## SCHEDULE 5.1

## Derivation Tables for Market Based Rates

1 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 % $ $ GJs/ year $/GJ $/GJ $/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 12 | $\begin{array}{r} \$ 2,118.91 \\ 20 \% \\ \$ 423.78 \\ \$ 1,695.13 \\ 80.98 \\ 20.9327 \\ 8.8206 \\ 12.1121 \end{array}$ |
| 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 | $\begin{aligned} & \text { \$ } \\ & \$ \\ & \$ \\ & \text { GJs } \\ & \$ \\ & \$ \\ & \text { \$ } \\ & \text { \$/GJ } \end{aligned}$ | Line 13 x 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 | $\begin{array}{r} \$ 980.84 \\ \$ 18.00 \\ \$ 216.00 \\ 0 \\ 0 \\ \$ 764.84 \\ \hline \$ 9.4450 \end{array}$ |

4 Derivation of distribution rates for MGS, LGS, CGS and ICGS rate classes using No. 2 Heating 5 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 | \$0.7902 | \$0.7806 | \$0.7707 | \$0.7659 |
| 2 | Assumed Efficiency Factor | \% | Assigned | 81.25\% | 81.25\% | 100.00\% | 100.00\% |
| 3 | Typical Annual Oil Consumption | GJs/year | Line 10 / Line 2 | 604 | 3,856 | 9,397 | 200,702 |
| 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 | 15,615 | 99,690 | 242,943 | 5,188,789 |
| 6 | Total Alternative Energy Cost | \$/ year | Line $1 \times$ Line 5 | \$12,340 | \$77,822 | \$187,226 | \$3,973,994 |
| 7 | Target Savings Level | \% | Assigned | 15\% | 15\% | 15\% | 15\% |
| 8 | Target Savings Amount | \$ | Line $6 \times$ Line 7 | \$1,850.94 | \$11,673.25 | \$28,083.95 | \$596,099.10 |
| 9 | Target Natural Gas Cost | \$ | Line 6 - Line 8 | \$10,488.66 | \$66,148.39 | \$159,142.40 | \$3,377,894.92 |
| 10 | Typical Annual Natural Gas Consumption | GJs/ year | Typical Customer | 490.48 | 3,132.77 | 9,397.39 | 200,702.01 |
| 11 | Target Burner Tip Price | \$/GJ | Line 9 / 10 | \$21.38 | \$21.12 | \$16.93 | \$16.83 |
| 12 | Commodity Cost | \$/GJ | EUG | \$8.8206 | \$8.8206 | \$8.8206 | \$8.8206 |
| 13 | Target Distribution Rate | \$/GJ | Line 11 - Line 12 | \$12.5639 | \$12.2944 | \$8.1141 | \$8.0098 |

