## SCHEDULE 5.1

## Derivation Tables for Market Based Rates

Derivation of distribution rates for the SGS rate class using electricity as the alternative energy source and a target savings of $20 \%$.

| Derivation of Distribution Rates - Electricity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Units | Calculation | SGS |
| 1 6 7 8 9 10 11 12 13 | Lines 1-5 not used <br> Total Alternative Energy Cost <br> Target Savings Level <br> Target Savings Amount <br> Target Natural Gas Cost <br> Typical Annual Natural Gas Consumption <br> Target Burner Tip Price <br> Commodity Cost <br> Target Distribution Rate | \$/ year <br> \% <br> \$ <br> \$ <br> GJs/ year <br> \$/GJ <br> \$/GJ <br> \$/GJ | Retail Electricity Cost <br> Assigned <br> Line $6 \times$ Line 7 <br> Line 6 - Line 8 <br> Typical Customer <br> Line 9 / 10 <br> EUG Price <br> Line 11 - Line 13 | $\begin{array}{r} \$ 3,239.83 \\ 20 \% \\ \$ 647.97 \\ \$ 2,591.87 \\ 117 \\ 22.2181 \\ 9.3459 \\ 12.8722 \end{array}$ |
| 14 15 16 17 18 19 20 21 | Target Annual Distribution Charge <br> Monthly Customer Charge <br> Annual Customer Charge <br> Average Contract Demand <br> Contract Demand Charge <br> Revenue from Demand Charge <br> Target Revenue From Delivery Charge <br> Distribution Delivery Charge | \$ <br> \$ <br> \$ <br> GJs <br> \$ <br> \$ <br> \$ <br> \$/GJ | Line $13 \times$ Line 10 <br> Assigned <br> Line 15 * 12 <br> Average <br> Assigned <br> Line 17 * Line 18 * 12 <br> Line 14 - Lines 16 or 19 <br> Line 20/Line 10 | $\begin{array}{r} \$ 1,501.61 \\ \$ 16.00 \\ \$ 192.00 \\ \mathrm{~N} / \mathrm{A} \\ 0 \\ 0 \\ \$ 1,309.61 \\ \hline \$ 11.2263 \end{array}$ |

Derivation of distribution rates for MGS, LGS, CGS and ICGS rate classes using No. 2 Heating Oil as the alternative energy source and a target savings of $15 \%$.

| Derivation of Distribution Rates - Oil |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Calculation | MGS | LGS | CGS | ICGS |
| 1 Alternative Energy Price | CAN\$/I | Retail Oil Price | \$0.9413 | \$0.9307 | \$0.9192 | \$0.9135 |
| 2 Assumed Efficiency Factor | \% | Assigned | 81.25\% | 81.25\% | 100.00\% | 100.00\% |
| 3 Typical Annual Oil Consumption | GJs/year | Line 10 / Line 2 | 844 | 3,553 | 12,547 | 231,513 |
| 4 Conversion Factor | I/GJ | Assigned | 25.8532 | 25.8532 | 25.8532 | 25.8532 |
| 5 Typical Annual Consumption | in litres | Line $3 \times$ Line 4 | 21,820 | 91,856 | 324,380 | 5,985,352 |
| 6 Total Alternative Energy Cost | \$/ year | Line $1 \times$ Line 5 | \$20,539.56 | \$85,492.57 | \$298,162.82 | \$5,467,905.07 |
| 7 Target Savings Level | \% | Assigned | 15\% | 15\% | 15\% | 15\% |
| 8 Target Savings Amount | \$ | Line $6 \times$ Line 7 | \$3,080.93 | \$12,823.89 | \$44,724.42 | \$820,185.76 |
| 9 Target Natural Gas Cost | \$ | Line 6 - Line 8 | \$17,458.63 | \$72,668.68 | \$253,438.40 | \$4,647,719.31 |
| 10 Typical Annual Natural Gas Consumption | GJs/ year | Typical Customer | 686 | 2,886 | 12,547 | 231,513 |
| 11 Target Burner Tip Price | \$/GJ | Line 9 / 10 | \$25.45 | \$25.18 | \$20.20 | \$20.08 |
| 12 Commodity Cost | \$/GJ | EUG or EVP price | \$9.3459 | \$9.3459 | \$9.3459 | \$6.0095 |
| 13 Target Distribution Rate | \$/GJ | Line 11 - Line 13 | \$16.1088 | \$15.8295 | \$10.8536 | \$14.0659 |

