

1 **Q. Please provide all supporting documents and workpapers used in developing the**  
2 **Energy and Demand Loss Factors shown on Schedule 4.2 of the 2001 Cost of Service**  
3 **Study. Please include the data for the three years (1999 – 2001) as indicated in the**  
4 **footnote.**

5  
6 A. Attachment A provides the detailed breakdown of system loss allocations from System  
7 Loss Studies for the years 1999, 2000 and 2001 which were used in developing the  
8 Energy and Demand Loss Factors shown in Schedule 4.2 of the 2001 Cost of Service  
9 Study.

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11 Attachment B provides a summary of the system loss factors for the three years 1999-  
12 2001 and the calculated three-year average found in Schedule 4.2 of the 2001 Cost of  
13 Service Study.

**NEWFOUNDLAND POWER INC.**

**SYSTEM LOSS ALLOCATION STUDIES 1999-2001 DETAILED BREAKDOWN  
COMPANY USE INCLUDED IN TOTAL LOSSES**

**ENERGY LOSSES**

| TOTAL TRANSMISSION SYSTEM LOSSES INCLUDING CO. USE        | 1999           | 2000           | 2001           |
|---|----------------|----------------|----------------|
| Transmission Sales (kWh)                                  | 23,261,623     | 9,983,505      | 5,302,684      |
| Energy Wheeled Through Transmission (kWh)                 | 55,176,081     | 59,064,066     | 53,800,540     |
| Energy Delivered to Distribution Power Transformers (kWh) | 4,430,757,722  | 4,614,618,019  | 4,746,373,872  |
| Total Energy Delivered By Transmission System (kWh)       | 4,509,195,426  | 4,683,665,590  | 4,805,477,096  |
| Transmission Losses Including Company Use (kWh)           | 48,762,226     | 58,192,471     | 43,251,233     |
| ( % )   | <b>1.0814%</b> | <b>1.2425%</b> | <b>0.9000%</b> |

**PRIMARY DISTRIBUTION LOSSES INCLUDING COMPANY USE**

|   |                |                |                |
|---|----------------|----------------|----------------|
| Primary Sales (kWh)   | 412,990,442    | 424,765,950    | 443,214,255    |
| Energy Wheeled through Primary (kWh)                            | 14,854,229     | 14,731,118     | 15,960,709     |
| Energy Delivered to Distribution Transformers (kWh)             | 3,924,750,467  | 4,077,102,364  | 4,207,998,307  |
| Total Energy Delivered by Primary (kWh)                         | 4,352,595,138  | 4,516,599,432  | 4,667,173,271  |
| Primary Losses Including Company Use (kWh)                      | 64,105,685     | 77,658,755     | 66,902,145     |
| ( % )   | 1.4728%        | 1.7194%        | 1.4335%        |
| Primary Losses Including Power Transformers & Company Use (kWh) | 90,601,494     | 109,332,018    | 90,480,541     |
| ( % )   | <b>2.0816%</b> | <b>2.4207%</b> | <b>1.9387%</b> |

**SECONDARY DISTRIBUTION LOSSES INCLUDING COMPANY USE**

|   |                |                |                |
|---|----------------|----------------|----------------|
| Secondary Sales (kWh)   | 3,840,093,298  | 3,975,710,374  | 4,121,505,437  |
| Secondary and Distribution Transformer Losses Incl. Co. Use (kWh) | 84,657,169     | 101,391,990    | 86,492,870     |
| ( % )   | <b>2.2046%</b> | <b>2.5503%</b> | <b>2.0986%</b> |

**NEWFOUNDLAND POWER INC.**

**SYSTEM LOSS ALLOCATION STUDIES 1999-2001 DETAILED BREAKDOWN  
COMPANY USE INCLUDED IN TOTAL LOSSES**

**DEMAND LOSSES**

| TOTAL TRANSMISSION SYSTEM PEAK LOSSES INCLUDING CO. USE | 1999           | 2000           | 2001           |
|---|----------------|----------------|----------------|
| Transmission Sales (kW)                                 | 7,569          | 7,351          | 8,243          |
| Peak Wheeled Through Transmission (kW)                  | 12,369         | 12,930         | 13,225         |
| Peak Delivered to Distribution Power Transformers (kW)  | 979,152        | 991,321        | 1,148,600      |
| Total Peak Delivered By Transmission System (kW)        | 999,091        | 1,011,602      | 1,170,069      |
| Transmission Losses Including Company Use (kW)          | 22,531         | 26,211         | 21,962         |
| ( % )   | <b>2.2552%</b> | <b>2.5911%</b> | <b>1.8770%</b> |

**PRIMARY DISTRIBUTION PEAK LOSSES INCLUDING COMPANY USE**

|  |                |                |                |
|--|----------------|----------------|----------------|
| Primary Sales (kW)   | 63,463         | 63,330         | 74,182         |
| Peak Wheeled through Primary (kW)                              | 3,330          | 3,225          | 3,923          |
| Peak Delivered to Distribution Transformers (kW)               | 875,335        | 880,652        | 1,029,074      |
| Total Peak Delivered by Primary (kW)                           | 942,128        | 947,206        | 1,107,179      |
| Primary Losses Including Company Use (kW)                      | 30,046         | 35,267         | 34,378         |
| ( % )  | 3.1892%        | 3.7233%        | 3.1050%        |
| Primary Losses Including Power Transformers & Company Use (kW) | 39,991         | 46,816         | 44,077         |
| ( % )  | <b>4.2447%</b> | <b>4.9426%</b> | <b>3.9810%</b> |

**SECONDARY DISTRIBUTION PEAK LOSSES INCLUDING COMPANY USE**

|  |                |                |                |
|--|----------------|----------------|----------------|
| Secondary Sales (kW)   | 843,090        | 843,257        | 991,680        |
| Secondary and Distribution Transformer Losses Including Co. Use (kW) | 32,246         | 37,394         | 37,393         |
| ( % )  | <b>3.8247%</b> | <b>4.4345%</b> | <b>3.7707%</b> |

**Newfoundland Power Inc.**  
**2001 Cost of Service Study**

**ENERGY AND DEMAND LOSS FACTORS**  
(Losses as a percentage of supply)

| <b>Energy Loss Factors</b>     | <u>1999</u>     | <u>2000</u>     | <u>2001</u>     | <u>Three Year<br/>Average</u>     |
|--------------------------------|-----------------|-----------------|-----------------|-----------------------------------|
| Transmission                   | 1.0814%         | 1.2425%         | 0.9000%         | 1.0746%                           |
| Primary                        | 2.0816%         | 2.4207%         | 1.9387%         | 2.1470%                           |
| Secondary                      | 2.2046%         | 2.5503%         | 2.0986%         | 2.2845%                           |
| <br><b>Demand Loss Factors</b> | <br><u>1999</u> | <br><u>2000</u> | <br><u>2001</u> | <br><u>Three Year<br/>Average</u> |
| Transmission                   | 2.2552%         | 2.5911%         | 1.8770%         | 2.2411%                           |
| Primary                        | 4.2447%         | 4.9426%         | 3.9810%         | 4.3894%                           |
| Secondary                      | 3.8247%         | 4.4345%         | 3.7707%         | 4.0100%                           |