**Total Cost for Electricity Service (Billions $2017)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Generation [1] | 13.3 | 13.3 | 13.6 | 13.7 | 13.3 | 13.4 | 13.4 | 13.7 | 13.7 | 13.8 | 13.8 | 13.8 | 13.5 | 13.3 | 12.9 | 12.8 | 12.5 | 12.1 | 11.7 |
| Conservation [2] | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Transmission | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| Distribution | 3.8 | 3.8 | 3.9 | 3.9 | 4.0 | 4.0 | 4.1 | 4.1 | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.4 | 4.4 | 4.4 | 4.5 | 4.5 | 4.5 |
| Wholesale | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 |
| Debt Retirement Charge | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Cost for Electricity Service | 20.6 | 20.6 | 20.2 | 20.5 | 20.1 | 20.2 | 20.3 | 20.7 | 20.7 | 20.8 | 20.9 | 20.9 | 20.7 | 20.5 | 20.1 | 20.1 | 19.8 | 19.4 | 19.1 |

Notes:

[1] Generation costs include Industrial Electricity Incentive program costs

[2] Conservation costs include Energy Efficiency delivery cost and Aboriginal, Community, and Municipal Funds

**Generation Cost By Resource (Real $2017 Billions)**

| | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclear | 6.133 | 5.995 | 6.344 | 6.357 | 5.964 | 6.000 | 5.725 | 6.759 | 5.785 | 6.222 | 6.474 | 6.621 | 6.691 | 6.717 | 6.339 | 6.840 | 6.833 | 6.838 | 6.720 |
| Natural Gas | 1.882 | 1.834 | 1.874 | 1.927 | 1.993 | 2.021 | 2.146 | 1.943 | 2.234 | 2.049 | 2.036 | 1.946 | 1.823 | 1.712 | 1.764 | 1.670 | 1.709 | 1.782 | 1.852 |
| Hydroelectric | 1.984 | 2.011 | 1.955 | 1.956 | 1.936 | 1.917 | 1.898 | 1.895 | 1.879 | 1.864 | 1.850 | 1.840 | 1.817 | 1.787 | 1.771 | 1.765 | 1.748 | 1.735 | 1.722 |
| Biomass | 0.245 | 0.244 | 0.244 | 0.229 | 0.221 | 0.216 | 0.210 | 0.191 | 0.178 | 0.173 | 0.167 | 0.163 | 0.162 | 0.157 | 0.155 | 0.151 | 0.148 | 0.143 | 0.140 |
| Solar | 1.511 | 1.554 | 1.593 | 1.603 | 1.570 | 1.539 | 1.509 | 1.481 | 1.450 | 1.422 | 1.394 | 1.368 | 1.335 | 1.282 | 1.165 | 1.023 | 0.842 | 0.603 | 0.474 |
| Wind | 1.659 | 1.750 | 1.739 | 1.758 | 1.734 | 1.706 | 1.679 | 1.660 | 1.625 | 1.598 | 1.572 | 1.551 | 1.514 | 1.479 | 1.430 | 1.376 | 1.326 | 1.212 | 1.089 |
| Storage (Phase I and II) [1] | 0.013 | 0.030 | 0.030 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 | 0.028 | 0.028 | 0.028 | 0.028 | 0.027 | 0.027 | 0.027 | 0.027 |
| Ontario Generation | 13.427 | 13.418 | 13.779 | 13.859 | 13.447 | 13.428 | 13.195 | 13.958 | 13.181 | 13.357 | 13.522 | 13.517 | 13.370 | 13.162 | 12.650 | 12.853 | 12.632 | 12.339 | 12.023 |
| Imports [2] | 0.300 | 0.302 | 0.243 | 0.304 | 0.370 | 0.421 | 0.638 | 0.311 | 0.935 | 0.780 | 0.689 | 0.675 | 0.542 | 0.628 | 0.688 | 0.572 | 0.541 | 0.411 | 0.444 |
| Total Market Demand | 13.727 | 13.720 | 14.022 | 14.163 | 13.816 | 13.849 | 13.832 | 14.269 | 14.116 | 14.137 | 14.212 | 14.192 | 13.911 | 13.790 | 13.338 | 13.425 | 13.173 | 12.750 | 12.467 |
| Exports [2] | 0.485 | 0.528 | 0.538 | 0.541 | 0.557 | 0.551 | 0.460 | 0.529 | 0.405 | 0.367 | 0.379 | 0.422 | 0.404 | 0.467 | 0.434 | 0.569 | 0.614 | 0.672 | 0.711 |
| Ontario Demand | 13.242 | 13.192 | 13.484 | 13.622 | 13.259 | 13.299 | 13.372 | 13.740 | 13.711 | 13.771 | 13.832 | 13.771 | 13.507 | 13.323 | 12.904 | 12.856 | 12.558 | 12.079 | 11.756 |

Note:

[1] Phase I storage is recovered from customers in the wholesale uplift charges

[2] Imports and exports reflect those that take place due to economic opportunities that exist in the real time energy market and from Quebec per the 2016 Energy Sales and Energy Cycling Agreement.

**Unit Cost for Generation by Resource (Real $2017/MWh)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nuclear | $ 71 | $ 72 | $ 74 | $ 78 | $ 79 | $ 83 | $ 91 | $ 91 | $ 101 | $ 104 | $ 103 | $ 99 | $ 99 | $ 96 | $ 97 | $ 94 | $ 92 | $ 91 | $ 89 |
| Natural Gas | $ 179 | $ 166 | $ 163 | $ 158 | $ 144 | $ 135 | $ 109 | $ 123 | $ 106 | $ 110 | $ 110 | $ 115 | $ 100 | $ 95 | $ 89 | $ 91 | $ 89 | $ 86 | $ 83 |
| Hydroelectric | $ 54 | $ 54 | $ 52 | $ 52 | $ 52 | $ 51 | $ 51 | $ 50 | $ 50 | $ 50 | $ 49 | $ 49 | $ 48 | $ 48 | $ 47 | $ 47 | $ 47 | $ 46 | $ 46 |
| Biomass | $ 183 | $ 182 | $ 179 | $ 166 | $ 162 | $ 159 | $ 155 | $ 140 | $ 130 | $ 128 | $ 123 | $ 120 | $ 118 | $ 116 | $ 113 | $ 111 | $ 108 | $ 106 | $ 105 |
| Solar | $ 472 | $ 453 | $ 423 | $ 406 | $ 398 | $ 390 | $ 382 | $ 375 | $ 368 | $ 360 | $ 353 | $ 346 | $ 338 | $ 325 | $ 295 | $ 259 | $ 213 | $ 151 | $ 119 |
| Wind | $ 123 | $ 122 | $ 120 | $ 117 | $ 115 | $ 113 | $ 111 | $ 109 | $ 108 | $ 106 | $ 104 | $ 102 | $ 100 | $ 98 | $ 95 | $ 91 | $ 88 | $ 81 | $ 72 |
| Storage (Phase I and II) [1] | $ 978 | $ 817 | $ 788 | $ 813 | $ 848 | $ 846 | $ 859 | $ 843 | $ 838 | $ 839 | $ 835 | $ 862 | $ 850 | $ 827 | $ 820 | $ 814 | $ 818 | $ 813 | $ 797 |

Note:

[1] Phase I storage is recovered from customers in the wholesale uplift charges

**Conservation Costs (Billions $2017)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy Efficiency delivery cost | $ 0.551 | $ 0.599 | $ 0.468 | $ 0.487 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 |
| Funds [1] | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ 0.010 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| Total Conservation and Fund Costs | $ 0.561 | $ 0.609 | $ 0.478 | $ 0.497 | $ 0.403 | $ 0.403 | $ 0.403 | $ 0.403 | $ 0.403 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 | $ 0.393 |

Note:

[1] Funds include costs for Aboriginal, Community, and Municipal Funds

**Transmission Delivery Costs (Billions $2017)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Transmission | $1.589 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 | $1.638 |
| Incremental Transmission | $0.000 | $0.001 | $0.001 | $0.077 | $0.087 | $0.087 | $0.088 | $0.137 | $0.137 | $0.136 | $0.136 | $0.136 | $0.136 | $0.136 | $0.135 | $0.136 | $0.138 | $0.139 | $0.140 |
| Total Transmission Costs | $1.589 | $1.639 | $1.639 | $1.714 | $1.724 | $1.725 | $1.725 | $1.774 | $1.774 | $1.774 | $1.774 | $1.774 | $1.773 | $1.773 | $1.773 | $1.774 | $1.775 | $1.776 | $1.778 |

**Distribution Delivery Costs (Billions $2017)**

| | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Base Distribution | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 | $ 3.656 |
| Incremental Distibution Cost due to Household Growth | $ 0.115 | $ 0.173 | $ 0.229 | $ 0.285 | $ 0.338 | $ 0.385 | $ 0.430 | $ 0.471 | $ 0.511 | $ 0.550 | $ 0.587 | $ 0.625 | $ 0.662 | $ 0.698 | $ 0.735 | $ 0.770 | $ 0.804 | $ 0.836 | $ 0.866 |
| Incremental Low Income Energy Assistance Program | $ 0.000 | $ 0.000 | $ 0.000 | $ 0.000 | $ 0.000 | $ 0.000 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 | $ 0.001 |
| Total Distribution Costs | $ 3.771 | $ 3.829 | $ 3.885 | $ 3.941 | $ 3.994 | $ 4.041 | $ 4.086 | $ 4.128 | $ 4.168 | $ 4.206 | $ 4.244 | $ 4.281 | $ 4.319 | $ 4.355 | $ 4.392 | $ 4.427 | $ 4.461 | $ 4.493 | $ 4.522 |

**Wholesale Market Service Costs (Billions $2017)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wholesale Market Services | $0.490 | $0.462 | $0.473 | $0.476 | $0.469 | $0.469 | $0.471 | $0.477 | $0.476 | $0.478 | $0.479 | $0.478 | $0.472 | $0.468 | $0.460 | $0.459 | $0.452 | $0.442 | $0.419 |
| Rural/Remote Settlement Rate | $0.138 | $0.041 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.043 | $0.044 | $0.044 | $0.044 | $0.045 | $0.045 | $0.046 |
| IESO Fee | $0.162 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 | $0.168 |
| Wholesale Market Charge Cost | $0.789 | $0.672 | $0.684 | $0.687 | $0.680 | $0.680 | $0.682 | $0.688 | $0.687 | $0.689 | $0.690 | $0.689 | $0.684 | $0.680 | $0.672 | $0.671 | $0.665 | $0.656 | $0.633 |

**Debt Retirement Charge (Billions $2017)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Debt Retirement Charge | 0.62 | 0.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Global Adjustment Costs (prior to Ontario Fair Hydro Plan) (Billions $2017)**

| | **2017** | **2018** | **2019** | **2020** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Global Adjustment (includes conservation and IEI program) | $ 10.1 | $ 9.9 | $ 10.4 | $ 10.0 | $ 8.9 | $ 8.6 | $ 7.8 | $ 8.6 | $ 7.6 | $ 8.3 | $ 8.3 | $ 8.3 | $ 7.9 | $ 7.3 | $ 6.4 | $ 6.2 | $ 5.4 | $ 4.5 | $ 3.3 |
| Market Revenues (via HOEP) | $ 3.8 | $ 3.9 | $ 3.7 | $ 4.2 | $ 4.8 | $ 5.2 | $ 6.1 | $ 5.5 | $ 6.5 | $ 5.9 | $ 5.9 | $ 5.9 | $ 6.0 | $ 6.4 | $ 6.9 | $ 7.0 | $ 7.5 | $ 8.0 | $ 8.8 |
| Total Generation, Conservation (including funds[1]) and IEI program costs | $ 13.9 | $ 13.9 | $ 14.0 | $ 14.2 | $ 13.7 | $ 13.8 | $ 13.8 | $ 14.1 | $ 14.1 | $ 14.1 | $ 14.2 | $ 14.1 | $ 13.9 | $ 13.7 | $ 13.3 | $ 13.2 | $ 12.9 | $ 12.5 | $ 12.1 |

Note:

[1] Funds include costs for Aboriginal, Community, and Municipal Funds

**Residential Monthly Bill Assuming 750 KWh Per Month Usage (prior to Ontario Fair Hydro Plan) (Nominal $/Month)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distribution | $ 37 | $ 39 | $ 39 | $ 40 | $ 41 | $ 42 | $ 43 | $ 43 | $ 44 | $ 45 | $ 46 | $ 47 | $ 48 | $ 49 | $ 50 | $ 51 | $ 52 | $ 53 | $ 54 |
| Line Losses | $ 3 | $ 3 | $ 3 | $ 3 | $ 3 | $ 3 | $ 3 | $ 3 | $ 3 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 3 | $ 3 | $ 3 |
| Transmission | $ 14 | $ 14 | $ 15 | $ 16 | $ 16 | $ 17 | $ 17 | $ 18 | $ 18 | $ 18 | $ 19 | $ 19 | $ 19 | $ 19 | $ 20 | $ 20 | $ 21 | $ 21 | $ 21 |
| Regulated Charges (Wholesale Uplift and DRC) | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 4 | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 4 |
| DRC | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| Commodity (excludes line losses) | $ 78 | $ 79 | $ 82 | $ 85 | $ 83 | $ 85 | $ 86 | $ 90 | $ 91 | $ 94 | $ 96 | $ 96 | $ 96 | $ 96 | $ 93 | $ 94 | $ 92 | $ 88 | $ 86 |
| Residential Bill Before Taxes | $ 135 | $ 139 | $ 143 | $ 147 | $ 147 | $ 150 | $ 153 | $ 159 | $ 161 | $ 165 | $ 169 | $ 171 | $ 171 | $ 172 | $ 171 | $ 173 | $ 173 | $ 170 | $ 169 |
| HST | $ 18 | $ 18 | $ 19 | $ 19 | $ 19 | $ 20 | $ 20 | $ 21 | $ 21 | $ 21 | $ 22 | $ 22 | $ 22 | $ 22 | $ 22 | $ 22 | $ 22 | $ 22 | $ 22 |
| Total Residential Bill After Taxes | $ 153 | $ 157 | $ 162 | $ 167 | $ 166 | $ 170 | $ 173 | $ 179 | $ 182 | $ 187 | $ 190 | $ 193 | $ 193 | $ 194 | $ 193 | $ 195 | $ 195 | $ 192 | $ 191 |

Note:

Residential Monthly Bill prior to Ontario Fair Hydro Plan (OFHP)

2017 Residential Bill is a forecast

**Direct Connect Class A Customer Rate (assuming the Average GA Class A Rate) (Nominal $/MWh)**

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Electricity (via HOEP Market Clearing Price) | $ 26 | $ 28 | $ 27 | $ 31 | $ 36 | $ 40 | $ 48 | $ 44 | $ 53 | $ 49 | $ 50 | $ 51 | $ 53 | $ 57 | $ 62 | $ 64 | $ 69 | $ 74 | $ 82 |
| Electricity (via GA Class A Rate) | $ 36 | $ 36 | $ 39 | $ 38 | $ 35 | $ 34 | $ 32 | $ 36 | $ 32 | $ 36 | $ 37 | $ 37 | $ 36 | $ 34 | $ 30 | $ 29 | $ 26 | $ 21 | $ 16 |
| Transmission | $ 11 | $ 11 | $ 12 | $ 12 | $ 13 | $ 13 | $ 14 | $ 14 | $ 15 | $ 15 | $ 15 | $ 15 | $ 16 | $ 16 | $ 16 | $ 16 | $ 17 | $ 17 | $ 18 |
| Regulatory | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 5 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 | $ 6 |
| DRC | $ 7 | $ 7 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| Total | $ 86 | $ 88 | $ 83 | $ 87 | $ 90 | $ 93 | $ 99 | $ 100 | $ 106 | $ 106 | $ 108 | $ 109 | $ 110 | $ 112 | $ 114 | $ 116 | $ 118 | $ 119 | $ 122 |

Note:

This is an illustrative industrial rate for a customer directly connected to the transmission system

No large industrial customer would obtain this rate as their GA unit rate would be based on the individual's customers usage during the 5 highest peak periods from the prior year

GA Class A rate is the average unit rate for all of Class A