

GA Smoothing Options

Working Draft

February 7, 2017

CONFIDENTIAL DRAFT

1a. GA Smoothing for RPP – Residential Bills Lowered 20% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

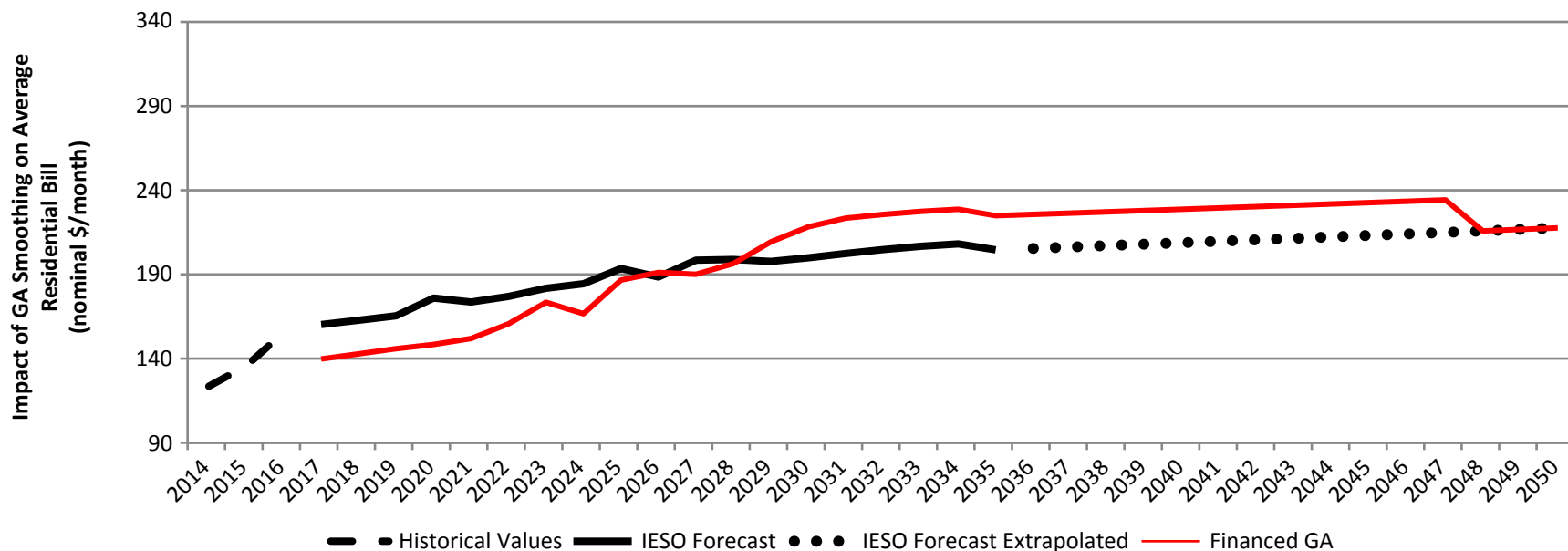
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-18	-18	-17	-24	-19
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		131	134	137	139	142
8% rebate		-11	-11	-11	-11	-11
HST		17	17	18	18	18
Revised Bill (includes HST)	163	138	141	144	146	149
Year-over-Year Change		-16%	2%	2%	2%	2%
Change from Forecast		-20%	-20%	-19%	-23%	-20%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	161	156	157	168	164
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-3%	-3%	-3%	-3%	-3%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

1a. GA Smoothing for RPP (Borrow \$1.5 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-18.1	-17.7	-17.3	-24.4	-19.2	-14.4	-7.4	-15.8	-6.1	2.4	-7.4	-2.2	10.3	16.3	18.6	18.5	18.3	18.2	18.0	17.9	17.8	17.7	17.7	17.6	17.5	17.5	17.4	17.3	17.2	17.2	17.1	0.0
Total Accumulated Debt (\$ billion)	1.5	3.0	4.6	6.9	8.8	10.4	11.6	13.5	14.6	15.2	16.6	17.6	17.7	17.2	16.6	15.9	15.1	14.4	13.6	12.7	11.8	10.9	9.9	8.9	7.8	6.7	5.4	4.2	2.9	1.5	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	1.5	1.5	1.6	2.2	1.9	1.6	1.1	1.9	1.2	0.6	1.4	1.0	0.1	-0.4	-0.7	-0.7	-0.7	-0.8	-0.8	-0.8	-0.9	-0.9	-1.0	-1.0	-1.1	-1.1	-1.2	-1.3	-1.3	-1.4	-1.5	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation with a limit of \$1.5 billion above the true cost of GA in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

1b. GA Smoothing for Class B – Residential Bills Lowered 20% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

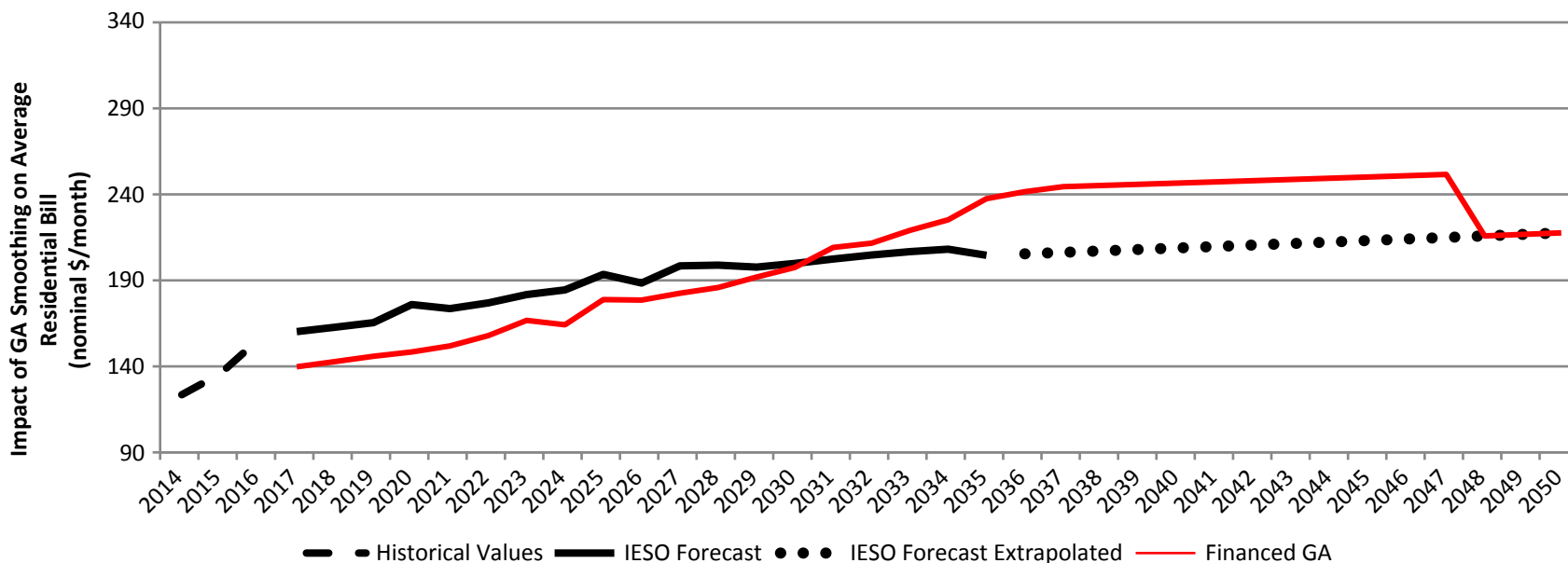
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-18	-18	-17	-24	-19
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		131	134	137	139	142
8% rebate		-11	-11	-11	-11	-11
HST		17	17	18	18	18
Revised Bill (includes HST)	163	138	141	144	146	149
Year-over-Year Change		-16%	2%	2%	2%	2%
Change from Forecast		-20%	-20%	-19%	-23%	-20%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	137	132	134	135	138
Year-over-Year Change		-14%	-4%	2%	1%	2%
Change from Forecast		-17%	-18%	-17%	-22%	-18%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

1b. GA Smoothing for Class B (Borrow \$2.8 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-18.1	-17.7	-17.3	-24.4	-19.2	-16.8	-13.3	-17.9	-13.0	-8.8	-14.1	-11.5	-5.1	-2.1	5.9	6.1	10.9	15.1	29.1	32.0	33.8	33.7	33.5	33.4	33.2	33.1	33.0	32.8	32.7	32.6	32.4	0.0
Total Accumulated Debt (\$ billion)	2.8	5.7	8.7	12.9	16.6	20.1	23.1	27.1	30.5	33.4	37.3	41.0	43.9	46.5	47.9	49.4	50.2	50.4	48.3	45.5	42.3	39.0	35.5	31.8	27.9	23.8	19.5	15.0	10.2	5.2	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	2.8	2.9	3.0	4.2	3.6	3.5	3.1	4.0	3.4	2.9	3.9	3.7	2.9	2.6	1.4	1.5	0.8	0.2	-2.1	-2.7	-3.2	-3.3	-3.5	-3.7	-3.9	-4.1	-4.3	-4.5	-4.7	-5.0	-5.2	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation with a limit of \$5.5 billion above the true cost of GA in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

1c. GA Smoothing for All – Residential Bills Lowered 20% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

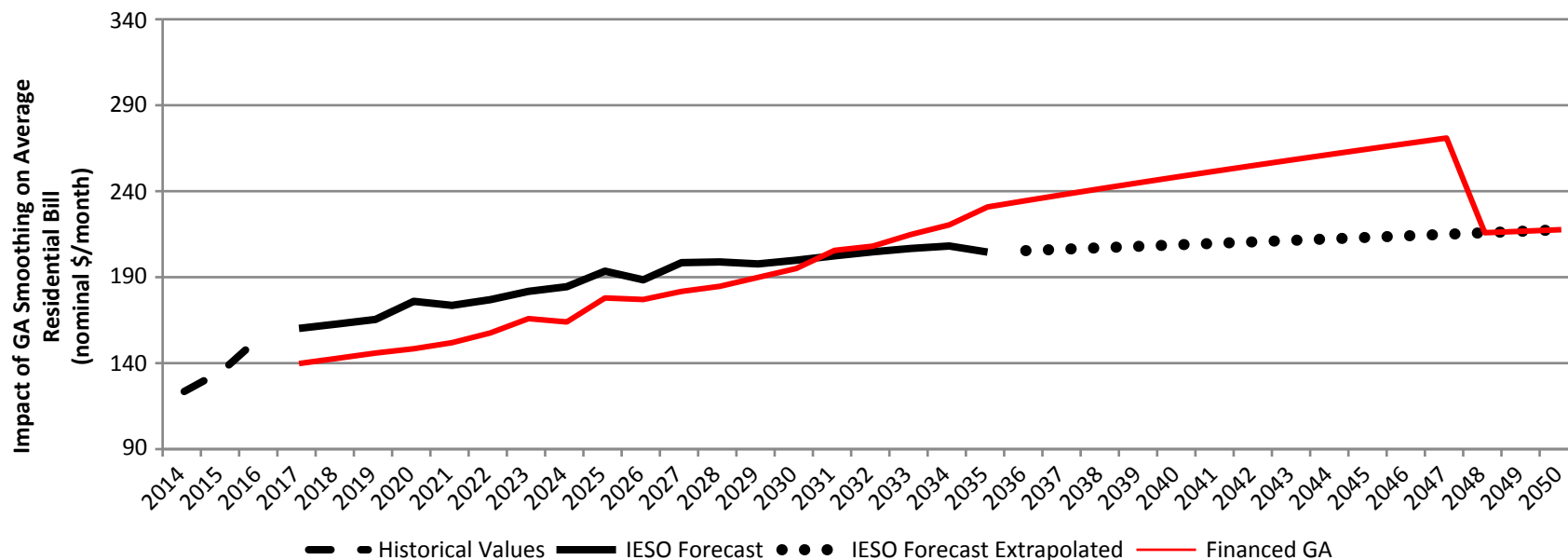
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-18	-18	-17	-24	-19
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		131	134	137	139	142
8% rebate		-11	-11	-11	-11	-11
HST		17	17	18	18	18
Revised Bill (includes HST)	163	138	141	144	146	149
Year-over-Year Change		-16%	2%	2%	2%	2%
Change from Forecast		-20%	-20%	-19%	-23%	-20%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	137	132	134	135	138
Year-over-Year Change		-14%	-4%	2%	1%	2%
Change from Forecast		-17%	-18%	-17%	-22%	-18%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	72	74	69	70	76
Year-over-Year Change		-20%	3%	-7%	2%	7%
Change from Forecast		-21%	-20%	-21%	-26%	-21%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

1c. GA Smoothing for All (Borrow \$3.2 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-18.1	-17.7	-17.3	-24.4	-19.2	-17.1	-14.0	-18.1	-13.8	-10.1	-14.8	-12.5	-6.9	-4.3	2.8	2.9	7.2	10.9	23.2	25.7	28.1	30.5	32.8	35.1	37.3	39.4	41.5	43.6	45.6	47.6	49.5	0.0
Total Accumulated Debt (\$ billion)	3.2	6.5	9.9	14.7	18.9	22.8	26.5	31.0	35.1	38.6	43.2	47.6	51.3	54.7	57.0	59.4	61.1	62.3	61.2	59.6	57.4	54.7	51.3	47.4	42.8	37.5	31.5	24.8	17.4	9.1	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	3.2	3.3	3.4	4.8	4.1	4.0	3.6	4.6	4.0	3.6	4.6	4.4	3.7	3.4	2.3	2.4	1.7	1.2	-1.1	-1.6	-2.2	-2.7	-3.3	-4.0	-4.6	-5.3	-6.0	-6.7	-7.5	-8.3	-9.1	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 0.1 percentage point with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

2a. GA Smoothing for RPP – Residential Bills Lowered 25% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

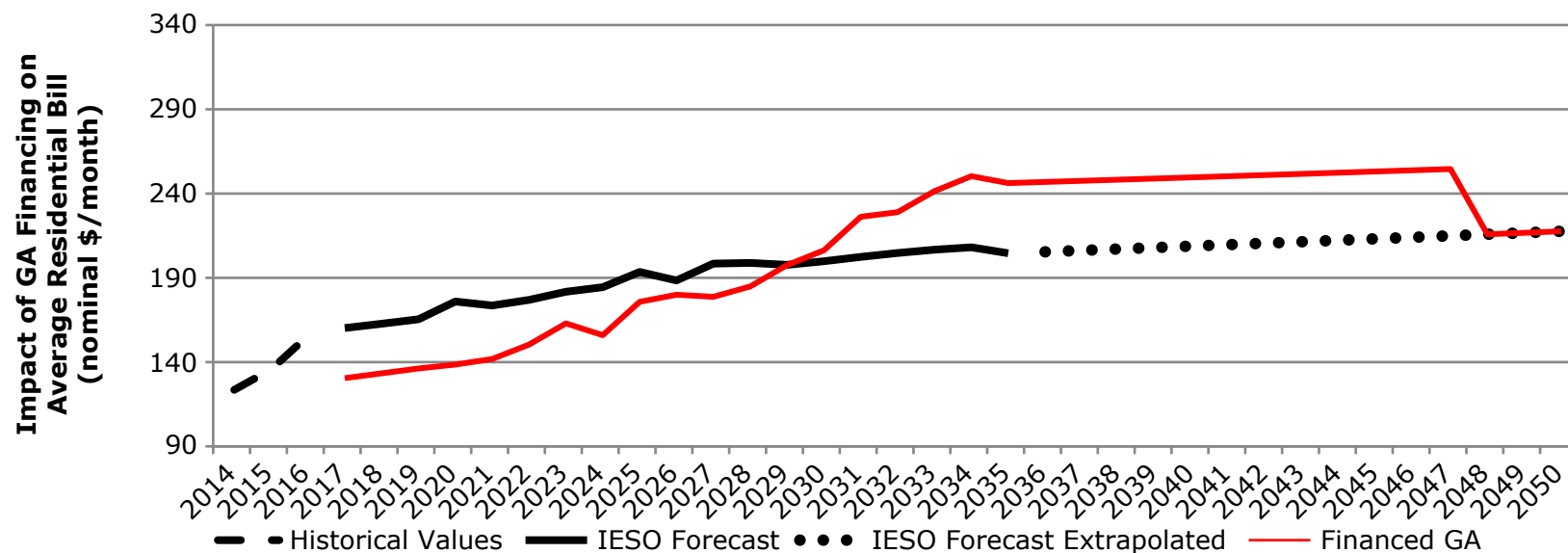
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-26	-26	-26	-33	-28
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		123	126	128	131	133
8% rebate		-10	-10	-10	-10	-11
HST		16	16	17	17	17
Revised Bill (includes HST)	163	129	132	135	137	140
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-24%	-28%	-25%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	161	156	157	168	164
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-3%	-3%	-3%	-3%	-3%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

2a. GA Smoothing for RPP (Borrow \$2.2 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-26.3	-26.1	-25.8	-33.1	-28.1	-23.5	-16.6	-25.2	-15.7	-7.5	-17.4	-12.4	-0.1	5.7	21.1	21.4	30.7	37.3	36.8	36.7	36.5	36.4	36.2	36.1	35.9	35.8	35.6	35.5	35.3	35.2	35.0	0.0
Total Accumulated Debt (\$ billion)	2.2	4.5	6.8	9.9	12.7	15.3	17.4	20.4	22.7	24.5	27.2	29.6	31.1	32.2	32.1	32.0	31.0	29.5	27.8	26.1	24.3	22.3	20.3	18.2	16.0	13.6	11.2	8.6	5.9	3.0	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	2.2	2.3	2.4	3.1	2.8	2.6	2.1	3.0	2.3	1.8	2.7	2.4	1.5	1.1	-0.1	-0.1	-0.9	-1.6	-1.7	-1.7	-1.8	-1.9	-2.0	-2.1	-2.2	-2.3	-2.5	-2.6	-2.7	-2.9	-3.0	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation with a limit of \$3.2 billion above the true cost of GA in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

2b. GA Smoothing for Class B – Residential Bills Lowered 25% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

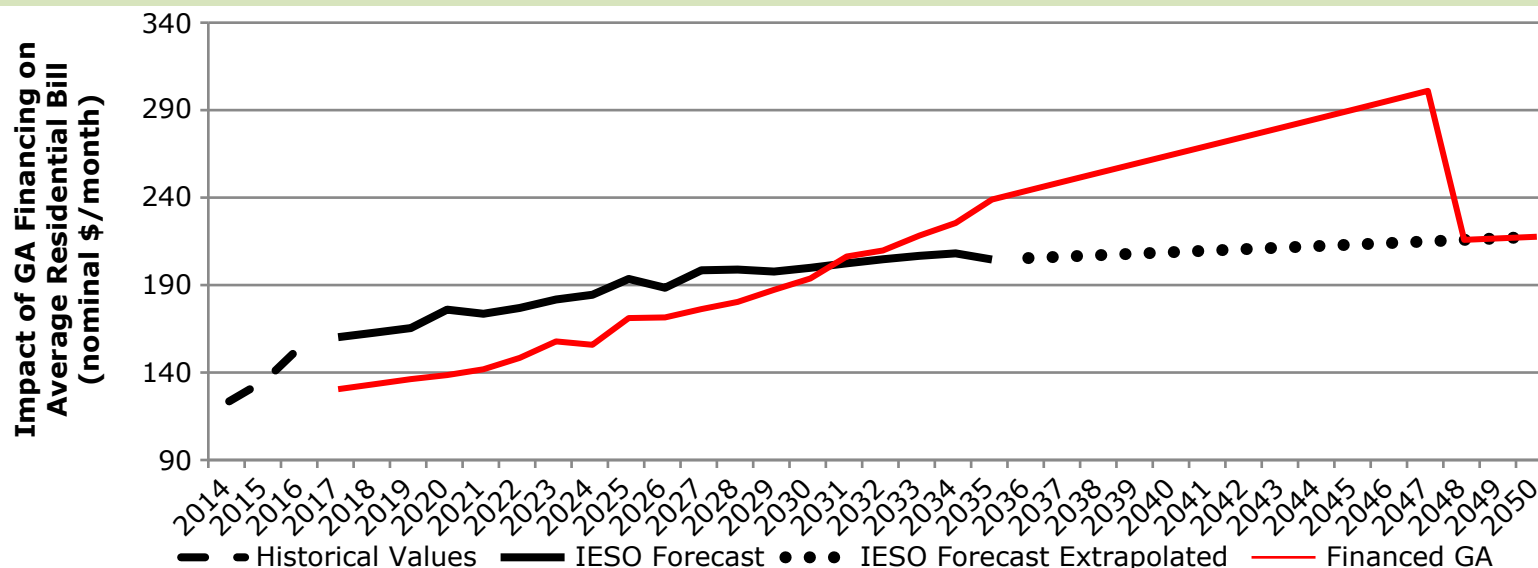
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-26	-26	-26	-33	-28
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		123	126	128	131	133
8% rebate		-10	-10	-10	-10	-11
HST		16	16	17	17	17
Revised Bill (includes HST)	163	129	132	135	137	140
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-24%	-28%	-25%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	126	121	123	124	127
Year-over-Year Change		-21%	-4%	2%	1%	2%
Change from Forecast		-24%	-24%	-24%	-28%	-25%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

2b. GA Smoothing for Class B (Borrow \$4.1 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-26.3	-26.1	-25.8	-33.1	-28.1	-25.3	-21.2	-25.3	-19.8	-15.0	-19.6	-16.4	-9.2	-5.4	3.5	4.5	10.2	15.4	30.3	34.2	38.1	41.9	45.7	49.5	53.2	57.0	60.8	64.6	68.4	72.3	76.2	0.0
Total Accumulated Debt (\$ billion)	4.1	8.4	12.8	18.6	23.9	29.1	33.9	39.5	44.6	49.2	54.8	60.1	64.6	68.8	71.8	74.7	77.0	78.4	77.5	75.9	73.6	70.5	66.6	61.9	56.2	49.6	41.9	33.2	23.4	12.3	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	4.1	4.3	4.4	5.8	5.3	5.1	4.8	5.7	5.1	4.6	5.6	5.3	4.5	4.2	3.0	3.0	2.2	1.5	-0.9	-1.6	-2.3	-3.1	-3.9	-4.8	-5.7	-6.6	-7.6	-8.7	-9.8	-11.0	-12.3	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 1.5 percentage points with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

2c. GA Smoothing for All – Residential Bills Lowered 25% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

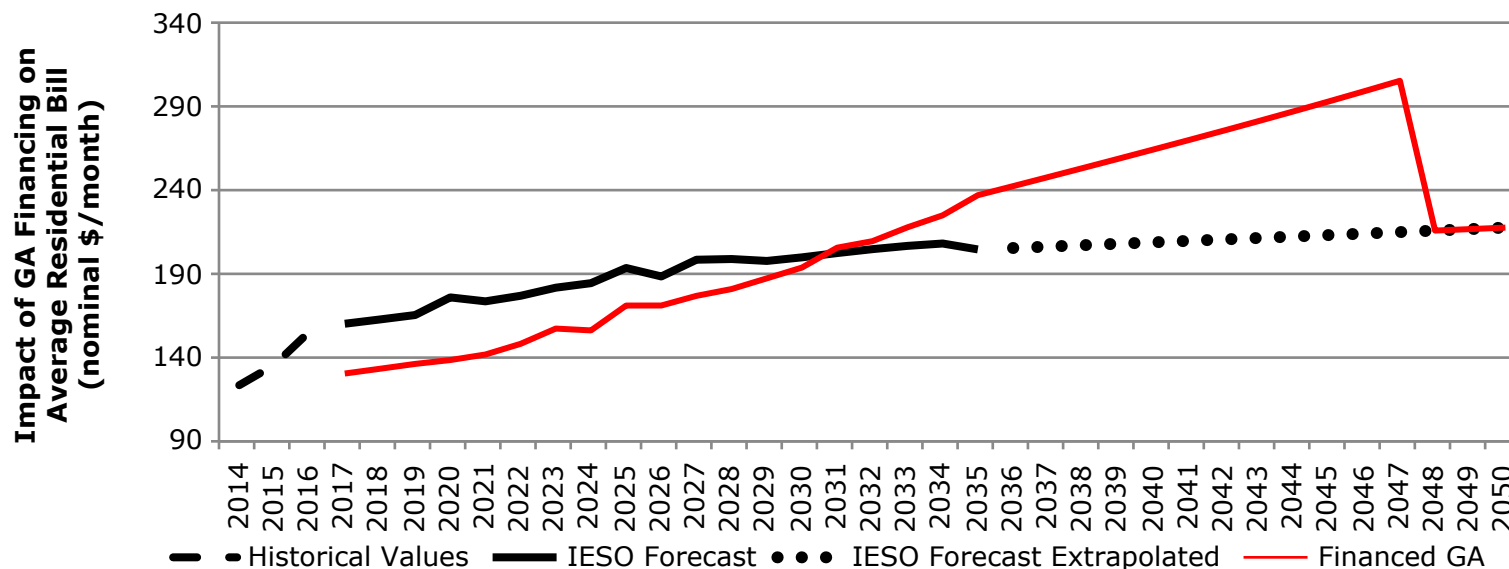
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-26	-26	-26	-33	-28
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		123	126	128	131	133
8% rebate		-10	-10	-10	-10	-11
HST		16	16	17	17	17
Revised Bill (includes HST)	163	129	132	135	137	140
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-24%	-28%	-25%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	126	121	123	124	127
Year-over-Year Change		-21%	-4%	2%	1%	2%
Change from Forecast		-24%	-24%	-24%	-28%	-25%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	65	67	62	63	68
Year-over-Year Change		-27%	3%	-8%	2%	8%
Change from Forecast		-28%	-28%	-29%	-33%	-29%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

2c. GA Smoothing for All (Borrow \$4.7 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-26.3	-26.1	-25.8	-33.1	-28.1	-25.4	-21.6	-25.0	-19.8	-15.4	-19.1	-15.9	-9.2	-5.4	2.8	4.2	9.8	14.9	28.7	32.7	36.7	40.8	44.9	49.1	53.3	57.5	61.8	66.2	70.7	75.3	79.9	0.0
Total Accumulated Debt (\$ billion)	4.7	9.5	14.6	21.2	27.2	33.1	38.6	45.0	50.8	56.1	62.3	68.3	73.4	78.1	81.6	85.0	87.6	89.4	88.7	87.2	84.8	81.6	77.3	72.1	65.7	58.2	49.4	39.3	27.8	14.7	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	4.7	4.9	5.0	6.6	6.0	5.9	5.5	6.4	5.8	5.3	6.2	6.0	5.1	4.7	3.5	3.4	2.6	1.8	-0.7	-1.5	-2.4	-3.3	-4.2	-5.3	-6.4	-7.5	-8.8	-10.1	-11.5	-13.1	-14.7	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 2.5 percentage points with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

3. GA Smoothing for All – Residential Bills Lowered 25% (with Tax-Base Funded 15% Rebate)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

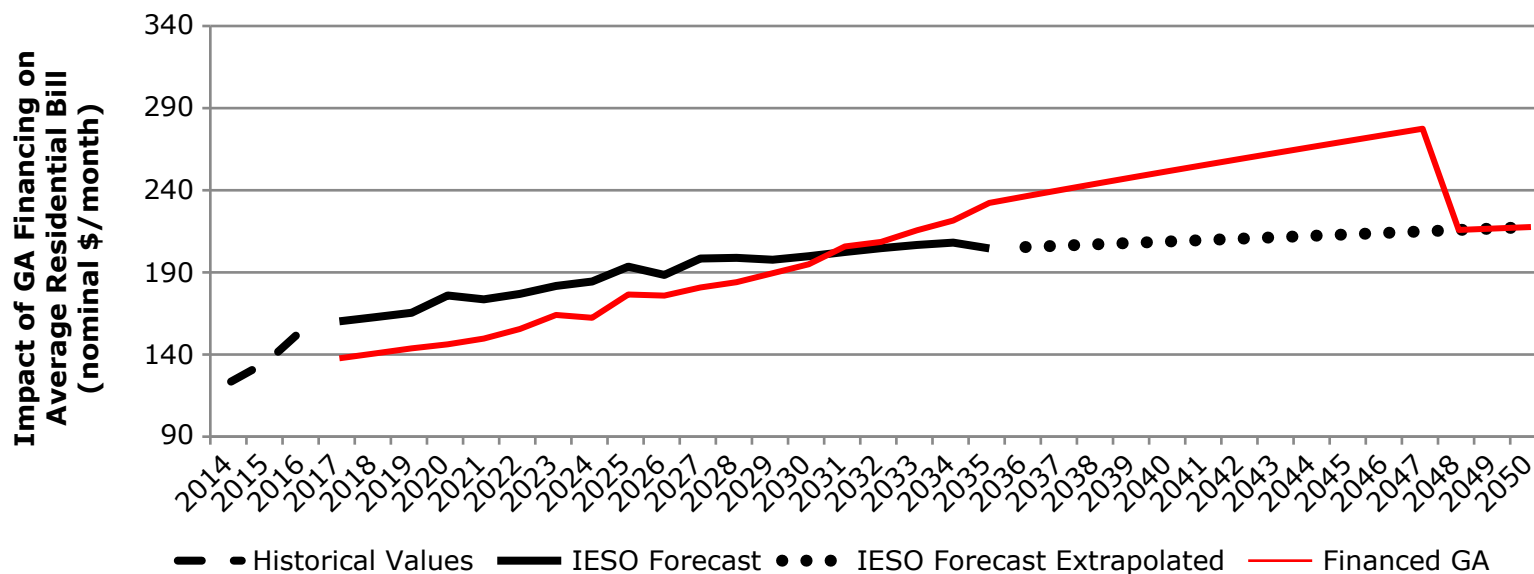
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-20	-20	-19	-26	-21
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Subtotal		132	135	137	140	143
15% rebate		-20	-20	-21	-21	-21
HST		17	17	18	18	19
Revised Bill (includes HST)	163	129	132	135	137	140
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		-25%	-25%	-24%	-28%	-25%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	138	133	135	136	139
Year-over-Year Change		-14%	-4%	2%	1%	2%
Change from Forecast		-17%	-17%	-17%	-21%	-18%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	74	76	71	72	77
Year-over-Year Change		-18%	3%	-7%	2%	7%
Change from Forecast		-19%	-18%	-19%	-24%	-19%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. The 15% rebate above represents incremental funding requirements compared to status quo.

3. GA Smoothing for All (Borrow \$3.5 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-19.9	-19.5	-19.2	-26.3	-21.1	-18.9	-15.6	-19.5	-15.0	-11.1	-15.6	-13.1	-7.3	-4.3	3.0	3.4	7.9	11.9	24.5	27.3	30.1	32.8	35.4	38.0	40.6	43.1	45.6	48.1	50.5	52.9	55.3	0.0
Total Accumulated Debt (\$ billion)	3.5	7.2	10.9	16.1	20.7	25.1	29.1	34.1	38.5	42.4	47.3	52.0	56.0	59.6	62.1	64.7	66.6	67.8	66.8	65.2	62.9	60.1	56.5	52.3	47.3	41.5	35.0	27.6	19.4	10.2	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	3.5	3.7	3.7	5.2	4.6	4.4	4.0	4.9	4.4	3.9	4.9	4.7	3.9	3.6	2.5	2.6	1.9	1.2	-1.0	-1.6	-2.2	-2.9	-3.5	-4.2	-5.0	-5.7	-6.5	-7.4	-8.3	-9.2	-10.2	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 0.6 percentage points with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

4a. GA Smoothing for RPP – Residential Bills Lowered 28% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

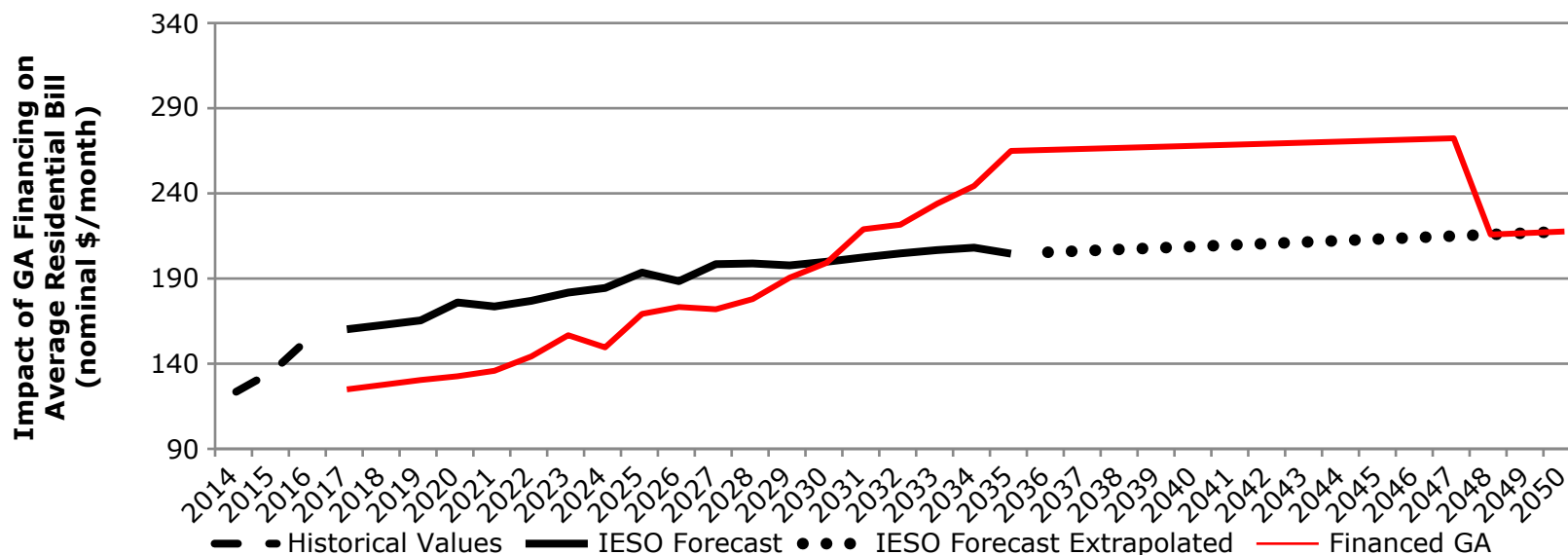
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	160	153	155	158	168	165
Impact of GA Financing		-31	-31	-31	-38	-33
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		118	121	123	125	128
8% rebate		-9	-10	-10	-10	-10
HST		15	16	16	16	17
Revised Bill (includes HST)	163	124	127	129	132	134
Year-over-Year Change		-24%	2%	2%	2%	2%
Change from Forecast		-28%	-28%	-27%	-30%	-28%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	161	156	157	168	164
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-3%	-3%	-3%	-3%	-3%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

4a. GA Smoothing for RPP (Borrow \$2.6 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-31.2	-31.1	-31.0	-38.3	-33.4	-28.9	-22.2	-30.9	-21.5	-13.4	-23.4	-18.5	-6.4	-0.6	14.6	14.9	24.1	32.1	53.4	53.2	53.0	52.7	52.5	52.3	52.1	51.9	51.7	51.4	51.2	51.0	50.8	0.0
Total Accumulated Debt (\$ billion)	2.6	5.3	8.1	11.7	15.0	18.2	20.9	24.5	27.6	30.1	33.5	36.8	39.2	41.2	42.1	43.0	43.2	42.7	40.3	37.8	35.2	32.4	29.5	26.4	23.2	19.8	16.2	12.4	8.5	4.4	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	2.6	2.7	2.8	3.6	3.3	3.1	2.8	3.6	3.0	2.5	3.5	3.2	2.4	2.1	0.9	0.9	0.2	-0.5	-2.4	-2.5	-2.6	-2.8	-2.9	-3.1	-3.2	-3.4	-3.6	-3.8	-3.9	-4.1	-4.4	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation with a limit of \$4.6 billion above the true cost of GA in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

4b. GA Smoothing for Class B – Residential Bills Lowered 28% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

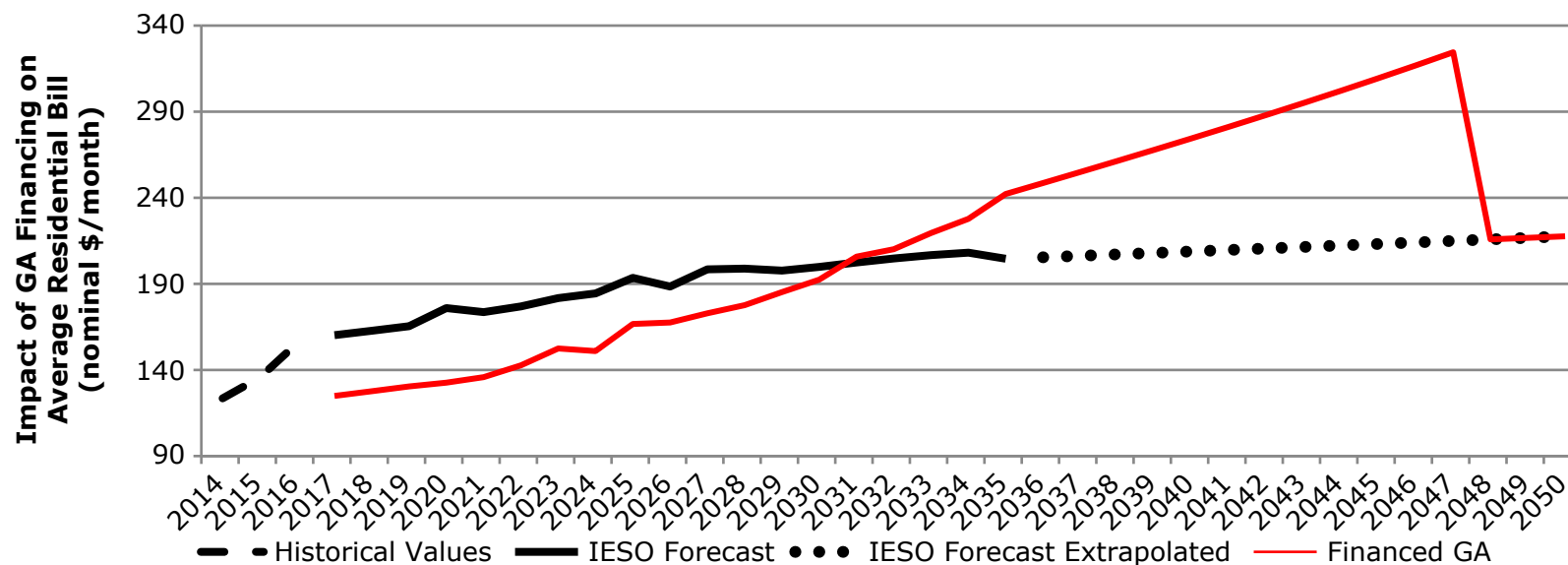
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	160	153	155	158	168	165
Impact of GA Financing		-31	-31	-31	-38	-33
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		118	121	123	125	128
8% rebate		-9	-10	-10	-10	-10
HST		15	16	16	16	17
Revised Bill (includes HST)	163	124	127	129	132	134
Year-over-Year Change		-24%	2%	2%	2%	2%
Change from Forecast		-28%	-28%	-27%	-30%	-28%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	119	114	116	117	119
Year-over-Year Change		-25%	-4%	2%	1%	2%
Change from Forecast		-28%	-29%	-28%	-32%	-29%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	87	89	84	91	91
Year-over-Year Change		-3%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-5%	-5%	-5%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

4b. GA Smoothing for Class B (Borrow \$4.9 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-31.2	-31.1	-31.0	-38.3	-33.4	-30.3	-25.9	-29.6	-23.7	-18.5	-22.6	-18.8	-11.1	-6.5	3.0	4.8	11.4	17.4	33.3	38.2	43.1	48.0	53.1	58.2	63.4	68.7	74.1	79.6	85.2	91.0	96.9	0.0
Total Accumulated Debt (\$ billion)	4.9	10.0	15.3	22.0	28.4	34.5	40.3	47.0	53.0	58.6	65.1	71.4	76.7	81.7	85.4	89.0	91.8	93.7	93.1	91.6	89.3	86.0	81.7	76.2	69.6	61.7	52.5	41.8	29.6	15.7	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	4.9	5.1	5.3	6.7	6.3	6.2	5.8	6.7	6.1	5.6	6.5	6.2	5.4	4.9	3.7	3.6	2.8	1.9	-0.6	-1.4	-2.3	-3.3	-4.3	-5.4	-6.6	-7.9	-9.2	-10.7	-12.2	-13.9	-15.7	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 2.8 percentage points with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.

4c. GA Smoothing for All – Residential Bills Lowered 28% (with Tax-Base Funded 8% Rebate and Social Programs)

- Total bill below is based on a revised IESO forecast. See footnotes for more information.

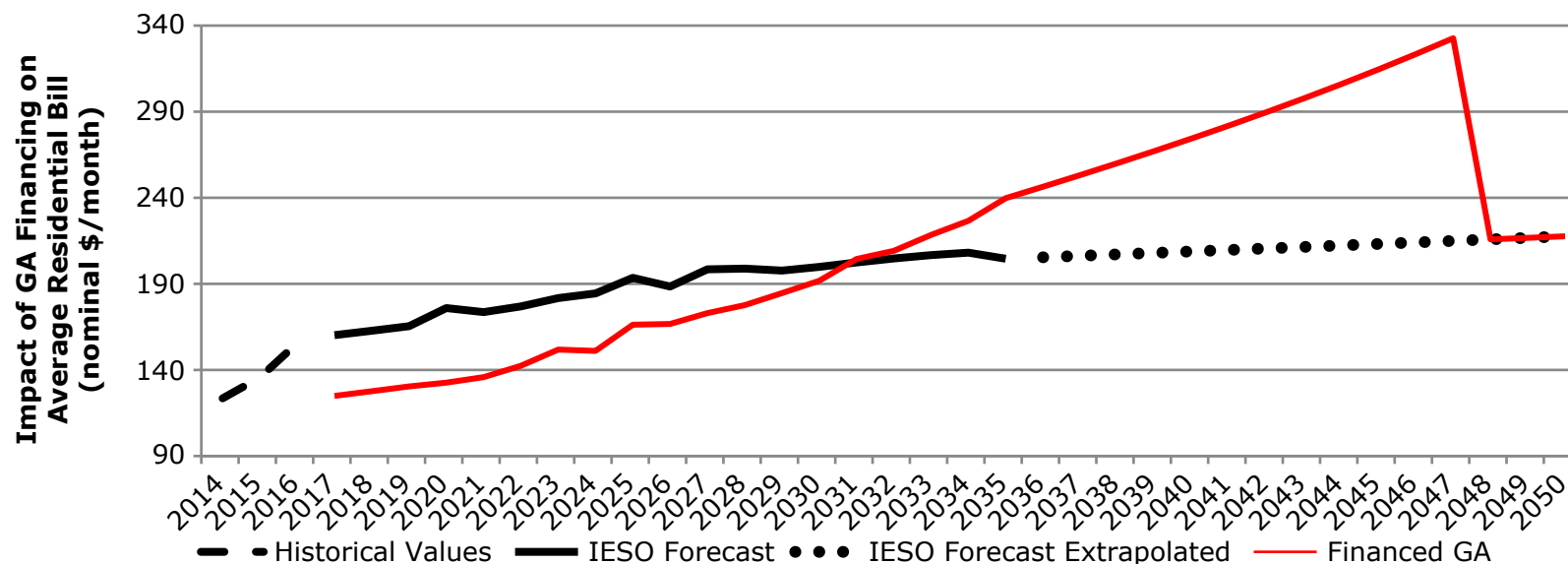
Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	163	172	175	178	189	187
Total Bill (excludes HST)	160	153	155	158	168	165
Impact of GA Financing		-31	-31	-31	-38	-33
Impact of OPG Efficiencies		-1	-1	-1	-1	-1
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		118	121	123	125	128
8% rebate		-9	-10	-10	-10	-10
HST		15	16	16	16	17
Revised Bill (includes HST)	163	124	127	129	132	134
Year-over-Year Change		-24%	2%	2%	2%	2%
Change from Forecast		-28%	-28%	-27%	-30%	-28%

Commercial & Small Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	160	165	160	162	173	169
Class B Revised Total (excludes HST)	160	119	114	116	117	119
Year-over-Year Change		-25%	-4%	2%	1%	2%
Change from Forecast		-28%	-29%	-28%	-32%	-29%

Large Industrial (\$/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	90	91	93	88	95	96
Class A Revised Total (excludes HST)	90	61	63	58	59	64
Year-over-Year Change		-32%	3%	-8%	2%	8%
Change from Forecast		-33%	-32%	-34%	-38%	-34%

Notes: Based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer. Above Class B estimate based on a 1 MW customer connected to Toronto Hydro, assumes delivery charge escalates as per residential forecast. "Social programs" refers to existing RRRP and OESP. While initiatives would take several months to implement, the above estimate for 2017 reflects a full-year impact. The 8% rebate above represents savings compared to status quo due to the reduction in the sub-total from GA financing. Fiscal savings as result of GA Smoothing.

4c. GA Smoothing for All (Borrow \$5.5 billion in 2017)



	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax (\$/month)	-31.2	-31.1	-31.0	-38.3	-33.4	-30.5	-26.5	-29.5	-24.1	-19.2	-22.5	-18.8	-11.6	-7.1	1.8	3.9	10.4	16.4	31.1	36.3	41.5	46.9	52.4	58.1	64.0	70.1	76.4	82.9	89.7	96.8	104.2	0.0
Total Accumulated Debt (\$ billion)	5.5	11.4	17.4	25.0	32.2	39.3	45.9	53.5	60.5	67.0	74.3	81.5	87.7	93.4	97.9	102.2	105.6	108.0	107.8	106.6	104.4	101.0	96.3	90.4	82.9	73.9	63.2	50.6	35.9	19.2	0.0	0.0
Total Change in Accumulated Debt (\$ billion)	5.5	5.8	6.0	7.7	7.2	7.0	6.7	7.6	7.0	6.5	7.4	7.1	6.2	5.8	4.5	4.3	3.4	2.4	-0.2	-1.2	-2.2	-3.4	-4.6	-6.0	-7.4	-9.0	-10.7	-12.6	-14.6	-16.8	-19.2	0.0

Notes: Assumes 30 year financing period and a nominal interest rate of 5% (compounded monthly). Ratepayer GA payments increase annually beyond 2021 at the rate of inflation plus 4.1 percentage points with no limit in any given year. IESO forecast is based on IESO's revised OPO forecast as of December 2016. Includes the cancellation of LRP II and EFW, expansion of ICI. Does not include smoothed OPG rates. Above residential bill is based on a 750 kWh per month Toronto Hydro customer.