Q. Please provide all studies, documents, data, calculations and workpapers
used developing the customer allocation factors referenced on page 10 and
shown on Schedule 3.1 (A, B, C, D & E) of Exhibit RDG-1.

5

4

A. Customer quantities used in the Cost of Service are based on the average number of customers included in the load forecast. For distribution services and meter allocations, customers are weighted by class based on the relative costs of meters, to more closely reflect cost causality. Please see attached for calculations.

#### Newfoundland and Labrador Hydro 2004 Forecast Cost of Service **Customer Allocation Factors**

| Line<br>No. | Class                                  | Island<br>Interconnected | Island<br>Isolated | Labrador<br>Isolated | L'Anse au<br>Loup | Labrador<br>Interconnected | Source   |
|-------------|--|--------------------------|--------------------|----------------------|-------------------|----------------------------|--|
|             | Rural Customers - Schedule 3.1 A, B, G | C, D, E                  |                    |                      |                   |                            |  |
| 1           | CFB - Goose Bay Secondary              |                          |                    |                      |                   | 1                          | Load Forecast  |
| 2           | 1.1 Domestic                           | 12,337                   |                    |                      | 742               | 712                        | Rural load forecast average customers                |
| 3           | 1.1A Domestic All Electric             |                          |                    |                      |                   | 7,143                      | Rural load forecast average customers                |
| 4           | 1.12 Domestic All Electric             | 6,817                    |                    |                      | 19                |                            | Rural load forecast average customers                |
| 5           | 1.2 Domestic Diesel                    |                          | 829                | 2,141                |                   |                            | Rural load forecast average customers                |
| 6           | 1.3 Special                            | 2                        |                    |                      |                   |                            | Rural load forecast average customers                |
| 7           | 2.1 GS 0-10 kW                         | 1,922                    | 121                | 389                  | 137               | 399                        | Rural load forecast average customers                |
| 8           | 2.2 GS 10-100 kW                       | 876                      | 18                 | 102                  | 63                | 609                        | Rural load forecast average customers                |
| 9           | 2.3 GS 110-1,000 kVa                   | 75                       | 3                  | 8                    | 2                 | 122                        | Rural load forecast average customers                |
| 10          | 2.4 GS Over 1,000 kVa                  | 6                        |                    | 1                    |                   | 6                          | Rural load forecast average customers                |
| 11          | 4.1 Street and Area Lighting           | 861                      | 38                 | 76                   | 30                | 277                        | Rural load forecast average customers                |
| 12          | Total                                  | 22,896                   | 1,009              | 2,717                | 993               | 9,269                      | •  |
|             | Weighted Rural Customers - Schedule    | 3.1 A, B, C, D, E        |                    |                      |                   |                            |  |
| 13          | CFB - Goose Bay Secondary              |                          |                    |                      |                   | _                          | No distribution meter costs applicable               |
| 14          | 1.1 Domestic                           | 12,337                   |                    |                      | 742               | 712                        | Schedule of Customers and weighted customers, pg 3-5 |
| 15          | 1.1A Domestic All Electric             | ,                        |                    |                      |                   |                            | Schedule of Customers and weighted customers, pg 3-5 |
| 16          | 1.12 Domestic All Electric             | 6,817                    |                    |                      | 19                | •                          | Schedule of Customers and weighted customers, pg 3-5 |
| 17          | 1.2 Domestic Diesel                    | -,-                      | 829                | 2,141                |                   |                            | Schedule of Customers and weighted customers, pg 3-5 |
| 18          | 1.3 Special                            | 2                        |                    | •                    |                   |                            | Schedule of Customers and weighted customers, pg 3-5 |
| 19          | 2.1 GS 0-10 kW                         | 3,844                    | 242                | 778                  | 274               | 798                        | Schedule of Customers and weighted customers, pg 3-5 |
| 20          | 2.2 GS 10-100 kW                       | 7,071                    | 145                | 823                  | 509               | 4,917                      | Schedule of Customers and weighted customers, pg 3-5 |
| 21          | 2.3 GS 110-1,000 kVa                   | 643                      | 26                 | 69                   | 17                | 1,044                      | Schedule of Customers and weighted customers, pg 3-5 |
| 22          | 2.4 GS Over 1,000 kVa                  | 51                       |                    | 9                    |                   | 51                         | Schedule of Customers and weighted customers, pg 3-5 |
| 23          | 4.1 Street and Area Lighting           | -                        | -                  | -                    | -                 | -                          | Schedule of Customers and weighted customers, pg 3-5 |
| 24          | Total                                  | 30,765                   | 1,242              | 3,819                | 1,561             | 14,666                     | -  |

### **NEWFOUNDLAND & LABRADOR HYDRO**

### 2004 Forecast Cost of Service Island Interconnected

# **Schedule of Customers and Weighted Customers**

|      | 1                                  | 2             | 3               | 4        | 5             | 6   |
|------|------------------------------------|---------------|-----------------|----------|---------------|---|
| Line |                                    | Average       | 184 - 1 - 1-4 - |          | ted Customers | =   |
| No.  |                                    | Customers     | Weights         | Services | Meters        | 0   |
|      | Island Interconnected              | Load Forecast |                 |          |               | Source  |
| 4    | Newfoundland Power                 | 1             |                 |          |               |   |
| 2    | Industrial                         | 1             |                 |          |               |   |
| 2    | Rural                              | 4             |                 |          |               |   |
| 2    | 1.1 Domestic                       | 10.007        | 1 0000          | 40.007   | 10 227        | Waighting Factor from Dags E. Line 12             |
| 3    |                                    | 12,337        | 1.0000          | 12,337   |               | Weighting Factor from Page 5, Line 13             |
| 4    | 1.12 Domestic All Electric         | 6,817         | 1.0000          | 6,817    |               | Weighting Factor from Page 5, Line 13             |
| 5    | 1.3 Special                        | 2             | 1.0000          | 2        |               | Weighting Factor from Page 5, Line 13             |
| 1    | 2.1 General Service 0-10 kW        | 1,922         | 2.0000          | 3,844    |               | Weighting Factor from Page 5, Line 16             |
| 7    | 2.2 General Service 10-100 kW      | 876           | 8.0714          | 7,071    |               | Weighting Factor from Page 5, Line 19             |
| 8    | 2.3 General Service 110-1,000 kVa  | 75            | 8.5714          | 643      |               | Weighting Factor from Page 5, Line 20             |
| 9    | 2.4 General Service Over 1,000 kVa | 6             | 8.5714          | 51       | 51            | Weighting Factor from Page 5, Line 20             |
| 10   | 4.1 Street and Area Lighting       | 861           |                 |          |               | No distribution service or meter costs applicable |
| 11   | Subtotal Rural                     | 22,896        |                 | 30,765   | 30,765        | <del>-</del><br>-                                 |
| 12   | Total Island Interconnected        | 22,901        |                 | 30,765   | 30,765        | =   |
|      |                                    |               |                 |          |               |   |
|      | Island Isolated                    |               |                 |          |               |   |
| 13   | 1.2 Domestic Diesel                | 829           | 1.0000          | 829      | 829           | Weighting Factor from Page 5, Line 13             |
| 14   | 2.1 General Service 0-10 kW        | 121           | 2.0000          | 242      | 242           | Weighting Factor from Page 5, Line 16             |
| 15   | 2.2 General Service 10-100 kW      | 18            | 8.0714          | 145      | 145           | Weighting Factor from Page 5, Line 19             |
| 16   | 2.3 General Service 110-1,000 kVa  | 3             | 8.5714          | 26       | 26            | Weighting Factor from Page 5, Line 20             |
| 17   | 4.1 Street and Area Lighting       | 38            |                 |          |               | No distribution service or meter costs applicable |
| 18   | Total Island Isolated              | 1,009         |                 | 1,242    | 1,242         |   |
|      |                                    | -             |                 |          |               | =   |

# **NEWFOUNDLAND & LABRADOR HYDRO**

### 2004 Forecast Cost of Service Labrador Isolated

# **Schedule of Customers and Weighted Customers**

|      | 1  | 2         | 3       | 4        | 5            | 6   |
|------|--|-----------|---------|----------|--------------|---|
| Line |  | Average   | _       | Weight   | ed Customers | _   |
| No.  |  | Customers | Weights | Services | Meters       |   |
|      |  |           |         |          |              | Source  |
|      | Labrador Isolated                        |           |         |          |              |   |
| 1    | 1.2 Domestic Diesel                      | 2,141     | 1.0000  | 2,141    | 2,141        | Weighting Factor from Page 5, Line 13             |
| 2    | 2.1 General Service 0-10 kW              | 389       | 2.0000  | 778      | 778          | Weighting Factor from Page 5, Line 16             |
| 3    | 2.2 General Service 10-100 kW            | 102       | 8.0714  | 823      | 823          | Weighting Factor from Page 5, Line 19             |
| 4    | 2.3 General Service 110-1,000 kVa        | 8         | 8.5714  | 69       | 69           | Weighting Factor from Page 5, Line 20             |
| 5    | 2.4 GS Over 1,000 kVa                    | 1         | 8.5714  | 9        |              | Weighting Factor from Page 5, Line 20             |
| 6    | 4.1 Street and Area Lighting             | 76        |         | -        | -            | No distribution service or meter costs applicable |
| 7    | 4.1G Government Street and Area Lighting | -         |         |          |              |   |
| 8    | Total Labrador Isolated                  | 2,717     |         | 3,819    | 3,819        |   |
|      |  |           |         |          |              | _   |
| _    | L'Anse Au Loup                           |           |         |          |              |   |
| 9    | 1.1 Domestic                             | 742       | 1.0000  | 742      |              | Weighting Factor from Page 5, Line 13             |
| 10   | 1.12 Domestic All Electric               | 19        | 1.0000  | 19       | 19           | Weighting Factor from Page 5, Line 13             |
| 11   | 2.1 General Service 0-10 kW              | 137       | 2.0000  | 274      | 274          | Weighting Factor from Page 5, Line 16             |
| 12   | 2.2 General Service 10-100 kW            | 63        | 8.0714  | 509      | 509          | Weighting Factor from Page 5, Line 19             |
| 13   | 2.3 General Service 110-1,000 kVa        | 2         | 8.5714  | 17       | 17           | Weighting Factor from Page 5, Line 20             |
| 14   | 4.1 Street and Area Lighting             | 30        |         |          |              | No distribution service or meter costs applicable |
| 15   | Total L'Anse au Loup                     | 993       |         | 1,561    | 1,561        | Ī   |

### **NEWFOUNDLAND & LABRADOR HYDRO**

#### 2004 Forecast Cost of Service Labrador Interconnected

# **Schedule of Customers and Weighted Customers**

|      | 1                                       | 2         | 3                  | 4         | 5                        | 6   |
|------|---|-----------|--------------------|-----------|--------------------------|---|
| Line |   | Average   | Weighted Customers |           | ighted Customers         |   |
| No.  |   | Customers | Weights            | Services  | Meters                   | Source  |
|      | Labrador Interconnected                 |           |                    |           |                          |   |
| 1    | CFB - Goose Bay Secondary               | 1         |                    |           |                          |   |
| 2    | IOCC Firm                               | 1         |                    |           |                          |   |
| 3    | IOCC Non-Firm                           | -         |                    |           |                          |   |
| 4    | 1.1 Domestic                            | 712       | 1.0000             | 712       | 712                      | Weighting Factor from Page 5, Line 13             |
| 5    | 1.1A Domestic All Electric              | 7,143     | 1.0000             | 7,143     | 7,143                    | Weighting Factor from Page 5, Line 13             |
| 6    | 2.1 General Service 0-10 kW             | 399       | 2.0000             | 798       | 798                      | Weighting Factor from Page 5, Line 16             |
| 7    | 2.2 General Service 10-100 kW           | 609       | 8.0714             | 4,917     | 4,917                    | Weighting Factor from Page 5, Line 19             |
| 8    | 2.3 General Service 110-1,000 kVa       | 122       | 8.5714             | 1,044     | 1,044                    | Weighting Factor from Page 5, Line 20             |
| 9    | 2.4 General Service Over 1,000 kVa      | 6         | 8.5714             | 51        |                          | Weighting Factor from Page 5, Line 20             |
| 10   | 4.1 Street and Area Lighting            | 277       |                    |           |                          | No distribution service or meter costs applicable |
| 11   | Subtotal Rural                          | 9,268     |                    | 14,666    | 14,666                   | <u>-</u>  |
| 12   | Total Labrador Interconnected           | 9,270     |                    | 14,666    | 14,666                   | ;<br>=  |
|      |   |           |                    |           |                          |   |
|      | 1                                       | 2         | 3                  | 4         | 5                        | 6   |
|      | Weighting factors for meters & services |           | Sustomers %        | •         |                          | Source  |
| 1:   | 3 <u>Domestic</u>                       | 1.0000    | 100%               | \$ 70.00  | Residential Meter - base |   |
|      | GS (0 -10 kW)                           |           |                    |           |                          |   |
| 1-   | 4 Customers with domestic meters        | 0.7500    | 75%                | \$ 70.00  | Residential Meter - base | Col 2 = Col 3 x (Col 4/Col 4, Line 13             |
| 1:   | 5 Customers with GS 0-10 kW meters      | 1.2500    | 25%                | \$ 350.00 | GS (0 -10 kW) Meter      | Col 2 = Col 3 x (Col 4/Col 4, Line 13             |
| 1    | 6 Weighting Factor                      | 2.0000    |                    |           |                          |   |
|      | GS (10 -100 kW)                         |           |                    |           |                          |   |
| 1    | 7 Customers with GS 0-10 kW meters      | 0.3571    | 10%                | \$ 250.00 | GS (10 -100 kW) Meter    | Col 2 = Col 3 x (Col 4/Col 4, Line 13             |
| 1    | 8 Customers with GS 10-100 kW meters    | 7.7143    | 90%                |           | GS (over 100 kW) Meter   | Col 2 = Col 3 x (Col 4/Col 4, Line 13             |
| 1    | 9 Weighting Factor                      | 8.0714    |                    |           | ,                        | , ,   |
| 2    | 0 <b>GS (over 100 kW)</b>               | 8.5714    | 100%               | \$ 600.00 | GS (over 100 kW) Meter   | Col 2 = Col 3 x (Col 4/Col 4, Line 13             |