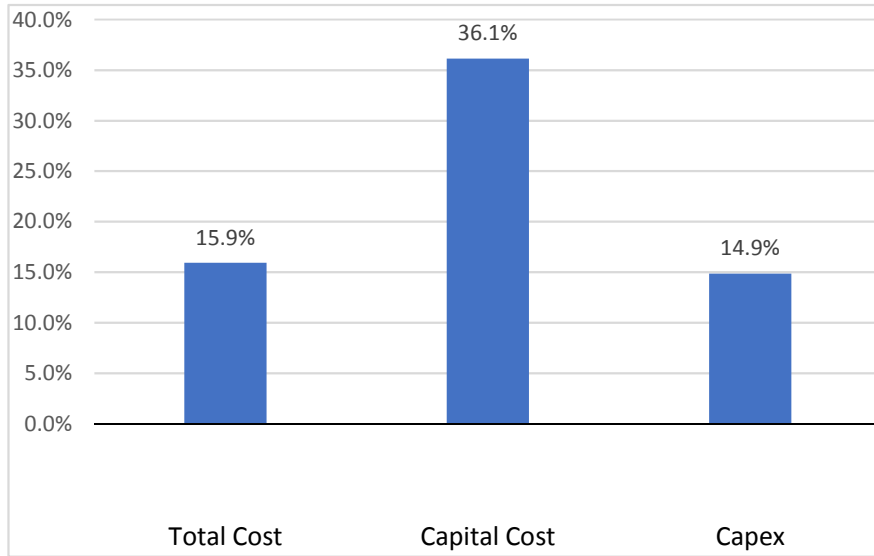


Benchmarking Results for Toronto Hydro's Proposed Costs (2020-2024)



Total Cost Performance of THESL

Year	Percent Difference ¹
2005	-34.8%
2006	-34.1%
2007	-29.7%
2008	-27.5%
2009	-25.4%
2010	-18.1%
2011	-10.6%
2012	-12.2%
2013	-7.2%
2014	-5.5%
2015	-3.3%
2016	1.2%
2017	4.1%
<i>2018</i>	<i>7.9%</i>
<i>2019</i>	<i>9.1%</i>
<i>2020</i>	<i>11.8%</i>
<i>2021</i>	<i>13.7%</i>
<i>2022</i>	<i>16.2%</i>
<i>2023</i>	<i>18.1%</i>
<i>2024</i>	<i>19.8%</i>
Annual Averages	
2005-2017	-15.6%
2015-2017	0.7%
2020-2024	15.9%

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

Note: Italicized numbers are projections/proposals.

Capital Cost Performance of THESL

Year	Percent Difference ¹
2005	-29.4%
2006	-26.4%
2007	-23.5%
2008	-17.8%
2009	-16.4%
2010	-12.1%
2011	-4.6%
2012	-3.9%
2013	0.0%
2014	5.6%
2015	9.3%
2016	16.1%
2017	20.6%
2018	26.0%
2019	27.7%
2020	30.4%
2021	32.9%
2022	36.4%
2023	39.3%
2024	41.7%
Annual Averages	
2005-2017	-6.3%
2015-2017	15.3%
2020-2024	36.1%

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

Note: Italicized numbers are projections/proposals.

Capex Performance of THESL

Year	Percent Difference ¹
2005	-84.0%
2006	-39.4%
2007	-36.8%
2008	-3.7%
2009	-51.1%
2010	-11.1%
2011	24.1%
2012	-50.5%
2013	0.6%
2014	17.6%
2015	5.9%
2016	33.7%
2017	18.3%
2018	32.5%
2019	-10.4%
2020	7.6%
2021	6.0%
2022	24.6%
2023	19.6%
2024	16.5%
Annual Averages	
2005-2017	-13.6%
2015-2017	19.3%
2020-2024	14.9%

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

Note: Italicized numbers are projections/proposals.

PEG Revised Econometric Total Cost Model

VARIABLE KEY

N = Number of customers
D = Ratcheted maximum peak demand
PCTCU = % service territory congested urban
AREA_OTHER = Service territory area multiplied by (1-PCTCU)
PCTFOREST = % service territory forested
PCTELEC = % electric customers
PCTAMI = % of customers with AMI meters
ELEVSTD = Elevation standard deviation
Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T-STATISTIC	P-VALUE
N	0.605	29.008	0.000
N*N	0.498	6.381	0.000
D	0.347	16.327	0.000
D*D	0.563	6.823	0.000
D*N	-0.513	-6.576	0.000
PCTCU	14.616	7.830	0.000
AREA_OTHER	0.019	3.124	0.002
PCTFOREST	0.042	13.583	0.000
PCTELEC	0.088	4.887	0.000
PCTAMI	0.029	2.741	0.006
ELEVSTD	0.032	6.417	0.000
Trend	-0.004	-7.787	0.000
Constant	19.777	2074.330	0.000

Adjusted R² 0.970

Sample Period 1995-2017

Number of Observations 1907

PEG's Revised Econometric Capital Cost Model

VARIABLE KEY

N = Number of customers
D = Ratcheted maximum peak demand
PCTCU = % service territory congested urban
AREA_OTHER = Service territory area multiplied by (1-PCTCU)
PCTFOREST = % service territory forested
PCTELEC = % electric customers
PCTAMI = % of customers with AMI meters
ELEVSTD = Elevation standard deviation
Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T-STATISTIC	P-VALUE
N	0.530	39.973	0.000
N*N	-0.110	-1.964	0.050
D	0.423	30.702	0.000
D*D	0.125	2.124	0.034
D*N	0.009	0.167	0.867
PCTCU	24.267	14.683	0.000
AREA_OTHER	0.069	15.082	0.000
PCTFOREST	0.036	14.538	0.000
PCTELEC	0.046	5.208	0.000
PCTAMI	0.027	5.005	0.000
ELEVSTD	0.016	4.654	0.000
Trend	-0.005	-15.678	0.000
Constant	17.413	2749.956	0.000

Adjusted R² 0.964

Sample Period 1995-2017

Number of Observations 1907

PEG's Revised Econometric Capex Model

VARIABLE KEY

N = Number of customers
D = Ratcheted maximum peak demand
PCTCU = % service territory congested urban
ELEVSTD = Elevation standard deviation
NGROWTH = % change in number of customers over last ten years
PCTAMIGROWTH = % change in PCTAMI from 2002 to 2017
DGROWTH = % change in D over sample period
Trend = Time trend

EXPLANATORY VARIABLE	PARAMETER ESTIMATE	T-STATISTIC	P-VALUE
N	0.494	9.203	0.000
N*N	0.279	1.120	0.263
D	0.569	9.740	0.000
D*D	0.384	1.405	0.160
D*N	-0.254	-0.996	0.320
PCTCU	45.023	8.756	0.000
ELEVSTD	0.055	4.380	0.000
NGROWTH	0.570	2.970	0.003
PCTAMIGROWTH	0.020	3.394	0.001
DGROWTH	0.316	2.439	0.015
Trend	-0.003	-1.729	0.084
Constant	14.492	504.380	0.000

Adjusted R² 0.869
Sample Period 1996-2017
Number of Observations 1306