

Table 3 (revised)

Econometric Model of Total Cost

VARIABLE KEY

N = Number of customers
 D = 5 year ratcheted maximum peak demand
 A = Service territory area
 PCTELEC = % electric customers
 ELEVSTD = Elevation standard deviation
 PCTOH * PFOREST = % of overhead assets times the percent forested
 PCTCU = % service territory congested urban
 PCTAMI = % of customers with AMI meters
 Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T- STATISTIC	P-VALUE
N	0.656	16.67	0.000
D	0.280	7.15	0.000
N*N	0.524	6.81	0.000
D*D	0.589	5.65	0.000
D*N	-1.049	-6.27	0.000
A	0.068	6.18	0.000
A*A	0.025	4.51	0.000
A*N	0.011	0.52	0.605
A*D	-0.057	-2.75	0.006
PCTELEC	0.172	5.13	0.000
ELEVSTD	0.019	1.83	0.067
PCTOH*PCTFORES1	0.045	5.78	0.000
PCTCU	10.169	3.12	0.002
PCTAMI	0.018	1.10	0.272
Trend	-0.002	-1.25	0.213
Constant	13.137	238.81	0.000

Adjusted R² 0.997

Sample Period 2002-2017

Number of Observations 1305

Table 4 (revised)

Econometric Model of OM&A Expenses

VARIABLE KEY

N = Number of customers
 D = 5 year ratcheted maximum peak demand
 ELEVSTD = Elevation standard deviation
 PCTOH * PFOREST = % of overhead assets times the percent forested
 PCTCU = % service territory congested urban
 PCTPOH = % of plant overhead
 Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T- STATISTIC	P-VALUE
N	0.882	11.91	0.000
N*N	0.614	3.98	0.000
D	0.106	1.39	0.165
D*D	0.467	2.31	0.021
D*N	-1.032	-3.11	0.002
ELEVSTD	0.052	3.04	0.002
PCTOH*PCTFOREST	0.057	4.39	0.000
PCTCU	84.707	4.74	0.000
PCTCU*PCTCU	-2254.280	-3.61	0.000
PCTPOH	1.391	7.06	0.000
Trend	-0.007	-2.65	0.008
Constant	10.794	57.33	0.000
Adjusted R²		0.981	
Sample Period		2002-2017	
Number of Observations		1305	

Table 5 (revised)

Econometric Model of Capital Cost

VARIABLE KEY

N = Number of customers
 D = 5 year ratcheted maximum peak demand
 A = Service territory area
 PCTELEC = % electric customers
 PCTOH * PFOREST = % of overhead assets times the percent forested
 PCTCU = % service territory congested urban
 PCTAMI = % of customers with AMI meters
 Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T- STATISTIC	P-VALUE
N	0.714	33.79	0.000
N*N	0.317	6.67	0.000
D	0.216	10.35	0.000
D*D	0.295	4.99	0.000
D*N	-0.551	-5.80	0.000
A	0.096	10.62	0.000
A*A	0.024	5.27	0.000
A*N	-0.029	-1.99	0.046
A*D	-0.013	-1.17	0.244
PCTELEC	0.174	5.59	0.000
ELEVSTD	0.010	1.31	0.191
PCTOH*PCTFOREST	0.025	3.76	0.000
PCTCU	11.404	3.59	0.000
PCTAMI	0.022	3.26	0.001
Trend	0.002	2.47	0.014
Constant	10.432	283.89	0.000

Adjusted R² 0.998

Sample Period 2002-2017

Number of Observations 1354

Table 6 (revised)

Year by Year Total Cost Benchmarking Results

Year	Percent Difference¹
2013	-14.3%
2014	-10.2%
2015	-6.7%
2016	-6.2%
2017	-6.1%
2018	-2.8%
<i>2019</i>	<i>2.8%</i>
<i>2020</i>	<i>1.8%</i>
<i>2021</i>	<i>4.4%</i>
<i>2022</i>	<i>5.4%</i>
<i>2023</i>	<i>4.6%</i>
<i>2024</i>	<i>3.9%</i>
<i>2025</i>	<i>4.6%</i>
Annual Averages	
2013-2018	-7.7%
2016-2018	-5.0%
2021-2025	4.6%

¹ Formula for benchmark comparison is $\ln(\text{Cost}^{\text{HOL}}/\text{Cost}^{\text{Bench}})$.

Note: Italicized numbers are projections/proposals.

Table 7 (revised)

Year by Year OM&A Benchmarking Results

Year	Percent Difference¹
2013	-21.2%
2014	-14.0%
2015	-8.0%
2016	-9.0%
2017	-10.6%
2018	-2.0%
<i>2019</i>	<i>-1.4%</i>
<i>2020</i>	<i>-3.2%</i>
<i>2021</i>	<i>-2.4%</i>
<i>2022</i>	<i>-2.3%</i>
<i>2023</i>	<i>-2.0%</i>
<i>2024</i>	<i>-1.8%</i>
<i>2025</i>	<i>-1.5%</i>
Annual Averages	
2013-2018	-10.8%
2016-2018	-7.2%
2021-2025	-2.0%

¹ Formula for benchmark comparison is $\ln(\text{Cost}^{\text{HOL}}/\text{Cost}^{\text{Bench}})$.

Note: Italicized numbers are projections/proposals.

Table 8 (revised)

Year by Year Capital Cost Benchmarking Results

Year	Percent Difference¹
2006	-0.4%
2007	1.6%
2008	-0.1%
2009	-2.8%
2010	-4.1%
2011	-8.7%
2012	-9.0%
2013	-6.1%
2014	-3.4%
2015	-0.2%
2016	0.4%
2017	1.8%
2018	3.5%
<i>2019</i>	<i>10.9%</i>
<i>2020</i>	<i>9.9%</i>
<i>2021</i>	<i>12.7%</i>
<i>2022</i>	<i>13.7%</i>
<i>2023</i>	<i>12.2%</i>
<i>2024</i>	<i>10.9%</i>
<i>2025</i>	<i>11.5%</i>
Annual Averages	
2006-2018	-2.1%
2016-2018	1.9%
2021-2025	12.2%

¹ Formula for benchmark comparison is $\ln(\text{Cost}^{\text{HOL}}/\text{Cost}^{\text{Bench}})$.

Note: Italicized numbers are projections/proposals.

Figure 1 (revised)

Hydro Ottawa's Total Cost Benchmarking Scores

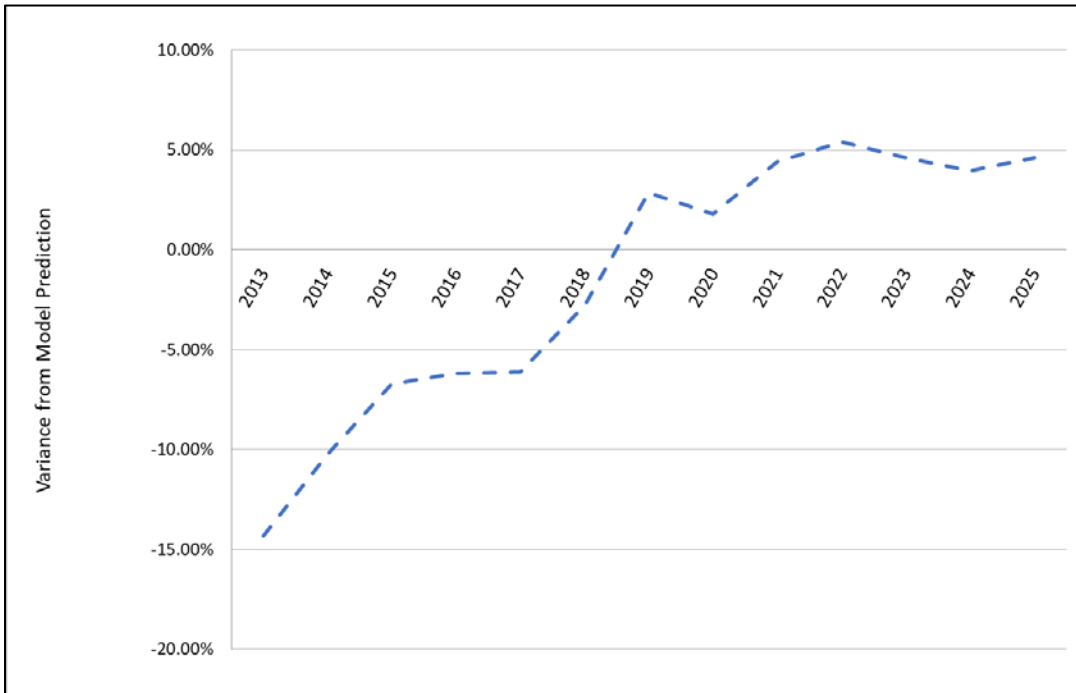


Figure 2 (revised)

Hydro Ottawa's OM&A Cost Benchmarking Scores

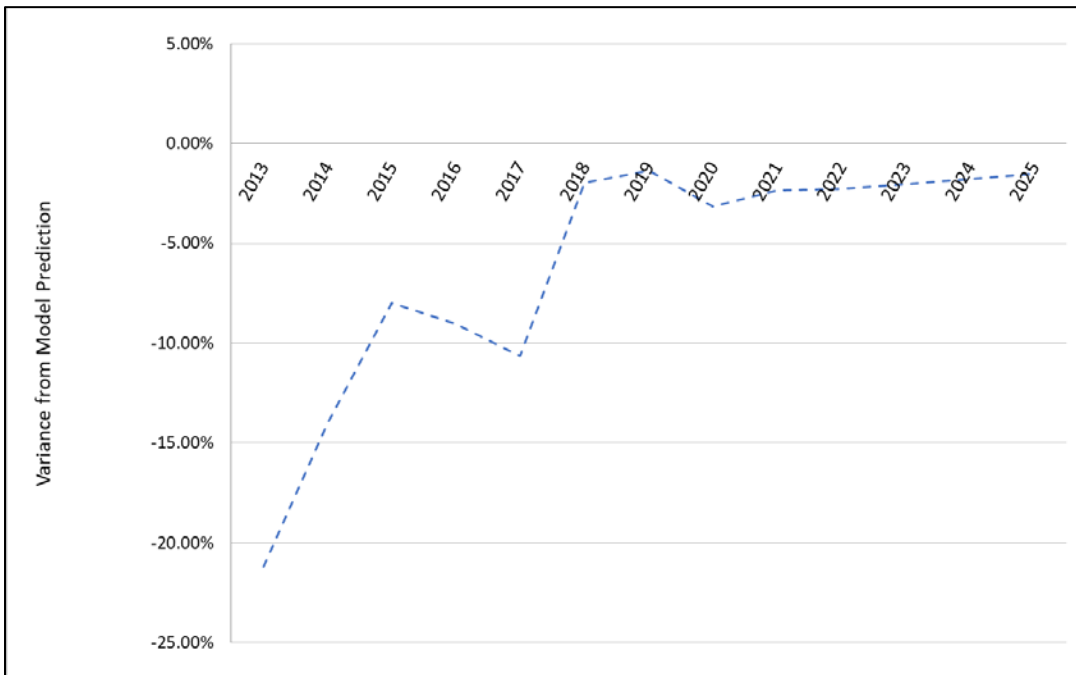


Figure 3 (revised)

Hydro Ottawa's Capital Cost Benchmarking Scores

