GRA Forecast, Exhibit B-14, Appendix 2.2, with assumed 60/40 LNG/diesel split.

Table 3.4-1, without re-running YECSIM to adjust this table to reflect the major change in annual load shape.<sup>3</sup> In contrast, the ST hydro forecasts re-ran the ST hydro model and thereby reflected impacts related to changes in the annual load shape. Other updates related to load forecast as well as O&M costs and rate base are not addressed.

As reviewed in response to YUB-YEC-1-3 and the attached table, load forecast updates impact the following revenue requirement forecast elements:

1. Revenues at existing rates;
2. Fuel costs (based on LTA or ST forecast hydro generation related to changes in firm grid load, assuming operation of a DCF under either case and GRA fuel price forecasts as well as GRA thermal generation maintenance fuel forecasts); and
3. Working capital (to the extent that changes in fuel costs impact working capital).

In summary, the attached table shows the two load forecast adjustments result in a reduction in the forecast 2018 revenue requirement of approximately \$0.5 million, assuming LTA hydro and thermal generation based on Table 3.4-1 of the GRA. In reality, this gap would likely be reduced when the DCF table is updated as required for the material change in annual load shape<sup>4</sup>, i.e., the LTA thermal generation will be higher than assumed in Update 2018 due to the higher-than-GRA forecast loads in the early winter months (which months drive annual thermal LTA) and the much lower-than-GRA forecast loads for the last six months.

With these adjustments, the ST#1 forecast revenue requirement in the table is not materially different from the LTA forecast, reflecting an increase in ST thermal generation cost from GRA forecast filings.<sup>5</sup> However, the forecast revenue requirement

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<sup>3</sup> The DCF Term Sheet (Attachment 3.4-1 of Exhibit B-1) requires at page 3.4-14 that YEC will provide the Board, for review and approval, an update to Table 3.4-1 when required in future to address material changes in LTA hydro system capability due to changes in loads, installed capacity, licensing/ permits or other factors. The updated load forecast for 2018 materially changes the annual load shape from that assumed for Table 3.4-1, with higher industrial loads in the first few winter months and very low industrial loads for the last six months.

<sup>4</sup> That is, the significant reduction in load to serve Minto.

<sup>5</sup> YUB-YEC-2-11(b) shows the ST Alternative Forecast for 2018 at \$49.16 million based on the GRA forecast loads and costs, with fuel cost at \$1.665 million (8.2 GW.h thermal generation). The Update ST#1 higher thermal at 9.4 GW.h reflects higher grid load in the January-April period having a greater thermal generation impact than the lower grid load from July to December.

gap between LTA and ST#1 Updates would widen with required updates to the DCF table and the LTA determination to reflect the material change in annual load shape.

In contrast, the ST#2 forecast shows a materially higher revenue requirement than the GRA forecast (under both LTA and ST thermal forecasts) due to the change in ST fuel cost forecasts. This shows the impact in the second year of a GRA filing (2018), using the ST hydro forecast approach, if materially higher grid loads are forecast in the first year of the GRA filing (2017).

Review of the two ST scenarios in the attached table demonstrates the volatile nature of short-term hydro assessments.

**Summary Update for 2018 Revenue Requirement (\$000)**

	<b>Proposed 2018</b>	<b>Update 2018</b>	<b>Update 2018 ST#1</b>	<b>Update 2018 ST#2</b>
<b>Sales Forecast (\$000)</b>				
Industrial <sup>1</sup>	4,198	3,952	3,952	3,952
Other YEC Firm <sup>2</sup>	31,813	31,813	31,813	31,813
Total YEC-Firm	<u>36,011</u>	<u>35,765</u>	<u>35,765</u>	<u>35,765</u>
Secondary <sup>3</sup>	642	115	115	115
Total Sales - base rates	<u>36,653</u>	<u>35,880</u>	<u>35,880</u>	<u>35,880</u>
Rider J	6,373	6,347	6,347	6,347
Total Sales	<u>43,026</u>	<u>42,227</u>	<u>42,227</u>	<u>42,227</u>
<b>Revenue Requirement (\$000)</b>				
Fuel <sup>4</sup>	2,368	1,918	1,885	3,630
Return on Working Capital <sup>5</sup>	256	255	255	259
Return on Balance of Rate Base <sup>2</sup>	14,092	14,092	14,092	14,092
Other Revenue Requirement <sup>2</sup>	33,148	33,148	33,148	33,148
Total Revenue Requirement	<u>49,864</u>	<u>49,413</u>	<u>49,380</u>	<u>51,129</u>
<b>Rate Base (\$000)</b>				
Adjusted Working Capital <sup>5</sup>	5,210	5,183	5,181	5,264
Balance of net mid-yr rate base <sup>2</sup>	<u>286,417</u>	<u>286,417</u>	<u>286,417</u>	<u>286,417</u>
Total mid-year net rate base	<u>291,627</u>	<u>291,600</u>	<u>291,598</u>	<u>291,681</u>

## Notes:

- 1 Updated Industrial forecast load at 32,192 MWh (vs. GRA forecast 38,219 MWh), based on actual January-June and revised forecast for balance of 2018.
- 2 Per GRA as originally filed.
- 3 Updated Secondary forecast load at 2,059.48 MW.h, based on six month actual and updated forecast for balance of months.
- 4 "Update 2018" assumes LTA thermal per GRA Table 3.4-1 of 11,641 MWh for adjusted load and 90/10 LNG/diesel; "Update 2018 ST#1" assumes ST based on GRA forecast loads for 2016 and 2017 with ST thermal for 2018 of 9,362 MWh for adjusted load and 60/40 LNG/diesel; "Update 2018 ST#2" assumes ST based on actual loads for 2016 and 2017 with ST thermal for 2018 of 18,387 MWh for adjusted load and 60/40 LNG/diesel. All updated forecasts include \$75k for forecast maintenance fuel costs.
- 5 Impacts of sales & fuel cost changes on working capital; assume GRA 4.92% return.