1	Q.	Ref	ference: Schedule 5 2024 Capital Expenditures Overview, pages B-41-42.
2		Нус	dro states that the variance in the budget for the Wood Pole Line Management Program was
3		pri	marily attributable to environmental mitigation activities and that the amount and depth of
4		bog	g and wetlands requiring mitigation were significantly higher than anticipated.
5			a) In determining the original budget for the program, did Hydro review the route looking
6			for particular areas such as bog that could and most likely would put pressure on the
7			budget? If not, why?
8			b) Given the additional costs incurred on environmental mitigation activities, what steps
9			has Hydro taken to ensure these issues are not repeated with the 2025 budget for this
10			program?
11			c) Please detail Hydro's approach to ensuring environmental requirements are adequately
12			reflected in cost estimates.
13			d) What would be the advantages and disadvantages of having environmental approvals of
14			capital programs/projects completed prior to submitting for approval by the Board?
15			
16			
17	A.	a)	In determining the original program budget, Newfoundland and Labrador Hydro ("Hydro")
18			completed a preliminary desktop review of the route prior to submission. As the Wood Pole $$
19			Line Management ("WPLM") budget is compiled during the winter months based on the
20			previous year's pole inspections, 1 environmental field assessments cannot be conducted
21			until that spring due to unsuitable field conditions. As a result, cost estimates for
22			environmental mitigation scopes are primarily based on engineering judgment and historical
23			expenditures.
24			Upon completion of the detailed field assessment for TL234 during the spring, there was a
25			significant difference identified between the preliminary desktop information available and

¹ The environmental field assessments are not completed in parallel with the previous year's inspections as the refurbishment list is not compiled until after the inspection data is processed.

1 the field conditions experienced, with limited access roads in the area and high amounts of 2 existing wetland when compared to other lines. Historically, Hydro has not incurred 3 significant cost overruns associated with environmental mitigation/access. b) Hydro continues to explore alternative means of environmental mitigation to reduce 4 5 expenditures. After reviewing lessons learned from prior work on TL234, Hydro has taken 6 the following steps to ensure the budget is more reflective of the conditions experienced: 7 The historical cost of environmental mitigation has been marginally adjusted within the 8 program budget to reflect these increased quantities; 9 Evaluation of the annual work schedule to allow for the earlier completion of 10 environmental field assessments for proposed work areas. This is heavily dependent upon the completion of the inspections and the availability of resources. 11 12 The benefits of implementing alternative access routes will be evaluated. If cost-13 effective, this will result in the development of additional trails on solid ground, subject 14 to regulatory approvals. 15 Investigate the potential for winter work during frozen conditions to reduce the environmental mitigation requirements. This option will be highly dependent upon 16 17 seasonal outage restrictions during peak load periods. 18 Investigate the effectiveness of alternate measures and types of environmental mitigation (i.e., temporary, reusable bog mats) and/or contracting strategies for 19 20 installation. 21 c) Please refer to part b) of this response. 22 d) The primary advantage of having an environmental assessment completed before 23 submitting for approval by the Board of Commissioners of Public Utilities would be that the 24 estimates would be based on actual verified field conditions. When using assumptions and 25 historical data to estimate project costs, there will always be some risk of potential outliers and anomalies in the field; however, historically, Hydro has not incurred significant cost 26

overruns associated with environmental mitigation/access.

27

The primary disadvantage of this approach is that additional time would be required for the
completion of the inspections and the environmental assessments prior to developing the
budget. By increasing this timeline, Hydro risks delaying the refurbishment of critical
components which could impact the reliability of the system. Hydro must also balance the
increased Front-End Engineering Design ("FEED") costs associated with environmental
assessment prior to project approval with the risk of cost recovery associated with
completing additional FEED work without prior approval.