

NextBridge Interrogatory # 44

Reference:

EB-2017-0364 - February 15, 2018 HONI Lake Superior Link Application, EXHIBIT B, TAB 7, SCHEDULE 1, Page 5 Table 3 (Construction Costs).

Interrogatory:

- a) Provide a detailed explanation of (1) the activities (include a detailed scope for each activity) and capital items included in each of the cost categories listed in column 1 of Table 3; (2) the reasonableness of each activity and capital item; (3) how each cost estimate in column 2 was developed, including copies of all workpapers; and (4) the potential for an increase in any of the column 2 cost estimates. Include the following in the explanation:
- i. The roles of HONI and SNC-Lavalin in the development of each cost category in column 1 and the cost figure in column 2, including what activities, the timeframe of the activities, and scope of work performed by HONI and SNC-Lavalin.
 - ii. Identify the percentage of engineering design and work that was completed to support the construction cost estimates in column 2.
 1. Explain how this percentage of engineering design and work was completed.
 2. Confirm that the percentage of engineering completed does not provide sufficient information and details to ensure no construction cost overruns. If confirmed, provide an estimated cost of the possible construction cost overruns. If confirmed, explain whether the cost overrun figure is already included in the construction cost estimates in Table 3. If included, identify where it is included. If not included, confirm that inclusion of this figure would increase the construction cost estimate in Table 3.
- b) Identify the materials and equipment included in the “Material” cost category, including towers, insulators, conductors, line surge arresters.
- c) Confirm that the percentage of engineering completed to date does not provide sufficient information and details to ensure no procurement cost overruns. If confirmed, provide an estimated cost of the possible procurement cost overruns. If confirmed, explain whether the cost overrun figure is already included in the construction cost estimates in Table 3. If included, identify where it is included. If not included, confirm that inclusion of this figure would increase the construction cost estimate in Table 3.

- 1 d) Identify whether HONI's construction cost estimate in Table 3 is an AACE Class 2 or AACE
2 Class 3 estimate. Explain in detail at what bandwidth of accuracy is HONI's estimate within
3 the identified Class.
- 4 i. Explain what information or scope is lacking for HONI to provide a Class 1 estimate,
5 and the timing of HONI being able to provide a Class 1 estimate.
- 6 ii. Confirm that the Table 3 cost estimate may increase until such time that HONI has a
7 Class 1 cost estimate. If not confirmed, explain your answer in detail. If confirmed,
8 identify the possible percentage increase in construction costs from the Table 3
9 estimate at the time of the submittal of the Application to the Class 1 estimate.
- 10
- 11 e) Provide a detailed breakdown of the costs set forth in Table 3 associated with the
12 construction of the four circuit transmission towers in Pukaskwa National Park.
- 13
- 14 f) Explain in detail what consultation and participation activities and costs are included in First
15 Nation and Métis Consultation cost category. Is it HONI's position that there are no
16 additional construction phase costs related to First Nation and Métis consultation and
17 participation other than that in this cost category?
- 18 i. If yes, explain your answer in detail and confirm that HONI has no intention to spend
19 any additional funds on First Nation and Métis consultation and participation than that
20 which is represented in column 2 of this cost category. If no, identify and explain in
21 detail the additional costs that HONI expects to expend on First Nation and Métis
22 consultation and participation, respectively. Confirm that these additional costs are not
23 included in HONI's current construction cost estimate in Table 3. If confirmed
24 identify where they are captured in the construction cost estimate. If not confirmed,
25 explain in detail why these costs were not included, and if HONI intends to add these
26 costs to its construction cost estimate and seek recovery of the costs.
- 27
- 28 g) Confirm that since the filing of the Application HONI is not aware of any costs that should
29 have been but were not included in the Table 3 construction cost estimate, such as escalation
30 cost for materials or new tower designs due to the need for extra-long spans. If not
31 confirmed, please reproduce Table 3 with the inclusion of the new cost estimate and provide
32 a detailed explanation for why the cost was not included in Table 3 at the time of filing the
33 Application.
- 34
- 35 h) Confirm that the Table 3 estimate cost estimate will increase if the in-service date for the
36 Lake Superior Link is delayed beyond December 2021. If confirmed, provide the cost

1 estimate increase in Table 3 construction costs for a December 2022 in-service date. If not
2 confirmed, explain your answer in detail.

- 3
- 4 i) Confirm that the Table 3 estimate cost estimate will increase if the in-service date for the
5 Lake Superior Link is delayed until December 2023. If confirmed, provide the cost estimate
6 increase in Table 3 construction costs for a December 2023 in-service date. If not confirmed,
7 explain your answer in detail.
- 8
- 9 j) Reproduce Table 3 and each answer to all the questions set forth in this interrogatory for
10 HONI's alternative to route around Pukaskwa National Park.
- 11

12 **Response:**

- 13 a)
- 14 1. The categories listed in Table 3 are self-explanatory for the particular activity.
15 2. Please refer to part d).
16 3. Each cost estimate was developed using standard estimating processes, as applicable, in
17 Hydro One and SNC-Lavalin.
18 4. SNC-Lavalin is providing a fixed price for the EPC scope on this project; refer to i.
19 i. The fixed price contract scope and cost estimate from SNC-Lavalin covers the
20 following rows from Table 3 of reference: Construction; Site Clearing,
21 Preparation & Site Remediation; Material; Other Costs; Construction
22 Management, Engineering, Design & Procurement. Time frame of activities
23 was mid 2017 till Feb 2018.
24 ii.
25 1. Sufficient engineering was completed to support the construction cost
26 estimate
27 2. Not confirmed.
- 28
- 29 b) The Materials category only includes material for the permanent asset as described in a). The
30 equipment used to construct the asset remains in both the Construction and Site Clearing
31 categories.
- 32
- 33 c) Sufficient engineering was completed at the time of the S92 application for meaningful
34 material pricing to be included in the costs estimate. SNC-Lavalin is providing a fixed price
35 for the EPC scope on this project that will mitigate any potential risk to ratepayers. As part
36 of this fixed price, a risk and contingency allowance from a Monte Carlo analysis was
37 performed and is included within the estimated costs.

- 1 d) Hydro One's cost estimate at the time of the S92 application would be considered an AACE
2 Class 3 estimate based on scope definition. The published band accuracy per AACE is -20%
3 to +30%, however Hydro One expects its accuracy band to be +/-6% given the portion of the
4 estimate that is fixed under the EPC contract as well as the risk and contingency analysis and
5 allowances provided within the estimate.
- 6 i. To bring the estimate to a Class 1, all permits and property access rights would need
7 to be confirmed or secured, supplier and labour contracts would need to be signed and
8 detailed engineering would need to be finalized.
- 9 ii. The possibility of the pricing within the Table 3 estimates increasing significantly is
10 extremely low as over 85% of the costs are from fixed pricing through the SNC-
11 Lavalin EPC contract.
- 12
- 13 e) The costs for the Pukaskwa National Park are included in SNC-Lavalin's fixed price estimate
14 and are not broken out separately.
- 15
- 16 f) Please refer to Exhibit I, Tab 1, Schedules 10 and 11.
- 17
- 18 g) Please refer to Exhibit I, Tab 1, Schedule 11.
- 19
- 20 h) Table 3 cost estimate will increase if the in-service date is delayed beyond December 2021.
21 Please refer to Exhibit I, Tab 1, Schedule 7.
- 22
- 23 i) Please refer to Exhibit I, Tab 1, Schedule 7. A 2023 cost impact scenario has not been
24 developed at this time as Hydro One intends to deliver the Project before the end of 2022 and
25 that a delay beyond 2022 is very unlikely.
- 26
- 27 j) Above answers can be associated to the alternative route around the Pukaskwa National Park
28 except for item d). The uncertainty in costs for the alternative is increased as there has not
29 been any engineering or site evaluations been done for the remainder of the line. This
30 portion would be considered an AACE Class 4 with a -30% to +50% band accuracy.