

# Overview of Hydro Hawkesbury Inc.'s 2018 Cost of Service Application – Settlement Proposal

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# Introduction and Timelines

- ▶ Hydro Hawkesbury Inc. ( "HHI") filed a Cost of Service application with the Ontario Energy Board (the "OEB") on July 12, 2017.
- ▶ A Community Meeting was held on September 18, 2017
- ▶ On November 21, 2017 HHI filed its responses to interrogatories and the OEB approved the list submitted by OEB staff as the final issues list.
- ▶ The settlement conference was convened on November 22, 2017.
- ▶ Full Settlement was reached.
- ▶ HHI, VECC and SEC participated in the settlement conference (collectively referred to as the "Parties").

# Settlement on Rate Base

Particulars	Application July 12 2017	IRR Nov 13 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Variance over IRs
Gross Fixed Assets (avg.)	\$7,983,667	\$7,983,667	\$0	\$7,973,514	-\$10,153
Accumulated Depreciation (avg.)	-\$923,368	-\$923,368	\$0	-\$923,622	-\$255
Net Fixed Assets (avg.)	\$7,060,300	\$7,060,300	\$0	\$7,049,892	-\$10,408
Allowance for Working Capital	\$1,554,729	\$1,565,231	\$10,503	\$1,478,441	-\$86,790
Total Rate Base	\$8,615,028	\$8,625,531	\$10,503	\$8,528,333	-\$97,198
Controllable Expenses	\$1,210,114	\$1,227,882	\$17,768	\$1,192,882	-\$35,000
Cost of Power	\$19,519,602	\$19,641,868	\$122,266	\$18,519,668	-\$1,122,200
Working Capital Base	\$20,729,716	\$20,869,750	\$140,034	\$19,712,551	-\$1,157,200
Working Capital Rate %	7.50%	7.50%	\$0.00	7.50%	0.00%
Working Capital Allowance	\$1,554,729	\$1,565,231	\$10,503	\$1,478,441	-\$86,790

- The Parties accepted the rate base calculations, after making the adjustment to, opening balances for 2018, the working capital allowance (OM&A, Cost of Power) as reasonable.

# Settlement on Capital Additions

	Application July 12 2017	IRR Nov 13 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Variance over IRs
Gross Assets					
System Access	\$36,800	\$36,800	\$0.00	\$36,800	\$0
System Renewal	\$117,780	\$117,780	\$0.00	\$117,780	\$0
System Service	\$10,000	\$10,000	\$0.00	\$0	-\$10,000
General Plant	\$11,250	\$11,250	\$0.00	\$11,250	\$0
Total Additions	\$175,830	\$175,830	\$0.00	\$165,830	-\$10,000
Capital Contribution included in System Access	\$0	\$0	\$0.00	-\$10,000	-\$10,000

- ▶ Full Settlement on the following
  - ▶ Updated in service addition forecast for 2017
  - ▶ Revision to include 10K in capital contribution associated with a subdivision.
  - ▶ Inclusion of 3.5M into Rate Base to cover the cost of the 110kV substation.



# 110KV Substation - Issues and Timelines

- ▶ **Sept 2012:** HHI requests ICM for 2.23M
  - ▶ 44kV = 790K (implemented on schedule and on-budget)
  - ▶ 110kV = 1.5M (delayed)
- ▶ **2012-2014:** Delays in implementing 110kV.
- ▶ **2013 (2014 CoS):** HHI refunds over-collection from 2012 to 2013 in the amount of -\$268,428 to its customers. The Forecast Costs of 1.5M is added to 2014 Rate Base.
- ▶ **2014-2017:** General Electric, hired to commission the substation, notices missing specs and equipment.
- ▶ Further delays in implementing 110kV. (Missing specs / Hydro One switch / Oil containment / detailed study requested by Infrastructure Ontario).
- ▶ **2016:** HHI incurs 1.15M in costs related to the substation.
- ▶ **April 2017:** Substation goes in service.
- ▶ **July 2017:** Cost of Service submitted with Actual costs of 3.5M.
- ▶ **Jan 1, 2018:** HHI refunds over-collection from 2014-2017 to its customers. The refund is in the amount of -\$305,798.

# 110KV Substation - Refund to customer

Rate Class (Enter Rate Classes in cells below)	Units	kW / kWh / # of Customers	Allocated Balance (excluding 1589)	Rate Rider for Deferral/Variance Accounts
RESIDENTIAL	# of Customers	4,836	-\$104,455.81	-\$21.60
GENERAL SERVICE < 50 KW	kWh	17,883,115	-\$32,667.44	-\$0.0018
GENERAL SERVICE > 50 TO 4999 KW	kW	221,782	-\$166,523.25	-\$0.7508
UNMETERED SCATTERED LOAD	kWh	432,358	-\$789.80	-\$0.0018
SENTINEL LIGHTING	kW	240	-\$284.44	-\$1.1852
STREET LIGHTING	kW	1,857	-\$1,077.80	-\$0.5804
Total			-\$305,798.55	

- ▶ The Parties accept HHI's proposal to refund amounts due to a delay in upgrading Hydro Hawkesbury's 110kV transformer station, including the quantum and method of disposition. The rate riders are shown above.
- ▶ The total refund is in the amount of -\$305,798.

# Settlement on Operational Costs

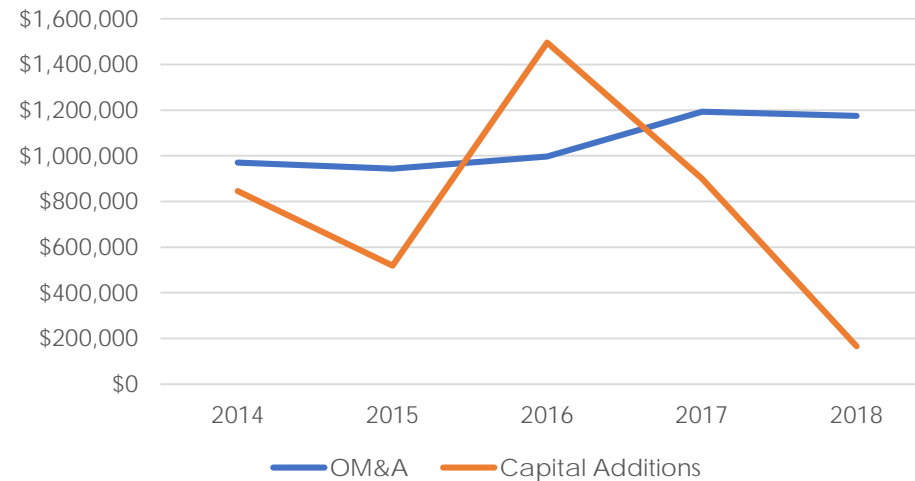
	Application July 12 2017	IRR Nov 13 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Variance over IRs
Operations	\$95,593	\$95,593	\$0	\$92,648	-\$2,945
Maintenance	\$204,514	\$204,514	\$0	\$198,496	-\$6,018
Billing and Collecting	\$476,632	\$476,632	\$0	\$462,970	-\$13,662
Community Relations	\$0	\$0	\$0	\$0	\$0
Administration & General +LEAP	\$433,375	\$433,375	\$0	\$421,000	-\$12,375
Total	\$1,210,114	\$1,210,114	\$0	\$1,175,114	-\$35,000

- Subject to an envelope reduction of \$35,000 to the proposed 2018 OM&A budget, the parties agree that the proposed OMA budget is appropriate.

# Summary of Capital & OM&A Spending

	Board Approved	2014	2015	2016	2017	2018
OM&A	\$1,126,741	\$970,668	\$944,340	\$996,817	\$1,193,426	\$1,175,114
Capital Spending	\$1,560,990	\$845,104	\$519,213	\$1,496,257	\$899,943	\$165,830
<i>Capital Additions related to the 110kV</i>				\$59,244	\$3,525,000	
<i>Construction in progress related to the 110kV</i>		\$707,031	\$141,544	\$1,153,904	-\$2,807,257	

OM&A VS CapEx





# Settlement on Customer and Load Forecast

Particulars	Application July 12 2017	IRR Nov 13 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Variance over IRs
Energy (kWh)					
Residential	48,228,553	47,552,180	-676,372	50,454,856	2,902,676
General Service < 50 kW	18,143,532	17,889,082	-254,451	17,883,115	-5,966
General Service > 50 to 4999 kW	81,021,489	79,885,218	-1,136,271	85,142,906	5,257,689
Unmetered Scattered Load	429,307	422,721	-6,586	432,358	9,638
Sentinel Lighting	84,029	82,740	-1,289	84,626	1,886
Street Lighting	641,942	632,094	-9,848	646,505	14,411
Total	148,548,851	146,464,034	-2,084,817	154,644,367	8,180,334
Demand (kW)					
General Service > 50 to 4999 kW	211,046	212,831	1,784	221,782	8,951
Unmetered Scattered Load	0	4	4	0	-4
Sentinel Lighting	238	240	2	240	0
Street Lighting	1,844	1,857	13	1,857	0
Total	213,128	214,932	1,803	223,879	8,947

▶ The Parties agree to:

- ▶ the removal of the CDM weighting factor related to 2015 CDM,
- ▶ For the 2015-2020 CDM Program Table, CHE used the 2016 verified results persisting in 2018 along with annual savings from the CDM plan for 2017 and 2018 assuming a 100% persistence for 2018.
- ▶ A revised allocation of the manual CDM adjustment based on the 2016 verified results and the CDM plan savings for 2017 and 2018.

# Settlement on Cost of Capital

Particulars	Application July 12 2017	Application July 12 2017	IR Nov 10 2017	IR Nov 10 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Settlement Proposal Jan 8 2018	Variance over IRs
Debt								
Long-term Debt	3.59%	\$173,259	3.59%	\$169,060	-\$4,198	3.33%	\$159,036	-\$10,024
Short-term Debt	1.76%	\$6,065	1.76%	\$6,072	\$7	2.29%	\$7,812	\$1,740
Total Debt	5.35%	\$179,324	8.78%	\$175,133	-\$4,191	3.67%	\$166,848	-\$8,284
Equity								
Common Equity	9.00%	\$302,560	9.00%	\$302,929	\$369	9.00%	\$307,020	\$4,091
Total Equity	0.00%	\$0	0.00%	\$0	\$0	0.00%	\$0	\$0
	9.00%	\$302,560	9.00%	\$302,929	\$369	9.00%	\$307,020	\$4,091
Total								

- ▶ The Parties agree to HHI's proposed cost of capital parameters as updated to reflect the OEB's deemed cost of capital parameters for the 2018 test year.

# Settlement on Revenue Requirement

	Application July 12 2017	IRR Nov 13 2017	Variance over Original Filing	Settlement Proposal Jan 8 2018	Variance over IRs
OM&A Expenses	\$1,210,114	\$1,210,114	\$0	\$1,175,114	-\$35,000
Amortization/Depreciation	\$280,878	\$280,878	\$0	\$281,068	\$190
Property Taxes	\$0	\$17,768	\$17,768	\$17,768	\$0
Income Taxes (Grossed up)	\$9,717	\$9,774	\$57	\$10,538	\$764
Return					
Deemed Interest Expense	\$179,324	\$175,133	-\$4,191	\$166,848	-\$8,284
Return on Deemed Equity	\$302,560	\$302,929	\$369	\$307,020	\$4,091
Service Revenue Requirement	\$1,982,593	\$1,996,596	\$14,003	\$1,958,356	-\$38,239
Revenue Offsets	\$207,894	\$208,216	\$322	\$214,216	\$6,000
Base Revenue Requirement	\$1,774,699	\$1,788,380	\$13,681	\$1,744,140	-\$44,239
Base Revenue Deficiency	\$163,342	\$188,290	\$24,948	\$120,493	-\$67,797

- ▶ OM&A: Envelope cut of 35K
  - ▶ Operation: -\$3k
  - ▶ Maintenance: -\$6k
  - ▶ Billing and Collect: -\$13.7k
  - ▶ Admin: -\$12.3k
- ▶ Adjustment to depreciation expense as a result of using actual in-service addition for 2017.
- ▶ Adjustment to return as a result of new Cost of Capital parameters
- ▶ Overall reduction of Revenue Deficiency of 67.8K

# Settlement on Rate Design

Particulars		Application July 12 2017	Application July 12 2017	IRR Nov 3 2017	IRR Nov 3 2017	Settlement Proposal Jan 8 2018	Settlement Proposal Jan 8 2018
Customer Class Name	per	Fixed Rate	Variable Rate	Fixed Rate	Variable Rate	Fixed Rate	Variable Rate
Residential	kWh	\$15.39	\$0.0028	\$15.63	\$0.0029	\$15.15	\$0.0027
General Service < 50 kW	kWh	\$15.47	\$0.0073	\$15.47	\$0.0076	\$15.47	\$0.0071
General Service > 50 to 4999 kW	kW	\$100.99	\$2.2602	\$100.99	\$2.2869	\$100.99	\$2.1023
Unmetered Scattered Load	kWh	\$7.29	\$0.0043	\$7.41	\$0.0044	\$7.12	\$0.0042
Sentinel Lighting	kW	\$1.83	\$3.6222	\$1.77	\$3.9378	\$1.66	\$3.8961
Street Lighting	kW	\$0.67	\$7.2372	\$0.61	\$6.6667	\$0.59	\$6.4020

- ▶ The Parties agree to that the Revenue-to-Cost ratios and Fixed to Variable Split have been correctly determined in accordance with OEB policies and practices. The parties agree that there are two years remaining in HHI's transition to fixed residential rates.

# Settlement on Deferral and Variance Balances

## Group 1&2 Balances

Total of Group 1 Accounts (1550, 1551, 1584, 1586 and 1595)	\$526,943
Total of Account 1580 and 1588 (not allocated to WMPs)	-\$1,270,007
Balance of Account 1589 Allocated to Non-WMPs	\$304,101

- ▶ The Parties accept the deferral and variance accounts are appropriate.

## LRAMVA Balances

Description	Residential	General Service <50 kW	General Service 50 - 4999 kW	Street Lighting	Sentinel Lighting	Unmetered Scattered Load	Total
	kWh	kWh	kW	kW	kWh	kW	
2015 Actuals	\$8,411.40	\$20,085.78	\$26.68	\$0.00	\$0.00	\$0.00	\$28,523.87
2015 Forecast	(\$13,962.18)	(\$3,281.89)	(\$11,454.47)	(\$529.58)	(\$25.97)	(\$22.31)	(\$29,276.39)
Amount Cleared							
2016 Actuals	\$11,421.43	\$23,583.05	\$27.24	\$0.00	\$0.00	\$0.00	\$35,031.72
2016 Forecast	(\$10,827.81)	(\$3,336.59)	(\$11,695.00)	(\$540.70)	(\$26.52)	(\$22.89)	(\$26,449.50)
Amount Cleared							
Carrying Charges	(\$86.48)	\$372.93	(\$243.03)	(\$11.26)	(\$0.55)	(\$0.47)	\$31.14
Total LRAMVA Balance	-\$5,044	\$37,423	-\$23,339	-\$1,082	-\$53	-\$46	\$7,861
Rate Rider	-0.0001	0.0021	-0.1052	-0.5824	-0.2210	-0.0001	

- ▶ The Parties accept HHI's proposal to dispose of all deferral and variances balances including LRAMVA balances, over a period of one year in order to mitigate the impact rate impacts.



## Settlement on Other issues

- ▶ The following other issues are agreed to be appropriate and have been correctly determined in accordance with OEB accounting policies and practices.
  - ▶ PILs in the amount of \$10,538
  - ▶ Other Revenues in the amount of \$214,216 adjusted to account for the disposal of 3 unused fully depreciated vehicles. Parties have agreed to amortize the revenue from the sale by including 1/5<sup>th</sup> or \$6,000 related to the sale in the Test Year Revenue Requirement
  - ▶ Loss Factor of 1.0509 or 5.09%
  - ▶ LRAMVA Baseline of 5,680,929 kWh
  - ▶ RTSR and Low Voltage Rates
  - ▶ HHI commits to carrying out an asset condition assessment to be filed in its next Cost of Service.
  - ▶ HHI commits to filing a detailed contract with its 3<sup>rd</sup> party contracting firm.

# Typical Bill Impacts

RATE CLASSES / CATEGORIES (e.g.: Residential TOU, Residential Retailer)	Units	Sub-Total						Total	
		A=Distribution Charges + LRAMVA		B =Subtotal A+ Deferral and Variance Rate Riders + LV charges + Smart Meter Charges		C= Subtotal B+ Transmission and Connection Charges		Total = C + pass-through chrgs + commodity + HST	
		\$	%	\$	%	\$	%	\$	%
Residential service classification - RPP	750 kWh	-\$21.02	-127.20%	-\$23.24	-114.10%	-\$22.71	-78.60%	-\$24.69	-24.80%
Residential service classification - non-RPP (retailer)	750 kWh	-\$21.02	-127.20%	-\$20.38	-94.80%	-\$20.38	-94.80%	-\$22.24	-19.60%
Residential service classification - RPP	313 kWh	-\$19.92	-139.50%	-\$20.24	-127.30%	-\$20.24	-127.30%	-\$21.60	-47.30%
Residential service classification - non-RPP (retailer)	313 kWh	-\$19.92	-139.50%	-\$19.05	-116.40%	-\$19.05	-116.40%	-\$20.35	-37.00%
General service less than 50 kw service classification - RPP	2000 kWh	-\$2.39	-8.40%	-\$9.73	-25.20%	-\$8.53	-14.40%	-\$11.19	-4.30%
General service 50 to 4,999 kw service classification - non-RPP (retailer)	240 kW	-\$166.92	-28.20%	-\$421.63	-64.80%	-\$358.82	-22.30%	-\$452.50	-8.50%
Unmetered scattered load service classification - non-RPP (retailer)	4600 kWh	-\$6.41	-26.10%	-\$25.51	-46.60%	-\$22.75	-22.30%	-\$31.26	-4.20%
Sentinel lighting service classification - non-RPP (other)	123 kWh	-\$71.73	-13.70%	-\$89.81	-15.70%	-\$89.81	-15.70%	-\$101.68	-15.30%
Street lighting service classification - non-RPP (other)	15,000 kWh	-\$2,104.62	-2.30%	-\$22,344.12	-24.00%	-\$22,344.12	-24.00%	-\$25,272.91	-23.60%

# Typical Bill Impacts (without station refund)

RATE CLASSES / CATEGORIES (e.g.: Residential TOU, Residential Retailer)	Units	Sub-Total						Total	
		A=Distribution Charges + LRAMVA		B =Subtotal A+ Deferral and Variance Rate Riders + LV charges + Smart Meter Charges		C= Subtotal B+ Transmission and Connection Charges		Total = C + pass-through chrgs + commodity + HST	
		\$	%	\$	%	\$	%	\$	%
Residential service classification - RPP	750 kWh	\$0.59	3.5%	-\$1.64	-8.0%	-\$1.11	-3.9%	-\$2.01	-2.0%
Residential service classification - non-RPP (retailer)	750 kWh	\$0.59	3.5%	\$1.22	5.7%	\$1.22	5.7%	\$0.44	0.4%
Residential service classification - RPP	313 kWh	\$1.68	11.7%	\$1.36	8.6%	\$1.36	8.6%	\$1.08	2.4%
Residential service classification - non-RPP (retailer)	313 kWh	\$1.68	11.7%	\$2.55	15.6%	\$2.55	15.6%	\$2.33	4.2%
General service less than 50 kw service classification - RPP	2000 kWh	\$1.21	4.3%	-\$6.13	-15.9%	-\$4.93	-8.3%	-\$7.41	-2.8%
General service 50 to 4,999 kw service classification - non-RPP (retailer)	240 kW	\$13.27	2.2%	-\$241.44	-37.1%	-\$178.63	-11.1%	-\$248.88	-4.7%
Unmetered scattered load service classification - non-RPP (retailer)	4600 kWh	\$1.87	7.6%	-\$17.23	-31.5%	-\$14.47	-14.2%	-\$21.90	-2.9%
Sentinel lighting service classification - non-RPP (other)	123 kWh	\$74.05	14.1%	\$55.97	9.8%	\$55.97	9.8%	\$63.06	9.5%
Street lighting service classification - non-RPP (other)	15,000 kWh	\$6,601.38	7.3%	-\$13,638.12	-14.7%	-\$13,638.12	-14.7%	-\$15,435.13	-14.4%

# Performance & Scorecards

## As filed using 2018 Test Year

	2015	2016	2017	2018
Cost Benchmarking Summary				
Actual Total Cost	1,436,164	1,604,174	1,843,323	1,826,959
Predicted Total Cost	2,837,771	2,821,443	2,939,496	3,060,884
Difference	(1,401,607)	(1,217,269)	(1,096,173)	(1,233,925)
Percentage Difference (Cost Performance)	-68.1%	-56.5%	-46.7%	-51.61%
Three-Year Average Performance			-57.1%	-51.58%
Annual Result	1	1	1	1

# Benchmarking and Scorecard results.

- ▶ HHI's efficiency ranking is based on merit. In other words, prudent management of the distribution system and efficiency in managing its operational costs.
- ▶ HHI ranked 1<sup>st</sup> in the province since 2009 (using 2006 data).
- ▶ The complications with the 110kV station build were specific to the one large project. HHI notes that the 44KV (2012 ICM) was implemented without any issues.
- ▶ HHI notes that even with the added costs of the 110kV station and a return to "normal" OM&A spending in 2017 and 2018, HHI continues to demonstrate excellent benchmarking and scorecard results.
- ▶ HHI's load is entirely supplied by the 2 new substations, with a refurbished substation as backup. HHI does not forecast a need for any further capital projects approaching the scale of the two recent station replacements in the near or mid term planning horizon.