

2018 Capital Budget Application – Muskrat Falls to Happy Valley Interconnection Project

1 Q. Re: Labrador Expansion Study, p. 38 (pdf); Network Addition Policy, page 8 (pdf)
 2 Citation 1 (Expansion Study):

Table 10: Labrador East – Proposed Future Phases

Phase	Load Trigger (MW) ³⁰	Project Description	Cost Estimate (\$ million) ³¹
1	>77	MF to HVY Interconnection	20
2	>104	Transformation Upgrade at HVYTS ³²	5
3	>125	Transformation Upgrade at HVYTS and MFATS2 ³³	15
4	>162	Construction of Second Line from MF to HVY	50

3 Citation 2 (Network Addition Policy)

Table 1
 Derivation of Expansion Costs per kW

Region	Capacity kW	Description	2019 Capital Investment (\$000)	Direct Investment \$ per kW
Labrador East	21,000	Transformer Upgrades at HV-GB	5,000	238
	37,000	Transformer Upgrades at HV-GB and MF Terminal Station	15,000	405
	100,000	Construct second line from MF to HV-GB	50,000	500
Labrador West	33,000	Wabush TS Upgrades and 230 kV uprating	16,500	500
Sub-Total	191,000		86,500	453
O&M ³				12
Total				465

- 4 a) Please confirm that the three expansion projects identified for Labrador East in
 5 the Network Addition Policy are identical to the projects identified as Phase 2, 3
 6 and 4 in the table from the Transmission Expansion Study.
 7 b) Please explain why the Phase 1 project from the Transmission Expansion Study
 8 (the MF to HVY Interconnection) was not included in the derivation of
 9 expansion costs in the Network Addition Policy.

10

11 A.

- 12 a) It is confirmed that the three expansion projects identified for Labrador East in
 13 the “Network Addition Policy” are identical to the projects identified as Phase 2,

1 3, and 4 in the table from the “Labrador Interconnected System Transmission
2 Expansion Study.”

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4 b) The derivation of expansion cost in the “Network Addition Policy” involves the
5 cost of transmission system expansion to meet incremental load beyond the
6 baseline load forecast. Such projects are listed in Table 1 in Citation 2 from the
7 “Network Addition Policy.” Transmission system projects that are required to
8 meet the baseline load forecast are not a component of this calculation.

9

10 The Muskrat Falls to Happy Valley Interconnection is the least-cost transmission
11 system solution to meet the baseline forecast in eastern Labrador. As such, this
12 interconnection is part of the baseline expansion plan, as defined in the
13 “Labrador Interconnection System Transmission Expansion Study.” This project
14 is therefore excluded from the derivation of expansion cost.