

IN THE MATTER OF sections 70 and 78 of the *Ontario Energy Board Act 1998*, S.O. 1998, c.15, (Schedule B);

AND IN THE MATTER OF a Board-initiated proceeding to designate an electricity transmitter to undertake development work for a new electricity transmission line between Northeast and Northwest Ontario: the East-West Tie Line.

**Proposed Interrogatories of Iccon Transmission, Inc. and
TransCanada Power Transmission (Ontario) L.P.**

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I. PROPOSED INTERROGATORIES TO ALTALINK ONTARIO L.P.

1. AltaLink estimates \$1.7 million in annual operations and maintenance (“O&M”) costs.¹ Please provide an approximate breakdown of the \$1.7 million O&M estimate, including property taxes, insurance, administration, regulatory and general expenses. Also, please provide an estimate of customary maintenance capital, which AltaLink states is not included in its O&M estimate.
2. AltaLink estimates \$1,540,000 for engineering during the development phase.² What engineering activities does this include and not include?
3. AltaLink proposes to preorder materials in advance of receiving leave to construct approval to expedite the construction schedule.³ Would AltaLink seek to collect the costs of preordered materials from ratepayers in the event leave to construct is not granted?
4. AltaLink conducted a preliminary evaluation under which it identified its “preferred route” to be adjacent to the existing East-West Tie Line for the entire length of the line, subject to environmental assessment and stakeholder input. AltaLink states that this preliminary evaluation formed the basis for its estimated schedule, cost estimates, appropriate environmental assessment (“EA”) scope, consultation program and mapping.⁴ Please explain:
 - (a) The nature of AltaLink’s preliminary evaluation and the reasons why it resulted in the selection of a preferred route which, amongst other things, traverses a national park.
 - (b) If AltaLink determines that an alternate route is preferable, how and to what extent will this impact each of AltaLink’s estimated schedule, cost estimates, EA scope, consultation program and mapping? In particular, how will this impact time and cost of the foregoing items?
5. In Table 8.2-1 East-West Tie Line Development Cost Estimate, AltaLink shows \$0 as the amount for Land Acquisition.⁵ However, the cost of Land Acquisition is identified in a group of items in Table 8.7-1 AOLP East-West Tie Line Construction Cost Estimate as forming 10% of the total construction costs. Please break out the estimated amount for the cost of Land Acquisition included in Table 8.7-1.⁶
6. In Table 8.2-1 East-West Tie Line Development Cost Estimate, AltaLink shows \$2,150,000 as the amount for First Nations and Métis Consultation and Participation.⁷

¹ Reference, p. B-114.

² Reference, p. B-109.

³ Reference, pp. B104-105.

⁴ Reference, p. A-21.

⁵ Reference, p. B-109.

⁶ Reference, Table 8.2-1, p. B-109 and Table 8.7.1, p. 112.

⁷ Reference, p. B-109.

However, Table 8.7-1 AOLP East-West Tie Line Construction Cost Estimate includes First Nations and Métis Consultation and Participation in a group of items forming 10% of the total construction costs. Please break out the estimated amount for the cost of First Nations and Métis Consultation and Participation in Table 8.7-1.⁸

7. In Table 8.7-1 East-West Tie Line Construction Cost Estimate, AltaLink shows a Total Cost Estimate in the range of \$425-\$550 million with different percentages for each construction activity/item.⁹ In respect of this estimate:
 - (a) What different assumptions drive the \$425 million cost estimate vis-à-vis the \$550 million estimate?
 - (b) What is the probability of the project costing \$425 versus \$550 million and vice versa?
 - (c) Are the percentages for each item construction activity/the same in both cases of the limits of the \$425 - \$550 million range?

8. AltaLink proposes offering First Nations and Métis communities an opportunity to acquire up to 49% equity ownership in the project to be held by a single entity.¹⁰ With respect to that proposal:
 - (a) AltaLink states that it will be open to all relevant First Nations and Métis communities affected by the Project. What criteria will AltaLink use to determine which First Nations and Métis communities are “relevant”?
 - (b) Has AltaLink discussed its proposed opportunity to acquire up to 49% equity ownership in the project with any First Nations or Métis communities and/or other participation opportunities (e.g., Impact Benefits Agreements)? If so:
 - (i) Which First Nations or Métis communities has AltaLink discussed this with?
 - (ii) What input did each of the First Nations or Métis communities provide, including their views on various forms of participation?
 - (iii) Have AltaLink’s proposed risk sharing proposals (i.e., target price mechanism, fixed lump sum) been made known to First Nations or Métis communities?¹¹ If so, what feedback did each of the First Nations or Métis communities provide on these proposals? Does AltaLink plan to implement any measures to insulate First Nations and Métis communities that receive equity in the project from the impact of these risk-sharing proposals? Would AltaLink’s 51% ownership stake permit it to impose these proposals on the First

⁸ Reference, Table 8.2-1, p. B-109 and Table 8.7.1, p. 112.

⁹ Reference, Table 8.7-1, p. B-112.

¹⁰ Reference, p. B-21.

¹¹ Reference, p. B-113.

Nations and Métis communities that take an equity interest in the project?

- (iv) What is the rationale for requiring a single entity to hold the equity ownership of First Nations and Métis communities?
 - (v) Has AltaLink consulted affected First Nations or Métis communities to determine if AltaLink's proposal for a single entity to hold the equity ownership of First Nations and Métis communities is acceptable?
- (c) How does AltaLink plan to allocate the 49% equity interest being offered amongst any interested First Nations and Métis communities? More specifically:
- (i) Will AltaLink make the 49% equity interest available to any or all of the 18 First Nations and Métis communities identified by the OPA?
 - (ii) Is there a maximum limit on the level of participation of an individual First Nations and Métis community? Will AltaLink require a minimum number First Nations and Métis communities to participate to offer an equity interest of 49%?
 - (iii) Is the proposed up to 49% First Nations and Métis equity a non-control minority interest and, if not, then why is it limited to 49%?
 - (iv) Is the equity participation proposed structured as an option to acquire equity? If so, what is the window in which interested communities can exercise the option?
 - (v) If not characterized as an option, when is the sale of equity interest proposed? Will the proposed First Nations and Métis equity be purchased at the commercial operation date? If not, when will it be purchased.
 - (vi) Please confirm that the valuation of equity will be done using fair market value principles and not book value principles. If valued at fair market, is there an anticipated premium between the fair market value and book value? If a premium is anticipated, how much would that premium be for this type of asset?
- (d) Has AltaLink investigated the availability of funding, and the terms and conditions that would attach to such funding, for First Nations and Métis communities that are interested in acquiring an equity interest in the project? If so, describe the terms and conditions that would attach to such funding.
- (e) Is AltaLink prepared to loan money or otherwise provide financing for First Nations and Métis communities to assist the communities in attracting

funding on stable and favourable terms to acquire an equity interest? If so, on what terms?

9. AltaLink proposes a mix of H-Frame wood pole structures and steel lattice towers that will reduce materials cost.¹² Please explain:
 - (a) How and to what extent will the increased right of way (“ROW”) required by the proposed H-Frame structures increase costs?
 - (b) How will increased ROW costs compare to estimated materials cost savings?
10. In Table 2.3-1, AltaLink lists projects by cost variance.¹³ For each project referenced in Table 2.3-1 with a final project cost exceeding \$75 million and that had a variance of greater than +20%, identify the original capital budget, the final cost and the reason for the variance for each project.

¹² Reference, p. B-92.

¹³ Reference, p. B-11.

II. PROPOSED INTERROGATORIES TO CANADIAN NIAGARA POWER INC.

1. CNP estimates \$1 million for inspection and maintenance of the line.¹⁴ Please provide a breakdown of \$1 million estimate, including estimated general and administrative expenses such as property taxes, insurance, office costs, ongoing legal regulatory expenses, etc.
2. CNP proposes an in-service date that is approximately one full year later than most other proposals.¹⁵ Please provide a breakdown of the increased costs that will result from bringing the East-West Tie Line into service in December 2019 as compared to December 2018, including inflation on labour and commodities, allowance for funds used during construction (“AFUDC”) on development costs, and project management.
3. CNP’s application includes a cost of \$18,752,000 to purchase the right of way.¹⁶ Please explain:
 - (a) Is this the cost to purchase the land in fee simple or to purchase a permanent easement?
 - (b) If this cost relates to a fee simple purchase, does it include the cost to purchase crown land or just private land?
 - (c) If the cost relates to the purchase of crown lands, explain how this benefits ratepayers.
 - (d) Do the land subdivision procedures required to purchase partial lots add to cost and schedule?
4. CNP states that a planning estimate (-25% to +25% accuracy) will be issued as the scope is further defined through the EA and leave to construct processes, at which point approvals to proceed with design would be issued.¹⁷ CNP states that subsequently an engineering estimate (-10% to +10% accuracy) will be issued before material is ordered and construction is bid, at which point a final approval will be issued before committing to the bulk of the project cost. Please explain:
 - (a) What regulatory body will be responsible for reviewing the accuracy of the engineering estimate of -10% to +10% and issuing final approval?
 - (b) When will this final approval be sought in relation to the East-West Tie Line leave to construct and EA processes?

¹⁴ Reference, p. 122 of 160.

¹⁵ Reference, p. 102 of 160.

¹⁶ Reference, p. 110 of 160.

¹⁷ Reference, pp. 117 of 160.

5. CNP states that foundations are budgeted at \$69,480,000¹⁸ but also states that foundation requirements are unknown.¹⁹ Please explain the basis for the \$68,480,000 estimate particularly in light of CNP's estimates for spacing and number of towers.
6. CNP states that it will not develop a new tower series for this project, but will modify the existing tower series.²⁰ With respect to that proposal:
 - (a) Has CNP considered prototype testing for modification of the existing tower series? If not, why not? If it has, please explain.
 - (b) What is the cost and schedule for developing a new tower series for the project? Has the tower development process been factored into CNP's proposed schedule and cost estimates?
7. CNP states that it has completed limited preliminary engineering that it believes is appropriate for a project at this stage in the designation proceeding.²¹ Please explain what level of engineering CNP has performed to date and how the estimated total of \$200,000 spent to date is broken down.
8. CNP states that Fortis has sufficient capital resources under its \$1 billion committed revolving corporate credit facility to finance the development and construction of the project.²² When does the credit facility expire? How much money will be available to finance the development of the project under that credit facility?
9. CNP's application proposes to offer First Nations communities an opportunity to acquire up to 49% equity ownership in the project. With respect to that proposal:
 - (a) Explain how CNP will allocate the 49% between its existing First Nations partners in the Lake Huron Anishinabek Transmission Company and additional First Nations communities that wish to take up equity.
 - (b) Has CNP investigated the availability of funding, and the terms and conditions that would be attached to such funding, for First Nations communities that are interested in acquiring an equity interest in the project? If so, describe the terms and conditions that would attach to such funding.
 - (c) Is CNP prepared to loan money or otherwise provide financing for First Nations communities to assist the communities in attracting funding on stable and favourable terms to acquire an equity interest? If so, on what terms?
 - (d) Will the proposed First Nations and Métis equity be purchased at the commercial operation date? If not, when will the equity be allocated?

¹⁸ Reference, p. 110 of 160.

¹⁹ Reference, p. 93 of 160.

²⁰ Reference, p. 93 of 160.

²¹ Reference, pp. 116 - 117 of 160.

²² Reference, p. 79 of 160.

- (e) Please explain why Métis communities were not included in CNP's proposal for equity participation.

III. PROPOSED INTERROGATORIES TO EWT L.P.

1. EWT's application states that the estimated construction costs for the Reference Option double circuit line including AFUDC is in the range of \$340 - \$510 million²³ with a base or mid-point cost of \$427 million.²⁴ In this respect:
 - (a) What different assumptions drive the \$340 million cost estimate vis-à-vis the \$510 million estimate for the Reference Option?
 - (b) What is the probability of the project costing \$340 versus \$510 million and vice versa?
 - (c) With respect to the \$427 million mid-point estimate for the Reference Option:
 - (i) Does the estimate include project management, land acquisition, geotechnical and owners (legal, financial, interest during construction ("IDC"), taxes, regulatory) costs?
 - (ii) If not included, why not? And please provide estimated costs for these items.
 - (iii) If included, please breakout the costs for these items.
 - (d) Does the \$427 million mid-point estimate for the Reference Option include amounts for risk and contingency?
 - (i) If not included, why not? And please provide estimated costs for these items.
 - (ii) If included, please breakout the costs for these items?
 - (e) Please provide a breakdown of the \$28 million AFUDC as between return on equity ("ROE") and IDC.
2. EWT proposes a design variation entailing a single circuit line using guyed CRS structures.²⁵ In regards to this proposed variation:
 - (a) Provide examples of where a guyed CRS line has been built on terrain similar to that upon which the East-West Tie Line will be constructed?
 - (b) Has Hydro One Network Inc. ("HONI") previously used a guyed-tower design, with or without CRS structures?
 - (i) If so, please explain where and how HONI has utilized this design.

²³ Reference, Part B - Ex. 8, p. 23.

²⁴ Reference, Part B - Ex. 6, p. 17.

²⁵ Reference, Part B - Ex. 6, pp. 14 of 21.

- (ii) If not, explain why.
 - (c) Has the Independent Electricity System Operator (the “IESO”) validated or otherwise opined on the use of guyed CRS structures for the East-West Tie Line?
 - (d) A potential risk of guyed structures, with or without CRS, is that the individual guys are less robust than self-supporting towers and are more susceptible to damage and being taken down (e.g., vandalism). The consequences of this are potentially significant.
 - (i) Has EWT considered or investigated this specific risk, in particular the risk of damage to guys by vandalism, snowmobiles, moose, etc.?
 - (ii) If not, why not?
 - (iii) If so, explain how this risk has been taken into account.
 - (e) What analysis or consideration, if any, was given to impacts of a guyed-tower design on animal species such as moose, deer, migratory birds, etc.?
 - (f) EWT proposes a two-part easement proposal to accommodate the greater ROW width requirements for CRS structures.²⁶ Does EWT have experience obtaining these unique easements in Ontario or elsewhere? What additional cost does EWT expect to incur to acquire these easements?
 - (g) At what stage in the development process will EWT determine whether a single circuit line using CRS structures is the preferred alternative? Why is EWT not in a position to make a determination on its preferred alternative at this stage?
3. EWT further states that the construction cost for a single circuit line using CRS structures would reduce the Reference Option cost by \$116 million to \$311 million.²⁷ In this respect:
- (a) As with the Reference Option, is there a cost range for the single circuit option and is \$311 million the mid-point or base estimate?
 - (i) If not, why is there no cost range?
 - (ii) If yes, what is the range and explain how it is derived.
 - (b) Does the \$311 million estimate for the single circuit option include project management, land acquisition, geotechnical and owners (legal, financial, IDC, taxes and regulatory) costs?

²⁶ Reference, Part B - Ex. 6, App. 6D, pp. 6-11.

²⁷ Reference, p. 13 and Part B - Ex. 6, p. 17.

- (i) If not included, why not? And please provide estimated costs for these items.
 - (ii) If included, please breakout the costs for these items.
 - (c) Does the \$311 million estimate for the single circuit option include amounts for risk and contingency?
 - (i) If not included, why not? And please provide estimated costs for these items.
 - (ii) If included, please breakout the costs for these items.
 - (d) Identify all of the system upgrades that will be necessary for the single circuit option and provide a full lifecycle analysis of the costs of each of the necessary upgrades (including capital replacement, operation and maintenance, and losses).
4. EWT states that the single loop galloping criteria is potentially overly conservative and will increase capital costs by necessitating shorter spans or uniquely designed towers. EWT therefore proposes revisiting the galloping criteria for the purpose of varying the Reference Option design.²⁸
- (a) How would EWT propose addressing the increased potential cost and risk of cascading failure and conductor galloping as part of a variation to the Reference Option?
 - (b) How does EWT intend to change the required galloping specifications and what, if any, approvals are required?
 - (c) What level of confidence does EWT have that galloping specifications can be changed?
5. EWT references retirement of existing circuits between Thunder Bay and Nipigon.²⁹ In regards to the proposed retirement:
- (a) What impact will the retirement of these existing circuits have on the IESO controlled grid?
 - (b) Did EWT consult the IESO and/or HONI with respect to the retirement of these existing circuits? If so, what did the IESO and/or HONI advise EWT about the option?
 - (c) Is the option of retiring these existing circuits available to any proponent the Board designates?

²⁸ Reference, Part B - Ex. 6, pp. 12-13 and Part B - Ex. 6, App. 6A, p. 5.

²⁹ Reference, Part B - Ex. 9, App. 9H.

6. How does EWT plan to accommodate equity requests by First Nations and Métis communities that are not Participating First Nations in BLP?

IV. PROPOSED INTERROGATORIES TO RES CANADA TRANSMISSION L.P.

1. RES proposes two design options, the Reference Design and the Preferred Design, that latter which is composed of a single circuit line along with subsequent staged transformer station upgrades and capacity additions, including series compensators, shunt reactors, shunt capacitor banks and protection and control (collectively the “Upgrades/Capacity Additions”).³⁰ RES acknowledges that the subsequent Upgrades/Capacity Additions would be constructed by HONI.³¹

The single circuit line, which RES proposes to bring into service by late 2018, will increase the East-West Tie Line transfer capacity to 387 MW. The subsequent additions and transformer station upgrades will, if at all, be undertaken between 2018 and 2027 and will increase the transfer capacity to 684 MW.³²

With regards to the Preferred Design and Preferred Route:

- (a) Did RES obtain an update from the Ontario Power Authority (“OPA”) regarding whether the staged preferred design meets the intent of the need identified in the OPA’s report, *Long Term Electricity Outlook for the Northwest and Context for the East-West Tie Expansion*?
- (b) What community, First Nation or Métis consultation, or other consultation with stakeholders, if any, did RES do and how did this inform RES’s decision on its Preferred Design and Preferred Route?
- (c) In Table B-2,³³ RES provides estimates of the Other Costs (HONI) for the Reference Design and each stage of the Preferred Design. Please:
 - (i) Provide a detailed breakdown of the Upgrades/Capacity Additions by equipment type that comprise Other Costs (HONI) for the Reference Design and each stage of the Preferred Design.
 - (ii) Explain the technical basis of RES’s estimated the Other Costs (HONI) for the Reference Design and each stage of the Preferred Design.
 - (iii) Did RES obtain any cost estimates or cost information from HONI? If so, please explain and produce.
 - (iv) Did RES estimate costs in today’s dollars or in year(s) when specific Upgrades/Capacity Additions are assumed to be brought into service? Please explain.
- (d) What cost control does RES assume, if any, over the costs of Upgrades/Capacity Additions built and owned by HONI?

³⁰ Reference, Ex. G, Tab 1, Sched. 1.

³¹ Reference, Ex. H, Tab 1, Sched. 1, p. 3.

³² Reference, Ex. G, Tab 1, Sched. 1, p. 7.

³³ Ex. B, Tab 1, Sched. 1, p. 12.

- (e) What owning and operating costs did RES attribute to each of the Upgrades/Capacity Additions? Please provide breakdown.
 - (f) What maintenance costs, including associated property taxes and insurance, did RES attribute to each of the Upgrades/Capacity Additions? Please provide breakdown.
 - (g) What is the expected life of the proposed single circuit and of each of the Upgrades/Capacity Additions? More specifically:
 - (i) Did RES undertake a lifecycle evaluation of the single circuit and each of the Upgrades/Capacity Additions as part of its selection of the Proposed Design?
 - (ii) If not, why not?
 - (iii) If RES did undertake a lifecycle evaluation of the single circuit and each of the Upgrades/Capacity Additions, please explain and provide details.
2. The IESO in its August 18, 2011 Feasibility Study³⁴ concluded: "For the One-plus-One contingency condition, the installation of a new double-circuit line to reinforce the East-West Tie would therefore represent the superior option." In light of the IESO's Feasibility Study:
- (a) Please explain why RES disagrees with the IESO's determination that a double circuit line represents a superior design.
 - (b) Specifically, please address why the increased contingency risks associated with a single circuit line are acceptable in the area of northern Ontario to be served by the East-West Tie Line.
 - (c) Provide an analysis of the One-plus-One contingency condition.
 - (d) Has RES prepared an analysis quantifying the cost impact of the reduced reliability resulting from the use of single circuit line. If so, please provide a copy of that analysis.
3. Did RES analyze and compare the differences in line losses between the Reference Design and the Preferred Design?
- (a) If not, why not?
 - (b) If yes, please explain and provide the details of this analysis and comparison.

³⁴ IESO, Feasibility Study: *An Assessment of the Westward Transfer Capability of Various Options for Reinforcing East-West Tie*, August 18, 2011 at p. 7.

- (c) Specifically, the current capacity of the proposed Aluminum Conductor Steel-Supported (“ACSS”) conductor is approximately twice that of the Aluminum Conductor Steel-Reinforced Cable Grackle.³⁵ How much will this increase losses beyond the 45 MW stated in IESO Feasibility Study? And were such increased losses factored into RES’ analysis? If so, explain taking into account the losses during the 50 years lifetime of the line.
 - (d) Did RES consider the mechanical properties of the proposed ACSS conductor that could affect the construction process? If not, why not? If so, explain.
4. Are all the cost estimates in Table B-2³⁶ expressed in 2013 dollars or spent dollars?
5. RES estimates \$2.2 million for O&M.³⁷ With regards to this estimate:
- (a) Is this estimate in 2013 or 2018 dollars?
 - (b) Provide a breakdown of the costs included in the estimate; in particular, identify the estimated property taxes, insurance, administration and general expenses.
6. RES indicates in Table B-4 lower estimated construction costs for its Preferred Route than the Reference Route (under both the Reference Design and Preferred Design) notwithstanding that the Preferred Route is longer and may entail a greenfield ROW.³⁸ Please explain.
7. RES’s application proposes to offer First Nations and Métis communities an opportunity to acquire up to 20% equity ownership in the project (Ex. D-2-1). With respect to that proposal:
- (a) How does RES plan to allocate the 20% equity interest being offered amongst any interested First Nations and Métis communities? More specifically:
 - (i) Will RES make the 20% equity interest available to any or all of the 18 First Nations and Métis communities identified by the OPA?
 - (ii) Is there a maximum limit on the level of participation of an individual First Nations and Métis community? Will RES require a minimum number First Nations and Métis communities to participate to offer an equity interest of 20%?
 - (iii) Will the proposed First Nations and Métis equity be purchased at the commercial operation date? If not, when will the equity be allocated?

³⁵ Reference, Ex. G, Tab 1, Sched. 1, p. 3.

³⁶ Ex. B, Tab 1, Sched. 1, p. 12.

³⁷ Ex. B, Tab 1, Sched. 1, p. 17.

³⁸ Ex. B, Tab 1, Sched. 1, p. 16

- (b) Is RES prepared to loan money or otherwise provide financing for First Nations and Métis communities to assist the communities in attracting funding on stable and favourable terms to acquire an equity interest? If so, on what terms?
 - (c) Has RES included any costs related to Impact Benefits Agreements for First Nations and Métis communities in its costs estimates for development or construction?
- 8. Section 4.4 of the First Nation and Métis Participation Plan Report (Ex. D-2-1) identifies risks associated with First Nations and Métis equity participation in the project. Does RES plan to implement any measures to insulate First Nations and Métis communities that receive equity in the project from the impact of the Risk Allocation Proposal?

V. PROPOSED INTERROGATORIES TO UPPER CANADA TRANSMISSION INC. OPERATING AS NEXTBRIDGE INFRASTRUCTURE

1. NextBridge's proposed late 2017 in-service date is approximately one year earlier than most of the other proposals.³⁹ Is this an aggressive schedule? If not, explain what steps could be accelerated and how this would further advance the in-service date.
2. NextBridge concluded, based in part on analysis by Burns and McDonnell, that guyed-Y steel lattice towers best meet the technical requirements of the project and are superior to conventional lattice towers, steel monopoles, and other options.⁴⁰ NextBridge therefore recommends the use of guyed-Y steel lattice towers. Please explain, in addition to the Burns and McDonnell analysis, what additional consultation, environmental analysis or other analysis informed NextBridge's decision to use guyed-Y steel lattice towers, in particular:
 - (a) What community, First Nation or Métis consultation, if any, was done and how did this inform NextBridge's decision?
 - (b) What analysis or consideration, if any, was given to impacts on animal species such as moose, deer, migratory birds, etc.?
3. Was the proposed guyed Y tower design available and in use at the time the original East-West Tie Line double circuit 230 kV line was constructed? If so, why in Nextbridge's opinion was it not utilized?
4. With regards to NextBridge's proposed guyed-Y tower design:
 - (a) NextBridge's tower design proposes the use of 16 km spacing to limit cascading.⁴¹ Please explain:
 - (i) Whether this spacing conforms with good utility practices and is otherwise prudent given the potential for extreme weather conditions across this part of northern Ontario.
 - (ii) Why was this 16 km spacing decided upon as opposed to usual 5 km spacing?
 - (iii) Does this 16 km spacing require carrying more spare parts in inventory to address a catastrophic event that takes out 16 km of line in the middle of winter? If not, why not, and what is the estimated time to procure and repair 16 km of downed line in the middle of winter? If so, what are the estimated additional inventory costs?

³⁹ Reference, Tab 7, p. 99.

⁴⁰ Reference, Tab 6, p. 88.

⁴¹ Reference, Tab 6, p. 80.

- (b) Are the tower clearances shown at Tab 6, page 90, in conformance with the prescribed galloping requirements? If so, explain.
 - (c) Has the IESO validated or otherwise opined on the use of guyed structures for the East-West Tie Line?
 - (d) A potential risk of guyed structures is that the individual guys are less robust than self-supporting towers and are more susceptible to damage and being taken down (e.g., vandalism). The consequences of this are potentially significant.
 - (i) Has NextBridge considered or investigated this specific risk, in particular the risk of damage to guys by vandalism, snowmobiles, moose, etc.?
 - (ii) If not, why not?
 - (e) If so, explain how this risk has been taken into account.
5. NextBridge proposes recovery of construction work in progress (“CWIP”).⁴² In this regard:
- (a) Does NextBridge’s construction cost estimate include IDC?
 - (b) If so, what is NextBridge’s estimate of IDC?
6. NextBridge estimates \$397 million for construction costs for its Recommend Plan and \$430 million for the Reference Plan.⁴³ In regards to this estimate:
- (a) Do they include amounts for risk and contingency?
 - (b) Provide estimated amounts for risk and contingency.
 - (c) Are the estimated amounts in 2013 dollars or as spent?
7. NextBridge states that it “may be appropriate to make one time lump sum payment to a First Nation or Métis community as community legacy of the project.” Describe the criteria and circumstances under which NextBridge would consider making a lump sum payment to a First Nation or Métis community.⁴⁴
8. NextBridge identifies \$4.2 million for Land Acquisition and Aboriginal Affairs in its development costs estimate.⁴⁵ Provide a breakdown of these costs between Land Acquisition and Aboriginal Affairs.

⁴² Reference, Tab 5, p. 76.

⁴³ Reference, Tab 6, p. 94.

⁴⁴ Reference, App. 5, S. 3(a).

⁴⁵ Reference, Tab 8, p. 115, Figure 21.

9. NextBridge identifies \$23.5 million for Land Acquisition and Aboriginal Affairs in its construction costs estimate.⁴⁶ Provide a breakdown of these costs between Land Acquisition and Aboriginal Affairs.

⁴⁶ Reference, Tab 8, p. 118, Figure 23.