

1 **Volume 2: Cost of Service Study**

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3 **Q. Please explain whether the demand charge paid by Memorial University is higher**  
4 **than the demand charge that would be paid if the University funded the cost of**  
5 **transformation. Please explain why.**

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7 A. Service to Newfoundland Power's customers is normally provided at secondary voltages  
8 ranging from 120V to 600V.<sup>1</sup> Delivery of service to customers at secondary voltages  
9 requires transmission (i.e. 33 kV to 138 kV) and primary distribution (i.e. 4 kV to 25 kV)  
10 transformers. The cost of providing the necessary transmission and primary distribution  
11 transformers is included in determining Newfoundland Power's customer rates.

12  
13 Customers that have their own transmission or primary distribution transformers are less  
14 costly to serve than customers that require Newfoundland Power to provide the necessary  
15 transformers. As a result, customers with their own transmission and primary distribution  
16 transformers receive a lower demand charge than customers that do not have their own  
17 transformers.

18  
19 Where a customer's service is at a transmission voltage (i.e. 33 kV to 138 kV), the  
20 customer's demand charges are reduced by \$0.90 per kVA. Where a customer's service is  
21 at a primary distribution voltage (i.e. 4 kV to 25 kV), the customer's demand charges are  
22 reduced by \$0.40 per kVA.<sup>2</sup> These lower demand charges reflect lower costs of providing  
23 service to customers who have their own high-voltage equipment and power  
24 transformers.

25  
26 Memorial University owns and maintains 12.5 kV primary distribution equipment and  
27 transformers that serve load throughout the university campus. As a result, Memorial  
28 University's demand charges are currently reduced by \$0.40 per kVA. If Memorial  
29 University were to fund the cost of all 66 kV transformation serving the university, its  
30 demand charges would be reduced by \$0.90 per kVA.

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<sup>1</sup> See Newfoundland Power's *Schedule of Rates, Rules and Regulations, Effective July 1, 2023, 5. Service Standards – Metered Services*, page 3.

<sup>2</sup> See Newfoundland Power's *Schedule of Rates, Rules and Regulations, Effective July 1, 2023, 9. Charges*, paragraph (k), page 9.