

1 **Volume 2, Tab 12 – Marginal Cost Study**
2

3 **Q. (page 36, Schedules 25 and 26) Do these schedules represent the total marginal cost**
4 **of distribution; i.e., the marginal cost of distribution supply to the Domestic Class**
5 **on a per customer basis would be $\$11 + \$9.34 = \$20.34/\text{customer}/\text{month}$? Based on**
6 **NP’s traditional cost of service approach of designating distribution costs as either**
7 **customer or demand-related, is it appropriate to designate all of the $\$20.34$ for the**
8 **Domestic class as customer-related, or should some portion be designated demand-**
9 **related? What is the basis for “Typical Design Demand by Customer” figures?**

10
11 A. Schedules 25 and 26 do not represent the total marginal cost of distribution. Adopting
12 the terms used in the *Marginal Cost Study* (the “Study”), the total marginal cost of
13 distribution would consist of Local Distribution Facilities Costs, Customer Costs and
14 Trunk-line Feeder Costs. For an illustration of the components of Newfoundland
15 Power’s distribution system, see the “Simplified Diagram of NP Distribution Elements”
16 on page 5 of the Study.

17
18 Local Distribution Facilities Costs are set out in Schedule 25.¹ Customer Costs are set
19 out in Schedule 26. The Trunk-line Feeder Costs are considered in the Study together
20 with the marginal cost associated with distribution substations. They are not included in
21 Schedules 25 or 26.

22
23 The Study is based on marginal cost concepts, as opposed to the traditional embedded
24 cost of service approach used by Newfoundland Power in completing its cost of service
25 study, and it is difficult to equate the two approaches as implied in the question.
26 However, it is possible to make some broad comparisons.

27
28 The Study includes distribution marginal costs that vary with demand in the Distribution
29 Substation Marginal Costs. This includes the Trunk-line Feeder Costs. These demand-
30 related distribution marginal costs are included in Schedule 23.

31
32 The Study computes the marginal costs of Local Distribution Facilities as fixed monthly
33 costs, as they are based on design demand and do not vary with customers’ actual peak.²
34

35 Newfoundland Power included the cost of Local Distribution Facilities Costs in its
36 comparison of Basic Customer Charges with marginal costs in the *Rate Design Review*
37 because these costs do not vary with changes in customer load and should be recovered
38 by fixed charges to customers. This approach is consistent with the Company’s approach
39 in comparing Basic Customer Charges with embedded customer costs (i.e., costs that do

¹ Local distribution facilities costs represent the typical investment in secondary lines, transformers and local primary lines for various types and sizes of customers.

² *Marginal Cost Study*, page 6. The marginal cost concept of costs incurred based on design demand is analogous to the minimum distribution concept, or “minimum size method”, used in Newfoundland Power’s embedded cost studies.

1 not vary with consumption but do vary based on the number of customers requiring
2 service).

3
4 The “Typical Design Demand by Customer” figures in Schedule 25 are based on typical
5 transformer capacities required to supply customers in the respective customer classes.